# StatiCAD-Masonry

## ANALYSIS CALCULATION REPORTS

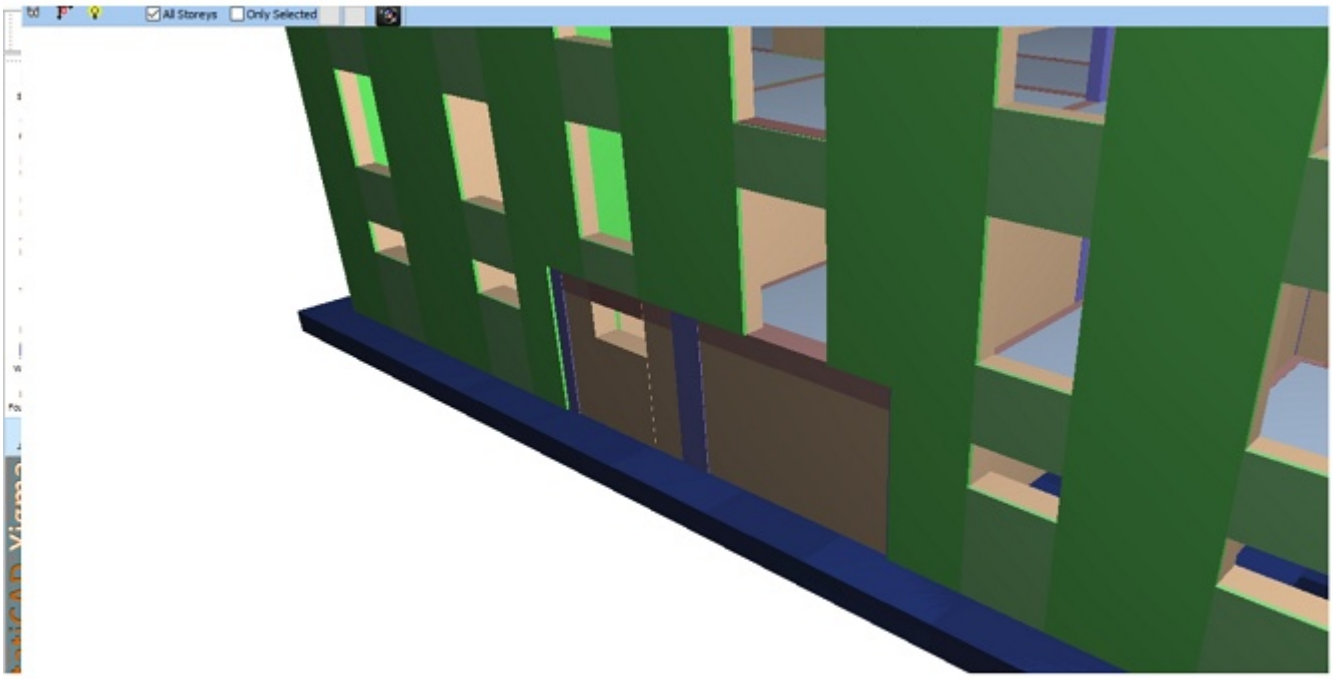
Project Maker: Sample

Project Name: Sample Retrofitting Project

Saved File Name: retrofit.sy3

Saved File MD5 Hash: B43181E34FECBFAFD6B2AE22496CE580

Analysis Count 35



## PROJECT PARAMETERS

| | | |
|---|---|---|
| **Story Number :** | 3 | (İncluding Basements and Ground Storeys) |
| **I:** | 1 | Building Importance Factor |
| **R:** | 2 | Structural Behavior Factor: |
| **A:** | 0.2 | Effective Ground Acceleration Coefficient |
| **S(T):** | 2.5 | Spectral Acceleration Coefficient: |
| **$\sigma_{zem}$:** | 16.3 | t/m2 Storey stress safety: |
| **Soil Group** | C | |

## MATERIAL SPECIFICATIONS

| Storey Slab Concrete: | Storey Slab Steel: | Horizontal Bond Beam Concrete | Horizontal Bond Beam Steel | Vertical Bond Beam Concrete | Vertical Bond Beam Steel | Base Concrete: | Base Steel: | Strengthening Concrete: | Strengthening Steel: |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 220 | 10 | 220 | 10 | 220 | 10 | 220 | 30 | 500 |

## LOAD COMBINATION

Used Load Factors for Pressure Strain Controls

| | | | |
|---|---|---|---|
| 1 | *G+ | 1 | *Q |

Used Load Factors For Reinforced Concrete Account of Storey Slab

| | | | |
|---|---|---|---|
| 1.4 | *G+ | 1.6 | *Q |

Used Load Factors For Cracking Safety Stress Account

| | | | |
|---|---|---|---|
| 1 | *G+ | HYKK | *Q |

Used Load Factors For Cracking Stress Account

| | | | | | |
|---|---|---|---|---|---|
| 1.0 | *G+ | HYKK | *Q+ | 1.0 | *E |

G:Dead Load

Q:Live Load

HYKK:Live Load Participation Coefficient

E: Earthquake Load

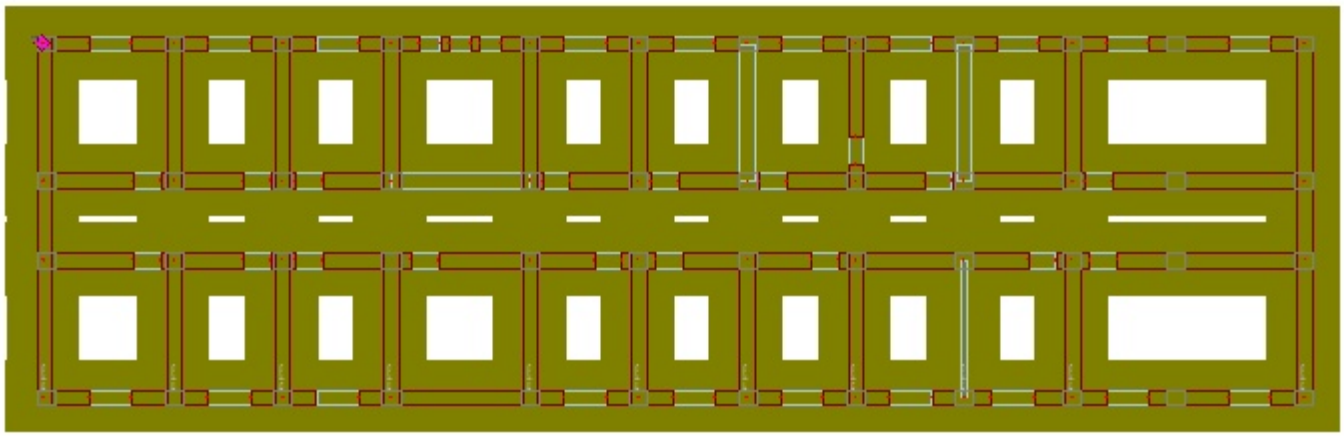
## ANALYSIS OF OPTIONS

| | | |
|---|---|---|
| **Seismic Load Account Effect of a 5% additional eccentricity Adding existing eccentricity Option:** | Was Not Added | |
| **Earthquake Direction Option:** | | |
| Earthquake Forces applied only the X and Y directions | | |
| **Tolerance angle difference can be made to transfer the load between the storeys** | 15 | Degree |
| **Option To Take İnto Account of Stiffnesses Vertical Beams:** | Yes | |
| **Coefficient of Relative Stiffness of Vertical Beams According on the Wall:** | 6.66 | |

## EXISTING CONSTRUCTION REVIEW AND STRENGTHENING OPTIONS

| | |
|---|---|
| **Analysis Type:** | STRENGTHENED BUILDING EARTQUAKE PERFORMANCE REPORT |
| **Building Knowledge Level:** | Medium |
| **Coefficient of Knowledge Level:** | 0.9 |
| **Acceleration Spectrum Multiplier:** | 1 Account For Probability of Earthquake in 50 Years is %10 |
| **Coefficient of Relative Stiffness of Jackets Stiffness According on the Wall:** | 6.66 |
| **Retrofit Jackets additive to wall pressure admissible stress:** | Were Taken Into Account |
| **Shear Capacity of retrofit jackets From Concrete Strength Account** | No |
| **Shear Capacity of Reinforced Walls from used wicker reinforcement resistance account** | Yes |

# FOUNDATION PLAN

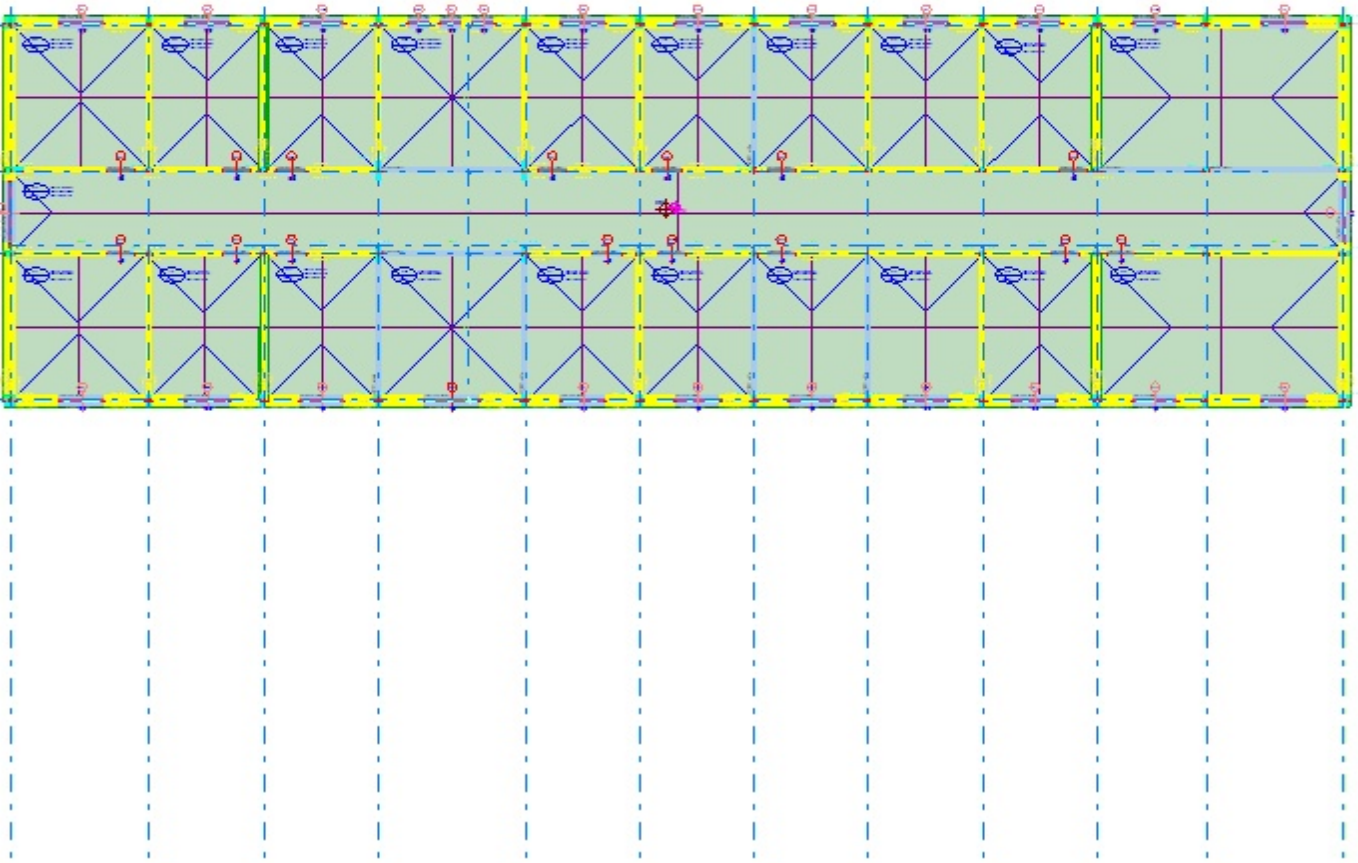


# Insufficient Section Colour Codes

- Elements Which Doesn't Provide Compressive Stress
- Elements Which Doesn't Provide Shear Stress
- Elements Which Doesn't Provide Compressive Stress and Shear Stress

Shear Capacity Usage Ratio | **BKKO :** | Compressive Stress Usage Ratio

# BASEMENT STORY PLAN



## Insufficient Section Colour Codes

- Elements Which Doesn't Provide Compressive Stress
- Elements Which Doesn't Provide Shear Stress
- Elements Which Doesn't Provide Compressive Stress and Shear Stress

Shear Capacity Usage Ratio | **BKKO :** | Compressive Stress Usage Ratio

# GROUND STORY PLAN

## Insufficient Section Colour Codes

- Elements Which Doesn't Provide Compressive Stress
- Elements Which Doesn't Provide Shear Stress
- Elements Which Doesn't Provide Compressive Stress and Shear Stress

Shear Capacity Usage Ratio | **BKKO :** | Compressive Stress Usage Ratio

# 1. STORY PLAN

# STOREY GENERAL INFORMATION AND OBJECT NUMBER OF STOREYS

| Storey Name | Storey Index | Storey Height | Live Load Participation Factor | Wall Number of Storey | Number of Storey Slab For Load Transfer | Number of Storey Slab For Concrete Account | Number of Vertical Bond Beam | Number of Bond Beam | Number of The Door | Number of Window | Number of Wall Jacket | Door, Window Upper/ Under Number of Jacket |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. STORY | 1 | 320 | 0.3 | 62 | 21 | 21 | 48 | 50 | 16 | 28 | 42 | 26 |
| GROUND STORY | Z | 320 | 0.3 | 68 | 21 | 21 | 49 | 46 | 19 | 27 | 61 | 29 |
| BASEMENT STORY | B | 290 | 0.3 | 63 | 20 | 20 | 60 | 45 | 18 | 23 | 39 | 21 |

# BASEMENT STORY

## GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WB01 | 5 | 0 | 150 | 0 | 50 | 25 | 0 | 40 | 0 | 0 | 0 | 0 | 70 | 0 | 0 |
| WB02 | 5 | 1160 | 150 | 1160 | 50 | 25 | 0 | 40 | 0 | 0 | 0 | 0 | 70 | 0 | 0 |
| WB03 | 5 | 710 | 295 | 710 | 50 | 25 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB04 | 5 | 450 | 295 | 450 | 50 | 25 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB05 | 1595 | 450 | 1635 | 450 | 50 | 25 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB06 | 5 | 1160 | 5 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB07 | 430 | 450 | 430 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB08 | 430 | 1160 | 430 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB09 | 785 | 450 | 785 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB10 | 785 | 1160 | 785 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB11 | 1140 | 450 | 1140 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB12 | 1140 | 1160 | 1140 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB13 | 1595 | 450 | 1595 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB14 | 1595 | 1160 | 1595 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB15 | 1950 | 450 | 1950 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB16 | 1950 | 1160 | 1950 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB17 | 2660 | 450 | 2660 | 395 | 50 | 25 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB18 | 2660 | 1160 | 2660 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB19 | 3370 | 450 | 3370 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB20 | 3370 | 1160 | 3370 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB21 | 4130 | 1160 | 4130 | 0 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB22 | 2305 | 1160 | 2305 | 710 | 50 | 25 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB23 | 3315 | 710 | 3425 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB24 | 290 | 0 | 540 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB25 | 680 | 0 | 895 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB26 | 1035 | 0 | 1230 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 120 | 0 | 0 |
| WB27 | 1300 | 0 | 1330 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 120 | 120 | 0 | 0 |
| WB28 | 1400 | 0 | 1430 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 120 | 120 | 0 | 0 |
| WB29 | 1500 | 0 | 1705 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 120 | 70 | 0 | 0 |
| WB30 | 1845 | 0 | 2060 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB31 | 2200 | 0 | 2415 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB32 | 2555 | 0 | 2770 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB33 | 2910 | 0 | 3120 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB34 | 3260 | 0 | 3480 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB35 | 3620 | 0 | 3880 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB36 | 4020 | 0 | 4130 | 0 | 50 | 0 | 25 | 40 | 0 | 0 | 0 | 70 | 0 | 0 | 0 |

## GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WB37 | 4020 | 1160 | 4130 | 1160 | 50 | 0 | 25 | 40 | 0 | 0 | 0 | 70 | 0 | 0 | 0 |
| WB38 | 3620 | 1160 | 3880 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB39 | 3245 | 1160 | 3480 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB40 | 2910 | 1160 | 3105 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB41 | 290 | 1160 | 540 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB42 | 680 | 1160 | 895 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB43 | 1035 | 1160 | 1705 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB44 | 1845 | 1160 | 2060 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB45 | 2200 | 1160 | 2415 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB46 | 2555 | 1160 | 2770 | 1160 | 50 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 70 | 0 | 0 |
| WB47 | 385 | 450 | 655 | 450 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB48 | 915 | 450 | 1140 | 450 | 50 | 0 | 25 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB49 | 745 | 450 | 825 | 450 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB50 | 1725 | 450 | 1990 | 450 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB51 | 2080 | 450 | 2345 | 450 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB52 | 2435 | 450 | 2885 | 450 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB53 | 2975 | 450 | 3410 | 450 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB54 | 3500 | 450 | 4130 | 450 | 50 | 0 | 25 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB55 | 385 | 710 | 655 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB56 | 915 | 710 | 1205 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB57 | 745 | 710 | 825 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB58 | 1295 | 710 | 1805 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB59 | 1895 | 710 | 2005 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB60 | 2095 | 710 | 2515 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB61 | 3515 | 710 | 4130 | 710 | 50 | 0 | 25 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB62 | 2605 | 710 | 3225 | 710 | 50 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WB63 | 2660 | 305 | 2660 | 0 | 50 | 0 | 25 | 40 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |

# GROUND STORY

## GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ01 | 3670 | 710 | 4137.5 | 710 | 20 | 0 | 17.5 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |

# GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ02 | -2.5 | 1167.5 | 150 | 1167.5 | 35 | 17.5 | 0 | 50 | 0 | 0 | 0 | 0 | 195 | 0 | 0 |
| WZ03 | 4137.5 | 1167.5 | 4137.5 | 675 | 35 | 17.5 | 0 | 50 | 0 | 0 | 0 | 0 | 200 | 0 | 0 |
| WZ04 | -2.5 | 1167.5 | -2.5 | 680 | 35 | 17.5 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ05 | -2.5 | 450 | 295 | 450 | 20 | 17.5 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ06 | 1595 | 450 | 1635 | 450 | 20 | 10 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ07 | -2.5 | 710 | 295 | 710 | 20 | 17.5 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ08 | 1595 | 710 | 1805 | 710 | 20 | 10 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ09 | 430 | 450 | 430 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ10 | 430 | 1167.5 | 430 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ11 | 785 | 450 | 785 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ12 | 785 | 1167.5 | 785 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ13 | 1140 | 450 | 1140 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ14 | 1140 | 1167.5 | 1140 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ15 | 1595 | 450 | 1595 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ16 | 1595 | 1167.5 | 1595 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ17 | 1950 | 450 | 1950 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ18 | 1950 | 1167.5 | 1950 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ19 | 2305 | 450 | 2305 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ20 | 2305 | 1167.5 | 2305 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ21 | 2660 | 450 | 2660 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ22 | 2660 | 1167.5 | 2660 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ23 | 3370 | 450 | 3370 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ24 | 3370 | 1167.5 | 3370 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ25 | 3015 | 1167.5 | 3015 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ26 | -25.1 | -7.5 | 150 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 195 | 0 | 0 |
| WZ27 | 290 | 1167.5 | 540 | 1167.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ28 | 680 | -7.5 | 895 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ29 | 290 | -7.5 | 540 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ30 | 1035 | -7.5 | 1230 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 120 | 0 | 0 |
| WZ31 | 1300 | -7.5 | 1330.5 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 120 | 120 | 0 | 0 |
| WZ32 | 1400.5 | -7.5 | 1430.5 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 120 | 120 | 0 | 0 |
| WZ33 | 1500.5 | -7.5 | 1705 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 120 | 195 | 0 | 0 |
| WZ34 | 1845 | -7.5 | 2060 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ35 | 2200 | -7.5 | 2415 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ36 | 2555 | -7.5 | 2770 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ37 | 2910 | -7.5 | 3120 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ38 | 4020 | -7.5 | 4154.5 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 0 | 0 | 0 |
| WZ39 | 3620 | -7.5 | 3880 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ40 | 3260 | -7.5 | 3480 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |

## GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ41 | 4137. | 485 | 4137. | -7.5 | 35 | 0 | 17.5 | 50 | 0 | 0 | 0 | 200 | 0 | 0 | 0 |
| WZ42 | 680 | 1167. | 895 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ43 | 1035 | 1167. | 1282. | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 0 | 0 | 0 |
| WZ44 | 1845 | 1167. | 2060 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ45 | 2200 | 1167. | 2415 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ46 | 2555 | 1167. | 2770 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ47 | 2910 | 1167. | 3105 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ48 | 4020 | 1167. | 4137. | 1167. | 35 | 0 | 17.5 | 50 | 0 | 0 | 0 | 195 | 0 | 0 | 0 |
| WZ49 | 3620 | 1167. | 3880 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ50 | 3245 | 1167. | 3480 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| WZ51 | 1452. | 1167. | 1705 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 195 | 230 | 230 |
| WZ52 | 385 | 450 | 655 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ53 | 745 | 450 | 825 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ54 | 915 | 450 | 1140 | 450 | 20 | 0 | 10 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ55 | 1725 | 450 | 1990 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ56 | 2080 | 450 | 2535 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ57 | 3315 | 710 | 3580 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ58 | 3340 | 450 | 3580 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ59 | 3670 | 450 | 4137. | 450 | 20 | 0 | 17.5 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ60 | 385 | 710 | 655 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ61 | 745 | 710 | 825 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ62 | 915 | 710 | 1140 | 710 | 20 | 0 | 10 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ63 | 1895 | 710 | 2005 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ64 | 2095 | 710 | 2515 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ65 | 2605 | 710 | 2870 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ66 | 2960 | 710 | 3225 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ67 | 2625 | 450 | 3250 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| WZ68 | -2.5 | 480 | -2.5 | -7.5 | 35 | 0 | 17.5 | 50 | 0 | 0 | 0 | 0 | 0 | 230 | 230 |

# 1. STORY

## GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

# GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W101 | 4137. | 485 | 4137. | -7.5 | 35 | 0 | 17.5 | 50 | 0 | 0 | 0 | 200 | 0 | 0 | 0 |
| W102 | -2.5 | 1167. | 150 | 1167. | 35 | 17.5 | 0 | 50 | 0 | 0 | 0 | 0 | 195 | 0 | 0 |
| W103 | 4137. | 1167. | 4137. | 675 | 35 | 17.5 | 0 | 50 | 0 | 0 | 0 | 0 | 200 | 0 | 0 |
| W104 | -2.5 | 1167. | -2.5 | 675 | 35 | 17.5 | 0 | 50 | 0 | 0 | 0 | 0 | 200 | 0 | 0 |
| W105 | -2.5 | 450 | 295 | 450 | 20 | 17.5 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W106 | 1595 | 450 | 1635 | 450 | 20 | 10 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W107 | -2.5 | 710 | 295 | 710 | 20 | 17.5 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W108 | 1595 | 710 | 1805 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W109 | 430 | 450 | 430 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W110 | 430 | 1167. | 430 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W111 | 785 | 450 | 785 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W112 | 785 | 1167. | 785 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W113 | 1140 | 450 | 1140 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W114 | 3315 | 710 | 3400 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W115 | 1595 | 450 | 1595 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W116 | 3490 | 710 | 4137. | 710 | 20 | 0 | 17.5 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W117 | 1950 | 450 | 1950 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W118 | 1950 | 1167. | 1950 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W119 | 3015 | 450 | 3015 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W120 | 2095 | 710 | 2345 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W121 | 2660 | 450 | 2660 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W122 | 1895 | 710 | 2005 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W123 | 3370 | 450 | 3370 | 0 | 20 | 10 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W124 | 3370 | 1167. | 3370 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W125 | 3015 | 1167. | 3015 | 710 | 20 | 17.5 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W126 | -25.1 | -7.5 | 150 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 195 | 0 | 0 |
| W127 | 290 | 1167. | 540 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W128 | 680 | -7.5 | 895 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W129 | 290 | -7.5 | 540 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W130 | 1035 | -7.5 | 1230 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 120 | 0 | 0 |
| W131 | 1300 | -7.5 | 1330. | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 120 | 120 | 0 | 0 |
| W132 | 1400. | -7.5 | 1430. | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 120 | 120 | 0 | 0 |
| W133 | 1500. | -7.5 | 1705 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 120 | 195 | 0 | 0 |
| W134 | 1845 | -7.5 | 2060 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W135 | 2200 | -7.5 | 2415 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W136 | 2555 | -7.5 | 2770 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W137 | 2910 | -7.5 | 3120 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W138 | 4020 | -7.5 | 4154. | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 0 | 0 | 0 |
| W139 | 3620 | -7.5 | 3880 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |

# GEOMETRIC PROPERTIES OF WALL

| Wall Name | X1 | Y1 | X2 | Y2 | Wall Width | Left Delta | Right Delta | Wall Top Bond Beam Height. | Wall Right Top Level | Wall Top-Left Elevation | Wall Bottom Level | Wall Left/Bottom Window Height * | Wall Left/Bottom Door Height* | Wall Left/Bottom Window Height * | Wall Right/Top Door Height * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W140 | 3260 | -7.5 | 3480 | -7.5 | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W141 | 3340 | 450 | 3370 | 450 | 20 | 0 | 10 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W142 | 680 | 1167. | 895 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W143 | 1035 | 1167. | 1282. | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 0 | 0 | 0 |
| W144 | 1845 | 1167. | 2060 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W145 | 2200 | 1167. | 2415 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W146 | 2555 | 1167. | 2770 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W147 | 2910 | 1167. | 3105 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W148 | 4020 | 1167. | 4137. | 1167. | 35 | 0 | 17.5 | 50 | 0 | 0 | 0 | 195 | 0 | 0 | 0 |
| W149 | 3620 | 1167. | 3880 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W150 | 3245 | 1167. | 3480 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 195 | 195 | 0 | 0 |
| W151 | 1452. | 1167. | 1705 | 1167. | 35 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 195 | 230 | 230 |
| W152 | 385 | 450 | 655 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W153 | 745 | 450 | 825 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W154 | 915 | 450 | 1140 | 450 | 20 | 0 | 10 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W155 | 1725 | 450 | 1990 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W156 | 2080 | 450 | 2345 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W157 | 2435 | 450 | 3250 | 450 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W158 | 915 | 710 | 1140 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W159 | 745 | 710 | 825 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W160 | 385 | 710 | 655 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W161 | 2435 | 710 | 3225 | 710 | 20 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 210 | 210 |
| W162 | -2.5 | 485 | -2.5 | -7.5 | 35 | 0 | 17.5 | 50 | 0 | 0 | 0 | 200 | 0 | 0 | 0 |

ICONS AND DESCRIPTIONS USED

X1:Wall Beginning X Coordinate (The Right Direction +)

Y1:Wall Beginning Y Coordinate (The Bottom Direction +)

X2:End of wall X Coordinate (The Right Direction +)
Y2:End of Wall Y Coordinate (The Bottom Direction +)

Left Delta:Wall X1,Y1 in the coordinate left/bottom cantilever size(Half the width of the left wall intersecting)

Right Delta:Wall X2,Y2 in the coordinate right/top cantilever size (Half the width of the right wall intersecting )
Wall Top Level: Bond Beam on the Wall, Relative Distance From Storey Top Level (The Bottom Direction -))
Wall Bottom Level: The bottom of the wall, relative distance from storey lower Level (The Top Direction +))

*In the absence of door or window left or right side in the wall, wall effective in the wall stiffness
Height=( Storey height- beam height above wall +Top Level-Bottom Level) is calculated by the formula

# BASEMENT STORY

## MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| WB01 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB02 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB03 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB04 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB05 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB06 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB07 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB08 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB09 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB10 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB11 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB12 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB13 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB14 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB15 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB16 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB17 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB18 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB19 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB20 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB21 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB22 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB23 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB24 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB25 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB26 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB27 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB28 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB29 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB30 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB31 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB32 | 2500 | 0.8 | 0.2 | 0 | 0 | Automatic |
| WB33 | 2500 | 0.8 | 0.2 | 0 | 0 | Automatic |
| WB34 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB35 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB36 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB37 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |

## MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| WB38 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB39 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB40 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB41 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB42 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB43 | 2500 | 0.8 | 0.2 | 0 | 0 | Automatic |
| WB44 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB45 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB46 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB47 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB48 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB49 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB50 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB51 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB52 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB53 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB54 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB55 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB56 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB57 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB58 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB59 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB60 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB61 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB62 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |
| WB63 | 2400 | 0.3 | 0.1 | 0 | 0 | Automatic |

# GROUND STORY

## MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| WZ01 | 2500 | 0.8 | 0.2 | 0 | 0 | Automatic |
| WZ02 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ03 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ04 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |

# MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| WZ05 | 2500 | 0.8 | 0.2 | 0 | 0 | Automatic |
| WZ06 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ07 | 2500 | 0.8 | 0.2 | 0 | 0 | Automatic |
| WZ08 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ09 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ10 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ11 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ12 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ13 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ14 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ15 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ16 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ17 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ18 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ19 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ20 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ21 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ22 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ23 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ24 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ25 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ26 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ27 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ28 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ29 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ30 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ31 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ32 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ33 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ34 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ35 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ36 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ37 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ38 | 2500 | 0.8 | 0.2 | 0 | 0 | Automatic |
| WZ39 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ40 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ41 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ42 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ43 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ44 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |

## MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| WZ45 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ46 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ47 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ48 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ49 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ50 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ51 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ52 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ53 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ54 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ55 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ56 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ57 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ58 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ59 | 2500 | 0.8 | 0.25 | 0 | 0 | Automatic |
| WZ60 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ61 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ62 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ63 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ64 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ65 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ66 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ67 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| WZ68 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |

# 1. STORY

## MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| W101 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W102 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W103 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W104 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W105 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W106 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |

# MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| W107 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W108 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W109 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W110 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W111 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W112 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W113 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W114 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W115 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W116 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W117 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W118 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W119 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W120 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W121 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W122 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W123 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W124 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W125 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W126 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W127 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W128 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W129 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W130 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W131 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W132 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W133 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W134 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W135 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W136 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W137 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W138 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W139 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W140 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W141 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W142 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W143 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W144 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W145 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W146 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |

# MECHANICAL PROPERTIES OF WALL AND EXTRA LOADS

| Wall Name | Wall BHA | fk (Mpa) | fvko (Mpa) | Extra G (kg/m) | Extra Q (kg/m) | k the choice of the coefficient |
|---|---|---|---|---|---|---|
| W147 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W148 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W149 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W150 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W151 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W152 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W153 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W154 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W155 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W156 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W157 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W158 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W159 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W160 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W161 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |
| W162 | 2200 | 0.8 | 0.15 | 0 | 0 | Automatic |

ICONS AND DESCRIPTIONS USED

Wall BHA:Unit Weight of Wall (kg/m3)
fk: pressure safety stress of wall (Existing Building Review or retrofit projet pressure strength stress of wall (fd) Value can be used)(Mpa))

fvko:cracking safety stress of wall (Existing Building Review or retrofit projet cracking strength stress of wall Value can be used)(Mpa))

Extra G:Defined on the wall extra dead load

Ekstra Q:Defined on the wall extra live load

k the choice of the coefficient:Wall stiffness formula(k*A/H) k coefficient. Program user has not entered a special Value. This Program 1.0 or 1.2 According to the state of the wall support is automatically calculated according.

# BASEMENT STORY

## VERTICAL BOND BEAM PROPERTIES

| Vertical Bond Beam Name | X1 | Y1 | X2 | Y2 | Vertical Bond Beam Width | Vertical Bond Beam Height |
|---|---|---|---|---|---|---|
| DHB01 | -20 | 0 | 40 | 0 | 50 | 60 |
| DHB02 | 400 | 0 | 460 | 0 | 50 | 60 |
| DHB03 | 755 | 0 | 815 | 0 | 50 | 60 |
| DHB04 | 1110 | 0 | 1170 | 0 | 50 | 60 |
| DHB05 | 1565 | 0 | 1625 | 0 | 50 | 60 |
| DHB06 | 1920 | 0 | 1980 | 0 | 50 | 60 |
| DHB07 | 2275 | 0 | 2335 | 0 | 50 | 60 |
| DHB08 | 2630 | 0 | 2690 | 0 | 50 | 60 |
| DHB09 | 3340 | 0 | 3400 | 0 | 50 | 60 |
| DHB10 | 4095 | 0 | 4155 | 0 | 50 | 60 |
| DHB11 | -20 | 450 | 40 | 450 | 50 | 60 |
| DHB12 | 400 | 450 | 460 | 450 | 50 | 60 |
| DHB13 | 755 | 450 | 815 | 450 | 50 | 60 |
| DHB14 | 1110 | 450 | 1170 | 450 | 50 | 60 |
| DHB15 | 1565 | 450 | 1625 | 450 | 50 | 60 |
| DHB16 | 1920 | 450 | 1980 | 450 | 50 | 60 |
| DHB17 | 2275 | 450 | 2335 | 450 | 50 | 60 |
| DHB18 | 2630 | 450 | 2690 | 450 | 50 | 60 |
| DHB19 | 3340 | 450 | 3400 | 450 | 50 | 60 |
| DHB20 | 3677.5 | 450 | 3737.5 | 450 | 50 | 60 |
| DHB21 | 4095 | 450 | 4155 | 450 | 50 | 60 |
| DHB22 | -20 | 710 | 40 | 710 | 50 | 60 |
| DHB23 | 400 | 710 | 460 | 710 | 50 | 60 |
| DHB24 | 400 | 710 | 460 | 710 | 50 | 60 |
| DHB25 | 755 | 710 | 815 | 710 | 50 | 60 |
| DHB26 | 755 | 710 | 815 | 710 | 50 | 60 |
| DHB27 | 1110 | 710 | 1170 | 710 | 50 | 60 |
| DHB28 | 1110 | 710 | 1170 | 710 | 50 | 60 |
| DHB29 | 1565 | 710 | 1625 | 710 | 50 | 60 |
| DHB30 | 1565 | 710 | 1625 | 710 | 50 | 60 |
| DHB31 | 1920 | 710 | 1980 | 710 | 50 | 60 |
| DHB32 | 1920 | 710 | 1980 | 710 | 50 | 60 |
| DHB33 | 2275 | 710 | 2335 | 710 | 50 | 60 |
| DHB34 | 2275 | 710 | 2335 | 710 | 50 | 60 |
| DHB35 | 2630 | 710 | 2690 | 710 | 50 | 60 |
| DHB36 | 4095 | 1160 | 4155 | 1160 | 50 | 60 |
| DHB37 | 3340 | 710 | 3400 | 710 | 50 | 60 |
| DHB38 | 3340 | 710 | 3400 | 710 | 50 | 60 |

## VERTICAL BOND BEAM PROPERTIES

| Vertical Bond Beam Name | X1 | Y1 | X2 | Y2 | Vertical Bond Beam Width | Vertical Bond Beam Height |
|---|---|---|---|---|---|---|
| DHB39 | 3677.5 | 710 | 3737.5 | 710 | 50 | 60 |
| DHB40 | 3677.5 | 710 | 3737.5 | 710 | 50 | 60 |
| DHB41 | 4095 | 710 | 4155 | 710 | 50 | 60 |
| DHB42 | 3340 | 1160 | 3400 | 1160 | 50 | 60 |
| DHB43 | -20 | 1160 | 40 | 1160 | 50 | 60 |
| DHB44 | 400 | 1160 | 460 | 1160 | 50 | 60 |
| DHB45 | 1110 | 1160 | 1170 | 1160 | 50 | 60 |
| DHB46 | 755 | 1160 | 815 | 1160 | 50 | 60 |
| DHB47 | 755 | 1160 | 815 | 1160 | 50 | 60 |
| DHB48 | 1565 | 1160 | 1625 | 1160 | 50 | 60 |
| DHB49 | 1565 | 1160 | 1625 | 1160 | 50 | 60 |
| DHB50 | 1920 | 1160 | 1980 | 1160 | 50 | 60 |
| DHB51 | 1920 | 1160 | 1980 | 1160 | 50 | 60 |
| DHB52 | 2275 | 1160 | 2335 | 1160 | 50 | 60 |
| DHB53 | 2275 | 1160 | 2335 | 1160 | 50 | 60 |
| DHB54 | 2630 | 1160 | 2690 | 1160 | 50 | 60 |
| DHB55 | 3677.5 | 0 | 3737.5 | 0 | 50 | 60 |
| DHB56 | 3677.5 | 1160 | 3737.5 | 1160 | 50 | 60 |
| DHB57 | 2985 | 1160 | 3045 | 1160 | 50 | 60 |
| DHB58 | 2985 | 0 | 3045 | 0 | 50 | 60 |
| DHB59 | 2985 | 450 | 3045 | 450 | 50 | 60 |
| DHB60 | 2985 | 710 | 3045 | 710 | 50 | 60 |

# GROUND STORY

## VERTICAL BOND BEAM PROPERTIES

| Vertical Bond Beam Name | X1 | Y1 | X2 | Y2 | Vertical Bond Beam Width | Vertical Bond Beam Height |
|---|---|---|---|---|---|---|
| DHZ01 | -20 | -7.5 | 15 | -7.5 | 35 | 35 |
| DHZ02 | 3360 | 710 | 3380 | 710 | 20 | 20 |
| DHZ03 | -20 | 1167.5 | 15 | 1167.5 | 35 | 35 |
| DHZ04 | -20 | 450 | 40 | 450 | 20 | 60 |
| DHZ05 | 2650 | 710 | 2670 | 710 | 20 | 20 |
| DHZ06 | -20 | 710 | 15 | 710 | 20 | 35 |
| DHZ07 | 3360 | 450 | 3380 | 450 | 20 | 20 |
| DHZ08 | 3697.5 | 450 | 3717.5 | 450 | 20 | 20 |
| DHZ09 | 420 | -7.5 | 440 | -7.5 | 35 | 20 |
| DHZ10 | 775 | -7.5 | 795 | -7.5 | 35 | 20 |
| DHZ11 | 1130 | -7.5 | 1150 | -7.5 | 35 | 20 |

# VERTICAL BOND BEAM PROPERTIES

| Vertical Bond Beam Name | X1 | Y1 | X2 | Y2 | Vertical Bond Beam Width | Vertical Bond Beam Height |
|---|---|---|---|---|---|---|
| DHZ12 | 1585 | -7.5 | 1605 | -7.5 | 35 | 20 |
| DHZ13 | 1940 | -7.5 | 1960 | -7.5 | 35 | 20 |
| DHZ14 | 2295 | -7.5 | 2315 | -7.5 | 35 | 20 |
| DHZ15 | 2650 | -7.5 | 2670 | -7.5 | 35 | 20 |
| DHZ16 | 3360 | -7.5 | 3380 | -7.5 | 35 | 20 |
| DHZ17 | 3697.5 | -7.5 | 3717.5 | -7.5 | 35 | 20 |
| DHZ18 | 3697.5 | 1167.5 | 3717.5 | 1167.5 | 35 | 20 |
| DHZ19 | 3360 | 1167.5 | 3380 | 1167.5 | 35 | 20 |
| DHZ20 | 2650 | 1167.5 | 2670 | 1167.5 | 35 | 20 |
| DHZ21 | 2295 | 1167.5 | 2315 | 1167.5 | 35 | 20 |
| DHZ22 | 1940 | 1167.5 | 1960 | 1167.5 | 35 | 20 |
| DHZ23 | 1585 | 1167.5 | 1605 | 1167.5 | 35 | 20 |
| DHZ24 | 1130 | 1167.5 | 1150 | 1167.5 | 35 | 20 |
| DHZ25 | 775 | 1167.5 | 795 | 1167.5 | 35 | 20 |
| DHZ26 | 420 | 1167.5 | 440 | 1167.5 | 35 | 20 |
| DHZ27 | 1130 | 450 | 1150 | 450 | 60 | 20 |
| DHZ28 | 1130 | 710 | 1150 | 710 | 60 | 20 |
| DHZ29 | 1585 | 450 | 1605 | 450 | 60 | 20 |
| DHZ30 | 1585 | 710 | 1605 | 710 | 60 | 20 |
| DHZ31 | 420 | 450 | 440 | 450 | 20 | 20 |
| DHZ32 | 420 | 710 | 440 | 710 | 20 | 20 |
| DHZ33 | 775 | 450 | 795 | 450 | 20 | 20 |
| DHZ34 | 775 | 710 | 795 | 710 | 20 | 20 |
| DHZ35 | 3005 | 1167.5 | 3025 | 1167.5 | 35 | 20 |
| DHZ36 | 1940 | 450 | 1960 | 450 | 20 | 20 |
| DHZ37 | 1940 | 710 | 1960 | 710 | 20 | 20 |
| DHZ38 | 2295 | 450 | 2315 | 450 | 20 | 20 |
| DHZ39 | 2305 | 460 | 2305 | 440 | 20 | 20 |
| DHZ40 | 2295 | 710 | 2315 | 710 | 20 | 20 |
| DHZ41 | 3697.5 | 710 | 3717.5 | 710 | 20 | 20 |
| DHZ42 | 2650 | 450 | 2670 | 450 | 20 | 20 |
| DHZ43 | 4120 | -7.5 | 4155 | -7.5 | 35 | 35 |
| DHZ44 | 4120 | 1167.5 | 4155 | 1167.5 | 35 | 35 |
| DHZ45 | 4120 | 450 | 4155 | 450 | 20 | 35 |
| DHZ46 | 4120 | 710 | 4155 | 710 | 20 | 35 |
| DHZ47 | 3005 | 710 | 3025 | 710 | 20 | 20 |
| DHZ48 | 3005 | 450 | 3025 | 450 | 20 | 20 |
| DHZ49 | 3005 | -7.5 | 3025 | -7.5 | 35 | 20 |

# 1. STORY

# VERTICAL BOND BEAM PROPERTIES

| Vertical Bond Beam Name | X1 | Y1 | X2 | Y2 | Vertical Bond Beam Width | Vertical Bond Beam Height |
|---|---|---|---|---|---|---|
| DH101 | -20 | -7.5 | 15 | -7.5 | 35 | 35 |
| DH102 | 3697.5 | 450 | 3717.5 | 450 | 20 | 20 |
| DH103 | -20 | 1167.5 | 15 | 1167.5 | 35 | 35 |
| DH104 | -20 | 450 | 40 | 450 | 20 | 60 |
| DH105 | 3360 | 450 | 3380 | 450 | 20 | 20 |
| DH106 | -20 | 710 | 15 | 710 | 20 | 35 |
| DH107 | 3360 | 710 | 3380 | 710 | 20 | 20 |
| DH108 | 3005 | 450 | 3025 | 450 | 20 | 20 |
| DH109 | 420 | -7.5 | 440 | -7.5 | 35 | 20 |
| DH110 | 775 | -7.5 | 795 | -7.5 | 35 | 20 |
| DH111 | 1130 | -7.5 | 1150 | -7.5 | 35 | 20 |
| DH112 | 1585 | -7.5 | 1605 | -7.5 | 35 | 20 |
| DH113 | 1940 | -7.5 | 1960 | -7.5 | 35 | 20 |
| DH114 | 2295 | -7.5 | 2315 | -7.5 | 35 | 20 |
| DH115 | 2650 | -7.5 | 2670 | -7.5 | 35 | 20 |
| DH116 | 3360 | -7.5 | 3380 | -7.5 | 35 | 20 |
| DH117 | 3697.5 | -7.5 | 3717.5 | -7.5 | 35 | 20 |
| DH118 | 3697.5 | 1167.5 | 3717.5 | 1167.5 | 35 | 20 |
| DH119 | 3360 | 1167.5 | 3380 | 1167.5 | 35 | 20 |
| DH120 | 2650 | 1167.5 | 2670 | 1167.5 | 35 | 20 |
| DH121 | 2295 | 1167.5 | 2315 | 1167.5 | 35 | 20 |
| DH122 | 1940 | 1167.5 | 1960 | 1167.5 | 35 | 20 |
| DH123 | 1585 | 1167.5 | 1605 | 1167.5 | 35 | 20 |
| DH124 | 1130 | 1167.5 | 1150 | 1167.5 | 35 | 20 |
| DH125 | 775 | 1167.5 | 795 | 1167.5 | 35 | 20 |
| DH126 | 420 | 1167.5 | 440 | 1167.5 | 35 | 20 |
| DH127 | 1130 | 450 | 1150 | 450 | 60 | 20 |
| DH128 | 1130 | 710 | 1150 | 710 | 60 | 20 |
| DH129 | 1585 | 450 | 1605 | 450 | 60 | 20 |
| DH130 | 1585 | 710 | 1605 | 710 | 60 | 20 |
| DH131 | 420 | 450 | 440 | 450 | 20 | 20 |
| DH132 | 420 | 710 | 440 | 710 | 20 | 20 |
| DH133 | 775 | 450 | 795 | 450 | 20 | 20 |
| DH134 | 775 | 710 | 795 | 710 | 20 | 20 |
| DH135 | 3005 | 710 | 3025 | 710 | 20 | 20 |
| DH136 | 1940 | 450 | 1960 | 450 | 20 | 20 |
| DH137 | 1940 | 710 | 1960 | 710 | 20 | 20 |
| DH138 | 2295 | 450 | 2315 | 450 | 20 | 20 |
| DH139 | 2305 | 460 | 2305 | 440 | 20 | 20 |
| DH140 | 2295 | 710 | 2315 | 710 | 20 | 20 |
| DH141 | 3697.5 | 710 | 3717.5 | 710 | 20 | 20 |
| DH142 | 2650 | 450 | 2670 | 450 | 20 | 20 |

# VERTICAL BOND BEAM PROPERTIES

| Vertical Bond Beam Name | X1 | Y1 | X2 | Y2 | Vertical Bond Beam Width | Vertical Bond Beam Height |
|---|---|---|---|---|---|---|
| DH143 | 4120 | 1167.5 | 4155 | 1167.5 | 35 | 35 |
| DH144 | 4120 | -7.5 | 4155 | -7.5 | 35 | 35 |
| DH145 | 4120 | 710 | 4155 | 710 | 20 | 35 |
| DH146 | 4120 | 450 | 4155 | 450 | 20 | 35 |
| DH147 | 3005 | -7.5 | 3025 | -7.5 | 35 | 20 |
| DH148 | 3005 | 1167.5 | 3025 | 1167.5 | 35 | 20 |

ICONS AND DESCRIPTIONS USED

X1:Vertical Bond Beam Beginning X Coordinate (Right Direction +)
Y1:Vertical Bond Beam Beginning Y Coordinate (Bottom Direction +)
X2:End of Vertical Bond Beam X Coordinate (Right Direction +)
Y2:End of Vertical Bond Beam Coordinate (Bottom Direction +)

# BASEMENT STORY

## WALL RETROFIT JACKET PROPERTIES

| Jacket Name | X1 | Y1 | X2 | Y2 | Jacket Width | Left Delta | Right Delta | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | The User Selects Wicker Reinforcement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CB01 | 2555 | 0 | 2660 | 0 | 8 | 0 | 25 | -29 | 0 | 0 | oto |
| CB02 | 4130 | 1160 | 4130 | 0 | 8 | 25 | 25 | 29 | 0 | 0 | oto |
| CB03 | 5 | 0 | 150 | 0 | 8 | 25 | 0 | -29 | 0 | 0 | oto |
| CB04 | 290 | 0 | 540 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB05 | 3245 | 1160 | 3480 | 1160 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB06 | 5 | 1160 | 150 | 1160 | 8 | 25 | 0 | 29 | 0 | 0 | oto |
| CB07 | 290 | 1160 | 540 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB08 | 680 | 1160 | 785 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB09 | 3370 | 1160 | 3480 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | 295 |
| CB10 | 4020 | 1160 | 4130 | 1160 | 8 | 0 | 25 | 29 | 0 | 0 | oto |
| CB11 | 3620 | 1160 | 3880 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB12 | 2910 | 1160 | 3105 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB13 | 3620 | 0 | 3880 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB14 | 4020 | 0 | 4130 | 0 | 8 | 0 | 25 | -29 | 0 | 0 | oto |
| CB15 | 1595 | 0 | 1705 | 0 | 8 | 25 | 0 | -29 | 0 | 0 | oto |
| CB16 | 2660 | 1160 | 2660 | 710 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB17 | 2200 | 1160 | 2415 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB18 | 1845 | 1160 | 2060 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB19 | 1595 | 1160 | 1705 | 1160 | 8 | 25 | 0 | 29 | 0 | 0 | oto |
| CB20 | 1845 | 0 | 2060 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB21 | 5 | 1160 | 5 | 0 | 8 | 25 | 25 | -29 | 0 | 0 | oto |
| CB22 | 2200 | 0 | 2415 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB23 | 430 | 1160 | 430 | 710 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB24 | 1140 | 1160 | 1140 | 710 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB25 | 1595 | 1160 | 1595 | 710 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB26 | 2555 | 1160 | 2770 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB27 | 3245 | 1160 | 3370 | 1160 | 8 | 0 | 0 | 29 | 0 | 0 | 295 |
| CB28 | 3260 | 0 | 3480 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB29 | 680 | 0 | 895 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB30 | 1035 | 0 | 1230 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB31 | 1300 | 0 | 1330 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB32 | 1400 | 0 | 1430 | 0 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB33 | 1500 | 0 | 1595 | 0 | 8 | 0 | 19 | -29 | 0 | 0 | oto |
| CB34 | 1500 | 0 | 1705 | 0 | 8 | 0 | 0 | 29 | 0 | 0 | oto |
| CB35 | 680 | 1160 | 895 | 1160 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB36 | 785 | 1160 | 785 | 710 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB37 | 2305 | 1160 | 2305 | 710 | 8 | 0 | 0 | 29 | 0 | 0 | oto |

## WALL RETROFIT JACKET PROPERTIES

| Jacket Name | X1 | Y1 | X2 | Y2 | Jacket Width | Left Delta | Right Delta | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | The User Selects Wicker Reinforcement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CB38 | 2660 | 450 | 2660 | 395 | 8 | 0 | 0 | -29 | 0 | 0 | oto |
| CB39 | 2660 | 305 | 2660 | 0 | 8 | 0 | 18 | -29 | 0 | 0 | oto |

# GROUND STORY

## WALL RETROFIT JACKET PROPERTIES

| Jacket Name | X1 | Y1 | X2 | Y2 | Jacket Width | Left Delta | Right Delta | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | The User Selects Wicker Reinforcement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CZ01 | 4137.5 | 485 | 4137.5 | -7.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | 295 |
| CZ02 | 1845 | 1167.5 | 2060 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ03 | 2555 | 1167.5 | 2660 | 1167.5 | 8 | 0 | 17.5 | 21.5 | 0 | 0 | oto |
| CZ04 | 1595 | 1167.5 | 1705 | 1167.5 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| CZ05 | 2200 | 1167.5 | 2415 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ06 | 4137.5 | 1167.5 | 4137.5 | 675 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| CZ07 | 290 | -7.5 | 540 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ08 | 680 | -7.5 | 785 | -7.5 | 8 | 0 | 17.5 | -21.5 | 0 | 0 | oto |
| CZ09 | 3370 | -7.5 | 3480 | -7.5 | 8 | 17.5 | 0 | -21.5 | 0 | 0 | oto |
| CZ10 | 3620 | -7.5 | 3880 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ11 | 4020 | -7.5 | 4137.5 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | 295 |
| CZ12 | 3370 | 1167.5 | 3480 | 1167.5 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| CZ13 | 3620 | 1167.5 | 3880 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ14 | 4020 | 1167.5 | 4137.5 | 1167.5 | 8 | 0 | 17.5 | 21.5 | 0 | 0 | oto |
| CZ15 | -2.5 | -7.5 | 150 | -7.5 | 8 | 17.5 | 0 | -21.5 | 0 | 0 | oto |
| CZ16 | -2.5 | 1167.5 | 150 | 1167.5 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| CZ17 | 290 | 1167.5 | 540 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ18 | 680 | 1167.5 | 784.8 | 1167.5 | 8 | 0 | 17.5 | 21.5 | 0 | 0 | oto |
| CZ19 | 1585 | -7.5 | 1705 | -7.5 | 8 | 17.5 | 0 | -21.5 | 0 | 0 | oto |
| CZ20 | 1845 | -7.5 | 2060 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ21 | 2200 | -7.5 | 2415 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ22 | 2555 | -7.5 | 2650 | -7.5 | 8 | 0 | 17.5 | -21.5 | 0 | 0 | oto |
| CZ23 | -2.5 | 1167.5 | -2.5 | 680 | 8 | 17.5 | 0 | -21.5 | 0 | 0 | oto |
| CZ24 | -2.5 | 480 | -2.5 | -7.5 | 8 | 0 | 17.5 | -21.5 | 0 | 0 | oto |
| CZ25 | -2.5 | 1167.5 | -2.5 | 680 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ26 | -2.5 | 480 | -2.5 | -7.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ27 | 4137.5 | 1167.5 | 4137.5 | 675 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ28 | 4137.5 | 485 | 4137.5 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | 295 |

# WALL RETROFIT JACKET PROPERTIES

| Jacket Name | X1 | Y1 | X2 | Y2 | Jacket Width | Left Delta | Right Delta | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | The User Selects Wicker Reinforcement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CZ29 | 784.8 | 1167.5 | 784.8 | 707.8 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ30 | 784.8 | 1167.5 | 784.8 | 707.8 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| CZ31 | 2305 | 1167.5 | 2305 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ32 | 2305 | 1167.5 | 2305 | 710 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| CZ33 | 2305 | 460 | 2305 | 0 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| CZ34 | 2305 | 450 | 2305 | 0 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ35 | 785 | 450 | 785 | -7.5 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ36 | 785 | 450 | 785 | -7.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ37 | 3370 | 1167.5 | 3370 | 710 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| CZ38 | 3370 | 1167.5 | 3370 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ39 | 3370 | 450 | 3370 | -7.5 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ40 | 3370 | 450 | 3370 | -7.5 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| CZ41 | 430 | 1167.5 | 430 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ42 | 1140 | 1160 | 1140 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ43 | 1595 | 1160 | 1595 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ44 | 2660 | 1167.5 | 2660 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| CZ45 | 785 | -7.5 | 895 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ46 | 1035 | -7.5 | 1230 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ47 | 1300 | -7.5 | 1330.2 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ48 | 1400.2 | -7.5 | 1430.2 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ49 | 1500.2 | -7.5 | 1595 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ50 | 2660 | -7.5 | 2770 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ51 | 2910 | -7.5 | 3120 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ52 | 3260 | -7.5 | 3370 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| CZ53 | 784.8 | 1167.5 | 895 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ54 | 1035 | 1167.5 | 1282.5 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ55 | 2660 | 1167.5 | 2770 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ56 | 2910 | 1167.5 | 3105 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ57 | 3245 | 1167.5 | 3370 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ58 | 1452.5 | 1167.5 | 1595 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ59 | 1500.2 | -7.5 | 1705 | -7.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| CZ60 | 915 | 710 | 1140 | 710 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| CZ61 | -2.5 | -7.5 | 150 | -7.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |

# 1. STORY

# WALL RETROFIT JACKET PROPERTIES

| Jacket Name | X1 | Y1 | X2 | Y2 | Jacket Width | Left Delta | Right Delta | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | The User Selects Wicker Reinforcement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C101 | 2200 | 1167.5 | 2415 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C102 | 4020 | 1167.5 | 4137.5 | 1167.5 | 8 | 0 | 17.5 | 21.5 | 0 | 0 | oto |
| C103 | 3620 | 1167.5 | 3880 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C104 | 1845 | 1167.5 | 2060 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C105 | 3370 | 1167.5 | 3480 | 1167.5 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| C106 | 2555 | 1167.5 | 2660 | 1167.5 | 8 | 0 | 17.5 | 21.5 | 0 | 0 | oto |
| C107 | 1035 | 1167.5 | 1282.5 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C108 | 784.8 | 1167.5 | 895 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C109 | 3370 | 450 | 3370 | -7.5 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| C110 | 3370 | 1167.5 | 3370 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| C111 | 784.8 | 1167.5 | 785 | 710 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| C112 | 785 | 450 | 785 | -7.5 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| C113 | 785 | 450 | 785 | -7.5 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| C114 | 3370 | 1160 | 3370 | 710 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| C115 | 3370 | 450 | 3370 | -7.5 | 8 | 0 | 0 | 14 | 0 | 0 | oto |
| C116 | 784.8 | 1167.5 | 785 | 710 | 8 | 0 | 0 | -14 | 0 | 0 | oto |
| C117 | -2.5 | 1167.5 | 150 | 1167.5 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| C118 | 290 | 1167.5 | 540 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C119 | 680 | 1167.5 | 784.8 | 1167.5 | 8 | 0 | 17.5 | 21.5 | 0 | 0 | oto |
| C120 | 1595 | 1167.5 | 1705 | 1167.5 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| C121 | -2.5 | 485 | -2.5 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C122 | -2.5 | 1167.5 | -2.5 | 675 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C123 | 1452.5 | 1167.5 | 1595 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C124 | 4137.5 | 1167.5 | 4137.5 | 675 | 8 | 17.5 | 0 | 21.5 | 0 | 0 | oto |
| C125 | 4137.5 | 485 | 4137.5 | -7.5 | 8 | 0 | 17.5 | 21.5 | 0 | 0 | oto |
| C126 | 2660 | 1167.5 | 2770 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C127 | 2910 | 1167.5 | 3105 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C128 | 3245 | 1167.5 | 3370 | 1167.5 | 8 | 0 | 0 | 21.5 | 0 | 0 | oto |
| C129 | -2.5 | -7.5 | 150 | -7.5 | 8 | 17.5 | 0 | -21.5 | 0 | 0 | oto |
| C130 | 680 | -7.5 | 895 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C131 | 290 | -7.5 | 540 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C132 | 1035 | -7.5 | 1230 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C133 | 1300 | -7.5 | 1330.2 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C134 | 1400.2 | -7.5 | 1430.2 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C135 | 1500.2 | -7.5 | 1705 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C136 | 1845 | -7.5 | 2060 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C137 | 2200 | -7.5 | 2415 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C138 | 2555 | -7.5 | 2770 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C139 | 2910 | -7.5 | 3120 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C140 | 3260 | -7.5 | 3480 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |

# WALL RETROFIT JACKET PROPERTIES

| Jacket Name | X1 | Y1 | X2 | Y2 | Jacket Width | Left Delta | Right Delta | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | The User Selects Wicker Reinforcement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C141 | 3620 | -7.5 | 3880 | -7.5 | 8 | 0 | 0 | -21.5 | 0 | 0 | oto |
| C142 | 4020 | -7.5 | 4137.5 | -7.5 | 8 | 0 | 17.5 | -21.5 | 0 | 0 | oto |

ICONS AND DESCRIPTIONS USED

X1:Beginning Jacket X Coordinate (Right Direction +)
Y1:Beginning Jacket Y Coordinate (Bottom Direction +)

X2:End of Jacket X Coordinate (Right Direction +)
Y2:End of Jacket Y Coordinate (Bottom Direction +)
Left Delta:Jacket X1,Y1 coordinate Left/Bottom cantilever size (Half the width of the left wall intersecting)
Right Delta:Jacket X2,Y2 coordinate Right/Top cantilever size (Half the width of the right wall intersecting)

Jacket Top Level: Bond Beam on the Wall, Relative Distance From Storey Top Level (The Bottom Direction -))
Jacket Bottom Level: The bottom of the wall, relative distance from storey lower Level (The Top Direction +))

The User Selects Wicker Reinforcement: If Selects Wicker Reinforcement by user select by the program shows the of selected wicker analysis table.

# BASEMENT STORY

## CONSTRUCTIVE WALL RETROFIT JACKET PROPERTIES

| Jackey Name | X1 | Y1 | X2 | Y2 | Jacket Width | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | Window Height | Window Parapet Height | Door Height |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FCB1 | 150 | 0 | 290 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB2 | 540 | 0 | 680 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB3 | 150 | 1160 | 290 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB4 | 540 | 1160 | 680 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB5 | 3880 | 1160 | 4020 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB6 | 3480 | 1160 | 3620 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB7 | 3480 | 0 | 3620 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB8 | 3880 | 0 | 4020 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB09 | 1705 | 0 | 1845 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB10 | 2415 | 1160 | 2555 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB11 | 2060 | 1160 | 2200 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB12 | 1705 | 1160 | 1845 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB13 | 2415 | 0 | 2555 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB14 | 2060 | 0 | 2200 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB15 | 3105 | 1160 | 3245 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB16 | 2770 | 1160 | 2910 | 1160 | 8 | 29 | 0 | 0 | 70 | 180 | 0 |
| FCB17 | 895 | 0 | 1035 | 0 | 8 | -29 | 0 | 0 | 70 | 180 | 0 |
| FCB18 | 1230 | 0 | 1300 | 0 | 8 | -29 | 0 | 0 | 120 | 130 | 0 |
| FCB19 | 1330 | 0 | 1400 | 0 | 8 | -29 | 0 | 0 | 120 | 130 | 0 |
| FCB20 | 1430 | 0 | 1500 | 0 | 8 | -29 | 0 | 0 | 120 | 130 | 0 |
| FCB21 | 2660 | 395 | 2660 | 305 | 8 | -29 | 0 | 0 | 0 | 0 | 210 |

# GROUND STORY

## CONSTRUCTIVE WALL RETROFIT JACKET PROPERTIES

| Jackey Name | X1 | Y1 | X2 | Y2 | Jacket Width | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | Window Height | Window Parapet Height | Door Height |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FCZ01 | 2060 | 1167.5 | 2200 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ02 | 2415 | 1167.5 | 2555 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ03 | 150 | -7.5 | 290 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ4 | 3480 | -7.5 | 3620 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ5 | 3880 | -7.5 | 4020 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ6 | 3480 | 1167.5 | 3620 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |

## CONSTRUCTIVE WALL RETROFIT JACKET PROPERTIES

| Jackey Name | X1 | Y1 | X2 | Y2 | Jacket Width | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | Window Height | Window Parapet Height | Door Height |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FCZ7 | 3880 | 1167.5 | 4020 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ8 | 540 | -7.5 | 680 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ9 | 150 | 1167.5 | 290 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ10 | 540 | 1167.5 | 680 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ11 | 1705 | -7.5 | 1845 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ12 | 2060 | -7.5 | 2200 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ13 | 2415 | -7.5 | 2555 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ14 | 1705 | 1167.5 | 1845 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ15 | 4137.5 | 675 | 4137.5 | 485 | 8 | 21.5 | 0 | 0 | 200 | 70 | 0 |
| FCZ16 | -2.5 | 680 | -2.5 | 480 | 8 | -17.5 | 0 | 0 | 0 | 0 | 230 |
| FCZ17 | -2.5 | 680 | -2.5 | 480 | 8 | -13.5 | 0 | 0 | 0 | 0 | 230 |
| FCZ18 | 4137.5 | 675 | 4137.5 | 485 | 8 | -21.5 | 0 | 0 | 200 | 70 | 0 |
| FCZ19 | -2.5 | 680 | -2.5 | 480 | 8 | 21.5 | 0 | 0 | 0 | 0 | 230 |
| FCZ20 | 895 | -7.5 | 1035 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ21 | 1230 | -7.5 | 1300 | -7.5 | 8 | -21.5 | 0 | 0 | 120 | 145 | 0 |
| FCZ22 | 1330.2 | -7.5 | 1400.2 | -7.5 | 8 | -21.5 | 0 | 0 | 120 | 150 | 0 |
| FCZ23 | 1430.2 | -7.5 | 1500.2 | -7.5 | 8 | -21.5 | 0 | 0 | 120 | 150 | 0 |
| FCZ24 | 2770 | -7.5 | 2910 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ25 | 3120 | -7.5 | 3260 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ26 | 895 | 1167.5 | 1035 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ27 | 2770 | 1167.5 | 2910 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ28 | 3105 | 1167.5 | 3245 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FCZ29 | 1282.5 | 1167.5 | 1452.5 | 1167.5 | 8 | 21.5 | 0 | 0 | 0 | 0 | 230 |

# 1. STORY

## CONSTRUCTIVE WALL RETROFIT JACKET PROPERTIES

| Jackey Name | X1 | Y1 | X2 | Y2 | Jacket Width | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | Window Height | Window Parapet Height | Door Height |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FC101 | 3880 | 1167.5 | 4020 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC102 | 3480 | 1167.5 | 3620 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC103 | 2415 | 1167.5 | 2555 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC104 | -2.5 | 675 | -2.5 | 485 | 8 | -17.5 | 0 | 0 | 200 | 70 | 0 |
| FC105 | 3105 | 1167.5 | 3245 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC106 | 2770 | 1167.5 | 2910 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC107 | 1282.5 | 1167.5 | 1452.5 | 1167.5 | 8 | 21.5 | 0 | 0 | 0 | 0 | 230 |

# CONSTRUCTIVE WALL RETROFIT JACKET PROPERTIES

| Jackey Name | X1 | Y1 | X2 | Y2 | Jacket Width | Jacket Eccentricity | Jacket Top Level | Jacket Bottom Level | Window Height | Window Parapet Height | Door Height |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FC108 | 895 | 1167.5 | 1035 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC109 | 4137.5 | 675 | 4137.5 | 485 | 8 | 21.5 | 0 | 0 | 200 | 70 | 0 |
| FC110 | 150 | 1167.5 | 290 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC111 | 540 | 1167.5 | 680 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC112 | 1705 | 1167.5 | 1845 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC113 | 2060 | 1167.5 | 2200 | 1167.5 | 8 | 21.5 | 0 | 0 | 195 | 75 | 0 |
| FC114 | 540 | -7.5 | 680 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC115 | 150 | -7.5 | 290 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC116 | 895 | -7.5 | 1035 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC117 | 1230 | -7.5 | 1300 | -7.5 | 8 | -21.5 | 0 | 0 | 120 | 145 | 0 |
| FC118 | 1330.2 | -7.5 | 1400.2 | -7.5 | 8 | -21.5 | 0 | 0 | 120 | 150 | 0 |
| FC119 | 1430.2 | -7.5 | 1500.2 | -7.5 | 8 | -21.5 | 0 | 0 | 120 | 150 | 0 |
| FC120 | 1705 | -7.5 | 1845 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC121 | 2060 | -7.5 | 2200 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC122 | 2415 | -7.5 | 2555 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC123 | 2770 | -7.5 | 2910 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC124 | 3120 | -7.5 | 3260 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC125 | 3480 | -7.5 | 3620 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |
| FC126 | 3880 | -7.5 | 4020 | -7.5 | 8 | -21.5 | 0 | 0 | 195 | 75 | 0 |

ICONS AND DESCRIPTIONS USED

Constructive Retrofit Projet, at the top and bottom of the window or at the top of the door duvar parçalarında devam ettirilmesidir.Duvar boşluklarında mantonun devam ettirilmesi dolu duvar parçalarındaki mantoların rijitliğini artırır ve binada daha iyi bir güçlendirme sağlar.

X1:Beginning Jacket X Coordinate (Right Direction +)

Y1:Beginning Jacket Y Coordinate (Bottom Direction +)

X2:End of Jacket X Coordinate (Right Direction +)

Y2:End of Jacket Y Coordinate (Bottom Direction +)

Jacket Top Level: Bond Beam on the Wall, Relative Distance From Storey Top Level (The Bottom Direction -))

Jacket Bottom Lavel: The bottom of the wall,relative distance from storey lower Level (The Top Direction +))

Height of Window:Height of Window at the location of Jacket

Height of Window Parapet:Height of Window Parapet at the location of Jacket

Height of Door :Height of Door at the location of Jacket

# BASEMENT STORY

## SLAB GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G Slab | Q Slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB01 | 5 | 0 | 430 | 450 | 5 | 450 | 430 | 0 | 220 | 200 | 0 | 10 |
| SB02 | 430 | 0 | 785 | 450 | 430 | 450 | 785 | 0 | 220 | 200 | 0 | 10 |
| SB03 | 785 | 0 | 1140 | 450 | 785 | 450 | 1140 | 0 | 220 | 200 | 0 | 10 |
| SB04 | 1140 | 0 | 1595 | 450 | 1140 | 450 | 1595 | 0 | 220 | 200 | 0 | 10 |
| SB05 | 1595 | 0 | 1950 | 450 | 1595 | 450 | 1950 | 0 | 220 | 200 | 0 | 10 |
| SB06 | 3370 | 710 | 4130 | 1160 | 3370 | 1160 | 4130 | 710 | 220 | 200 | 0 | 10 |
| SB07 | 2305 | 0 | 2660 | 450 | 2305 | 450 | 2660 | 0 | 220 | 200 | 0 | 10 |
| SB08 | 3370 | 0 | 4130 | 450 | 3370 | 450 | 4130 | 0 | 220 | 200 | 0 | 10 |
| SB09 | 5 | 450 | 4130 | 710 | 5 | 710 | 4130 | 450 | 220 | 200 | 0 | 10 |
| SB10 | 5 | 710 | 430 | 1160 | 5 | 1160 | 430 | 710 | 220 | 200 | 0 | 10 |
| SB11 | 430 | 710 | 785 | 1160 | 430 | 1160 | 785 | 710 | 220 | 200 | 0 | 10 |
| SB12 | 785 | 710 | 1140 | 1160 | 785 | 1160 | 1140 | 710 | 220 | 200 | 0 | 10 |
| SB13 | 1140 | 710 | 1595 | 1160 | 1140 | 1160 | 1595 | 710 | 220 | 200 | 0 | 10 |
| SB14 | 1595 | 710 | 1950 | 1160 | 1595 | 1160 | 1950 | 710 | 220 | 200 | 0 | 10 |
| SB15 | 1950 | 710 | 2305 | 1160 | 1950 | 1160 | 2305 | 710 | 220 | 200 | 0 | 10 |
| SB16 | 2305 | 710 | 2660 | 1160 | 2305 | 1160 | 2660 | 710 | 220 | 200 | 0 | 10 |
| SB17 | 3015 | 0 | 3370 | 450 | 3015 | 450 | 3370 | 0 | 220 | 200 | 0 | 10 |
| SB18 | 2660 | 0 | 3015 | 450 | 2660 | 450 | 3015 | 0 | 220 | 200 | 0 | 10 |
| SB19 | 1950 | 0 | 2305 | 450 | 1950 | 450 | 2305 | 0 | 220 | 200 | 0 | 10 |
| SB20 | 2660 | 710 | 3370 | 1160 | 2660 | 1160 | 3370 | 710 | 220 | 200 | 0 | 10 |

# GROUND STORY

## SLAB GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G Slab | Q Slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SZ01 | -2.5 | -7.5 | 430 | 450 | -2.5 | 450 | 430 | -7.5 | 250 | 200 | 0 | 10 |
| SZ02 | 430 | -7.5 | 785 | 450 | 430 | 450 | 785 | -7.5 | 250 | 200 | 0 | 10 |
| SZ03 | 785 | -7.5 | 1140 | 450 | 785 | 450 | 1140 | -7.5 | 250 | 200 | 0 | 10 |
| SZ04 | 1140 | -7.5 | 1595 | 450 | 1140 | 450 | 1595 | -7.5 | 220 | 200 | 0 | 10 |
| SZ05 | 1595 | -7.5 | 1950 | 450 | 1595 | 450 | 1950 | -7.5 | 250 | 200 | 0 | 10 |
| SZ06 | 1950 | -7.5 | 2305 | 450 | 1950 | 450 | 2305 | -7.5 | 250 | 200 | 0 | 10 |

## SLAB GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G Slab | Q Slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SZ07 | 2305 | 0 | 2660 | 450 | 2305 | 450 | 2660 | 0 | 250 | 200 | 0 | 10 |
| SZ08 | 3370 | 710 | 4137.5 | 1167.5 | 3370 | 1167.5 | 4137.5 | 710 | 250 | 200 | 0 | 10 |
| SZ09 | 3370 | -7.5 | 4137.5 | 450 | 3370 | 450 | 4137.5 | -7.5 | 250 | 200 | 0 | 10 |
| SZ10 | -2.5 | 450 | 4137.5 | 710 | -2.5 | 710 | 4137.5 | 450 | 250 | 200 | 0 | 10 |
| SZ11 | -2.5 | 710 | 420 | 1167.5 | -2.5 | 1167.5 | 420 | 710 | 250 | 200 | 0 | 10 |
| SZ12 | 420 | 710 | 775 | 1167.5 | 420 | 1167.5 | 775 | 710 | 250 | 200 | 0 | 10 |
| SZ13 | 784.8 | 707.8 | 1140 | 1167.5 | 784.8 | 1167.5 | 1140 | 707.8 | 250 | 200 | 0 | 10 |
| SZ14 | 1140 | 710 | 1595 | 1167.5 | 1140 | 1167.5 | 1595 | 710 | 250 | 200 | 0 | 10 |
| SZ15 | 1595 | 710 | 1950 | 1167.5 | 1595 | 1167.5 | 1950 | 710 | 250 | 200 | 0 | 10 |
| SZ16 | 1950 | 710 | 2305 | 1167.5 | 1950 | 1167.5 | 2305 | 710 | 250 | 200 | 0 | 10 |
| SZ17 | 2305 | 710 | 2660 | 1167.5 | 2305 | 1167.5 | 2660 | 710 | 250 | 200 | 0 | 10 |
| SZ18 | 2660 | 710 | 3015 | 1167.5 | 2660 | 1167.5 | 3015 | 710 | 250 | 200 | 0 | 10 |
| SZ19 | 3015 | 710 | 3370 | 1167.5 | 3015 | 1167.5 | 3370 | 710 | 250 | 200 | 0 | 10 |
| SZ20 | 2660 | -7.5 | 3015 | 450 | 2660 | 450 | 3015 | -7.5 | 250 | 200 | 0 | 10 |
| SZ21 | 3015 | -7.5 | 3370 | 450 | 3015 | 450 | 3370 | -7.5 | 250 | 200 | 0 | 10 |

# 1. STORY

## SLAB GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G Slab | Q Slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S101 | -2.5 | -7.5 | 430 | 450 | -2.5 | 450 | 430 | -7.5 | 80 | 150 | 0 | 10 |
| S102 | 430 | -7.5 | 785 | 450 | 430 | 450 | 785 | -7.5 | 80 | 150 | 0 | 10 |
| S103 | 785 | -7.5 | 1140 | 450 | 785 | 450 | 1140 | -7.5 | 80 | 150 | 0 | 10 |
| S104 | 1140 | -7.5 | 1595 | 450 | 1140 | 450 | 1595 | -7.5 | 80 | 150 | 0 | 10 |
| S105 | 1595 | -7.5 | 1950 | 450 | 1595 | 450 | 1950 | -7.5 | 80 | 150 | 0 | 10 |
| S106 | 1950 | -7.5 | 2305 | 450 | 1950 | 450 | 2305 | -7.5 | 80 | 150 | 0 | 10 |
| S107 | 2305 | -7.5 | 2660 | 450 | 2305 | 450 | 2660 | -7.5 | 80 | 150 | 0 | 10 |
| S108 | 3370 | 710 | 4137.5 | 1167.5 | 3370 | 1167.5 | 4137.5 | 710 | 80 | 150 | 0 | 10 |
| S109 | 3370 | -7.5 | 4137.5 | 450 | 3370 | 450 | 4137.5 | -7.5 | 80 | 150 | 0 | 10 |
| S110 | -2.5 | 450 | 4137.5 | 710 | -2.5 | 710 | 4137.5 | 450 | 80 | 150 | 0 | 10 |
| S111 | -2.5 | 710 | 420 | 1167.5 | -2.5 | 1167.5 | 420 | 710 | 80 | 150 | 0 | 10 |
| S112 | 420 | 710 | 775 | 1167.5 | 420 | 1167.5 | 775 | 710 | 80 | 150 | 0 | 10 |
| S113 | 784.8 | 707.8 | 1140 | 1167.5 | 784.8 | 1167.5 | 1140 | 707.8 | 80 | 150 | 0 | 10 |
| S114 | 1140 | 710 | 1595 | 1167.5 | 1140 | 1167.5 | 1595 | 710 | 80 | 150 | 0 | 10 |

# SLAB GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G Slab | Q Slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S115 | 1595 | 710 | 1950 | 1167.5 | 1595 | 1167.5 | 1950 | 710 | 80 | 150 | 0 | 10 |
| S116 | 1950 | 710 | 2305 | 1167.5 | 1950 | 1167.5 | 2305 | 710 | 80 | 150 | 0 | 10 |
| S117 | 2305 | 710 | 2660 | 1160 | 2305 | 1167.5 | 2660 | 710 | 80 | 150 | 0 | 10 |
| S118 | 2660 | 710 | 3015 | 1167.5 | 2660 | 1160 | 3015 | 710 | 80 | 150 | 0 | 10 |
| S119 | 3015 | 710 | 3370 | 1167.5 | 3015 | 1167.5 | 3370 | 710 | 80 | 150 | 0 | 10 |
| S120 | 2660 | -7.5 | 3015 | 450 | 2660 | 450 | 3015 | -7.5 | 80 | 150 | 0 | 10 |
| S121 | 3015 | 0 | 3370 | 450 | 3015 | 450 | 3370 | 0 | 80 | 150 | 0 | 10 |

ICONS AND DESCRIPTIONS USED

Slab only can it be used to transfer load the program. the slab for reinforced concrete and static calculations Reinforced concrete account axis is used.

X1:Slab left top corner X coordinate (Right Direction +)
Y1:Slab left top corner Y coordinate (Bottom Direction +)
X2:Slab Rightbottom corner X coordinate (Right Direction +)
Y2:Slab Right bottom corner Y coordinate (Bottom Direction +)
X3:Slab Right Top Corner X Coordinate (Right Direction +)
Y3:Slab Right Top Corner Y Coordinate (Bottom Direction +)
X4:Slab Left Bottom Corner X Coordinate (Right Direction +)
Y4:Slab Left Bottom Corner Y Coordinate (Bottom Direction +)
G slab:Load on the Slab(concrete of slab self weight is included account by Program )
Q slab:Live load on Slab
Slab Elevation: Slab top coordinate, from the coordinate top storey the relative distance (Bottom Direction (-))
Slab Height:Slab reinforced concrete is thickness.

# BASEMENT STORY

## SLAB REINFORCED CONCRETE CALCULATION AXIS GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G slab | Q slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DB01 | 5 | 0 | 430 | 450 | 5 | 450 | 430 | 0 | 220 | 200 | 0 | 10 |
| DB02 | 430 | 0 | 785 | 450 | 430 | 450 | 785 | 0 | 220 | 200 | 0 | 10 |
| DB03 | 785 | 0 | 1140 | 450 | 785 | 450 | 1140 | 0 | 220 | 200 | 0 | 10 |
| DB04 | 1140 | 0 | 1595 | 450 | 1140 | 450 | 1595 | 0 | 220 | 200 | 0 | 10 |
| DB05 | 1595 | 0 | 1950 | 450 | 1595 | 450 | 1950 | 0 | 220 | 200 | 0 | 10 |
| DB06 | 3370 | 710 | 4130 | 1160 | 3370 | 1160 | 4130 | 710 | 220 | 200 | 0 | 10 |
| DB07 | 2305 | 0 | 2660 | 450 | 2305 | 450 | 2660 | 0 | 220 | 200 | 0 | 10 |
| DB08 | 3370 | 0 | 4130 | 450 | 3370 | 450 | 4130 | 0 | 220 | 200 | 0 | 10 |
| DB09 | 5 | 450 | 4130 | 710 | 5 | 710 | 4130 | 450 | 220 | 200 | 0 | 10 |
| DB10 | 5 | 710 | 430 | 1160 | 5 | 1160 | 430 | 710 | 220 | 200 | 0 | 10 |
| DB11 | 430 | 710 | 785 | 1160 | 430 | 1160 | 785 | 710 | 220 | 200 | 0 | 10 |
| DB12 | 785 | 710 | 1140 | 1160 | 785 | 1160 | 1140 | 710 | 220 | 200 | 0 | 10 |
| DB13 | 1140 | 710 | 1595 | 1160 | 1140 | 1160 | 1595 | 710 | 220 | 200 | 0 | 10 |
| DB14 | 1595 | 710 | 1950 | 1160 | 1595 | 1160 | 1950 | 710 | 220 | 200 | 0 | 10 |
| DB15 | 1950 | 710 | 2305 | 1160 | 1950 | 1160 | 2305 | 710 | 220 | 200 | 0 | 10 |
| DB16 | 2305 | 710 | 2660 | 1160 | 2305 | 1160 | 2660 | 710 | 220 | 200 | 0 | 10 |
| DB17 | 3015 | 0 | 3370 | 450 | 3015 | 450 | 3370 | 0 | 220 | 200 | 0 | 10 |
| DB18 | 2660 | 0 | 3015 | 450 | 2660 | 450 | 3015 | 0 | 220 | 200 | 0 | 10 |
| DB19 | 1950 | 0 | 2305 | 450 | 1950 | 450 | 2305 | 0 | 220 | 200 | 0 | 10 |
| DB20 | 2660 | 710 | 3370 | 1160 | 2660 | 1160 | 3370 | 710 | 220 | 200 | 0 | 10 |

# GROUND STORY

## SLAB REINFORCED CONCRETE CALCULATION AXIS GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G slab | Q slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DZ01 | -2.5 | -7.5 | 430 | 450 | -2.5 | 450 | 430 | -7.5 | 250 | 200 | 0 | 10 |
| DZ02 | 430 | -7.5 | 785 | 450 | 430 | 450 | 785 | -7.5 | 250 | 200 | 0 | 10 |
| DZ03 | 785 | -7.5 | 1140 | 450 | 785 | 450 | 1140 | -7.5 | 250 | 200 | 0 | 10 |
| DZ04 | 1140 | -7.5 | 1595 | 450 | 1140 | 450 | 1595 | -7.5 | 250 | 200 | 0 | 10 |

# SLAB REINFORCED CONCRETE CALCULATION AXIS GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G slab | Q slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DZ05 | 1595 | -7.5 | 1950 | 450 | 1595 | 450 | 1950 | -7.5 | 250 | 200 | 0 | 10 |
| DZ06 | 1950 | -7.5 | 2305 | 450 | 1950 | 450 | 2305 | -7.5 | 250 | 200 | 0 | 10 |
| DZ07 | 2305 | 0 | 2660 | 450 | 2305 | 450 | 2660 | 0 | 250 | 200 | 0 | 10 |
| DZ08 | 3370 | 710 | 4137.5 | 1167.5 | 3370 | 1167.5 | 4137.5 | 710 | 250 | 200 | 0 | 10 |
| DZ09 | 3370 | -7.5 | 4137.5 | 450 | 3370 | 450 | 4137.5 | -7.5 | 250 | 200 | 0 | 10 |
| DZ10 | -2.5 | 450 | 4137.5 | 710 | -2.5 | 710 | 4137.5 | 450 | 250 | 200 | 0 | 10 |
| DZ11 | -2.5 | 710 | 420 | 1167.5 | -2.5 | 1167.5 | 420 | 710 | 250 | 200 | 0 | 10 |
| DZ12 | 420 | 710 | 775 | 1167.5 | 420 | 1167.5 | 775 | 710 | 250 | 200 | 0 | 10 |
| DZ13 | 784.8 | 707.8 | 1140 | 1167.5 | 784.8 | 1167.5 | 1140 | 707.8 | 250 | 200 | 0 | 10 |
| DZ14 | 1140 | 710 | 1595 | 1167.5 | 1140 | 1167.5 | 1595 | 710 | 250 | 200 | 0 | 10 |
| DZ15 | 1595 | 710 | 1950 | 1167.5 | 1595 | 1167.5 | 1950 | 710 | 250 | 200 | 0 | 10 |
| DZ16 | 1950 | 710 | 2305 | 1167.5 | 1950 | 1167.5 | 2305 | 710 | 250 | 200 | 0 | 10 |
| DZ17 | 2305 | 710 | 2660 | 1167.5 | 2305 | 1167.5 | 2660 | 710 | 250 | 200 | 0 | 10 |
| DZ18 | 2660 | 710 | 3015 | 1167.5 | 2660 | 1167.5 | 3015 | 710 | 250 | 200 | 0 | 10 |
| DZ19 | 3015 | 710 | 3370 | 1167.5 | 3015 | 1167.5 | 3370 | 710 | 250 | 200 | 0 | 10 |
| DZ20 | 2660 | -7.5 | 3015 | 450 | 2660 | 450 | 3015 | -7.5 | 250 | 200 | 0 | 10 |
| DZ21 | 3015 | -7.5 | 3370 | 450 | 3015 | 450 | 3370 | -7.5 | 250 | 200 | 0 | 10 |

## 1. STORY

# SLAB REINFORCED CONCRETE CALCULATION AXIS GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G slab | Q slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D101 | -2.5 | -7.5 | 430 | 450 | -2.5 | 450 | 430 | -7.5 | 80 | 150 | 0 | 10 |
| D102 | 430 | -7.5 | 785 | 450 | 430 | 450 | 785 | -7.5 | 80 | 150 | 0 | 10 |
| D103 | 785 | -7.5 | 1140 | 450 | 785 | 450 | 1140 | -7.5 | 80 | 150 | 0 | 10 |
| D104 | 1140 | -7.5 | 1595 | 450 | 1140 | 450 | 1595 | -7.5 | 80 | 150 | 0 | 10 |
| D105 | 1595 | -7.5 | 1950 | 450 | 1595 | 450 | 1950 | -7.5 | 80 | 150 | 0 | 10 |
| D106 | 1950 | -7.5 | 2305 | 450 | 1950 | 450 | 2305 | -7.5 | 80 | 150 | 0 | 10 |
| D107 | 2305 | -7.5 | 2660 | 450 | 2305 | 450 | 2660 | -7.5 | 80 | 150 | 0 | 10 |
| D108 | 3370 | 710 | 4137.5 | 1167.5 | 3370 | 1167.5 | 4137.5 | 710 | 80 | 150 | 0 | 10 |
| D109 | 3370 | -7.5 | 4137.5 | 450 | 3370 | 450 | 4137.5 | -7.5 | 80 | 150 | 0 | 10 |

# SLAB REINFORCED CONCRETE CALCULATION AXIS GEOMETRIC PROPERTIES

| Slab Name | X1 | Y1 | X2 | Y2 | X3 | Y3 | X4 | Y4 | G slab | Q slab | Slab Elevation | Slab Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D110 | -2.5 | 450 | 4137.5 | 710 | -2.5 | 710 | 4137.5 | 450 | 80 | 150 | 0 | 10 |
| D111 | -2.5 | 710 | 420 | 1167.5 | -2.5 | 1167.5 | 420 | 710 | 80 | 150 | 0 | 10 |
| D112 | 420 | 710 | 775 | 1167.5 | 420 | 1167.5 | 775 | 710 | 80 | 150 | 0 | 10 |
| D113 | 784.8 | 707.8 | 1140 | 1167.5 | 784.8 | 1167.5 | 1140 | 707.8 | 80 | 150 | 0 | 10 |
| D114 | 1140 | 710 | 1595 | 1167.5 | 1140 | 1167.5 | 1595 | 710 | 80 | 150 | 0 | 10 |
| D115 | 1595 | 710 | 1950 | 1167.5 | 1595 | 1167.5 | 1950 | 710 | 80 | 150 | 0 | 10 |
| D116 | 1950 | 710 | 2305 | 1167.5 | 1950 | 1167.5 | 2305 | 710 | 80 | 150 | 0 | 10 |
| D117 | 2305 | 710 | 2660 | 1160 | 2305 | 1167.5 | 2660 | 710 | 80 | 150 | 0 | 10 |
| D118 | 2660 | 710 | 3015 | 1167.5 | 2660 | 1160 | 3015 | 710 | 80 | 150 | 0 | 10 |
| D119 | 3015 | 710 | 3370 | 1167.5 | 3015 | 1167.5 | 3370 | 710 | 80 | 150 | 0 | 10 |
| D120 | 2660 | -7.5 | 3015 | 450 | 2660 | 450 | 3015 | -7.5 | 80 | 150 | 0 | 10 |
| D121 | 3015 | 0 | 3370 | 450 | 3015 | 450 | 3370 | 0 | 80 | 150 | 0 | 10 |

ICONS AND DESCRIPTIONS USED

The program for slab reinforced concrete and static account"Reinforced Concrete Account Axis" used.
Slab only can it be used to transfer load.
X1:Slab Reinforced Concrete Account Axis left top corner X Coordinate (Right Direction +)
Y1:Slab Reinforced Concrete Account Axis left top corner Y Coordinate (Bottom Direction +)
X2:Slab Reinforced Concrete Account Axis right bottom corner X Coordinete (Right Direction +)
Y2:Slab Reinforced Concrete Account Axis right bottom corner Y Coordinete (Bottom Direction +)
X3:Slab Reinforced Concrete Account Axis right top corner X Coordinete (Right Direction +)
Y3:Slab Reinforced Concrete Account Axis right top corner Y Coordinete (Bottom Direction +)
X4:Slab Reinforced Concrete Account Axis left bottom corner X Coordinete (Right Direction +)
Y4:Slab Reinforced Concrete Account Axis left bottom corner Y Coordinete (Bottom Direction +)
G slab:Coating load on Slab Reinforced Concrete Account Axis (concrete of slab self weight by program is included account)
Q slab:The Live Load on Slab Reinforced Concrete Account Axis
Slab Elevation: Top Coordinate of Slab Reinforced Concrete Account Axis, from the coordinate top storey the (bottom direction (-))
Slab Height: Reinforced Concrete Thickness of Slab Reinforced Concrete Account Axis.

# BASEMENT STORY

## HORIZONTAL BOND BEAM PROPERTIES

| Bond Beam Name | X1 | Y1 | X2 | Y2 | Bond Beam Width | Bond Beam Height | Extra G Load | Extra Q Load |
|---|---|---|---|---|---|---|---|---|
| HB01 | 1140 | 450 | 1595 | 450 | 50 | 80 | 0 | 0 |
| HB02 | 150 | 0 | 290 | 0 | 50 | 40 | 0 | 0 |
| HB03 | 540 | 0 | 680 | 0 | 50 | 40 | 0 | 0 |
| HB04 | 895 | 0 | 1035 | 0 | 50 | 40 | 0 | 0 |
| HB05 | 1230 | 0 | 1300 | 0 | 50 | 40 | 0 | 0 |
| HB06 | 1330 | 0 | 1400 | 0 | 50 | 40 | 0 | 0 |
| HB07 | 1430 | 0 | 1500 | 0 | 50 | 40 | 0 | 0 |
| HB08 | 1705 | 0 | 1845 | 0 | 50 | 40 | 0 | 0 |
| HB09 | 2060 | 0 | 2200 | 0 | 50 | 40 | 0 | 0 |
| HB10 | 2415 | 0 | 2555 | 0 | 50 | 40 | 0 | 0 |
| HB11 | 2770 | 0 | 2910 | 0 | 50 | 40 | 0 | 0 |
| HB12 | 3120 | 0 | 3260 | 0 | 50 | 40 | 0 | 0 |
| HB13 | 3480 | 0 | 3620 | 0 | 50 | 40 | 0 | 0 |
| HB14 | 3880 | 0 | 4020 | 0 | 50 | 40 | 0 | 0 |
| HB15 | 3880 | 1160 | 4020 | 1160 | 50 | 40 | 0 | 0 |
| HB16 | 3480 | 1160 | 3620 | 1160 | 50 | 40 | 0 | 0 |
| HB17 | 3105 | 1160 | 3245 | 1160 | 50 | 40 | 0 | 0 |
| HB18 | 2770 | 1160 | 2910 | 1160 | 50 | 40 | 0 | 0 |
| HB19 | 150 | 1160 | 290 | 1160 | 50 | 40 | 0 | 0 |
| HB20 | 540 | 1160 | 680 | 1160 | 50 | 40 | 0 | 0 |
| HB21 | 895 | 1160 | 1035 | 1160 | 50 | 40 | 0 | 0 |
| HB22 | 1705 | 1160 | 1845 | 1160 | 50 | 40 | 0 | 0 |
| HB23 | 2060 | 1160 | 2200 | 1160 | 50 | 40 | 0 | 0 |
| HB24 | 2415 | 1160 | 2555 | 1160 | 50 | 40 | 0 | 0 |
| HB25 | 295 | 450 | 385 | 450 | 50 | 75 | 0 | 0 |
| HB26 | 825 | 450 | 915 | 450 | 50 | 75 | 0 | 0 |
| HB27 | 655 | 450 | 745 | 450 | 50 | 75 | 0 | 0 |
| HB28 | 1635 | 450 | 1725 | 450 | 50 | 75 | 0 | 0 |
| HB29 | 1990 | 450 | 2080 | 450 | 50 | 75 | 0 | 0 |
| HB30 | 2345 | 450 | 2435 | 450 | 50 | 75 | 0 | 0 |
| HB31 | 2885 | 450 | 2975 | 450 | 50 | 75 | 0 | 0 |
| HB32 | 3410 | 450 | 3500 | 450 | 50 | 75 | 0 | 0 |
| HB33 | 295 | 710 | 385 | 710 | 50 | 75 | 0 | 0 |
| HB34 | 825 | 710 | 915 | 710 | 50 | 75 | 0 | 0 |
| HB35 | 655 | 710 | 745 | 710 | 50 | 75 | 0 | 0 |
| HB36 | 1205 | 710 | 1295 | 710 | 50 | 75 | 0 | 0 |
| HB37 | 1805 | 710 | 1895 | 710 | 50 | 75 | 0 | 0 |

## HORIZONTAL BOND BEAM PROPERTIES

| Bond Beam Name | X1 | Y1 | X2 | Y2 | Bond Beam Width | Bond Beam Height | Extra G Load | Extra Q Load |
|---|---|---|---|---|---|---|---|---|
| HB38 | 2005 | 710 | 2095 | 710 | 50 | 75 | 0 | 0 |
| HB39 | 3015 | 450 | 3015 | 0 | 50 | 40 | 0 | 0 |
| HB40 | 2515 | 710 | 2605 | 710 | 50 | 75 | 0 | 0 |
| HB41 | 2660 | 395 | 2660 | 305 | 50 | 75 | 0 | 0 |
| HB42 | 3225 | 710 | 3315 | 710 | 50 | 75 | 0 | 0 |
| HB43 | 3425 | 710 | 3515 | 710 | 50 | 75 | 0 | 0 |
| HB44 | 2305 | 450 | 2305 | 0 | 50 | 40 | 0 | 0 |
| HB45 | 3015 | 1160 | 3015 | 710 | 20 | 0 | 0 | 0 |

# GROUND STORY

## HORIZONTAL BOND BEAM PROPERTIES

| Bond Beam Name | X1 | Y1 | X2 | Y2 | Bond Beam Width | Bond Beam Height | Extra G Load | Extra Q Load |
|---|---|---|---|---|---|---|---|---|
| HZ01 | 1140 | 450 | 1595 | 450 | 20 | 110 | 0 | 0 |
| HZ02 | 1140 | 710 | 1595 | 710 | 20 | 110 | 0 | 0 |
| HZ03 | 150 | 1167.5 | 290 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ04 | 540 | -7.5 | 680 | -7.5 | 35 | 50 | 0 | 0 |
| HZ05 | 150 | -7.5 | 290 | -7.5 | 35 | 50 | 0 | 0 |
| HZ06 | 895 | -7.5 | 1035 | -7.5 | 35 | 50 | 0 | 0 |
| HZ07 | 1230 | -7.5 | 1300 | -7.5 | 35 | 50 | 0 | 0 |
| HZ08 | 1330.2 | -7.5 | 1400.2 | -7.5 | 35 | 50 | 0 | 0 |
| HZ09 | 1430.2 | -7.5 | 1500.2 | -7.5 | 35 | 50 | 0 | 0 |
| HZ10 | 1705 | -7.5 | 1845 | -7.5 | 35 | 50 | 0 | 0 |
| HZ11 | 2060 | -7.5 | 2200 | -7.5 | 35 | 50 | 0 | 0 |
| HZ12 | 2415 | -7.5 | 2555 | -7.5 | 35 | 50 | 0 | 0 |
| HZ13 | 2770 | -7.5 | 2910 | -7.5 | 35 | 50 | 0 | 0 |
| HZ14 | 3120 | -7.5 | 3260 | -7.5 | 35 | 50 | 0 | 0 |
| HZ15 | 3480 | -7.5 | 3620 | -7.5 | 35 | 50 | 0 | 0 |
| HZ16 | 3880 | -7.5 | 4020 | -7.5 | 35 | 50 | 0 | 0 |
| HZ17 | 4137.5 | 675 | 4137.5 | 485 | 35 | 50 | 0 | 0 |
| HZ18 | 540 | 1167.5 | 680 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ19 | 895 | 1167.5 | 1035 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ20 | 1705 | 1167.5 | 1845 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ21 | 2060 | 1167.5 | 2200 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ22 | 2415 | 1167.5 | 2555 | 1167.5 | 35 | 50 | 0 | 0 |

## HORIZONTAL BOND BEAM PROPERTIES

| Bond Beam Name | X1 | Y1 | X2 | Y2 | Bond Beam Width | Bond Beam Height | Extra G Load | Extra Q Load |
|---|---|---|---|---|---|---|---|---|
| HZ23 | 2770 | 1167.5 | 2910 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ24 | 3105 | 1167.5 | 3245 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ25 | 3480 | 1167.5 | 3620 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ26 | 3880 | 1167.5 | 4020 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ27 | 1282.5 | 1167.5 | 1452.5 | 1167.5 | 35 | 50 | 0 | 0 |
| HZ28 | 295 | 450 | 385 | 450 | 20 | 110 | 0 | 0 |
| HZ29 | 655 | 450 | 745 | 450 | 20 | 110 | 0 | 0 |
| HZ30 | 825 | 450 | 915 | 450 | 20 | 110 | 0 | 0 |
| HZ31 | 1635 | 450 | 1725 | 450 | 20 | 110 | 0 | 0 |
| HZ32 | 1990 | 450 | 2080 | 450 | 20 | 110 | 0 | 0 |
| HZ33 | 3015 | 450 | 3015 | -7.5 | 20 | 10 | 0 | 0 |
| HZ34 | 3250 | 450 | 3340 | 450 | 20 | 110 | 0 | 0 |
| HZ35 | 3580 | 450 | 3670 | 450 | 20 | 110 | 0 | 0 |
| HZ36 | 295 | 710 | 385 | 710 | 20 | 110 | 0 | 0 |
| HZ37 | 655 | 710 | 745 | 710 | 20 | 110 | 0 | 0 |
| HZ38 | 825 | 710 | 915 | 710 | 20 | 110 | 0 | 0 |
| HZ39 | 1805 | 710 | 1895 | 710 | 20 | 110 | 0 | 0 |
| HZ40 | 2005 | 710 | 2095 | 710 | 20 | 110 | 0 | 0 |
| HZ41 | 2515 | 710 | 2605 | 710 | 20 | 110 | 0 | 0 |
| HZ42 | 2870 | 710 | 2960 | 710 | 20 | 110 | 0 | 0 |
| HZ43 | 3225 | 710 | 3315 | 710 | 20 | 110 | 0 | 0 |
| HZ44 | 3580 | 710 | 3670 | 710 | 20 | 110 | 0 | 0 |
| HZ45 | 2535 | 450 | 2625 | 450 | 20 | 110 | 0 | 0 |
| HZ46 | -2.5 | 680 | -2.5 | 480 | 35 | 50 | 0 | 0 |

# 1. STORY

## HORIZONTAL BOND BEAM PROPERTIES

| Bond Beam Name | X1 | Y1 | X2 | Y2 | Bond Beam Width | Bond Beam Height | Extra G Load | Extra Q Load |
|---|---|---|---|---|---|---|---|---|
| H101 | 1140 | 450 | 1595 | 450 | 20 | 110 | 0 | 0 |
| H102 | 1140 | 710 | 1595 | 710 | 20 | 110 | 0 | 0 |
| H103 | 150 | 1167.5 | 290 | 1167.5 | 35 | 50 | 0 | 0 |
| H104 | 540 | -7.5 | 680 | -7.5 | 35 | 50 | 0 | 0 |
| H105 | 150 | -7.5 | 290 | -7.5 | 35 | 50 | 0 | 0 |
| H106 | 895 | -7.5 | 1035 | -7.5 | 35 | 50 | 0 | 0 |

# HORIZONTAL BOND BEAM PROPERTIES

| Bond Beam Name | X1 | Y1 | X2 | Y2 | Bond Beam Width | Bond Beam Height | Extra G Load | Extra Q Load |
|---|---|---|---|---|---|---|---|---|
| H107 | 1230 | -7.5 | 1300 | -7.5 | 35 | 50 | 0 | 0 |
| H108 | 1330.2 | -7.5 | 1400.2 | -7.5 | 35 | 50 | 0 | 0 |
| H109 | 1430.2 | -7.5 | 1500.2 | -7.5 | 35 | 50 | 0 | 0 |
| H110 | 1705 | -7.5 | 1845 | -7.5 | 35 | 50 | 0 | 0 |
| H111 | 2060 | -7.5 | 2200 | -7.5 | 35 | 50 | 0 | 0 |
| H112 | 2415 | -7.5 | 2555 | -7.5 | 35 | 50 | 0 | 0 |
| H113 | 2770 | -7.5 | 2910 | -7.5 | 35 | 50 | 0 | 0 |
| H114 | 3120 | -7.5 | 3260 | -7.5 | 35 | 50 | 0 | 0 |
| H115 | 3480 | -7.5 | 3620 | -7.5 | 35 | 50 | 0 | 0 |
| H116 | 3880 | -7.5 | 4020 | -7.5 | 35 | 50 | 0 | 0 |
| H117 | 4137.5 | 675 | 4137.5 | 485 | 35 | 50 | 0 | 0 |
| H118 | 540 | 1167.5 | 680 | 1167.5 | 35 | 50 | 0 | 0 |
| H119 | 895 | 1167.5 | 1035 | 1167.5 | 35 | 50 | 0 | 0 |
| H120 | 1705 | 1167.5 | 1845 | 1167.5 | 35 | 50 | 0 | 0 |
| H121 | 2060 | 1167.5 | 2200 | 1167.5 | 35 | 50 | 0 | 0 |
| H122 | 2415 | 1167.5 | 2555 | 1167.5 | 35 | 50 | 0 | 0 |
| H123 | 2770 | 1167.5 | 2910 | 1167.5 | 35 | 50 | 0 | 0 |
| H124 | 3105 | 1167.5 | 3245 | 1167.5 | 35 | 50 | 0 | 0 |
| H125 | 3480 | 1167.5 | 3620 | 1167.5 | 35 | 50 | 0 | 0 |
| H126 | 3880 | 1167.5 | 4020 | 1167.5 | 35 | 50 | 0 | 0 |
| H127 | 1282.5 | 1167.5 | 1452.5 | 1167.5 | 35 | 50 | 0 | 0 |
| H128 | 295 | 450 | 385 | 450 | 20 | 110 | 0 | 0 |
| H129 | 655 | 450 | 745 | 450 | 20 | 110 | 0 | 0 |
| H130 | 825 | 450 | 915 | 450 | 20 | 110 | 0 | 0 |
| H131 | 1635 | 450 | 1725 | 450 | 20 | 110 | 0 | 0 |
| H132 | 1990 | 450 | 2080 | 450 | 20 | 110 | 0 | 0 |
| H133 | 2345 | 450 | 2435 | 450 | 20 | 110 | 0 | 0 |
| H134 | 3250 | 450 | 3340 | 450 | 20 | 110 | 0 | 0 |
| H135 | 2660 | 1160 | 2660 | 710 | 20 | 50 | 0 | 0 |
| H136 | 295 | 710 | 385 | 710 | 20 | 110 | 0 | 0 |
| H137 | 655 | 710 | 745 | 710 | 20 | 110 | 0 | 0 |
| H138 | 825 | 710 | 915 | 710 | 20 | 110 | 0 | 0 |
| H139 | 1805 | 710 | 1895 | 710 | 20 | 110 | 0 | 0 |
| H140 | 2005 | 710 | 2095 | 710 | 20 | 110 | 0 | 0 |
| H141 | 3370 | 450 | 3707.5 | 450 | 20 | 10 | 0 | 0 |
| H142 | 3400 | 710 | 3490 | 710 | 20 | 110 | 0 | 0 |
| H143 | 3225 | 710 | 3315 | 710 | 20 | 110 | 0 | 0 |
| H144 | 3707.5 | 450 | 4130 | 450 | 20 | 10 | 0 | 0 |
| H145 | 1140 | 1167.5 | 1140 | 710 | 20 | 50 | 0 | 0 |
| H146 | 1595 | 1160 | 1595 | 710 | 20 | 50 | 0 | 0 |

# HORIZONTAL BOND BEAM PROPERTIES

| Bond Beam Name | X1 | Y1 | X2 | Y2 | Bond Beam Width | Bond Beam Height | Extra G Load | Extra Q Load |
|---|---|---|---|---|---|---|---|---|
| H147 | 2305 | 450 | 2305 | 0 | 20 | 50 | 0 | 0 |
| H148 | 2305 | 1160 | 2305 | 710 | 20 | 50 | 0 | 0 |
| H149 | 2345 | 710 | 2435 | 710 | 20 | 110 | 0 | 0 |
| H150 | -2.5 | 675 | -2.5 | 485 | 35 | 50 | 0 | 0 |

ICONS AND DESCRIPTIONS USED

X1:Beginning Bond Beam X Coordinate (Right Direction +)
Y1:Beginning Bond Beam Y Coordinate (Bottom Direction +)
X2:End of Bond Beam X Coordinate (Right Direction +)
Y2:End of Bond Beam Y Coordinate (Bottom Direction +)

# BASEMENT STORY

## DOOR PROPERTIES

| Door Name | X1 | Y1 | X2 | Y2 | Door Width | Door Height | The width of the wall above the door | Unit weight of the wall above the door | Net height of the wall above the door | Unit Area Weight of Door |
|---|---|---|---|---|---|---|---|---|---|---|
| KB01 | 295 | 450 | 385 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB02 | 825 | 450 | 915 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB03 | 655 | 450 | 745 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB04 | 1635 | 450 | 1725 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB05 | 1990 | 450 | 2080 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB06 | 2345 | 450 | 2435 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB07 | 2885 | 450 | 2975 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB08 | 3410 | 450 | 3500 | 450 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB09 | 295 | 710 | 385 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB10 | 825 | 710 | 915 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB11 | 655 | 710 | 745 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB12 | 1205 | 710 | 1295 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB13 | 1805 | 710 | 1895 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB14 | 2005 | 710 | 2095 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB15 | 3425 | 710 | 3515 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB16 | 2515 | 710 | 2605 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB17 | 2660 | 395 | 2660 | 305 | 90 | 210 | 50 | 2400 | 5 | 50 |
| KB18 | 3225 | 710 | 3315 | 710 | 90 | 210 | 50 | 2400 | 5 | 50 |

# GROUND STORY

## DOOR PROPERTIES

| Door Name | X1 | Y1 | X2 | Y2 | Door Width | Door Height | The width of the wall above the door | Unit weight of the wall above the door | Net height of the wall above the door | Unit Area Weight of Door |
|---|---|---|---|---|---|---|---|---|---|---|
| KZ01 | 1282.5 | 1167.5 | 1452.5 | 1167.5 | 170 | 230 | 35 | 2200 | 40 | 50 |
| KZ02 | 295 | 450 | 385 | 450 | 90 | 210 | 20 | 2500 | 0 | 50 |
| KZ03 | 655 | 450 | 745 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ04 | 825 | 450 | 915 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ05 | 1635 | 450 | 1725 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ06 | 1990 | 450 | 2080 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ07 | 3580 | 710 | 3670 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ08 | 3250 | 450 | 3340 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ09 | 3580 | 450 | 3670 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |

## DOOR PROPERTIES

| Door Name | X1 | Y1 | X2 | Y2 | Door Width | Door Height | The width of the wall above the door | Unit weight of the wall above the door | Net height of the wall above the door | Unit Area Weight of Door |
|---|---|---|---|---|---|---|---|---|---|---|
| KZ10 | 295 | 710 | 385 | 710 | 90 | 210 | 20 | 2500 | 0 | 50 |
| KZ11 | 655 | 710 | 745 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ12 | 825 | 710 | 915 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ13 | 1805 | 710 | 1895 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ14 | 2005 | 710 | 2095 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ15 | 2515 | 710 | 2605 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ16 | 2870 | 710 | 2960 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ17 | 3225 | 710 | 3315 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ18 | 2535 | 450 | 2625 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| KZ19 | -2.5 | 680 | -2.5 | 480 | 200 | 230 | 35 | 2200 | 0 | 50 |

# 1. STORY

## DOOR PROPERTIES

| Door Name | X1 | Y1 | X2 | Y2 | Door Width | Door Height | The width of the wall above the door | Unit weight of the wall above the door | Net height of the wall above the door | Unit Area Weight of Door |
|---|---|---|---|---|---|---|---|---|---|---|
| K101 | 1282.5 | 1167.5 | 1452.5 | 1167.5 | 170 | 230 | 35 | 2200 | 40 | 50 |
| K102 | 295 | 450 | 385 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K103 | 655 | 450 | 745 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K104 | 825 | 450 | 915 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K105 | 1635 | 450 | 1725 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K106 | 1990 | 450 | 2080 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K107 | 2345 | 450 | 2435 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K108 | 3250 | 450 | 3340 | 450 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K109 | 3225 | 710 | 3315 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K110 | 295 | 710 | 385 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K111 | 655 | 710 | 745 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K112 | 825 | 710 | 915 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K113 | 1805 | 710 | 1895 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K114 | 2005 | 710 | 2095 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K115 | 3400 | 710 | 3490 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |
| K116 | 2345 | 710 | 2435 | 710 | 90 | 210 | 20 | 2200 | 0 | 50 |

ICONS AND DESCRIPTIONS USED

X1:Beginning Door X Coordinate (Right Direction +)
Y1:Beginning Door Y Coordinate (Bottom Direction +)
X2:End of Door X Coordinate (Right Direction +)
Y2:End of Door Y Coordinate (Bottom Direction +)

# BASEMENT STORY

## WINDOW PROPERTIES

| Window Name | X1 | Y1 | X2 | Y2 | Window Width | Window Height | Window Top end Bottom Wall Width | Window Top end Bottom unit weight of wall | Net height of the wall above the window | Unit Area Weight of Window | Parapet Height of Window |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PB01 | 150 | 0 | 290 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB02 | 540 | 0 | 680 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB03 | 895 | 0 | 1035 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB04 | 1230 | 0 | 1300 | 0 | 70 | 120 | 50 | 2400 | 0 | 25 | 130 |
| PB05 | 1330 | 0 | 1400 | 0 | 70 | 120 | 50 | 2400 | 0 | 25 | 130 |
| PB06 | 1430 | 0 | 1500 | 0 | 70 | 120 | 50 | 2400 | 0 | 25 | 130 |
| PB07 | 1705 | 0 | 1845 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB08 | 2060 | 0 | 2200 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB09 | 2415 | 0 | 2555 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB10 | 2770 | 0 | 2910 | 0 | 140 | 70 | 50 | 2500 | 0 | 25 | 180 |
| PB11 | 3120 | 0 | 3260 | 0 | 140 | 70 | 50 | 2500 | 0 | 25 | 180 |
| PB12 | 3480 | 0 | 3620 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB13 | 3880 | 0 | 4020 | 0 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB14 | 3880 | 1160 | 4020 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB15 | 3480 | 1160 | 3620 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB16 | 3105 | 1160 | 3245 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB17 | 2770 | 1160 | 2910 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB18 | 150 | 1160 | 290 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB19 | 540 | 1160 | 680 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB20 | 895 | 1160 | 1035 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB21 | 1705 | 1160 | 1845 | 1160 | 140 | 70 | 50 | 2500 | 0 | 25 | 180 |
| PB22 | 2060 | 1160 | 2200 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |
| PB23 | 2415 | 1160 | 2555 | 1160 | 140 | 70 | 50 | 2400 | 0 | 25 | 180 |

# GROUND STORY

## WINDOW PROPERTIES

| Window Name | X1 | Y1 | X2 | Y2 | Window Width | Window Height | Window Top end Bottom Wall Width | Window Top end Bottom unit weight of wall | Net height of the wall above the window | Unit Area Weight of Window | Parapet Height of Window |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PZ01 | 150 | 1167.5 | 290 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ02 | 540 | -7.5 | 680 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ03 | 150 | -7.5 | 290 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ04 | 895 | -7.5 | 1035 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |

## WINDOW PROPERTIES

| Window Name | X1 | Y1 | X2 | Y2 | Window Width | Window Height | Window Top end Bottom Wall Width | Window Top end Bottom unit weight of wall | Net height of the wall above the window | Unit Area Weight of Window | Parapet Height of Window |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PZ05 | 1230 | -7.5 | 1300 | -7.5 | 70 | 120 | 35 | 2200 | 5 | 25 | 145 |
| PZ06 | 1230 | -7.5 | 1300 | -7.5 | 70 | 120 | 35 | 2200 | 0 | 25 | 150 |
| PZ07 | 1330.2 | -7.5 | 1400.2 | -7.5 | 70 | 120 | 35 | 2200 | 0 | 25 | 150 |
| PZ08 | 1430.2 | -7.5 | 1500.2 | -7.5 | 70 | 120 | 35 | 2200 | 0 | 25 | 150 |
| PZ09 | 1705 | -7.5 | 1845 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ10 | 2060 | -7.5 | 2200 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ11 | 2415 | -7.5 | 2555 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ12 | 2770 | -7.5 | 2910 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ13 | 3120 | -7.5 | 3260 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ14 | 3480 | -7.5 | 3620 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ15 | 3880 | -7.5 | 4020 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ16 | 4137.5 | 675 | 4137.5 | 485 | 190 | 200 | 35 | 2200 | 0 | 25 | 70 |
| PZ17 | 540 | 1167.5 | 680 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ18 | 540 | 1167.5 | 680 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ19 | 540 | 1167.5 | 680 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ20 | 895 | 1167.5 | 1035 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ21 | 1705 | 1167.5 | 1845 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ22 | 2060 | 1167.5 | 2200 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ23 | 2415 | 1167.5 | 2555 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ24 | 2770 | 1167.5 | 2910 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ25 | 3105 | 1167.5 | 3245 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ26 | 3480 | 1167.5 | 3620 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| PZ27 | 3880 | 1167.5 | 4020 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |

# 1. STORY

## WINDOW PROPERTIES

| Window Name | X1 | Y1 | X2 | Y2 | Window Width | Window Height | Window Top end Bottom Wall Width | Window Top end Bottom unit weight of wall | Net height of the wall above the window | Unit Area Weight of Window | Parapet Height of Window |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P101 | 150 | 1167.5 | 290 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P102 | 540 | -7.5 | 680 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P103 | 150 | -7.5 | 290 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P104 | 895 | -7.5 | 1035 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P105 | 1230 | -7.5 | 1300 | -7.5 | 70 | 120 | 35 | 2200 | 5 | 25 | 145 |
| P106 | 1230 | -7.5 | 1300 | -7.5 | 70 | 120 | 35 | 2200 | 0 | 25 | 150 |
| P107 | 1330.2 | -7.5 | 1400.2 | -7.5 | 70 | 120 | 35 | 2200 | 0 | 25 | 150 |

# WINDOW PROPERTIES

| Window Name | X1 | Y1 | X2 | Y2 | Window Width | Window Height | Window Top end Bottom Wall Width | Window Top end Bottom unit weight of wall | Net height of the wall above the window | Unit Area Weight of Window | Parapet Height of Window |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P108 | 1430.2 | -7.5 | 1500.2 | -7.5 | 70 | 120 | 35 | 2200 | 0 | 25 | 150 |
| P109 | 1705 | -7.5 | 1845 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P110 | 2060 | -7.5 | 2200 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P111 | 2415 | -7.5 | 2555 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P112 | 2770 | -7.5 | 2910 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P113 | 3120 | -7.5 | 3260 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P114 | 3480 | -7.5 | 3620 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P115 | 3880 | -7.5 | 4020 | -7.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P116 | 4137.5 | 675 | 4137.5 | 485 | 190 | 200 | 35 | 2200 | 0 | 25 | 70 |
| P117 | 540 | 1167.5 | 680 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P118 | 540 | 1167.5 | 680 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P119 | 540 | 1167.5 | 680 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P120 | 895 | 1167.5 | 1035 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P121 | 1705 | 1167.5 | 1845 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P122 | 2060 | 1167.5 | 2200 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P123 | 2415 | 1167.5 | 2555 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P124 | 2770 | 1167.5 | 2910 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P125 | 3105 | 1167.5 | 3245 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P126 | 3480 | 1167.5 | 3620 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P127 | 3880 | 1167.5 | 4020 | 1167.5 | 140 | 195 | 35 | 2200 | 0 | 25 | 75 |
| P128 | -2.5 | 675 | -2.5 | 485 | 190 | 200 | 35 | 2200 | 0 | 25 | 70 |

ICONS AND DESCRIPTIONS USED

X1:Beginning window X Coordinate (Right Direction +)
Y1:Beginning window Y Coordinate (Bottom Direction +)
X2:End of Window X Coordinate (Right Direction +)
Y2:End of Window Y Coordinate (Bottom Direction +))

# FOUNDATION PROPERTIES

| Foundation Name | X1 | Y1 | X2 | Y2 | Foundation Width | Foundation Height | Foundation Eccentricity | Left cantilever size of foundation | Right cantilever size of foundation |
|---|---|---|---|---|---|---|---|---|---|
| T001 | 0 | 0 | 4130 | 0 | 240 | 50 | 0 | 120 | 120 |
| T002 | 0 | 450 | 4130 | 450 | 240 | 50 | 0 | 120 | 120 |
| T003 | 0 | 710 | 4130 | 710 | 240 | 50 | 0 | 120 | 120 |
| T004 | 0 | 1160 | 4130 | 1160 | 240 | 50 | 0 | 120 | 120 |
| T005 | 5 | 1160 | 5 | 0 | 240 | 50 | 0 | 120 | 120 |
| T006 | 430 | 1160 | 430 | 0 | 240 | 50 | 0 | 120 | 120 |
| T007 | 785 | 1160 | 785 | 0 | 240 | 50 | 0 | 120 | 120 |
| T008 | 1140 | 1160 | 1140 | 0 | 240 | 50 | 0 | 120 | 120 |
| T009 | 1595 | 1160 | 1595 | 0 | 240 | 50 | 0 | 120 | 120 |
| T010 | 1950 | 1160 | 1950 | 0 | 240 | 50 | 0 | 120 | 120 |
| T011 | 2305 | 1160 | 2305 | 0 | 240 | 50 | 0 | 120 | 120 |
| T012 | 2660 | 1160 | 2660 | 0 | 240 | 50 | 0 | 120 | 120 |
| T013 | 3015 | 1160 | 3015 | 0 | 240 | 50 | 0 | 120 | 120 |
| T014 | 3370 | 1160 | 3370 | 0 | 240 | 50 | 0 | 120 | 120 |
| T015 | 4130 | 1160 | 4130 | 0 | 240 | 50 | 0 | 120 | 120 |

ICONS AND DESCRIPTIONS USED

X1:Beginning Foundation X Coordinate (Right Direction +)

Y1:Beginning Foundation Y Coordinate (Bottom Direction +)

X2:End of Foundation X Coordinate (Right Direction +)

Y2:End of Foundation Y Coordinate (Bottom Direction +)

# BASEMENT STORY

## BASEMENT STORY LOADS OF BOND BEAM

| Bond Beam Name | Self (t) | G Load From Upper Wall(t) | Q Load From Upper Wall(t) | G From Slab (t) | Q From Slab (t) | Ekstra G Load (t) | Ekstra Q Load (t) | G Load From the Piece of the Wall Above Window(t) | G Load From the Piece of the Wall Above Door(t) | G Load From the Upper Storey Window and Parapet(t) | G Load from the Upper Storey Door(t) | G Load From Horizontal Bond Beam(t) | Q Load From Horizontal Bond Beam(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HB01 | 4.55 | 0 | 0 | 5.125 | 2.181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HB02 | 0.7 | 0 | 0 | 0.699 | 0.297 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB03 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB04 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB05 | 0.35 | 0 | 0 | 0.374 | 0.159 | 0 | 0 | 0 | 0 | 1.632 | 0 | 0 | 0 |
| HB06 | 0.35 | 0.026 | 0.002 | 0.374 | 0.159 | 0 | 0 | 0 | 0 | 0.828 | 0 | 0 | 0 |
| HB07 | 0.35 | 0.024 | 0.002 | 0.374 | 0.159 | 0 | 0 | 0 | 0 | 0.828 | 0 | 0 | 0 |
| HB08 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB09 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB10 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB11 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB12 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB13 | 0.7 | 0 | 0 | 1.042 | 0.443 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB14 | 0.7 | 0 | 0 | 1.042 | 0.443 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB15 | 0.7 | 0 | 0 | 1.042 | 0.443 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB16 | 0.7 | 0 | 0 | 1.042 | 0.443 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB17 | 0.7 | 0 | 0 | 1.011 | 0.43 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB18 | 0.7 | 0 | 0 | 1.011 | 0.43 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB19 | 0.7 | 0 | 0 | 0.699 | 0.297 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB20 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 2.631 | 0 | 0 | 0 |
| HB21 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB22 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB23 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB24 | 0.7 | 0 | 0 | 0.584 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HB25 | 0.844 | 0 | 0 | 0.982 | 0.418 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB26 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB27 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB28 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB29 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB30 | 0.844 | 4.643 | 0.791 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0 | 0 | 0 |
| HB31 | 0.844 | 4.749 | 0.787 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0 | 0 | 0 |

## BASEMENT STORY LOADS OF BOND BEAM

| Bond Beam Name | Self (t) | G Load From Upper Wall(t) | Q Load From Upper Wall(t) | G From Slab (t) | Q From Slab (t) | Ekstra G Load (t) | Ekstra Q Load (t) | G Load From the Piece of the Wall Above Window(t) | G Load From the Piece of the Wall Above Door(t) | G Load From the Upper Storey Window and Parapet(t) | G Load from the Upper Storey Door(t) | G Load From Horizontal Bond Beam(t) | Q Load From Horizontal Bond Beam(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HB32 | 0.844 | 3.659 | 0.759 | 1.203 | 0.512 | 0 | 0 | 0 | 0.054 | 0 | 0 | 0 | 0 |
| HB33 | 0.844 | 0 | 0 | 0.982 | 0.418 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB34 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB35 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB36 | 0.844 | 0 | 0 | 1.014 | 0.431 | 0 | 0 | 0 | 0.054 | 0 | 0 | 0 | 0 |
| HB37 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB38 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB39 | 2.25 | 0 | 0 | 4.547 | 1.935 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HB40 | 0.844 | 0 | 0 | 0.908 | 0.386 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB41 | 0.844 | 4.206 | 0.682 | 0.909 | 0.387 | 0 | 0 | 0 | 0.054 | 0 | 0 | 0 | 0 |
| HB42 | 0.844 | 0 | 0 | 1.183 | 0.503 | 0 | 0 | 0 | 0.054 | 0 | 0.094 | 0 | 0 |
| HB43 | 0.844 | 5.38 | 1.072 | 1.203 | 0.512 | 0 | 0 | 0 | 0.054 | 0 | 0 | 0 | 0 |
| HB44 | 2.25 | 17.158 | 1.945 | 4.547 | 1.935 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HB45 | 0 | 21.557 | 3.649 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# GROUND STORY

## GROUND STORY LOADS OF BOND BEAM

| Bond Beam Name | Self (t) | G Load From Upper Wall(t) | Q Load From Upper Wall(t) | G From Slab (t) | Q From Slab (t) | Ekstra G Load (t) | Ekstra Q Load (t) | G Load From the Piece of the Wall Above Window(t) | G Load From the Piece of the Wall Above Door(t) | G Load From the Upper Storey Window and Parapet(t) | G Load from the Upper Storey Door(t) | G Load From Horizontal Bond Beam(t) | Q Load From Horizontal Bond Beam(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HZ01 | 2.502 | 0 | 0 | 5.297 | 2.181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HZ02 | 2.502 | 0 | 0 | 5.452 | 2.181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HZ03 | 0.612 | 0 | 0 | 0.739 | 0.296 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ04 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ05 | 0.612 | 0 | 0 | 0.757 | 0.303 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ06 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ07 | 0.306 | 0 | 0 | 0.374 | 0.159 | 0 | 0 | 0 | 0 | 1.632 | 0 | 0 | 0 |
| HZ08 | 0.306 | 0 | 0 | 0.374 | 0.159 | 0 | 0 | 0 | 0 | 0.83 | 0 | 0 | 0 |
| HZ09 | 0.306 | 0 | 0 | 0.374 | 0.159 | 0 | 0 | 0 | 0 | 0.83 | 0 | 0 | 0 |
| HZ10 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ11 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |

# GROUND STORY LOADS OF BOND BEAM

| Bond Beam Name | Self (t) | G Load From Upper Wall(t) | Q Load From Upper Wall(t) | G From Slab (t) | Q From Slab (t) | Ekstra G Load (t) | Ekstra Q Load (t) | G Load From the Piece of the Wall Above Window(t) | G Load From the Piece of the Wall Above Door(t) | G Load From the Upper Storey Window and Parapet(t) | G Load from the Upper Storey Door(t) | G Load From Horizontal Bond Beam(t) | Q Load From Horizontal Bond Beam(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HZ12 | 0.612 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ13 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ14 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ15 | 0.612 | 0 | 0 | 1.124 | 0.45 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ16 | 0.612 | 0 | 0 | 1.124 | 0.45 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ17 | 0.831 | 0 | 0 | 0.617 | 0.247 | 0 | 0 | 0 | 0 | 1.119 | 0 | 0 | 0 |
| HZ18 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 2.631 | 0 | 0 | 0 |
| HZ19 | 0.612 | 0 | 0 | 0.622 | 0.249 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ20 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ21 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ22 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ23 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ24 | 0.612 | 0 | 0 | 0.621 | 0.248 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ25 | 0.612 | 0 | 0 | 1.124 | 0.45 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ26 | 0.612 | 0 | 0 | 1.124 | 0.45 | 0 | 0 | 0 | 0 | 0.877 | 0 | 0 | 0 |
| HZ27 | 0.744 | 0 | 0 | 0.967 | 0.387 | 0 | 0 | 0 | 0.524 | 0 | 0.195 | 0 | 0 |
| HZ28 | 0.495 | 0 | 0 | 1.053 | 0.421 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ29 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ30 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ31 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ32 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ33 | 0.229 | 9.68 | 1.459 | 4.97 | 1.988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HZ34 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ35 | 0.495 | 0 | 0 | 1.289 | 0.516 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HZ36 | 0.495 | 0 | 0 | 1.042 | 0.417 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ37 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ38 | 0.495 | 0 | 0 | 0.567 | 0.227 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ39 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ40 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ41 | 0.495 | 2.093 | 0.323 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HZ42 | 0.495 | 2.093 | 0.323 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HZ43 | 0.495 | 0 | 0 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0.094 | 0 | 0 |
| HZ44 | 0.495 | 2.271 | 0.414 | 1.289 | 0.516 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## GROUND STORY LOADS OF BOND BEAM

| Bond Beam Name | Self (t) | G Load From Upper Wall(t) | Q Load From Upper Wall(t) | G From Slab (t) | Q From Slab (t) | Ekstra G Load (t) | Ekstra Q Load (t) | G Load From the Piece of the Wall Above Window(t) | G Load From the Piece of the Wall Above Door(t) | G Load From the Upper Storey Window and Parapet(t) | G Load from the Upper Storey Door(t) | G Load From Horizontal Bond Beam(t) | Q Load From Horizontal Bond Beam(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HZ45 | 0.495 | 2.089 | 0.322 | 0.966 | 0.386 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HZ46 | 0.875 | 0.365 | 0.018 | 0.65 | 0.26 | 0 | 0 | 0 | 0 | 1.119 | 0 | 0 | 0 |

# 1. STORY

## 1. STORY LOADS OF BOND BEAM

| Bond Beam Name | Self (t) | G Load From Upper Wall(t) | Q Load From Upper Wall(t) | G From Slab (t) | Q From Slab (t) | Ekstra G Load (t) | Ekstra Q Load (t) | G Load From the Piece of the Wall Above Window(t) | G Load From the Piece of the Wall Above Door(t) | G Load From the Upper Storey Window and Parapet(t) | G Load from the Upper Storey Door(t) | G Load From Horizontal Bond Beam(t) | Q Load From Horizontal Bond Beam(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H101 | 2.502 | 0 | 0 | 3.599 | 1.636 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H102 | 2.502 | 0 | 0 | 3.599 | 1.636 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H103 | 0.612 | 0 | 0 | 0.488 | 0.222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H104 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H105 | 0.612 | 0 | 0 | 0.5 | 0.227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H106 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H107 | 0.306 | 0 | 0 | 0.263 | 0.119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H108 | 0.306 | 0 | 0 | 0.263 | 0.119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H109 | 0.306 | 0 | 0 | 0.263 | 0.119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H110 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H111 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H112 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H113 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H114 | 0.612 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H115 | 0.612 | 0 | 0 | 0.742 | 0.337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H116 | 0.612 | 0 | 0 | 0.742 | 0.337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H117 | 0.831 | 0 | 0 | 0.408 | 0.185 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H118 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H119 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H120 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H121 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H122 | 0.612 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H123 | 0.612 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# 1. STORY LOADS OF BOND BEAM

| Bond Beam Name | Self (t) | G Load From Upper Wall(t) | Q Load From Upper Wall(t) | G From Slab (t) | Q From Slab (t) | Ekstra G Load (t) | Ekstra Q Load (t) | G Load From the Piece of the Wall Above Window(t) | G Load From the Piece of the Wall Above Door(t) | G Load From the Upper Storey Window and Parapet(t) | G Load from the Upper Storey Door(t) | G Load From Horizontal Bond Beam(t) | Q Load From Horizontal Bond Beam(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H124 | 0.612 | 0 | 0 | 0.41 | 0.186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H125 | 0.612 | 0 | 0 | 0.742 | 0.337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H126 | 0.612 | 0 | 0 | 0.742 | 0.337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H127 | 0.744 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0.524 | 0 | 0 | 0 | 0 |
| H128 | 0.495 | 0 | 0 | 0.695 | 0.316 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H129 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H130 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H131 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H132 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H133 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H134 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H135 | 1.125 | 0 | 0 | 4.254 | 1.934 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H136 | 0.495 | 0 | 0 | 0.688 | 0.313 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H137 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H138 | 0.495 | 0 | 0 | 0.374 | 0.17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H139 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H140 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H141 | 0.169 | 0 | 0 | 3.191 | 1.45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H142 | 0.495 | 0 | 0 | 0.851 | 0.387 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H143 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H144 | 0.211 | 0 | 0 | 3.994 | 1.816 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H145 | 1.144 | 0 | 0 | 3.372 | 1.533 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H146 | 1.125 | 0 | 0 | 3.312 | 1.505 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H147 | 1.125 | 0 | 0 | 3.226 | 1.467 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H148 | 1.125 | 0 | 0 | 3.727 | 1.694 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H149 | 0.495 | 0 | 0 | 0.638 | 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| H150 | 0.831 | 0 | 0 | 0.408 | 0.185 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# BASEMENT STORY

## BASEMENT STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WB01 | 6.061 | 14.577 | 0.818 | 0.724 | 0.308 | 0 | 0 | 1.138 | 0.149 | 0 | 0 |
| WB02 | 6.061 | 12.853 | 0.823 | 0.724 | 0.308 | 0 | 0 | 1.138 | 0.149 | 0 | 0 |
| WB03 | 10.208 | 16.27 | 2.776 | 3.164 | 1.346 | 0 | 0 | 0.987 | 0.209 | 0 | 0 |
| WB04 | 10.208 | 16.341 | 2.806 | 3.164 | 1.346 | 0 | 0 | 0.987 | 0.209 | 0 | 0 |
| WB05 | 1.408 | 3.236 | 0.639 | 0.404 | 0.172 | 0 | 0 | 0.95 | 0.193 | 0 | 0 |
| WB06 | 47.618 | 81.207 | 4.238 | 5.538 | 2.357 | 0 | 0 | 0 | 0 | 0 | 0.23 |
| WB07 | 15.75 | 21.259 | 3.507 | 4.645 | 1.977 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB08 | 18.36 | 24.528 | 3.56 | 4.645 | 1.977 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB09 | 15.75 | 32.577 | 3.422 | 4.547 | 1.935 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB10 | 18.36 | 21.421 | 3.485 | 4.547 | 1.935 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB11 | 15.75 | 21.117 | 3.512 | 4.653 | 1.98 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB12 | 18.36 | 14.568 | 2.044 | 4.653 | 1.98 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB13 | 15.75 | 21.117 | 3.512 | 4.653 | 1.98 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB14 | 18.36 | 14.56 | 2.04 | 4.653 | 1.98 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB15 | 15.75 | 21.057 | 3.422 | 4.547 | 1.935 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB16 | 15.75 | 21.408 | 3.479 | 4.547 | 1.935 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB17 | 2.244 | 2.57 | 0.417 | 0.556 | 0.236 | 0 | 0 | 3.007 | 0.535 | 0 | 0 |
| WB18 | 18.36 | 14.477 | 1.988 | 4.653 | 1.98 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB19 | 15.75 | 32.774 | 3.505 | 4.653 | 1.98 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB20 | 15.75 | 33.29 | 3.571 | 4.759 | 2.025 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB21 | 47.618 | 81.694 | 4.254 | 5.553 | 2.363 | 0 | 0 | 0 | 0 | 1.119 | 0 |
| WB22 | 18.36 | 17.405 | 1.988 | 4.547 | 1.935 | 0 | 0 | 0 | 0 | 0 | 0 |
| WB23 | 3.872 | 6.575 | 1.31 | 1.458 | 0.62 | 0 | 0 | 4.828 | 1.043 | 0 | 0 |
| WB24 | 10.2 | 21.095 | 1.354 | 1.158 | 0.493 | 0 | 0 | 2.219 | 0.273 | 0 | 0 |
| WB25 | 8.772 | 18.402 | 1.103 | 0.897 | 0.382 | 0 | 0 | 2.161 | 0.248 | 0 | 0 |
| WB26 | 7.956 | 16.911 | 1.041 | 0.919 | 0.391 | 0 | 0 | 2.259 | 0.204 | 0 | 0 |
| WB27 | 1.224 | 4.634 | 0.397 | 0.16 | 0.068 | 0 | 0 | 1.967 | 0.16 | 0 | 0 |
| WB28 | 1.224 | 4.222 | 0.396 | 0.16 | 0.068 | 0 | 0 | 1.577 | 0.161 | 0.002 | 0 |
| WB29 | 9.808 | 18.698 | 1.076 | 0.967 | 0.411 | 0 | 0 | 1.868 | 0.205 | 0.002 | 0 |
| WB30 | 8.772 | 18.29 | 1.103 | 0.897 | 0.382 | 0 | 0 | 2.161 | 0.248 | 0 | 0 |
| WB31 | 8.772 | 17.981 | 0.979 | 0.897 | 0.382 | 0 | 0 | 2.161 | 0.248 | 0 | 0 |
| WB32 | 8.548 | 18.029 | 0.979 | 0.897 | 0.382 | 0 | 0 | 2.161 | 0.248 | 0 | 0 |
| WB33 | 7.612 | 17.733 | 0.994 | 0.876 | 0.373 | 0 | 0 | 2.161 | 0.248 | 0 | 0 |
| WB34 | 8.976 | 19.623 | 1.478 | 1.278 | 0.544 | 0 | 0 | 2.39 | 0.346 | 0 | 0 |
| WB35 | 10.608 | 23.847 | 2.248 | 1.936 | 0.824 | 0 | 0 | 2.619 | 0.443 | 0 | 0 |
| WB36 | 4.633 | 12.326 | 1.054 | 0.819 | 0.348 | 0 | 0 | 1.31 | 0.222 | 0 | 0 |
| WB37 | 4.633 | 11.192 | 1.054 | 0.819 | 0.348 | 0 | 0 | 1.31 | 0.222 | 0 | 0 |

## BASEMENT STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WB38 | 10.608 | 23.847 | 2.248 | 1.936 | 0.824 | 0 | 0 | 2.619 | 0.443 | 0 | 0 |
| WB39 | 10.951 | 20.997 | 1.617 | 1.722 | 0.733 | 0 | 0 | 2.604 | 0.437 | 0 | 0 |
| WB40 | 7.956 | 16.368 | 0.808 | 1.409 | 0.599 | 0 | 0 | 2.588 | 0.43 | 0 | 0 |
| WB41 | 10.2 | 21.915 | 1.33 | 1.158 | 0.493 | 0 | 0 | 3.096 | 0.273 | 0 | 0 |
| WB42 | 9.381 | 19.32 | 1.073 | 0.897 | 0.382 | 0 | 0 | 3.038 | 0.248 | 0 | 0 |
| WB43 | 25.07 | 43.534 | 2.915 | 3.329 | 1.417 | 0 | 0 | 2.161 | 0.248 | 0 | 0.195 |
| WB44 | 8.772 | 18.29 | 1.103 | 0.897 | 0.382 | 0 | 0 | 2.161 | 0.248 | 0 | 0 |
| WB45 | 8.772 | 17.763 | 0.863 | 0.897 | 0.382 | 0 | 0 | 2.161 | 0.248 | 0 | 0 |
| WB46 | 8.772 | 17.475 | 0.63 | 1.233 | 0.525 | 0 | 0 | 2.375 | 0.339 | 0 | 0 |
| WB47 | 9.504 | 15.603 | 2.766 | 2.761 | 1.175 | 0 | 0 | 1.937 | 0.402 | 0 | 0 |
| WB48 | 7.92 | 11.986 | 2.029 | 2.27 | 0.966 | 0 | 0 | 0.95 | 0.193 | 0 | 0 |
| WB49 | 2.816 | 6.472 | 1.277 | 0.807 | 0.343 | 0 | 0 | 1.9 | 0.386 | 0 | 0 |
| WB50 | 9.328 | 15.222 | 2.667 | 2.674 | 1.138 | 0 | 0 | 1.9 | 0.386 | 0 | 0 |
| WB51 | 9.328 | 13.672 | 2.331 | 2.674 | 1.138 | 0 | 0 | 4.175 | 0.782 | 0 | 0 |
| WB52 | 15.84 | 18.88 | 3.153 | 4.54 | 1.932 | 0 | 0 | 6.502 | 1.176 | 0 | 0.094 |
| WB53 | 15.312 | 17.358 | 2.995 | 4.52 | 1.923 | 0 | 0 | 6.157 | 1.222 | 0 | 0.094 |
| WB54 | 22.176 | 18.322 | 3.611 | 8.418 | 3.582 | 0 | 0 | 2.88 | 0.635 | 0 | 0.094 |
| WB55 | 9.504 | 15.57 | 2.752 | 2.761 | 1.175 | 0 | 0 | 1.937 | 0.402 | 0 | 0 |
| WB56 | 10.208 | 13.096 | 1.889 | 3.002 | 1.277 | 0 | 0 | 1.906 | 0.409 | 0 | 0 |
| WB57 | 2.816 | 6.069 | 1.107 | 0.807 | 0.343 | 0 | 0 | 1.9 | 0.386 | 0 | 0 |
| WB58 | 17.952 | 11.276 | 1.916 | 5.498 | 2.339 | 0 | 0 | 1.906 | 0.409 | 0 | 0 |
| WB59 | 3.872 | 7.891 | 1.503 | 1.11 | 0.472 | 0 | 0 | 1.9 | 0.386 | 0 | 0 |
| WB60 | 14.784 | 21.797 | 3.733 | 4.237 | 1.803 | 0 | 0 | 1.9 | 0.386 | 0 | 0 |
| WB61 | 21.648 | 31.886 | 6.066 | 8.217 | 3.497 | 0 | 0 | 3.74 | 0.792 | 0 | 0.094 |
| WB62 | 21.824 | 31.937 | 5.434 | 7.98 | 3.396 | 0 | 0 | 2.038 | 0.445 | 0 | 0.094 |
| WB63 | 12.548 | 14.254 | 2.312 | 3.082 | 1.311 | 0 | 0 | 3.007 | 0.535 | 0 | 0 |

# GROUND STORY

## GROUND STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ01 | 7.48 | 11.797 | 2.149 | 6.697 | 2.679 | 0 | 0 | 2.028 | 0.465 | 0 | 0 |
| WZ02 | 4.926 | 6.008 | 0.353 | 0.805 | 0.322 | 0 | 0 | 1.114 | 0.148 | 0 | 0 |
| WZ03 | 18.81 | 18.079 | 0.912 | 2.73 | 1.092 | 0 | 0 | 1.284 | 0.123 | 0 | 0 |

# GROUND STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ04 | 18.62 | 17.775 | 0.898 | 2.699 | 1.079 | 0 | 0 | 1.504 | 0.139 | 0 | 0 |
| WZ05 | 4.76 | 7.278 | 1.202 | 3.481 | 1.393 | 0 | 0 | 0.821 | 0.211 | 0 | 0 |
| WZ06 | 0.59 | 1.439 | 0.274 | 0.429 | 0.172 | 0 | 0 | 0.778 | 0.193 | 0 | 0 |
| WZ07 | 4.76 | 7.25 | 1.19 | 3.444 | 1.378 | 0 | 0 | 0.816 | 0.208 | 0 | 0 |
| WZ08 | 3.095 | 5.149 | 0.821 | 2.254 | 0.902 | 0 | 0 | 0.778 | 0.193 | 0 | 0 |
| WZ09 | 6.471 | 9.778 | 1.503 | 5.01 | 2.004 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ10 | 9.507 | 9.936 | 1.526 | 5.086 | 2.034 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ11 | 12.231 | 15.457 | 1.467 | 4.889 | 1.955 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ12 | 6.579 | 9.864 | 1.493 | 4.978 | 1.991 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ13 | 6.471 | 9.783 | 1.505 | 4.863 | 2.007 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ14 | 9.459 | 0 | 0 | 5.109 | 2.044 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ15 | 6.471 | 9.783 | 1.505 | 4.863 | 2.007 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ16 | 9.459 | 0 | 0 | 5.101 | 2.04 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ17 | 6.471 | 9.697 | 1.467 | 4.889 | 1.955 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ18 | 6.579 | 9.859 | 1.491 | 4.97 | 1.988 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ19 | 12.295 | 0 | 0 | 4.863 | 1.945 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ20 | 12.435 | 0 | 0 | 4.97 | 1.988 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ21 | 6.471 | 9.697 | 1.467 | 4.863 | 1.945 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ22 | 9.507 | 0 | 0 | 4.97 | 1.988 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ23 | 12.231 | 15.526 | 1.498 | 5.018 | 2.007 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ24 | 12.435 | 15.754 | 1.53 | 5.101 | 2.041 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ25 | 6.579 | 10.368 | 1.722 | 4.97 | 1.988 | 0 | 0 | 0 | 0 | 0 | 0 |
| WZ26 | 6.469 | 6.594 | 0.361 | 0.824 | 0.33 | 0 | 0 | 1.123 | 0.151 | 0 | 0 |
| WZ27 | 7.891 | 9.757 | 0.57 | 1.219 | 0.488 | 0 | 0 | 3.047 | 0.272 | 0 | 0 |
| WZ28 | 6.898 | 8.439 | 0.473 | 0.954 | 0.382 | 0 | 0 | 2.111 | 0.248 | 0 | 0 |
| WZ29 | 7.891 | 9.78 | 0.58 | 1.245 | 0.498 | 0 | 0 | 2.179 | 0.276 | 0 | 0 |
| WZ30 | 6.155 | 7.596 | 0.446 | 0.947 | 0.391 | 0 | 0 | 2.212 | 0.204 | 0 | 0 |
| WZ31 | 0.952 | 1.635 | 0.171 | 0.161 | 0.069 | 0 | 0 | 1.912 | 0.159 | 0 | 0 |
| WZ32 | 0.947 | 1.629 | 0.171 | 0.16 | 0.068 | 0 | 0 | 1.51 | 0.159 | 0 | 0 |
| WZ33 | 7.952 | 7.94 | 0.461 | 0.995 | 0.411 | 0 | 0 | 1.811 | 0.204 | 0 | 0 |
| WZ34 | 6.786 | 8.439 | 0.473 | 0.954 | 0.382 | 0 | 0 | 2.111 | 0.248 | 0 | 0 |
| WZ35 | 6.786 | 8.439 | 0.473 | 0.955 | 0.382 | 0 | 0 | 1.8 | 0.124 | 0 | 0 |
| WZ36 | 6.834 | 8.439 | 0.473 | 0.955 | 0.382 | 0 | 0 | 1.8 | 0.124 | 0 | 0 |
| WZ37 | 6.629 | 8.062 | 0.373 | 0.932 | 0.373 | 0 | 0 | 2.111 | 0.248 | 0 | 0 |
| WZ38 | 4.524 | 5.552 | 0.452 | 0.943 | 0.377 | 0 | 0 | 1.307 | 0.225 | 0 | 0 |
| WZ39 | 8.207 | 10.939 | 0.963 | 2.087 | 0.835 | 0 | 0 | 2.614 | 0.45 | 0 | 0 |
| WZ40 | 7.056 | 8.834 | 0.58 | 1.371 | 0.549 | 0 | 0 | 2.362 | 0.349 | 0 | 0 |
| WZ41 | 18.698 | 18.079 | 0.912 | 2.73 | 1.092 | 0 | 0 | 1.284 | 0.123 | 0 | 0 |
| WZ42 | 6.898 | 8.523 | 0.46 | 0.911 | 0.364 | 0 | 0 | 2.988 | 0.249 | 0 | 0 |

## GROUND STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ43 | 7.812 | 10.119 | 0.621 | 1.277 | 0.511 | 0 | 0 | 2.271 | 0.318 | 0 | 0 |
| WZ44 | 6.786 | 8.439 | 0.473 | 0.954 | 0.382 | 0 | 0 | 2.111 | 0.248 | 0 | 0 |
| WZ45 | 6.786 | 7.912 | 0.233 | 0.954 | 0.382 | 0 | 0 | 2.111 | 0.248 | 0 | 0 |
| WZ46 | 6.898 | 7.511 | 0 | 0.954 | 0.382 | 0 | 0 | 2.111 | 0.248 | 0 | 0 |
| WZ47 | 6.155 | 7.236 | 0.213 | 0.865 | 0.346 | 0 | 0 | 2.111 | 0.248 | 0 | 0 |
| WZ48 | 3.821 | 5.121 | 0.452 | 0.943 | 0.377 | 0 | 0 | 1.307 | 0.225 | 0 | 0 |
| WZ49 | 8.207 | 10.939 | 0.963 | 2.087 | 0.835 | 0 | 0 | 2.614 | 0.45 | 0 | 0 |
| WZ50 | 7.53 | 9.667 | 0.693 | 1.438 | 0.575 | 0 | 0 | 2.362 | 0.349 | 0 | 0 |
| WZ51 | 8.082 | 10.403 | 0.628 | 1.299 | 0.519 | 0 | 0 | 2.27 | 0.318 | 0 | 0 |
| WZ52 | 3.98 | 7.083 | 1.185 | 2.942 | 1.177 | 0 | 0 | 1.599 | 0.404 | 0 | 0 |
| WZ53 | 1.179 | 2.878 | 0.547 | 0.859 | 0.343 | 0 | 0 | 1.556 | 0.386 | 0 | 0 |
| WZ54 | 3.316 | 5.477 | 0.869 | 2.415 | 0.966 | 0 | 0 | 0.778 | 0.193 | 0 | 0 |
| WZ55 | 3.906 | 6.916 | 1.143 | 2.844 | 1.138 | 0 | 0 | 1.556 | 0.386 | 0 | 0 |
| WZ56 | 6.707 | 9.237 | 1.501 | 4.884 | 1.953 | 0 | 0 | 2.553 | 0.547 | 0 | 0.094 |
| WZ57 | 3.906 | 5.436 | 1.058 | 3.598 | 1.439 | 0 | 0 | 2.805 | 0.658 | 0 | 0.094 |
| WZ58 | 3.538 | 1.221 | 0.242 | 3.33 | 1.332 | 0 | 0 | 1.67 | 0.451 | 0 | 0 |
| WZ59 | 7.48 | 0 | 0 | 6.697 | 2.679 | 0 | 0 | 0.892 | 0.258 | 0 | 0 |
| WZ60 | 3.98 | 7.07 | 1.179 | 2.928 | 1.171 | 0 | 0 | 1.593 | 0.402 | 0 | 0 |
| WZ61 | 1.179 | 2.718 | 0.475 | 0.816 | 0.326 | 0 | 0 | 1.356 | 0.307 | 0 | 0 |
| WZ62 | 4.756 | 5.345 | 0.81 | 2.416 | 0.966 | 0 | 0 | 0.578 | 0.113 | 0 | 0 |
| WZ63 | 1.621 | 3.533 | 0.644 | 1.181 | 0.472 | 0 | 0 | 1.556 | 0.386 | 0 | 0 |
| WZ64 | 6.191 | 8.449 | 1.382 | 4.508 | 1.803 | 0 | 0 | 2.555 | 0.548 | 0 | 0.094 |
| WZ65 | 3.906 | 6.163 | 0.951 | 2.844 | 1.138 | 0 | 0 | 3.554 | 0.709 | 0 | 0 |
| WZ66 | 3.906 | 6.163 | 0.951 | 2.844 | 1.138 | 0 | 0 | 2.555 | 0.548 | 0 | 0 |
| WZ67 | 9.212 | 14.509 | 2.235 | 6.708 | 2.683 | 0 | 0 | 2.553 | 0.547 | 0 | 0 |
| WZ68 | 18.62 | 17.78 | 0.9 | 2.706 | 1.082 | 0 | 0 | 1.504 | 0.139 | 0 | 0 |

# 1. STORY

## 1. STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W101 | 15.658 | 0 | 0 | 1.802 | 0.819 | 0 | 0 | 0.619 | 0.093 | 0 | 0 |
| W102 | 4.926 | 0 | 0 | 0.532 | 0.242 | 0 | 0 | 0.55 | 0.111 | 0 | 0 |
| W103 | 15.658 | 0 | 0 | 1.802 | 0.819 | 0 | 0 | 0.619 | 0.093 | 0 | 0 |

# 1. STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W104 | 15.546 | 0 | 0 | 1.792 | 0.814 | 0 | 0 | 0.619 | 0.093 | 0 | 0 |
| W105 | 4.385 | 0 | 0 | 2.298 | 1.044 | 0 | 0 | 0.595 | 0.158 | 0 | 0 |
| W106 | 0.59 | 0 | 0 | 0.283 | 0.129 | 0 | 0 | 0.566 | 0.145 | 0 | 0 |
| W107 | 4.385 | 0 | 0 | 2.273 | 1.033 | 0 | 0 | 0.591 | 0.156 | 0 | 0 |
| W108 | 3.095 | 0 | 0 | 1.488 | 0.676 | 0 | 0 | 0.566 | 0.145 | 0 | 0 |
| W109 | 6.471 | 0 | 0 | 3.307 | 1.503 | 0 | 0 | 0 | 0 | 0 | 0 |
| W110 | 6.579 | 0 | 0 | 3.357 | 1.526 | 0 | 0 | 0 | 0 | 0 | 0 |
| W111 | 12.231 | 0 | 0 | 3.226 | 1.467 | 0 | 0 | 0 | 0 | 0 | 0 |
| W112 | 6.579 | 0 | 0 | 3.285 | 1.493 | 0 | 0 | 0 | 0 | 0 | 0 |
| W113 | 6.471 | 0 | 0 | 3.312 | 1.505 | 0 | 0 | 0 | 0 | 0 | 0 |
| W114 | 1.253 | 0 | 0 | 0.673 | 0.306 | 0 | 0 | 1.239 | 0.338 | 0 | 0 |
| W115 | 6.471 | 0 | 0 | 3.312 | 1.505 | 0 | 0 | 0 | 0 | 0 | 0 |
| W116 | 9.544 | 0 | 0 | 6.122 | 2.783 | 0 | 0 | 0.673 | 0.193 | 0 | 0 |
| W117 | 6.471 | 0 | 0 | 3.226 | 1.467 | 0 | 0 | 0 | 0 | 0 | 0 |
| W118 | 6.579 | 0 | 0 | 3.28 | 1.491 | 0 | 0 | 0 | 0 | 0 | 0 |
| W119 | 6.471 | 0 | 0 | 3.209 | 1.459 | 0 | 0 | 0 | 0 | 0 | 0 |
| W120 | 3.685 | 0 | 0 | 1.771 | 0.805 | 0 | 0 | 1.133 | 0.29 | 0 | 0 |
| W121 | 6.471 | 0 | 0 | 3.226 | 1.467 | 0 | 0 | 0 | 0 | 0 | 0 |
| W122 | 1.621 | 0 | 0 | 0.779 | 0.354 | 0 | 0 | 1.133 | 0.29 | 0 | 0 |
| W123 | 12.231 | 0 | 0 | 3.295 | 1.498 | 0 | 0 | 0 | 0 | 0 | 0 |
| W124 | 12.387 | 0 | 0 | 3.367 | 1.53 | 0 | 0 | 0 | 0 | 0 | 0 |
| W125 | 6.579 | 0 | 0 | 3.789 | 1.722 | 0 | 0 | 0 | 0 | 0 | 0 |
| W126 | 5.493 | 0 | 0 | 0.544 | 0.247 | 0 | 0 | 0.556 | 0.114 | 0 | 0 |
| W127 | 7.891 | 0 | 0 | 0.805 | 0.366 | 0 | 0 | 1.062 | 0.204 | 0 | 0 |
| W128 | 6.786 | 0 | 0 | 0.63 | 0.286 | 0 | 0 | 1.023 | 0.186 | 0 | 0 |
| W129 | 7.891 | 0 | 0 | 0.822 | 0.374 | 0 | 0 | 1.067 | 0.207 | 0 | 0 |
| W130 | 6.155 | 0 | 0 | 0.645 | 0.293 | 0 | 0 | 0.796 | 0.153 | 0 | 0 |
| W131 | 0.952 | 0 | 0 | 0.113 | 0.051 | 0 | 0 | 0.569 | 0.119 | 0 | 0 |
| W132 | 0.947 | 0 | 0 | 0.113 | 0.051 | 0 | 0 | 0.569 | 0.119 | 0 | 0 |
| W133 | 6.466 | 0 | 0 | 0.678 | 0.308 | 0 | 0 | 0.796 | 0.153 | 0 | 0 |
| W134 | 6.786 | 0 | 0 | 0.63 | 0.286 | 0 | 0 | 1.023 | 0.186 | 0 | 0 |
| W135 | 6.786 | 0 | 0 | 0.63 | 0.286 | 0 | 0 | 1.023 | 0.186 | 0 | 0 |
| W136 | 6.786 | 0 | 0 | 0.63 | 0.286 | 0 | 0 | 1.023 | 0.186 | 0 | 0 |
| W137 | 6.629 | 0 | 0 | 0.616 | 0.28 | 0 | 0 | 0.818 | 0.093 | 0 | 0 |
| W138 | 4.252 | 0 | 0 | 0.623 | 0.283 | 0 | 0 | 0.677 | 0.169 | 0 | 0 |
| W139 | 8.207 | 0 | 0 | 1.378 | 0.626 | 0 | 0 | 1.354 | 0.337 | 0 | 0 |
| W140 | 6.944 | 0 | 0 | 0.906 | 0.412 | 0 | 0 | 0.984 | 0.169 | 0 | 0 |
| W141 | 0.442 | 0 | 0 | 0.213 | 0.097 | 0 | 0 | 0.566 | 0.145 | 0 | 0 |
| W142 | 6.898 | 0 | 0 | 0.601 | 0.273 | 0 | 0 | 1.023 | 0.186 | 0 | 0 |

# 1. STORY WALL LOADS

| Wall Name | Self Weight (t) | G Load From Upper'+'Wall (t) | Q Load From Upper'+'Wall (t) | G Load From Slab (t) | Q Load From Slab (t) | Extra G Load (t) | Extra Q Load (t) | G Load From Hor.Bond Beam (t) | Q Load From Hor.Bond Beam (t) | G Load From the Upper Storey Window And Parapet(t) | G Load From the Upper Storey Door(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W143 | 7.812 | 0 | 0 | 0.843 | 0.383 | 0 | 0 | 1.464 | 0.238 | 0 | 0 |
| W144 | 6.786 | 0 | 0 | 0.63 | 0.286 | 0 | 0 | 1.023 | 0.186 | 0 | 0 |
| W145 | 6.786 | 0 | 0 | 0.308 | 0.14 | 0 | 0 | 0.818 | 0.093 | 0 | 0 |
| W146 | 6.898 | 0 | 0 | 0 | 0 | 0 | 0 | 0.613 | 0 | 0 | 0 |
| W147 | 6.155 | 0 | 0 | 0.264 | 0.12 | 0 | 0 | 0.818 | 0.093 | 0 | 0 |
| W148 | 3.821 | 0 | 0 | 0.623 | 0.283 | 0 | 0 | 0.677 | 0.169 | 0 | 0 |
| W149 | 8.207 | 0 | 0 | 1.378 | 0.626 | 0 | 0 | 1.354 | 0.337 | 0 | 0 |
| W150 | 7.53 | 0 | 0 | 0.949 | 0.431 | 0 | 0 | 1.189 | 0.262 | 0 | 0 |
| W151 | 8.082 | 0 | 0 | 0.857 | 0.39 | 0 | 0 | 1.464 | 0.238 | 0 | 0 |
| W152 | 3.98 | 0 | 0 | 1.941 | 0.882 | 0 | 0 | 1.161 | 0.303 | 0 | 0 |
| W153 | 1.179 | 0 | 0 | 0.567 | 0.258 | 0 | 0 | 1.133 | 0.29 | 0 | 0 |
| W154 | 3.316 | 0 | 0 | 1.594 | 0.725 | 0 | 0 | 0.566 | 0.145 | 0 | 0 |
| W155 | 3.906 | 0 | 0 | 1.877 | 0.853 | 0 | 0 | 1.133 | 0.29 | 0 | 0 |
| W156 | 3.906 | 0 | 0 | 1.877 | 0.853 | 0 | 0 | 1.133 | 0.29 | 0 | 0 |
| W157 | 12.013 | 0 | 0 | 5.773 | 2.624 | 0 | 0 | 1.133 | 0.29 | 0 | 0 |
| W158 | 3.316 | 0 | 0 | 1.594 | 0.725 | 0 | 0 | 0.434 | 0.085 | 0 | 0 |
| W159 | 1.179 | 0 | 0 | 0.538 | 0.245 | 0 | 0 | 1.001 | 0.23 | 0 | 0 |
| W160 | 3.98 | 0 | 0 | 1.932 | 0.878 | 0 | 0 | 1.158 | 0.301 | 0 | 0 |
| W161 | 11.645 | 0 | 0 | 5.596 | 2.544 | 0 | 0 | 1.133 | 0.29 | 0 | 0 |
| W162 | 15.546 | 0 | 0 | 1.797 | 0.817 | 0 | 0 | 0.619 | 0.093 | 0 | 0 |

# BASEMENT STORY

## BASEMENT STORY X-X DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Pd (ton/m2) | Lx(m) | Ly(m) | m=ll/ls | Alfa x2 | Mx2(tcm/m) | Alfax1 - | Mx1 - (tcm/m) | Alfax3 - | Mx3 - (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| DB01 | 0.98 | 4.25 | 4.5 | 1.06 | 0.04 | 70.56 | 0.053 | 93.83 | 0.027 | 47.28 |
| DB02 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB03 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB04 | 0.98 | 4.55 | 4.5 | 1.01 | 0.031 | 61.39 | 0.041 | 81.2 | 0.021 | 41.59 |
| DB05 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB06 | 0.98 | 7.6 | 4.5 | 1.69 | 0.037 | 73.28 | 0.049 | 97.04 | 0.025 | 49.51 |
| DB07 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB08 | 0.98 | 7.6 | 4.5 | 1.69 | 0.037 | 73.28 | 0.049 | 97.04 | 0.025 | 49.51 |
| DB09 | 0.98 | 41.25 | 2.6 | 15.87 | 0 | 0 | 0 | 0 | 0 | 0 |
| DB10 | 0.98 | 4.25 | 4.5 | 1.06 | 0.04 | 70.56 | 0.053 | 93.83 | 0.027 | 47.28 |
| DB11 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB12 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB13 | 0.98 | 4.55 | 4.5 | 1.01 | 0.031 | 61.39 | 0.041 | 81.2 | 0.021 | 41.59 |
| DB14 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB15 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB16 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB17 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB18 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB19 | 0.98 | 3.55 | 4.5 | 1.27 | 0.042 | 51.8 | 0.056 | 68.66 | 0.028 | 34.94 |
| DB20 | 0.98 | 7.1 | 4.5 | 1.58 | 0.031 | 61.39 | 0.041 | 81.2 | 0.021 | 41.59 |

# GROUND STORY

## GROUND STORY X-X DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Pd (ton/m2) | Lx(m) | Ly(m) | m=ll/ls | Alfa x2 | Mx2(tcm/m) | Alfax1 - | Mx1 - (tcm/m) | Alfax3 - | Mx3 - (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ01 | 1.02 | 4.32 | 4.58 | 1.06 | 0.04 | 76.11 | 0.053 | 101.21 | 0.027 | 51.01 |
| DZ02 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ03 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ04 | 1.02 | 4.55 | 4.58 | 1.01 | 0.031 | 65.93 | 0.042 | 89.27 | 0.021 | 44.58 |

# GROUND STORY X-X DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Pd (ton/m2) | Lx(m) | Ly(m) | m=ll/ls | Alfa x2 | Mx2(tcm/m) | Alfax1 - | Mx1 - (tcm/m) | Alfax3 - | Mx3 - (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ05 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ06 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ07 | 1.02 | 3.55 | 4.5 | 1.27 | 0.042 | 54.03 | 0.056 | 71.61 | 0.028 | 36.45 |
| DZ08 | 1.02 | 7.68 | 4.58 | 1.68 | 0.037 | 78.99 | 0.049 | 104.61 | 0.025 | 53.37 |
| DZ09 | 1.02 | 7.68 | 4.58 | 1.68 | 0.037 | 78.99 | 0.049 | 104.61 | 0.025 | 53.37 |
| DZ10 | 1.02 | 41.4 | 2.6 | 15.92 | 0 | 0 | 0 | 0 | 0 | 0 |
| DZ11 | 1.02 | 4.22 | 4.58 | 1.08 | 0.041 | 74.91 | 0.055 | 99.78 | 0.027 | 50.04 |
| DZ12 | 1.02 | 3.55 | 4.58 | 1.29 | 0.05 | 63.84 | 0.066 | 84.26 | 0.033 | 42.13 |
| DZ13 | 1.02 | 3.55 | 4.6 | 1.29 | 0.058 | 74.34 | 0.077 | 98.65 | 0.039 | 49.97 |
| DZ14 | 1.02 | 4.55 | 4.58 | 1.01 | 0.031 | 65.93 | 0.042 | 89.27 | 0.021 | 44.58 |
| DZ15 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ16 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ17 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ18 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ19 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ20 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |
| DZ21 | 1.02 | 3.55 | 4.58 | 1.29 | 0.043 | 54.84 | 0.057 | 72.69 | 0.029 | 36.99 |

# 1. STORY

# 1. STORY X-X DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Pd (ton/m2) | Lx(m) | Ly(m) | m=ll/ls | Alfa x2 | Mx2(tcm/m) | Alfax1 - | Mx1 - (tcm/m) | Alfax3 - | Mx3 - (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| D101 | 0.7 | 4.32 | 4.58 | 1.06 | 0.04 | 52.38 | 0.053 | 69.66 | 0.027 | 35.11 |
| D102 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D103 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D104 | 0.7 | 4.55 | 4.58 | 1.01 | 0.031 | 45.37 | 0.042 | 61.44 | 0.021 | 30.68 |
| D105 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D106 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D107 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D108 | 0.7 | 7.68 | 4.58 | 1.68 | 0.037 | 54.37 | 0.049 | 72 | 0.025 | 36.73 |
| D109 | 0.7 | 7.68 | 4.58 | 1.68 | 0.037 | 54.37 | 0.049 | 72 | 0.025 | 36.73 |

# 1. STORY X-X DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Pd (ton/m2) | Lx(m) | Ly(m) | m=ll/ls | Alfa x2 | Mx2(tcm/m) | Alfax1 - | Mx1 - (tcm/m) | Alfax3 - | Mx3 - (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| D110 | 0.7 | 41.4 | 2.6 | 15.92 | 0 | 0 | 0 | 0 | 0 | 0 |
| D111 | 0.7 | 4.22 | 4.58 | 1.08 | 0.041 | 51.56 | 0.055 | 68.67 | 0.027 | 34.44 |
| D112 | 0.7 | 3.55 | 4.58 | 1.29 | 0.05 | 43.94 | 0.066 | 57.99 | 0.033 | 29 |
| D113 | 0.7 | 3.55 | 4.6 | 1.29 | 0.058 | 51.17 | 0.077 | 67.89 | 0.039 | 34.39 |
| D114 | 0.7 | 4.55 | 4.58 | 1.01 | 0.031 | 45.37 | 0.042 | 61.44 | 0.021 | 30.68 |
| D115 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D116 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D117 | 0.7 | 3.55 | 4.54 | 1.28 | 0.042 | 37.46 | 0.056 | 49.66 | 0.029 | 25.27 |
| D118 | 0.7 | 3.55 | 4.54 | 1.28 | 0.042 | 37.46 | 0.056 | 49.66 | 0.029 | 25.27 |
| D119 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D120 | 0.7 | 3.55 | 4.58 | 1.29 | 0.043 | 37.74 | 0.057 | 50.03 | 0.029 | 25.46 |
| D121 | 0.7 | 3.55 | 4.5 | 1.27 | 0.042 | 37.18 | 0.056 | 49.28 | 0.028 | 25.08 |

# BASEMENT STORY

## BASEMENT STORY Y-Y DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Status | t(m) | G(t/m2) | Q(t/m2) | Alfa y2 | My2(tcm/m) | Alfay1 | My1 (tcm/m) | Alfay3 | My3 (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| DB01 | 3 | 0.1 | 0.22 | 0.2 | 0.037 | 65.36 | 0.049 | 86.56 | 0.025 | 44.16 |
| DB02 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB03 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB04 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 62.27 | 0.043 | 84.28 | 0.021 | 42.03 |
| DB05 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB06 | 3 | 0.1 | 0.22 | 0.2 | 0.06 | 119.4 | 0.08 | 158.04 | 0.04 | 79.26 |
| DB07 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB08 | 3 | 0.1 | 0.22 | 0.2 | 0.06 | 119.4 | 0.08 | 158.04 | 0.04 | 79.26 |
| DB09 | 0 | 0.1 | 0.22 | 0.2 | 0 | 44.08 | 0 | 73.46 | 0 | 0 |
| DB10 | 3 | 0.1 | 0.22 | 0.2 | 0.037 | 65.36 | 0.049 | 86.56 | 0.025 | 44.16 |
| DB11 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB12 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB13 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 62.27 | 0.043 | 84.28 | 0.021 | 42.03 |
| DB14 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB15 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB16 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB17 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB18 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB19 | 2 | 0.1 | 0.22 | 0.2 | 0.031 | 38.21 | 0.041 | 50.53 | 0.021 | 25.88 |
| DB20 | 2 | 0.1 | 0.22 | 0.2 | 0.051 | 101.36 | 0.068 | 134.89 | 0.034 | 67.82 |

# GROUND STORY

## GROUND STORY Y-Y DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Status | t(m) | G(t/m2) | Q(t/m2) | Alfa y2 | My2(tcm/m) | Alfay1 | My1 (tcm/m) | Alfay3 | My3 (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ01 | 3 | 0.1 | 0.25 | 0.2 | 0.037 | 70.6 | 0.049 | 93.49 | 0.025 | 47.7 |
| DZ02 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ03 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ04 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 65.46 | 0.041 | 86.58 | 0.021 | 44.34 |

# GROUND STORY Y-Y DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Status | t(m) | G(t/m2) | Q(t/m2) | Alfa y2 | My2(tcm/m) | Alfay1 | My1 (tcm/m) | Alfay3 | My3 (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ05 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ06 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ07 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ08 | 3 | 0.1 | 0.25 | 0.2 | 0.06 | 128.04 | 0.079 | 169.5 | 0.04 | 85.06 |
| DZ09 | 3 | 0.1 | 0.25 | 0.2 | 0.06 | 128.04 | 0.079 | 169.5 | 0.04 | 85.06 |
| DZ10 | 0 | 0.1 | 0.25 | 0.2 | 0 | 45.97 | 0 | 76.61 | 0 | 0 |
| DZ11 | 3 | 0.1 | 0.25 | 0.2 | 0.037 | 67.37 | 0.049 | 89.22 | 0.025 | 45.52 |
| DZ12 | 3 | 0.1 | 0.25 | 0.2 | 0.037 | 47.56 | 0.049 | 62.99 | 0.025 | 32.14 |
| DZ13 | 6 | 0.1 | 0.25 | 0.2 | 0.044 | 56.64 | 0.058 | 74.66 | 0.029 | 37.33 |
| DZ14 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 65.46 | 0.041 | 86.58 | 0.021 | 44.34 |
| DZ15 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ16 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ17 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ18 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ19 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ20 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |
| DZ21 | 2 | 0.1 | 0.25 | 0.2 | 0.031 | 39.85 | 0.041 | 52.7 | 0.021 | 26.99 |

# 1. STORY

# 1. STORY Y-Y DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Status | t(m) | G(t/m2) | Q(t/m2) | Alfa y2 | My2(tcm/m) | Alfay1 | My1 (tcm/m) | Alfay3 | My3 (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| D101 | 3 | 0.1 | 0.08 | 0.15 | 0.037 | 48.59 | 0.049 | 64.34 | 0.025 | 32.83 |
| D102 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D103 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D104 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 45.05 | 0.041 | 59.59 | 0.021 | 30.52 |
| D105 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D106 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D107 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D108 | 3 | 0.1 | 0.08 | 0.15 | 0.06 | 88.12 | 0.079 | 116.66 | 0.04 | 58.54 |
| D109 | 3 | 0.1 | 0.08 | 0.15 | 0.06 | 88.12 | 0.079 | 116.66 | 0.04 | 58.54 |

# 1. STORY Y-Y DIRECTION SLAB STATIC ANALYSIS

| Slab Name | Status | t(m) | G(t/m2) | Q(t/m2) | Alfa y2 | My2(tcm/m) | Alfay1 | My1 (tcm/m) | Alfay3 | My3 (tcm/m) |
|---|---|---|---|---|---|---|---|---|---|---|
| D110 | 0 | 0.1 | 0.08 | 0.15 | 0 | 31.64 | 0 | 52.73 | 0 | 0 |
| D111 | 3 | 0.1 | 0.08 | 0.15 | 0.037 | 46.37 | 0.049 | 61.4 | 0.025 | 31.33 |
| D112 | 3 | 0.1 | 0.08 | 0.15 | 0.037 | 32.73 | 0.049 | 43.35 | 0.025 | 22.12 |
| D113 | 6 | 0.1 | 0.08 | 0.15 | 0.044 | 38.98 | 0.058 | 51.38 | 0.029 | 25.69 |
| D114 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 45.05 | 0.041 | 59.59 | 0.021 | 30.52 |
| D115 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D116 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D117 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 722.67 | 0.021 | 18.58 |
| D118 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 722.67 | 0.021 | 18.58 |
| D119 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D120 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |
| D121 | 2 | 0.1 | 0.08 | 0.15 | 0.031 | 27.43 | 0.041 | 36.27 | 0.021 | 18.58 |

# BASEMENT STORY

## BASEMENT STORY SLAB RC ANALYSIS (SPAN)

| Slab Name | Mdx(tcm/m) | Asx(cm2/m) | Straight X | Bent Up X | Selected | Mdy(tcm/m) | Asy(cm2/m) | Straight Y | Bent Up Y | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DB01 | 70.56 | 5.36 | Ø8/18 | Ø8/18 | 5.59 | 65.36 | 4.97 | Ø8/20 | Ø8/20 | 5.03 |
| DB02 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB03 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB04 | 61.39 | 4.66 | Ø8/21 | Ø8/21 | 4.79 | 62.27 | 4.73 | Ø8/21 | Ø8/21 | 4.79 |
| DB05 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB06 | 73.28 | 5.57 | Ø8/18 | Ø8/18 | 5.59 | 119.4 | 9.07 | Ø8/11 | Ø8/11 | 9.14 |
| DB07 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB08 | 73.28 | 5.57 | Ø8/18 | Ø8/18 | 5.59 | 119.4 | 9.07 | Ø8/11 | Ø8/11 | 9.14 |
| DB09 | 0 | 1.8 | Ø8/30 | Ø8/30 | 3.35 | 44.08 | 3.35 | Ø8/30 | Ø8/30 | 3.35 |
| DB10 | 70.56 | 5.36 | Ø8/18 | Ø8/18 | 5.59 | 65.36 | 4.97 | Ø8/20 | Ø8/20 | 5.03 |
| DB11 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB12 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB13 | 61.39 | 4.66 | Ø8/21 | Ø8/21 | 4.79 | 62.27 | 4.73 | Ø8/21 | Ø8/21 | 4.79 |
| DB14 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB15 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB16 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB17 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB18 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB19 | 51.8 | 3.94 | Ø8/25 | Ø8/25 | 4.02 | 38.21 | 2.9 | Ø8/30 | Ø8/30 | 3.35 |
| DB20 | 61.39 | 4.66 | Ø8/21 | Ø8/21 | 4.79 | 101.36 | 7.7 | Ø8/13 | Ø8/13 | 7.73 |

# GROUND STORY

## GROUND STORY SLAB RC ANALYSIS (SPAN)

| Slab Name | Mdx(tcm/m) | Asx(cm2/m) | Straight X | Bent Up X | Selected | Mdy(tcm/m) | Asy(cm2/m) | Straight Y | Bent Up Y | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ01 | 76.11 | 5.78 | Ø8/17 | Ø8/17 | 5.91 | 70.6 | 5.36 | Ø8/18 | Ø8/18 | 5.59 |
| DZ02 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ03 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |

# GROUND STORY SLAB RC ANALYSIS (SPAN)

| Slab Name | Mdx(tcm/m) | Asx(cm2/m) | Straight X | Bent Up X | Selected | Mdy(tcm/m) | Asy(cm2/m) | Straight Y | Bent Up Y | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ04 | 65.93 | 5.01 | Ø8/20 | Ø8/20 | 5.03 | 65.46 | 4.97 | Ø8/20 | Ø8/20 | 5.03 |
| DZ05 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ06 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ07 | 54.03 | 4.1 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ08 | 78.99 | 6 | Ø8/16 | Ø8/16 | 6.28 | 128.04 | 9.73 | Ø8/10 | Ø8/10 | 10.05 |
| DZ09 | 78.99 | 6 | Ø8/16 | Ø8/16 | 6.28 | 128.04 | 9.73 | Ø8/10 | Ø8/10 | 10.05 |
| DZ10 | 0 | 1.8 | Ø8/30 | Ø8/30 | 3.35 | 45.97 | 3.49 | Ø8/28 | Ø8/28 | 3.59 |
| DZ11 | 74.91 | 5.69 | Ø8/17 | Ø8/17 | 5.91 | 67.37 | 5.12 | Ø8/19 | Ø8/19 | 5.29 |
| DZ12 | 63.84 | 4.85 | Ø8/20 | Ø8/20 | 5.03 | 47.56 | 3.61 | Ø8/27 | Ø8/27 | 3.72 |
| DZ13 | 74.34 | 5.65 | Ø8/17 | Ø8/17 | 5.91 | 56.64 | 4.3 | Ø8/23 | Ø8/23 | 4.37 |
| DZ14 | 65.93 | 5.01 | Ø8/20 | Ø8/20 | 5.03 | 65.46 | 4.97 | Ø8/20 | Ø8/20 | 5.03 |
| DZ15 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ16 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ17 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ18 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ19 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ20 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |
| DZ21 | 54.84 | 4.17 | Ø8/24 | Ø8/24 | 4.19 | 39.85 | 3.03 | Ø8/30 | Ø8/30 | 3.35 |

# 1. STORY

# 1. STORY SLAB RC ANALYSIS (SPAN)

| Slab Name | Mdx(tcm/m) | Asx(cm2/m) | Straight X | Bent Up X | Selected | Mdy(tcm/m) | Asy(cm2/m) | Straight Y | Bent Up Y | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| D101 | 52.38 | 3.98 | Ø8/25 | Ø8/25 | 4.02 | 48.59 | 3.69 | Ø8/27 | Ø8/27 | 3.72 |
| D102 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D103 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D104 | 45.37 | 3.45 | Ø8/29 | Ø8/29 | 3.47 | 45.05 | 3.42 | Ø8/29 | Ø8/29 | 3.47 |
| D105 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D106 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D107 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D108 | 54.37 | 4.13 | Ø8/24 | Ø8/24 | 4.19 | 88.12 | 6.7 | Ø8/15 | Ø8/15 | 6.7 |

# 1. STORY SLAB RC ANALYSIS (SPAN)

| Slab Name | Mdx(tcm/m) | Asx(cm2/m) | Straight X | Bent Up X | Selected | Mdy(tcm/m) | Asy(cm2/m) | Straight Y | Bent Up Y | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| D109 | 54.37 | 4.13 | Ø8/24 | Ø8/24 | 4.19 | 88.12 | 6.7 | Ø8/15 | Ø8/15 | 6.7 |
| D110 | 0 | 1.8 | Ø8/30 | Ø8/30 | 3.35 | 31.64 | 2.4 | Ø8/30 | Ø8/30 | 3.35 |
| D111 | 51.56 | 3.92 | Ø8/25 | Ø8/25 | 4.02 | 46.37 | 3.52 | Ø8/28 | Ø8/28 | 3.59 |
| D112 | 43.94 | 3.34 | Ø8/30 | Ø8/30 | 3.35 | 32.73 | 2.49 | Ø8/30 | Ø8/30 | 3.35 |
| D113 | 51.17 | 3.89 | Ø8/25 | Ø8/25 | 4.02 | 38.98 | 2.96 | Ø8/30 | Ø8/30 | 3.35 |
| D114 | 45.37 | 3.45 | Ø8/29 | Ø8/29 | 3.47 | 45.05 | 3.42 | Ø8/29 | Ø8/29 | 3.47 |
| D115 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D116 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D117 | 37.46 | 1.8 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D118 | 37.46 | 1.8 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D119 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D120 | 37.74 | 2.87 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |
| D121 | 37.18 | 2.83 | Ø8/30 | Ø8/30 | 3.35 | 27.43 | 2.08 | Ø8/30 | Ø8/30 | 3.35 |

# BASEMENT STORY

## BASEMENT STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DB01 | left | --- | 47.28 | --- | --- | 47.28 | 3.59 | 2.68 | Ø8/50 | 3.69 |
| DB01 | right | DB02 | 93.83 | 68.66 | 0.73 | 86.19 | 6.55 | 4.65 | Ø8/26 | 6.58 |
| DB01 | top | --- | 44.16 | --- | --- | 44.16 | 3.36 | 2.48 | Ø8/50 | 3.49 |
| DB01 | bottom | DB09 | 86.56 | 73.46 | 0.85 | 86.56 | 6.58 | 4.16 | Ø8/20 | 6.67 |
| DB02 | left | DB01 | 68.66 | 93.83 | 0.73 | 86.19 | 6.55 | 4.65 | Ø8/26 | 6.58 |
| DB02 | right | DB03 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB02 | top | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB02 | bottom | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB03 | left | DB02 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB03 | right | DB04 | 68.66 | 81.2 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB03 | top | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB03 | bottom | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB04 | left | DB03 | 81.2 | 68.66 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB04 | right | DB05 | 81.2 | 68.66 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB04 | top | --- | 42.03 | --- | --- | 42.03 | 3.19 | 2.37 | Ø8/50 | 3.37 |
| DB04 | bottom | DB09 | 84.28 | 73.46 | 0.87 | 84.28 | 6.4 | 4.04 | Ø8/21 | 6.43 |
| DB05 | left | DB04 | 68.66 | 81.2 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB05 | right | DB19 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB05 | top | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB05 | bottom | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB06 | left | DB20 | 97.04 | 81.2 | 0.84 | 97.04 | 7.37 | 5.12 | Ø8/22 | 7.4 |
| DB06 | right | --- | 49.51 | --- | --- | 49.51 | 3.76 | 2.78 | Ø8/50 | 3.79 |
| DB06 | top | DB09 | 158.04 | 73.46 | 0.46 | 137.39 | 10.44 | 6.21 | Ø8/11 | 10.78 |
| DB06 | bottom | --- | 79.26 | --- | --- | 79.26 | 6.02 | 4.54 | Ø8/33 | 6.06 |
| DB07 | left | DB19 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB07 | right | DB18 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB07 | top | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB07 | bottom | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |

# BASEMENT STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DB08 | left | DB17 | 97.04 | 68.66 | 0.71 | 91.02 | 6.92 | 4.75 | Ø8/23 | 6.94 |
| DB08 | right | --- | 49.51 | --- | --- | 49.51 | 3.76 | 2.78 | Ø8/50 | 3.79 |
| DB08 | top | --- | 79.26 | --- | --- | 79.26 | 6.02 | 4.54 | Ø8/33 | 6.06 |
| DB08 | bottom | DB09 | 158.04 | 73.46 | 0.46 | 137.39 | 10.44 | 6.21 | Ø8/11 | 10.78 |
| DB09 | left | --- | 0 | --- | --- | 0 | 0 | 0.9 | --- | --- |
| DB09 | right | --- | 0 | --- | --- | 0 | 0 | 0.9 | --- | --- |
| DB09 | top | DB19 | 73.46 | 50.53 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB09 | bottom | DB15 | 73.46 | 50.53 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB10 | left | --- | 47.28 | --- | --- | 47.28 | 3.59 | 2.68 | Ø8/50 | 3.69 |
| DB10 | right | DB11 | 93.83 | 68.66 | 0.73 | 86.19 | 6.55 | 4.65 | Ø8/26 | 6.58 |
| DB10 | top | DB09 | 86.56 | 73.46 | 0.85 | 86.56 | 6.58 | 4.16 | Ø8/20 | 6.67 |
| DB10 | bottom | --- | 44.16 | --- | --- | 44.16 | 3.36 | 2.48 | Ø8/50 | 3.49 |
| DB11 | left | DB10 | 68.66 | 93.83 | 0.73 | 86.19 | 6.55 | 4.65 | Ø8/26 | 6.58 |
| DB11 | right | DB12 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB11 | top | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB11 | bottom | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB12 | left | DB11 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB12 | right | DB13 | 68.66 | 81.2 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB12 | top | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB12 | bottom | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB13 | left | DB12 | 81.2 | 68.66 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB13 | right | DB14 | 81.2 | 68.66 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB13 | top | DB09 | 84.28 | 73.46 | 0.87 | 84.28 | 6.4 | 4.04 | Ø8/21 | 6.43 |
| DB13 | bottom | --- | 42.03 | --- | --- | 42.03 | 3.19 | 2.37 | Ø8/50 | 3.37 |
| DB14 | left | DB13 | 68.66 | 81.2 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB14 | right | DB15 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB14 | top | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB14 | bottom | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB15 | left | DB14 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB15 | right | DB16 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB15 | top | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB15 | bottom | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |

# BASEMENT STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DB16 | left | DB15 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB16 | right | DB20 | 68.66 | 81.2 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB16 | top | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB16 | bottom | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB17 | left | DB18 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB17 | right | DB08 | 68.66 | 97.04 | 0.71 | 91.02 | 6.92 | 4.75 | Ø8/23 | 6.94 |
| DB17 | top | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB17 | bottom | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB18 | left | DB07 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB18 | right | DB17 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB18 | top | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB18 | bottom | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB19 | left | DB05 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB19 | right | DB07 | 68.66 | 68.66 | 1 | 68.66 | 5.22 | 3.94 | Ø8/39 | 5.22 |
| DB19 | top | --- | 25.88 | --- | --- | 25.88 | 1.97 | 1.45 | Ø8/50 | 2.46 |
| DB19 | bottom | DB09 | 50.53 | 73.46 | 0.69 | 63.77 | 4.85 | 3.13 | Ø8/29 | 4.86 |
| DB20 | left | DB16 | 81.2 | 68.66 | 0.85 | 81.2 | 6.17 | 4.3 | Ø8/26 | 6.23 |
| DB20 | right | DB06 | 81.2 | 97.04 | 0.84 | 97.04 | 7.37 | 5.12 | Ø8/22 | 7.4 |
| DB20 | top | DB09 | 134.89 | 73.46 | 0.54 | 119.89 | 9.11 | 5.52 | Ø8/14 | 9.12 |
| DB20 | bottom | --- | 67.82 | --- | --- | 67.82 | 5.15 | 3.85 | Ø8/38 | 5.17 |

# GROUND STORY

# GROUND STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ01 | left | --- | 51.01 | --- | --- | 51.01 | 3.88 | 2.89 | Ø8/50 | 3.9 |
| DZ01 | right | DZ02 | 101.21 | 72.69 | 0.72 | 92.64 | 7.04 | 4.97 | Ø8/24 | 7.07 |
| DZ01 | top | --- | 47.7 | --- | --- | 47.7 | 3.62 | 2.68 | Ø8/50 | 3.69 |
| DZ01 | bottom | DZ10 | 93.49 | 76.61 | 0.82 | 93.49 | 7.1 | 4.43 | Ø8/18 | 7.22 |

# GROUND STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ02 | left | DZ01 | 72.69 | 101.21 | 0.72 | 92.64 | 7.04 | 4.97 | Ø8/24 | 7.07 |
| DZ02 | right | DZ03 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ02 | top | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ02 | bottom | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ03 | left | DZ02 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ03 | right | DZ04 | 72.69 | 89.27 | 0.81 | 89.27 | 6.78 | 4.59 | Ø8/22 | 6.87 |
| DZ03 | top | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ03 | bottom | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ04 | left | DZ03 | 89.27 | 72.69 | 0.81 | 89.27 | 6.78 | 4.59 | Ø8/22 | 6.87 |
| DZ04 | right | DZ05 | 89.27 | 72.69 | 0.81 | 89.27 | 6.78 | 4.59 | Ø8/22 | 6.87 |
| DZ04 | top | --- | 44.34 | --- | --- | 44.34 | 3.37 | 2.49 | Ø8/50 | 3.49 |
| DZ04 | bottom | DZ10 | 86.58 | 76.61 | 0.88 | 86.58 | 6.58 | 4.23 | Ø8/21 | 6.63 |
| DZ05 | left | DZ04 | 72.69 | 89.27 | 0.81 | 89.27 | 6.78 | 4.59 | Ø8/22 | 6.87 |
| DZ05 | right | DZ06 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ05 | top | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ05 | bottom | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ06 | left | DZ05 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ06 | right | DZ07 | 72.69 | 71.61 | 0.99 | 72.69 | 5.52 | 4.14 | Ø8/36 | 5.53 |
| DZ06 | top | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ06 | bottom | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ07 | left | DZ06 | 71.61 | 72.69 | 0.99 | 72.69 | 5.52 | 4.14 | Ø8/36 | 5.53 |
| DZ07 | right | DZ20 | 71.61 | 72.69 | 0.99 | 72.69 | 5.52 | 4.14 | Ø8/36 | 5.53 |
| DZ07 | top | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ07 | bottom | DZ10 | 52.7 | 76.61 | 0.69 | 66.51 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ08 | left | DZ19 | 104.61 | 72.69 | 0.69 | 97.88 | 7.44 | 5.08 | Ø8/21 | 7.48 |
| DZ08 | right | --- | 53.37 | --- | --- | 53.37 | 4.06 | 3 | Ø8/47 | 4.07 |
| DZ08 | top | DZ10 | 169.5 | 76.61 | 0.45 | 147.06 | 11.17 | 6.61 | Ø8/11 | 11.18 |
| DZ08 | bottom | --- | 85.06 | --- | --- | 85.06 | 6.46 | 4.86 | Ø8/31 | 6.49 |
| DZ09 | left | DZ21 | 104.61 | 72.69 | 0.69 | 97.88 | 7.44 | 5.08 | Ø8/21 | 7.48 |
| DZ09 | right | --- | 53.37 | --- | --- | 53.37 | 4.06 | 3 | Ø8/47 | 4.07 |
| DZ09 | top | --- | 85.06 | --- | --- | 85.06 | 6.46 | 4.86 | Ø8/31 | 6.49 |
| DZ09 | bottom | DZ10 | 169.5 | 76.61 | 0.45 | 147.06 | 11.17 | 6.61 | Ø8/11 | 11.18 |

# GROUND STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ10 | left | --- | 0 | --- | --- | 0 | 0 | 0.9 | --- | --- |
| DZ10 | right | --- | 0 | --- | --- | 0 | 0 | 0.9 | --- | --- |
| DZ10 | top | DZ06 | 76.61 | 52.7 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ10 | bottom | DZ16 | 76.61 | 52.7 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ11 | left | --- | 50.04 | --- | --- | 50.04 | 3.8 | 2.85 | Ø8/50 | 3.85 |
| DZ11 | right | DZ12 | 99.78 | 84.26 | 0.84 | 99.78 | 7.58 | 5.27 | Ø8/21 | 7.66 |
| DZ11 | top | DZ10 | 89.22 | 76.61 | 0.86 | 89.22 | 6.78 | 4.31 | Ø8/20 | 6.82 |
| DZ11 | bottom | --- | 45.52 | --- | --- | 45.52 | 3.46 | 2.56 | Ø8/50 | 3.56 |
| DZ12 | left | DZ11 | 84.26 | 99.78 | 0.84 | 99.78 | 7.58 | 5.27 | Ø8/21 | 7.66 |
| DZ12 | right | --- | 42.13 | --- | --- | 42.13 | 3.2 | 2.43 | Ø8/50 | 3.43 |
| DZ12 | top | DZ10 | 62.99 | 76.61 | 0.82 | 76.61 | 5.82 | 3.55 | Ø8/22 | 5.84 |
| DZ12 | bottom | --- | 32.14 | --- | --- | 32.14 | 2.44 | 1.81 | Ø8/50 | 2.81 |
| DZ13 | left | --- | 49.97 | --- | --- | 49.97 | 3.8 | 2.82 | Ø8/50 | 3.83 |
| DZ13 | right | DZ14 | 98.65 | 89.27 | 0.9 | 98.65 | 7.49 | 5.33 | Ø8/23 | 7.51 |
| DZ13 | top | --- | 37.33 | --- | --- | 37.33 | 2.84 | 2.15 | Ø8/50 | 3.16 |
| DZ13 | bottom | --- | 37.33 | --- | --- | 37.33 | 2.84 | 2.15 | Ø8/50 | 3.16 |
| DZ14 | left | DZ13 | 89.27 | 98.65 | 0.9 | 98.65 | 7.49 | 5.33 | Ø8/23 | 7.51 |
| DZ14 | right | DZ15 | 89.27 | 72.69 | 0.81 | 89.27 | 6.78 | 4.59 | Ø8/22 | 6.87 |
| DZ14 | top | DZ10 | 86.58 | 76.61 | 0.88 | 86.58 | 6.58 | 4.23 | Ø8/21 | 6.63 |
| DZ14 | bottom | --- | 44.34 | --- | --- | 44.34 | 3.37 | 2.49 | Ø8/50 | 3.49 |
| DZ15 | left | DZ14 | 72.69 | 89.27 | 0.81 | 89.27 | 6.78 | 4.59 | Ø8/22 | 6.87 |
| DZ15 | right | DZ16 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ15 | top | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ15 | bottom | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ16 | left | DZ15 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ16 | right | DZ17 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ16 | top | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ16 | bottom | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ17 | left | DZ16 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ17 | right | DZ18 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ17 | top | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ17 | bottom | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |

# GROUND STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| DZ18 | left | DZ17 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ18 | right | DZ19 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ18 | top | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ18 | bottom | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ19 | left | DZ18 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ19 | right | DZ08 | 72.69 | 104.61 | 0.69 | 97.88 | 7.44 | 5.08 | Ø8/21 | 7.48 |
| DZ19 | top | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ19 | bottom | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ20 | left | DZ07 | 72.69 | 71.61 | 0.99 | 72.69 | 5.52 | 4.14 | Ø8/36 | 5.53 |
| DZ20 | right | DZ21 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ20 | top | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ20 | bottom | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |
| DZ21 | left | DZ20 | 72.69 | 72.69 | 1 | 72.69 | 5.52 | 4.17 | Ø8/37 | 5.53 |
| DZ21 | right | DZ09 | 72.69 | 104.61 | 0.69 | 97.88 | 7.44 | 5.08 | Ø8/21 | 7.48 |
| DZ21 | top | --- | 26.99 | --- | --- | 26.99 | 2.05 | 1.51 | Ø8/50 | 2.52 |
| DZ21 | bottom | DZ10 | 52.7 | 76.61 | 0.69 | 66.45 | 5.05 | 3.26 | Ø8/28 | 5.06 |

# 1. STORY

# 1. STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| D101 | left | --- | 35.11 | --- | --- | 35.11 | 2.67 | 1.99 | Ø8/50 | 3 |
| D101 | right | D102 | 69.66 | 50.03 | 0.72 | 63.76 | 4.84 | 3.42 | Ø8/35 | 4.86 |
| D101 | top | --- | 32.83 | --- | --- | 32.83 | 2.49 | 1.85 | Ø8/50 | 2.85 |
| D101 | bottom | D110 | 64.34 | 52.73 | 0.82 | 64.34 | 4.89 | 3.05 | Ø8/27 | 4.91 |
| D102 | left | D101 | 50.03 | 69.66 | 0.72 | 63.76 | 4.84 | 3.42 | Ø8/35 | 4.86 |
| D102 | right | D103 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D102 | top | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D102 | bottom | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |

# 1. STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| D103 | left | D102 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D103 | right | D104 | 50.03 | 61.44 | 0.81 | 61.44 | 4.67 | 3.16 | Ø8/33 | 4.68 |
| D103 | top | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D103 | bottom | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D104 | left | D103 | 61.44 | 50.03 | 0.81 | 61.44 | 4.67 | 3.16 | Ø8/33 | 4.68 |
| D104 | right | D105 | 61.44 | 50.03 | 0.81 | 61.44 | 4.67 | 3.16 | Ø8/33 | 4.68 |
| D104 | top | --- | 30.52 | --- | --- | 30.52 | 2.32 | 1.71 | Ø8/50 | 2.72 |
| D104 | bottom | D110 | 59.59 | 52.73 | 0.88 | 59.59 | 4.53 | 2.91 | Ø8/31 | 4.53 |
| D105 | left | D104 | 50.03 | 61.44 | 0.81 | 61.44 | 4.67 | 3.16 | Ø8/33 | 4.68 |
| D105 | right | D106 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D105 | top | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D105 | bottom | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D106 | left | D105 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D106 | right | D107 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D106 | top | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D106 | bottom | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D107 | left | D106 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D107 | right | D120 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D107 | top | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D107 | bottom | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D108 | left | D119 | 72 | 50.03 | 0.69 | 67.37 | 5.12 | 3.5 | Ø8/31 | 5.12 |
| D108 | right | --- | 36.73 | --- | --- | 36.73 | 2.79 | 2.07 | Ø8/50 | 3.07 |
| D108 | top | D110 | 116.66 | 52.73 | 0.45 | 101.21 | 7.69 | 4.55 | Ø8/16 | 7.69 |
| D108 | bottom | --- | 58.54 | --- | --- | 58.54 | 4.45 | 3.35 | Ø8/45 | 4.46 |
| D109 | left | D121 | 72 | 49.28 | 0.68 | 67.21 | 5.11 | 3.48 | Ø8/30 | 5.15 |
| D109 | right | --- | 36.73 | --- | --- | 36.73 | 2.79 | 2.07 | Ø8/50 | 3.07 |
| D109 | top | --- | 58.54 | --- | --- | 58.54 | 4.45 | 3.35 | Ø8/45 | 4.46 |
| D109 | bottom | D110 | 116.66 | 52.73 | 0.45 | 101.21 | 7.69 | 4.55 | Ø8/16 | 7.69 |
| D110 | left | --- | 0 | --- | --- | 0 | 0 | 0.9 | --- | --- |
| D110 | right | --- | 0 | --- | --- | 0 | 0 | 0.9 | --- | --- |
| D110 | top | D106 | 52.73 | 36.27 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D110 | bottom | D116 | 52.73 | 36.27 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |

# 1. STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| D111 | left | --- | 34.44 | --- | --- | 34.44 | 2.62 | 1.96 | Ø8/50 | 2.96 |
| D111 | right | D112 | 68.67 | 57.99 | 0.84 | 68.67 | 5.22 | 3.63 | Ø8/31 | 5.25 |
| D111 | top | D110 | 61.4 | 52.73 | 0.86 | 61.4 | 4.67 | 2.96 | Ø8/29 | 4.7 |
| D111 | bottom | --- | 31.33 | --- | --- | 31.33 | 2.38 | 1.76 | Ø8/50 | 2.77 |
| D112 | left | D111 | 57.99 | 68.67 | 0.84 | 68.67 | 5.22 | 3.63 | Ø8/31 | 5.25 |
| D112 | right | --- | 29 | --- | --- | 29 | 2.2 | 1.67 | Ø8/50 | 2.67 |
| D112 | top | D110 | 43.35 | 52.73 | 0.82 | 52.73 | 4.01 | 2.45 | Ø8/32 | 4.02 |
| D112 | bottom | --- | 22.12 | --- | --- | 22.12 | 1.68 | 1.24 | Ø8/50 | 2.25 |
| D113 | left | --- | 34.39 | --- | --- | 34.39 | 2.61 | 1.94 | Ø8/50 | 2.95 |
| D113 | right | D114 | 67.89 | 61.44 | 0.9 | 67.89 | 5.16 | 3.67 | Ø8/33 | 5.19 |
| D113 | top | --- | 25.69 | --- | --- | 25.69 | 1.95 | 1.48 | Ø8/50 | 2.49 |
| D113 | bottom | --- | 25.69 | --- | --- | 25.69 | 1.95 | 1.48 | Ø8/50 | 2.49 |
| D114 | left | D113 | 61.44 | 67.89 | 0.9 | 67.89 | 5.16 | 3.67 | Ø8/33 | 5.19 |
| D114 | right | D115 | 61.44 | 50.03 | 0.81 | 61.44 | 4.67 | 3.16 | Ø8/33 | 4.68 |
| D114 | top | D110 | 59.59 | 52.73 | 0.88 | 59.59 | 4.53 | 2.91 | Ø8/31 | 4.53 |
| D114 | bottom | --- | 30.52 | --- | --- | 30.52 | 2.32 | 1.71 | Ø8/50 | 2.72 |
| D115 | left | D114 | 50.03 | 61.44 | 0.81 | 61.44 | 4.67 | 3.16 | Ø8/33 | 4.68 |
| D115 | right | D116 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D115 | top | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D115 | bottom | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D116 | left | D115 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D116 | right | D117 | 50.03 | 49.66 | 0.99 | 50.03 | 3.8 | 2.33 | Ø8/34 | 3.81 |
| D116 | top | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D116 | bottom | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D117 | left | D116 | 49.66 | 50.03 | 0.99 | 50.03 | 3.8 | 2.33 | Ø8/34 | 3.81 |
| D117 | right | D118 | 49.66 | 49.66 | 1 | 49.66 | 3.77 | 1.8 | Ø8/25 | 3.81 |
| D117 | top | D110 | 722.67 | 52.73 | 0.07 | 559.98 | 42.55 | 2.24 | Ø12/2 | 58.79 |
| D117 | bottom | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D118 | left | D117 | 49.66 | 49.66 | 1 | 49.66 | 3.77 | 1.8 | Ø8/25 | 3.81 |
| D118 | right | D119 | 49.66 | 50.03 | 0.99 | 50.03 | 3.8 | 2.33 | Ø8/34 | 3.81 |
| D118 | top | D110 | 722.67 | 52.73 | 0.07 | 559.98 | 42.55 | 2.24 | Ø12/2 | 58.79 |
| D118 | bottom | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |

# 1. STORY SLAB RC ANALYSIS (SUPPORT)

| Slab1 Name | Calc. Loc. | Slab2 Name | Mm1(tcm/m) | Mm2(tcm/m) | Mms/Mmb | Mdmax. | Required As | Existing As | Additional Steel | Selected |
|---|---|---|---|---|---|---|---|---|---|---|
| D119 | left | D118 | 50.03 | 49.66 | 0.99 | 50.03 | 3.8 | 2.33 | Ø8/34 | 3.81 |
| D119 | right | D108 | 50.03 | 72 | 0.69 | 67.37 | 5.12 | 3.5 | Ø8/31 | 5.12 |
| D119 | top | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D119 | bottom | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D120 | left | D107 | 50.03 | 50.03 | 1 | 50.03 | 3.8 | 2.87 | Ø8/50 | 3.87 |
| D120 | right | D121 | 50.03 | 49.28 | 0.99 | 50.03 | 3.8 | 2.85 | Ø8/50 | 3.85 |
| D120 | top | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D120 | bottom | D110 | 36.27 | 52.73 | 0.69 | 45.73 | 3.47 | 2.24 | Ø8/40 | 3.5 |
| D121 | left | D120 | 49.28 | 50.03 | 0.99 | 50.03 | 3.8 | 2.85 | Ø8/50 | 3.85 |
| D121 | right | D109 | 49.28 | 72 | 0.68 | 67.21 | 5.11 | 3.48 | Ø8/30 | 5.15 |
| D121 | top | --- | 18.58 | --- | --- | 18.58 | 1.41 | 1.04 | Ø8/50 | 2.05 |
| D121 | bottom | D110 | 36.27 | 52.73 | 0.69 | 45.77 | 3.48 | 2.24 | Ø8/40 | 3.5 |

# LATERAL FORCES ACTING ON THE STORIES

## Pre-Analysis Data Information

| | | |
|---|---|---|
| **Seismic Code** | **Eurocode 8** | |
| **Earthquake Analysis** | **Equivalent Seismic Force Method Linear Analysis** | |
| **A** | **: 0.2** | Effective Ground Acceleration Coefficient |
| **gI** | **: 1** | Building Importance Factor |
| **q** | **: 2** | Structural Behavior Factor |
| **H** | **: 0** | Rigid Basement Height |
| **b** | **: 0.2** | The lower bound factor for the horizontal design spectrum |
| **Ct** | **: 0.05** | Calculating Method for T1 fundamental period of vibration of a building |
| **Ground Type** | **: C** | Ground Type (EC8, §3.1.2) |
| **S** | **: 1.15** | is the soil factor |
| **TB** | **: 0.2** | is the lower limit of the period of the constant spectral acceleration branch |
| **TC** | **: 0.6** | is the upper limit of the period of the constant spectral acceleration branch |
| **TD** | **: 2** | is the value defining the beginning of the constant displacement response range of the spectrum |
| **Building H** | **: 9.3** | Building Height from foundation top level (m) |
| **Building Net Height(m)** | **: 9.3** | Building Height used in Eartquake Analysis |

## Analysis Results

| | | | |
|---|---|---|---|
| **T=Ct*(H)^0.75:** | 0.266 | sec | Approximate fundamental period of vibration (EC8 eq.4.6) |
| **Sd(T)=** | 0.29 | | Maximum horizontal seismic acceleration (EC8 eq.3.15) |
| **Vo=** | 679.87 | | Base Shear Force |

# DESIGN SEISMIC LOADS ACTING AT STORIES

| Story Name | WG(t) | LLRF | WQ(t) | Wİ | Hİ | Wİ*Hİ | Wİ*Hİ/ ∑Wİ*Hİ | Vt(t) | Vi(t) | Qi(t) |
|---|---|---|---|---|---|---|---|---|---|---|
| BASEMENT STORY | 1243.11 | 0.3 | 95.7 | 1271.82 | 2.9 | 3688.29 | 0.24 | 679.87 | 166.51 | 679.87 |
| GROUND STORY | 806.61 | 0.3 | 97.16 | 835.76 | 6.1 | 5098.13 | 0.34 | 679.87 | 230.16 | 513.36 |
| 1. STORY | 652.67 | 0.3 | 72.83 | 674.52 | 9.3 | 6272.99 | 0.42 | 679.87 | 283.2 | 283.2 |
| TOTAL | 2702.39 | --- | --- | 2782.1 | --- | 15059.4 | 1,00 | --- | 679.87 | --- |

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SYMBOLS USED IN TABLES AND EXPLANATIONS

WG (t):Story Total Dead Load

LLRF: Live Load Reduction Factor

WQ (t):Story Total Live Load

Wi (t):Design Total Story Weight Used In Seismic Load Calculation (Wi=WG+HYKK*WQ)

Hi (m):Height of Story Top Level From Top of Foundation Level

Vt (t):Total Design Seismic Load Acting At Building (Basement Lateral Force)

Vi (t):Seismic Load Acting At Stories Level)

Qi (t):Seismic Total Load Acting At Stories Level (Including above story seismic loads)

# ECCENTRICITY CALCULATIONS

| Story Name : BASEMENT STORY | | | |
|---|---|---|---|
| X Mass Center Coordinate (m) : | 20.13 | ErX : | 1.01 |
| Y Mass Center Coordinate (m) : | 5.96 | ErY : | -0.06 |
| X Shear Rigidity Center Coordinate (m) : | 18.45 | MaxEx : | 210.43 |
| Y Shear Rigidity Center Coordinate (m) : | 6.05 | MinEx : | -207.07 |
| EoX : | 1.68 | MaxMzX : | 143068.27 |
| EoY : | -0.09 | MaxMzY : | 39368.89 |
| EaX : | 208.75 | MaxEY : | 57.91 |
| EaY : | 58 | MinEY : | -58.09 |
| EfX : | 2.02 | Dx : | 0 |
| EfY : | -0.11 | Dy : | 0 |

| Story Name : GROUND STORY | | | |
|---|---|---|---|
| X Mass Center Coordinate (m) : | 20.44 | ErX : | 0.27 |
| Y Mass Center Coordinate (m) : | 5.84 | ErY : | 0.04 |
| X Shear Rigidity Center Coordinate (m) : | 19.99 | MaxEx : | 209.46 |
| Y Shear Rigidity Center Coordinate (m) : | 5.77 | MinEx : | -208.55 |
| EoX : | 0.46 | MaxMzX : | 107528.44 |
| EoY : | 0.07 | MaxMzY : | 30197.27 |
| EaX : | 209 | MaxEY : | 58.82 |
| EaY : | 58.75 | MinEY : | -58.68 |
| EfX : | 0.55 | Dx : | 0 |
| EfY : | 0.09 | Dy : | 0 |

| Story Name : 1. STORY | | | |
|---|---|---|---|
| X Mass Center Coordinate (m) : | 20.33 | ErX : | -0.17 |
| Y Mass Center Coordinate (m) : | 5.7 | ErY : | 0.04 |
| X Shear Rigidity Center Coordinate (m) : | 20.61 | MaxEx : | 208.72 |
| Y Shear Rigidity Center Coordinate (m) : | 5.63 | MinEx : | -209.29 |
| EoX : | -0.29 | MaxMzX : | 59109.2 |
| EoY : | 0.07 | MaxMzY : | 16616.57 |
| EaX : | 209 | MaxEY : | 58.82 |
| EaY : | 58.75 | MinEY : | -58.68 |
| EfX : | -0.34 | Dx : | 0 |
| EfY : | 0.08 | Dy : | 0 |

SYMBOLS USED IN TABLES AND EXPLANATIONS

MaxMzX,MaxMzY: Maximum rotational moments of horizontal storey load due to load eccentricities direction X-X,Y-Y

MaxEY,MinEY:Maximum, minimum design eccentricities direction Y-Y

EoX,EoY: Storey eccentricities direction X-X,Y-Y

EaX,EaY: Accidental storey eccentricities direction X-X,Y-Y

EfX,EfY:take into account some accidental torsional effects the eccentricities

ErX,ErY:take into account some accidental torsional effects the eccentricities

MaxEx,MinEx: Maximum, minimum design eccentricities direction X-X

Dx,Dy: Approximate relative horizontal storey movement direction X-X,Y-Y

# OVERTURNING CHECK

| | | | |
|---|---|---|---|
| Building Right X | 4155 | Building Up Y | 0 |
| Building Left X | -20 | Building Down Y | 1160 |

| Story Name | Vi | Hi | Vi*Hi | Story DL | LLRF | Story LL | MCX | MCY | Mao+X | Mao-X | Mao-Y | Mao+Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BASEMENT STORY | 166.51 | 2.9 | 482.89 | 1243.11 | 0.3 | 95.7 | 20.13 | 5.96 | 23043.66 | 23043.66 | 6816.59 | 6816.59 |
| GROUND STORY | 230.16 | 6.1 | 1403.98 | 806.61 | 0.3 | 97.16 | 20.44 | 5.84 | 15376.3 | 15376.3 | 4392.44 | 4392.44 |
| 1. STORY | 283.2 | 9.3 | 2633.78 | 652.67 | 0.3 | 72.83 | 20.33 | 5.7 | 12339.07 | 12339.07 | 3463.18 | 3463.18 |
| Total | 679.87 | | 4520.64 | Overturning Check: √ | | | | | 50759.04 | 50759.04 | 14672.2 | 14672.2 |

## Overturning Check

Mo=Σ(Vi*Hi) ; Mo:Overturning Moment (same at all directions). ΣMao:Moment Against Overturning

Mo<Mao+X, Overturning Ckeck In +X Direction is OK √
Mo<Mao-X, Overturning Ckeck In -X Direction is OK √
Mo<Mao+Y, Overturning Ckeck In +Y Direction is OK √
Mo<Mao-Y, Overturning Ckeck In -Y Direction is OK √

SYMBOLS USED IN TABLES AND EXPLANATIONS

Building Right X:The outermost point at the right side of the building
Building Left X:The outermost point at the left side of the building
Building Down Y:The outermost point at the bottom side of the building
Vi (t):Seismic Load Acting At Stories Level)
Hi:Storey Height from foundation top level (m)
Mo=Vi*Hi:Storey SeismicLoad*Storey Height from foundation top level (Overturning Moment) (tm)
Story DL:Storey Total Dead Load
LLRF:Live Load Reduction Factor
Story LL:Storey Total Live Load
MCX:Mass Center X Coordinate
MCY:Mass Center Y Coordinate
Mao+X:Moment Againts Overturning at +X Direction
Mao-X:Moment Againts Overturning at -X Direction
Mao+Y:Moment Againts Overturning at +Y Direction
Mao-Y:Moment Againts Overturning at -Y Direction

# BASEMENT STORY

## BASEMENT STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| WB01 | 0 | 2.5 | 1.7 | 50 | 1000 | 0.85 | 0.205 | 0.018 | 0.205 | 0.018 |
| WB02 | 0 | 2.5 | 1.7 | 50 | 1000 | 0.85 | 0.205 | 0.018 | 0.205 | 0.018 |
| WB03 | 0 | 2.1 | 3.15 | 50 | 1000 | 1.58 | 1.302 | 0.033 | 1.302 | 0.033 |
| WB04 | 0 | 2.1 | 3.15 | 50 | 1000 | 1.58 | 1.302 | 0.033 | 1.302 | 0.033 |
| WB05 | 0 | 2.1 | 0.65 | 50 | 1000 | 0.32 | 0.011 | 0.007 | 0.011 | 0.007 |
| WB06 | 90 | 2.5 | 12.1 | 50 | 1000 | 6.05 | 73.815 | 0.126 | 0.126 | 73.815 |
| WB07 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB08 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB09 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB10 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB11 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB12 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB13 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB14 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB15 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB16 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB17 | 90 | 2.5 | 0.8 | 50 | 1000 | 0.4 | 0.021 | 0.008 | 0.008 | 0.021 |
| WB18 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB19 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB20 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB21 | 90 | 2.5 | 12.1 | 50 | 1000 | 6.05 | 73.815 | 0.126 | 0.126 | 73.815 |
| WB22 | 90 | 2.5 | 5 | 50 | 1000 | 2.5 | 5.208 | 0.052 | 0.052 | 5.208 |
| WB23 | 0 | 2.1 | 1.1 | 50 | 1000 | 0.55 | 0.055 | 0.011 | 0.055 | 0.011 |
| WB24 | 0 | 2.5 | 2.5 | 50 | 1000 | 1.25 | 0.651 | 0.026 | 0.651 | 0.026 |
| WB25 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB26 | 0 | 2.5 | 1.95 | 50 | 1000 | 0.98 | 0.309 | 0.02 | 0.309 | 0.02 |
| WB27 | 0 | 2.5 | 0.3 | 50 | 1000 | 0.15 | 0.001 | 0.003 | 0.001 | 0.003 |
| WB28 | 0 | 2.5 | 0.3 | 50 | 1000 | 0.15 | 0.001 | 0.003 | 0.001 | 0.003 |
| WB29 | 0 | 2.5 | 2.05 | 50 | 1000 | 1.02 | 0.359 | 0.021 | 0.359 | 0.021 |
| WB30 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB31 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB32 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB33 | 0 | 2.5 | 2.1 | 50 | 1000 | 1.05 | 0.386 | 0.022 | 0.386 | 0.022 |
| WB34 | 0 | 2.5 | 2.2 | 50 | 1000 | 1.1 | 0.444 | 0.023 | 0.444 | 0.023 |
| WB35 | 0 | 2.5 | 2.6 | 50 | 1000 | 1.3 | 0.732 | 0.027 | 0.732 | 0.027 |
| WB36 | 0 | 2.5 | 1.35 | 50 | 1000 | 0.68 | 0.103 | 0.014 | 0.103 | 0.014 |
| WB37 | 0 | 2.5 | 1.35 | 50 | 1000 | 0.68 | 0.103 | 0.014 | 0.103 | 0.014 |

## BASEMENT STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| WB38 | 0 | 2.5 | 2.6 | 50 | 1000 | 1.3 | 0.732 | 0.027 | 0.732 | 0.027 |
| WB39 | 0 | 2.5 | 2.35 | 50 | 1000 | 1.18 | 0.541 | 0.024 | 0.541 | 0.024 |
| WB40 | 0 | 2.5 | 1.95 | 50 | 1000 | 0.98 | 0.309 | 0.02 | 0.309 | 0.02 |
| WB41 | 0 | 2.5 | 2.5 | 50 | 1000 | 1.25 | 0.651 | 0.026 | 0.651 | 0.026 |
| WB42 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB43 | 0 | 2.5 | 6.7 | 50 | 1000 | 3.35 | 12.532 | 0.07 | 12.532 | 0.07 |
| WB44 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB45 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB46 | 0 | 2.5 | 2.15 | 50 | 1000 | 1.08 | 0.414 | 0.022 | 0.414 | 0.022 |
| WB47 | 0 | 2.1 | 2.7 | 50 | 1000 | 1.35 | 0.82 | 0.028 | 0.82 | 0.028 |
| WB48 | 0 | 2.1 | 2.5 | 50 | 1000 | 1.25 | 0.651 | 0.026 | 0.651 | 0.026 |
| WB49 | 0 | 2.1 | 0.8 | 50 | 1000 | 0.4 | 0.021 | 0.008 | 0.021 | 0.008 |
| WB50 | 0 | 2.1 | 2.65 | 50 | 1000 | 1.32 | 0.775 | 0.028 | 0.775 | 0.028 |
| WB51 | 0 | 2.1 | 2.65 | 50 | 1000 | 1.32 | 0.775 | 0.028 | 0.775 | 0.028 |
| WB52 | 0 | 2.1 | 4.5 | 50 | 1000 | 2.25 | 3.797 | 0.047 | 3.797 | 0.047 |
| WB53 | 0 | 2.1 | 4.35 | 50 | 1000 | 2.17 | 3.43 | 0.045 | 3.43 | 0.045 |
| WB54 | 0 | 2.1 | 6.55 | 50 | 1000 | 3.28 | 11.709 | 0.068 | 11.709 | 0.068 |
| WB55 | 0 | 2.1 | 2.7 | 50 | 1000 | 1.35 | 0.82 | 0.028 | 0.82 | 0.028 |
| WB56 | 0 | 2.1 | 2.9 | 50 | 1000 | 1.45 | 1.016 | 0.03 | 1.016 | 0.03 |
| WB57 | 0 | 2.1 | 0.8 | 50 | 1000 | 0.4 | 0.021 | 0.008 | 0.021 | 0.008 |
| WB58 | 0 | 2.1 | 5.1 | 50 | 1000 | 2.55 | 5.527 | 0.053 | 5.527 | 0.053 |
| WB59 | 0 | 2.1 | 1.1 | 50 | 1000 | 0.55 | 0.055 | 0.011 | 0.055 | 0.011 |
| WB60 | 0 | 2.1 | 4.2 | 50 | 1000 | 2.1 | 3.087 | 0.044 | 3.087 | 0.044 |
| WB61 | 0 | 2.1 | 6.4 | 50 | 1000 | 3.2 | 10.923 | 0.067 | 10.923 | 0.067 |
| WB62 | 0 | 2.1 | 6.2 | 50 | 1000 | 3.1 | 9.93 | 0.065 | 9.93 | 0.065 |
| WB63 | 90 | 2.5 | 3.3 | 50 | 1000 | 1.65 | 1.497 | 0.034 | 0.034 | 1.497 |

# GROUND STORY

## GROUND STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| WZ01 | 0 | 2.1 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 1.901 | 0.003 |
| WZ02 | 0 | 2.7 | 1.7 | 35 | 1000 | 0.6 | 0.143 | 0.006 | 0.143 | 0.006 |
| WZ03 | 90 | 2.7 | 5.1 | 35 | 1000 | 1.78 | 3.869 | 0.018 | 0.018 | 3.869 |
| WZ04 | 90 | 2.7 | 5.05 | 35 | 1000 | 1.77 | 3.756 | 0.018 | 0.018 | 3.756 |

# GROUND STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| WZ05 | 0 | 2.1 | 3.15 | 20 | 1000 | 0.63 | 0.521 | 0.002 | 0.521 | 0.002 |
| WZ06 | 0 | 2.1 | 0.5 | 20 | 1000 | 0.1 | 0.002 | 0 | 0.002 | 0 |
| WZ07 | 0 | 2.1 | 3.15 | 20 | 1000 | 0.63 | 0.521 | 0.002 | 0.521 | 0.002 |
| WZ08 | 0 | 2.1 | 2.2 | 20 | 1000 | 0.44 | 0.177 | 0.001 | 0.177 | 0.001 |
| WZ09 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ10 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ11 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ12 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ13 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ14 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ15 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ16 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ17 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ18 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ19 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ20 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ21 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ22 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ23 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| WZ24 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ25 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| WZ26 | 0 | 2.7 | 1.75 | 35 | 1000 | 0.61 | 0.156 | 0.006 | 0.156 | 0.006 |
| WZ27 | 0 | 2.7 | 2.5 | 35 | 1000 | 0.88 | 0.456 | 0.009 | 0.456 | 0.009 |
| WZ28 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| WZ29 | 0 | 2.7 | 2.5 | 35 | 1000 | 0.88 | 0.456 | 0.009 | 0.456 | 0.009 |
| WZ30 | 0 | 2.7 | 1.95 | 35 | 1000 | 0.68 | 0.216 | 0.007 | 0.216 | 0.007 |
| WZ31 | 0 | 2.7 | 0.3 | 35 | 1000 | 0.11 | 0.001 | 0.001 | 0.001 | 0.001 |
| WZ32 | 0 | 2.7 | 0.3 | 35 | 1000 | 0.1 | 0.001 | 0.001 | 0.001 | 0.001 |
| WZ33 | 0 | 2.7 | 2.05 | 35 | 1000 | 0.72 | 0.251 | 0.007 | 0.251 | 0.007 |
| WZ34 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| WZ35 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| WZ36 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| WZ37 | 0 | 2.7 | 2.1 | 35 | 1000 | 0.74 | 0.27 | 0.008 | 0.27 | 0.008 |
| WZ38 | 0 | 2.7 | 1.35 | 35 | 1000 | 0.47 | 0.071 | 0.005 | 0.071 | 0.005 |
| WZ39 | 0 | 2.7 | 2.6 | 35 | 1000 | 0.91 | 0.513 | 0.009 | 0.513 | 0.009 |
| WZ40 | 0 | 2.7 | 2.2 | 35 | 1000 | 0.77 | 0.311 | 0.008 | 0.311 | 0.008 |
| WZ41 | 90 | 2.7 | 5.1 | 35 | 1000 | 1.78 | 3.869 | 0.018 | 0.018 | 3.869 |
| WZ42 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| WZ43 | 0 | 2.7 | 2.48 | 35 | 1000 | 0.87 | 0.442 | 0.009 | 0.442 | 0.009 |
| WZ44 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |

## GROUND STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| WZ45 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| WZ46 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| WZ47 | 0 | 2.7 | 1.95 | 35 | 1000 | 0.68 | 0.216 | 0.007 | 0.216 | 0.007 |
| WZ48 | 0 | 2.7 | 1.35 | 35 | 1000 | 0.47 | 0.072 | 0.005 | 0.072 | 0.005 |
| WZ49 | 0 | 2.7 | 2.6 | 35 | 1000 | 0.91 | 0.513 | 0.009 | 0.513 | 0.009 |
| WZ50 | 0 | 2.7 | 2.35 | 35 | 1000 | 0.82 | 0.379 | 0.008 | 0.379 | 0.008 |
| WZ51 | 0 | 2.7 | 2.52 | 35 | 1000 | 0.88 | 0.47 | 0.009 | 0.47 | 0.009 |
| WZ52 | 0 | 2.1 | 2.7 | 20 | 1000 | 0.54 | 0.328 | 0.002 | 0.328 | 0.002 |
| WZ53 | 0 | 2.1 | 0.8 | 20 | 1000 | 0.16 | 0.009 | 0.001 | 0.009 | 0.001 |
| WZ54 | 0 | 2.1 | 2.35 | 20 | 1000 | 0.47 | 0.216 | 0.002 | 0.216 | 0.002 |
| WZ55 | 0 | 2.1 | 2.65 | 20 | 1000 | 0.53 | 0.31 | 0.002 | 0.31 | 0.002 |
| WZ56 | 0 | 2.1 | 4.55 | 20 | 1000 | 0.91 | 1.57 | 0.003 | 1.57 | 0.003 |
| WZ57 | 0 | 2.1 | 2.65 | 20 | 1000 | 0.53 | 0.31 | 0.002 | 0.31 | 0.002 |
| WZ58 | 0 | 2.1 | 2.4 | 20 | 1000 | 0.48 | 0.23 | 0.002 | 0.23 | 0.002 |
| WZ59 | 0 | 2.1 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 1.901 | 0.003 |
| WZ60 | 0 | 2.1 | 2.7 | 20 | 1000 | 0.54 | 0.328 | 0.002 | 0.328 | 0.002 |
| WZ61 | 0 | 2.1 | 0.8 | 20 | 1000 | 0.16 | 0.009 | 0.001 | 0.009 | 0.001 |
| WZ62 | 0 | 2.1 | 2.35 | 20 | 1000 | 0.47 | 0.216 | 0.002 | 0.216 | 0.002 |
| WZ63 | 0 | 2.1 | 1.1 | 20 | 1000 | 0.22 | 0.022 | 0.001 | 0.022 | 0.001 |
| WZ64 | 0 | 2.1 | 4.2 | 20 | 1000 | 0.84 | 1.235 | 0.003 | 1.235 | 0.003 |
| WZ65 | 0 | 2.1 | 2.65 | 20 | 1000 | 0.53 | 0.31 | 0.002 | 0.31 | 0.002 |
| WZ66 | 0 | 2.1 | 2.65 | 20 | 1000 | 0.53 | 0.31 | 0.002 | 0.31 | 0.002 |
| WZ67 | 0 | 2.1 | 6.25 | 20 | 1000 | 1.25 | 4.069 | 0.004 | 4.069 | 0.004 |
| WZ68 | 90 | 2.7 | 5.05 | 35 | 1000 | 1.77 | 3.756 | 0.018 | 0.018 | 3.756 |

# 1. STORY

## 1. STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| W101 | 90 | 2.7 | 5.1 | 35 | 1000 | 1.78 | 3.869 | 0.018 | 0.018 | 3.869 |
| W102 | 0 | 2.7 | 1.7 | 35 | 1000 | 0.6 | 0.143 | 0.006 | 0.143 | 0.006 |
| W103 | 90 | 2.7 | 5.1 | 35 | 1000 | 1.78 | 3.869 | 0.018 | 0.018 | 3.869 |
| W104 | 90 | 2.7 | 5.1 | 35 | 1000 | 1.78 | 3.869 | 0.018 | 0.018 | 3.869 |
| W105 | 0 | 2.1 | 3.15 | 20 | 1000 | 0.63 | 0.521 | 0.002 | 0.521 | 0.002 |
| W106 | 0 | 2.1 | 0.5 | 20 | 1000 | 0.1 | 0.002 | 0 | 0.002 | 0 |

# 1. STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| W107 | 0 | 2.1 | 3.15 | 20 | 1000 | 0.63 | 0.521 | 0.002 | 0.521 | 0.002 |
| W108 | 0 | 2.1 | 2.1 | 20 | 1000 | 0.42 | 0.154 | 0.001 | 0.154 | 0.001 |
| W109 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W110 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| W111 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W112 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| W113 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W114 | 0 | 2.1 | 0.85 | 20 | 1000 | 0.17 | 0.01 | 0.001 | 0.01 | 0.001 |
| W115 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W116 | 0 | 2.1 | 6.65 | 20 | 1000 | 1.33 | 4.901 | 0.004 | 4.901 | 0.004 |
| W117 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W118 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| W119 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W120 | 0 | 2.1 | 2.5 | 20 | 1000 | 0.5 | 0.26 | 0.002 | 0.26 | 0.002 |
| W121 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W122 | 0 | 2.1 | 1.1 | 20 | 1000 | 0.22 | 0.022 | 0.001 | 0.022 | 0.001 |
| W123 | 90 | 2.7 | 4.6 | 20 | 1000 | 0.92 | 1.622 | 0.003 | 0.003 | 1.622 |
| W124 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| W125 | 90 | 2.7 | 4.85 | 20 | 1000 | 0.97 | 1.901 | 0.003 | 0.003 | 1.901 |
| W126 | 0 | 2.7 | 1.75 | 35 | 1000 | 0.61 | 0.156 | 0.006 | 0.156 | 0.006 |
| W127 | 0 | 2.7 | 2.5 | 35 | 1000 | 0.88 | 0.456 | 0.009 | 0.456 | 0.009 |
| W128 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| W129 | 0 | 2.7 | 2.5 | 35 | 1000 | 0.88 | 0.456 | 0.009 | 0.456 | 0.009 |
| W130 | 0 | 2.7 | 1.95 | 35 | 1000 | 0.68 | 0.216 | 0.007 | 0.216 | 0.007 |
| W131 | 0 | 2.7 | 0.3 | 35 | 1000 | 0.11 | 0.001 | 0.001 | 0.001 | 0.001 |
| W132 | 0 | 2.7 | 0.3 | 35 | 1000 | 0.1 | 0.001 | 0.001 | 0.001 | 0.001 |
| W133 | 0 | 2.7 | 2.05 | 35 | 1000 | 0.72 | 0.251 | 0.007 | 0.251 | 0.007 |
| W134 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| W135 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| W136 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| W137 | 0 | 2.7 | 2.1 | 35 | 1000 | 0.74 | 0.27 | 0.008 | 0.27 | 0.008 |
| W138 | 0 | 2.7 | 1.35 | 35 | 1000 | 0.47 | 0.071 | 0.005 | 0.071 | 0.005 |
| W139 | 0 | 2.7 | 2.6 | 35 | 1000 | 0.91 | 0.513 | 0.009 | 0.513 | 0.009 |
| W140 | 0 | 2.7 | 2.2 | 35 | 1000 | 0.77 | 0.311 | 0.008 | 0.311 | 0.008 |
| W141 | 0 | 2.1 | 0.4 | 20 | 1000 | 0.08 | 0.001 | 0 | 0.001 | 0 |
| W142 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| W143 | 0 | 2.7 | 2.48 | 35 | 1000 | 0.87 | 0.442 | 0.009 | 0.442 | 0.009 |
| W144 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| W145 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |
| W146 | 0 | 2.7 | 2.15 | 35 | 1000 | 0.75 | 0.29 | 0.008 | 0.29 | 0.008 |

# 1. STORY RIGIDITY OF WALLS

| Name of Walls | Angle | Effective Height of Wall | Wall Length | Wall Thickness | The modulus of elasticity | Wall Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| W147 | 0 | 2.7 | 1.95 | 35 | 1000 | 0.68 | 0.216 | 0.007 | 0.216 | 0.007 |
| W148 | 0 | 2.7 | 1.35 | 35 | 1000 | 0.47 | 0.072 | 0.005 | 0.072 | 0.005 |
| W149 | 0 | 2.7 | 2.6 | 35 | 1000 | 0.91 | 0.513 | 0.009 | 0.513 | 0.009 |
| W150 | 0 | 2.7 | 2.35 | 35 | 1000 | 0.82 | 0.379 | 0.008 | 0.379 | 0.008 |
| W151 | 0 | 2.7 | 2.52 | 35 | 1000 | 0.88 | 0.47 | 0.009 | 0.47 | 0.009 |
| W152 | 0 | 2.1 | 2.7 | 20 | 1000 | 0.54 | 0.328 | 0.002 | 0.328 | 0.002 |
| W153 | 0 | 2.1 | 0.8 | 20 | 1000 | 0.16 | 0.009 | 0.001 | 0.009 | 0.001 |
| W154 | 0 | 2.1 | 2.35 | 20 | 1000 | 0.47 | 0.216 | 0.002 | 0.216 | 0.002 |
| W155 | 0 | 2.1 | 2.65 | 20 | 1000 | 0.53 | 0.31 | 0.002 | 0.31 | 0.002 |
| W156 | 0 | 2.1 | 2.65 | 20 | 1000 | 0.53 | 0.31 | 0.002 | 0.31 | 0.002 |
| W157 | 0 | 2.1 | 8.15 | 20 | 1000 | 1.63 | 9.022 | 0.005 | 9.022 | 0.005 |
| W158 | 0 | 2.1 | 2.25 | 20 | 1000 | 0.45 | 0.19 | 0.002 | 0.19 | 0.002 |
| W159 | 0 | 2.1 | 0.8 | 20 | 1000 | 0.16 | 0.009 | 0.001 | 0.009 | 0.001 |
| W160 | 0 | 2.1 | 2.7 | 20 | 1000 | 0.54 | 0.328 | 0.002 | 0.328 | 0.002 |
| W161 | 0 | 2.1 | 7.9 | 20 | 1000 | 1.58 | 8.217 | 0.005 | 8.217 | 0.005 |
| W162 | 90 | 2.7 | 5.1 | 35 | 1000 | 1.78 | 3.869 | 0.018 | 0.018 | 3.869 |

# BASEMENT STORY

| | |
|---|---|
| Wall Anayls Options: | **Calculate By Only Accepting Filled Walls As Load-Bearing** |
| Effective Wall Height Option: | **Take Net Height Into Account While Calculating Effective Wall Height** |
| Modulus Of Elasticity Option: | **Take Elastic Modulus Into Account While Calculating Rigidity** |
| Minor Moment Of Inertia Opsion: | **Accept Wall Minor Moment Of Inertia As Zero** |
| Storey Height: | **2.9 (m)** |

## BASEMENT STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| WB01 | X-X | 79029.49 | 470637.84 | 2802750.95 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB02 | X-X | 79029.49 | -446104.25 | 2518161.23 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB03 | X-X | 261290.32 | -299120.46 | 342427.73 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB04 | X-X | 261290.32 | 380234.38 | 553323.9 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB05 | X-X | 13820.22 | 20111.43 | 29266.51 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB06 | Y-Y | 0 | 0 | 0 | 954419.14 | 19166439.1 | 384896290. | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB07 | Y-Y | 0 | 0 | 0 | 369230.77 | 5845581.79 | 92545988.3 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB08 | Y-Y | 0 | 0 | 0 | 369230.77 | 5845581.79 | 92545988.3 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB09 | Y-Y | 0 | 0 | 0 | 369230.77 | 4534812.56 | 55695588.3 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB10 | Y-Y | 0 | 0 | 0 | 369230.77 | 4534812.56 | 55695588.3 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB11 | Y-Y | 0 | 0 | 0 | 369230.77 | 3224043.33 | 28151649.9 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB12 | Y-Y | 0 | 0 | 0 | 369230.77 | 3224043.33 | 28151649.9 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB13 | Y-Y | 0 | 0 | 0 | 369230.77 | 1544043.33 | 6456855.7 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB14 | Y-Y | 0 | 0 | 0 | 369230.77 | 1544043.33 | 6456855.7 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB15 | Y-Y | 0 | 0 | 0 | 369230.77 | 233274.1 | 147378.85 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB16 | Y-Y | 0 | 0 | 0 | 369230.77 | 233274.1 | 147378.85 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB17 | Y-Y | 0 | 0 | 0 | 15040.39 | -97284.5 | 629257.17 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB18 | Y-Y | 0 | 0 | 0 | 369230.77 | -2388264.3 | 15447809.7 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB19 | Y-Y | 0 | 0 | 0 | 369230.77 | -5009802.8 | 67974086.8 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB20 | Y-Y | 0 | 0 | 0 | 369230.77 | -5009802.8 | 67974086.8 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB21 | Y-Y | 0 | 0 | 0 | 954419.14 | -20203350. | 427668888. | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB22 | Y-Y | 0 | 0 | 0 | 369230.77 | -1077495.1 | 3144363.53 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB23 | X-X | 39416.02 | -45122.75 | 51655.71 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB24 | X-X | 125000 | 744402.25 | 4433077.66 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB25 | X-X | 98803.28 | 588395.07 | 3504020.93 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB26 | X-X | 83985.56 | 500152.31 | 2978516.02 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB27 | X-X | 828.22 | 4932.24 | 29372.54 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB28 | X-X | 828.22 | 4932.24 | 29372.54 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |

# BASEMENT STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| WB29 | X-X | 91370.81 | 544133.08 | 3240431.08 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB30 | X-X | 98803.28 | 588395.07 | 3504020.93 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB31 | X-X | 98803.28 | 588395.07 | 3504020.93 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB32 | X-X | 98803.28 | 588395.07 | 3504020.93 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB33 | X-X | 95082.14 | 566234.84 | 3372051.92 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB34 | X-X | 102532.5 | 610603.38 | 3636276.23 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB35 | X-X | 132499.06 | 789060.77 | 4699028.9 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB36 | X-X | 50393.86 | 300106.39 | 1787198.99 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB37 | X-X | 50393.86 | -284462.33 | 1605727.84 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB38 | X-X | 132499.06 | -747928.3 | 4221892.2 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB39 | X-X | 113753.7 | -642114.83 | 3624598.23 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB40 | X-X | 83985.56 | -474080.17 | 2676079.22 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB41 | X-X | 125000 | -705597.75 | 3982945.5 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB42 | X-X | 98803.28 | -557722.98 | 3148224.66 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB43 | X-X | 426856.37 | -2409511.1 | 13601165.3 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB44 | X-X | 98803.28 | -557722.98 | 3148224.66 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB45 | X-X | 98803.28 | -557722.98 | 3148224.66 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB46 | X-X | 98803.28 | -557722.98 | 3148224.66 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB47 | X-X | 178326.81 | 259504.38 | 377635.44 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB48 | X-X | 192758.45 | 280505.56 | 408196.74 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB49 | X-X | 19258.26 | 28024.96 | 40782.43 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB50 | X-X | 173912.79 | 253081.02 | 368288.05 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB51 | X-X | 173912.79 | 253081.02 | 368288.05 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB52 | X-X | 332971.59 | 484546.24 | 705120.4 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB53 | X-X | 320351.49 | 466181.26 | 678395.35 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB54 | X-X | 603143.57 | 877705.37 | 1277252.64 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB55 | X-X | 178326.81 | -204145.33 | 233701.9 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB56 | X-X | 195914.47 | -224279.36 | 256750.97 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB57 | X-X | 19258.26 | -22046.51 | 25238.44 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB58 | X-X | 383109.79 | -438577.2 | 502075.29 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB59 | X-X | 39416.02 | -45122.75 | 51655.71 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB60 | X-X | 307692.31 | -352240.62 | 403238.73 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB61 | X-X | 588406.68 | -673597.38 | 771122.17 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB62 | X-X | 473939.38 | -542557.28 | 621109.81 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WB63 | Y-Y | 0 | 0 | 0 | 221605.34 | -1433391.2 | 9271484.07 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| | --- | 20898418. | -1962704.7 | 482510578. | 25680708.5 | 43226447.0 | 562756455 | | |

# GROUND STORY

| | |
|---|---|
| Wall Anayls Options: | **Calculate By Only Accepting Filled Walls As Load-Bearing** |
| Effective Wall Height Option: | **Take Net Height Into Account While Calculating Effective Wall Height** |
| Modulus Of Elasticity Option: | **Take Elastic Modulus Into Account While Calculating Rigidity** |
| Minor Moment Of Inertia Opsion: | **Accept Wall Minor Moment Of Inertia As Zero** |
| Storey Height: | **3.2 (m)** |

# GROUND STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| WZ01 | X-X | 173894.64 | -219178.89 | 276255.7 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ02 | X-X | 47884.99 | -279428.65 | 1630581.26 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ03 | Y-Y | 0 | 0 | 0 | 241849.51 | -5062576.0 | 105973656. | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ04 | Y-Y | 0 | 0 | 0 | 239071.94 | 4893144.28 | 100149190. | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ05 | X-X | 104516.13 | 140008.56 | 187553.78 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ06 | X-X | 2768.55 | 3708.72 | 4968.15 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ07 | X-X | 104516.13 | -131733.38 | 166038.33 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ08 | X-X | 64284.96 | -81025.53 | 102125.55 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ09 | Y-Y | 0 | 0 | 0 | 122256.45 | 1973493.75 | 31856622.9 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ10 | Y-Y | 0 | 0 | 0 | 130248.35 | 2102501.03 | 33939090.2 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ11 | Y-Y | 0 | 0 | 0 | 122256.45 | 1539483.36 | 19385554.1 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ12 | Y-Y | 0 | 0 | 0 | 130248.35 | 1640119.38 | 20652787.7 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ13 | Y-Y | 0 | 0 | 0 | 122256.45 | 1105472.97 | 9995959.22 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ14 | Y-Y | 0 | 0 | 0 | 130248.35 | 1177737.73 | 10649395.0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ15 | Y-Y | 0 | 0 | 0 | 122256.45 | 549206.12 | 2467169.37 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ16 | Y-Y | 0 | 0 | 0 | 130248.35 | 585107.73 | 2628448.22 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ17 | Y-Y | 0 | 0 | 0 | 122256.45 | 115195.73 | 108542.79 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ18 | Y-Y | 0 | 0 | 0 | 130248.35 | 122726.07 | 115638.23 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ19 | Y-Y | 0 | 0 | 0 | 122256.45 | -318814.66 | 831390.01 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ20 | Y-Y | 0 | 0 | 0 | 130248.35 | -339655.58 | 885737.97 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ21 | Y-Y | 0 | 0 | 0 | 122256.45 | -752825.06 | 4635711.02 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ22 | Y-Y | 0 | 0 | 0 | 130248.35 | -802037.23 | 4938747.44 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ23 | Y-Y | 0 | 0 | 0 | 122256.45 | -1620845.8 | 21488774.4 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ24 | Y-Y | 0 | 0 | 0 | 130248.35 | -1726800.5 | 22893495.5 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ25 | Y-Y | 0 | 0 | 0 | 130248.35 | -1264418.8 | 12274666.6 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ26 | X-X | 42188.84 | 249529.62 | 1475864.87 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ27 | X-X | 77782.76 | -453894.42 | 2648660.96 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ28 | X-X | 60891.31 | 360147.01 | 2130121.18 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |

# GROUND STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| WZ29 | X-X | 77782.76 | 460052.96 | 2721023.71 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ30 | X-X | 51407.27 | 304052.85 | 1798347.32 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ31 | X-X | 470.6 | 2783.43 | 16462.83 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ32 | X-X | 462.96 | 2738.24 | 16195.53 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ33 | X-X | 56046.64 | 331492.79 | 1960643.31 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ34 | X-X | 60891.31 | 360147.01 | 2130121.18 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ35 | X-X | 60891.31 | 360147.01 | 2130121.18 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ36 | X-X | 60891.31 | 360147.01 | 2130121.18 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ37 | X-X | 58503.9 | 346026.46 | 2046603.95 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ38 | X-X | 29861.07 | 176615.96 | 1044610.62 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ39 | X-X | 82639.48 | 488778.46 | 2890923.22 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ40 | X-X | 63287.31 | 374318.38 | 2213939.03 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ41 | Y-Y | 0 | 0 | 0 | 241849.51 | -5062576.0 | 105973656. | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ42 | X-X | 60891.31 | -355325.87 | 2073472.86 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ43 | X-X | 76569.69 | -446815.69 | 2607353.63 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ44 | X-X | 60891.31 | -355325.87 | 2073472.86 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ45 | X-X | 60891.31 | -355325.87 | 2073472.86 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ46 | X-X | 60891.31 | -355325.87 | 2073472.86 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ47 | X-X | 51407.27 | -299982.62 | 1750522.17 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ48 | X-X | 30000 | -175062.36 | 1021560.99 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ49 | X-X | 82639.48 | -482235.39 | 2814042.17 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ50 | X-X | 70515.23 | -411485.42 | 2401186.97 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ51 | X-X | 78996.34 | -460976.21 | 2689986.07 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ52 | X-X | 71330.72 | 95553.78 | 128002.71 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ53 | X-X | 7703.3 | 10319.25 | 13823.55 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ54 | X-X | 70703.65 | 94713.76 | 126877.41 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ55 | X-X | 69565.12 | 93188.6 | 124834.33 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ56 | X-X | 134868.02 | 180667.58 | 242020.13 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ57 | X-X | 69565.12 | -87680.7 | 110513.81 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ58 | X-X | 60699.47 | 81312.28 | 108924.96 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ59 | X-X | 173894.64 | 232947.18 | 312053.26 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ60 | X-X | 71330.72 | -89906.1 | 113318.72 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ61 | X-X | 7703.3 | -9709.33 | 12237.76 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ62 | X-X | 70703.65 | -89115.72 | 112322.52 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ63 | X-X | 15766.41 | -19872.17 | 25047.12 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ64 | X-X | 123076.92 | -155127.63 | 195524.72 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ65 | X-X | 69565.12 | -87680.7 | 110513.81 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ66 | X-X | 69565.12 | -87680.7 | 110513.81 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| WZ67 | X-X | 191216.83 | 256151.77 | 343137.85 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |

# GROUND STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| WZ68 | Y-Y | 0 | 0 | 0 | 239071.94 | 4893144.28 | 100149190.80 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| | --- | 10670136.65 | 773652.78 | 313254036.08 | 29273998.72 | 13351756.74 | 646179913 0 | | |

# 1. STORY

| | |
|---|---|
| Wall Anayls Options: | **Calculate By Only Accepting Filled Walls As Load-Bearing** |
| Effective Wall Height Option: | **Take Net Height Into Account While Calculating Effective Wall Height** |
| Modulus Of Elasticity Option: | **Take Elastic Modulus Into Account While Calculating Rigidity** |
| Minor Moment Of Inertia Opsion: | **Accept Wall Minor Moment Of Inertia As Zero** |
| Storey Height: | **3.2 (m)** |

# 1. STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| W101 | Y-Y | 0 | 0 | 0 | 241849.51 | -5090731.0 | 107155654.20 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W102 | X-X | 47884.99 | -285883.01 | 1706779 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W103 | Y-Y | 0 | 0 | 0 | 241849.51 | -5090731.0 | 107155654.20 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W104 | Y-Y | 0 | 0 | 0 | 241849.51 | 4921838.61 | 100163508.20 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W105 | X-X | 104516.13 | 125920.94 | 151709.44 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W106 | X-X | 2768.55 | 3335.55 | 4018.66 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W107 | X-X | 104516.13 | -145820.99 | 203449.58 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W108 | X-X | 60000 | -83712.05 | 116795.13 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W109 | Y-Y | 0 | 0 | 0 | 122256.45 | 1959261.26 | 31398791.02 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W110 | Y-Y | 0 | 0 | 0 | 130248.35 | 2087338.17 | 33451329.92 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W111 | Y-Y | 0 | 0 | 0 | 122256.45 | 1525250.87 | 19028773 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W112 | Y-Y | 0 | 0 | 0 | 130248.35 | 1624956.51 | 20272683.85 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W113 | Y-Y | 0 | 0 | 0 | 122256.45 | 1091240.48 | 9740228.72 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W114 | X-X | 8892.15 | -12406.33 | 17309.32 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W115 | Y-Y | 0 | 0 | 0 | 122256.45 | 534973.63 | 2340954.53 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W116 | X-X | 245183.2 | -342079.81 | 477270.05 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |

# 1. STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| W117 | Y-Y | 0 | 0 | 0 | 122256.45 | 100963.24 | 83378.63 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W118 | Y-Y | 0 | 0 | 0 | 130248.35 | 107563.21 | 88829.09 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W119 | Y-Y | 0 | 0 | 0 | 122256.45 | -1201067.9 | 11799493.7 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W120 | X-X | 64252.82 | -89645.59 | 125073.6 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W121 | Y-Y | 0 | 0 | 0 | 122256.45 | -767057.55 | 4812648.23 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W122 | X-X | 15766.41 | -21997.3 | 30690.66 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W123 | Y-Y | 0 | 0 | 0 | 122256.45 | -1635078.3 | 21867812.9 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W124 | Y-Y | 0 | 0 | 0 | 130248.35 | -1741963.4 | 23297311.8 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W125 | Y-Y | 0 | 0 | 0 | 130248.35 | -1279581.7 | 12570826.5 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W126 | X-X | 42188.84 | 243843.03 | 1409363.72 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W127 | X-X | 77782.76 | -464378.68 | 2772433.98 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W128 | X-X | 60891.31 | 351939.53 | 2034139.82 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W129 | X-X | 77782.76 | 449568.7 | 2598416.81 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W130 | X-X | 51407.27 | 297123.72 | 1717315.4 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W131 | X-X | 470.6 | 2720 | 15721.03 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W132 | X-X | 462.96 | 2675.83 | 15465.78 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W133 | X-X | 56046.64 | 323938.33 | 1872298.47 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W134 | X-X | 60891.31 | 351939.53 | 2034139.82 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W135 | X-X | 60891.31 | 351939.53 | 2034139.82 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W136 | X-X | 60891.31 | 351939.53 | 2034139.82 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W137 | X-X | 58503.9 | 338140.78 | 1954385.8 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W138 | X-X | 29861.07 | 172591.01 | 997541.39 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W139 | X-X | 82639.48 | 477639.58 | 2760660.8 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W140 | X-X | 63287.31 | 365787.96 | 2114180.91 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W141 | X-X | 1495.76 | 1802.1 | 2171.16 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W142 | X-X | 60891.31 | -363533.35 | 2170367.1 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W143 | X-X | 76569.69 | -457136.44 | 2729196.34 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W144 | X-X | 60891.31 | -363533.35 | 2170367.1 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W145 | X-X | 60891.31 | -363533.35 | 2170367.1 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W146 | X-X | 60891.31 | -363533.35 | 2170367.1 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W147 | X-X | 51407.27 | -306911.75 | 1832324.8 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W148 | X-X | 30000 | -179106.03 | 1069298.95 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W149 | X-X | 82639.48 | -493374.28 | 2945543.52 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W150 | X-X | 70515.23 | -420990.09 | 2513395.43 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W151 | X-X | 78996.34 | -471624.04 | 2815690.22 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W152 | X-X | 71330.72 | 85939.19 | 103539.47 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W153 | X-X | 7703.3 | 9280.93 | 11181.66 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W154 | X-X | 70703.65 | 85183.69 | 102629.24 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W155 | X-X | 69565.12 | 83811.99 | 100976.61 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |

# 1. STORY WALL STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Wall Name | Wall Direction | Dx(kN/m) | Dx*Y(kN) | Iox=Dx*Y2 (kNm) | Dy(kN/m) | Dy*X(kN) | Ioy=Dy*X2 (kNm) | K Rigidity Factor | Formula |
|---|---|---|---|---|---|---|---|---|---|
| W156 | X-X | 69565.12 | 83811.99 | 100976.61 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W157 | X-X | 253128.17 | 304968.59 | 367425.9 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W158 | X-X | 66426.11 | -92677.77 | 129304.1 | 0 | 0 | 0 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| W159 | X-X | 7703.3 | -10747.65 | 14995.14 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W160 | X-X | 71330.72 | -99520.69 | 138851.35 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W161 | X-X | 245022.41 | -341855.48 | 476957.07 | 0 | 0 | 0 | 1 | 1/(h3/(12EI)+1.2h/(GA)) |
| W162 | Y-Y | 0 | 0 | 0 | 241849.51 | 4921838.61 | 100163508.64 | 1.2 | 1/(h3/(12EI)+1.2h/(GA)) |
| | --- | 10298632.24 | 722898.72 | 320570121.94 | 15872697.13 | -4526617.00 | 4084873990 | | |

# BASEMENT STORY

## BASEMENT STORY Vertical Bond Beam Rigidity

| Vertical Bond Beam Name | Degree | Effective Height of X-X/Y-Y | Vertical Bond Beam Length | Vertical Bond Beam Thickness | Modulus Of Elasticity | Vertical Bond Beam Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| DHB01 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB02 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB03 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB04 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB05 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB06 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB07 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB08 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB09 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB10 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB11 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB12 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB13 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB14 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB15 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB16 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB17 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB18 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB19 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB20 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB21 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB22 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB23 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB24 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB25 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB26 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB27 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB28 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB29 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB30 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB31 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB32 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB33 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB34 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB35 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB36 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |

## BASEMENT STORY Vertical Bond Beam Rigidity

| Vertical Bond Beam Name | Degree | Effective Height of X-X/Y-Y | Vertical Bond Beam Length | Vertical Bond Beam Thickness | Modulus Of Elasticity | Vertical Bond Beam Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| DHB37 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB38 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB39 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB40 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB41 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB42 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB43 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB44 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB45 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB46 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB47 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB48 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB49 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB50 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB51 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB52 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB53 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB54 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB55 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB56 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB57 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB58 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB59 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |
| DHB60 | xx | 2.9/2.9 | 60 | 50 | 22000 | 0.3 | 0.009 | 0.006 | 0.009 | 0.006 |

# GROUND STORY

## GROUND STORY Vertical Bond Beam Rigidity

| Vertical Bond Beam Name | Degree | Effective Height of X-X/Y-Y | Vertical Bond Beam Length | Vertical Bond Beam Thickness | Modulus Of Elasticity | Vertical Bond Beam Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| DHZ01 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DHZ02 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ03 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DHZ04 | xx | 3.2/3.2 | 60 | 20 | 22000 | 0.12 | 0.004 | 0 | 0.004 | 0 |

# GROUND STORY Vertical Bond Beam Rigidity

| Vertical Bond Beam Name | Degree | Effective Height of X-X/Y-Y | Vertical Bond Beam Length | Vertical Bond Beam Thickness | Modulus Of Elasticity | Vertical Bond Beam Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| DHZ05 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ06 | xx | 3.2/3.2 | 35 | 20 | 22000 | 0.07 | 0.001 | 0 | 0.001 | 0 |
| DHZ07 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ08 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ09 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ10 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ11 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ12 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ13 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ14 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ15 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ16 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ17 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ18 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ19 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ20 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ21 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ22 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ23 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ24 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ25 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ26 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ27 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DHZ28 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DHZ29 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DHZ30 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DHZ31 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ32 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ33 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ34 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ35 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DHZ36 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ37 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ38 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ39 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ40 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ41 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ42 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |

## GROUND STORY Vertical Bond Beam Rigidity

| Vertical Bond Beam Name | Degree | Effective Height of X-X/Y-Y | Vertical Bond Beam Length | Vertical Bond Beam Thickness | Modulus Of Elasticity | Vertical Bond Beam Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| DHZ43 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DHZ44 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DHZ45 | xx | 3.2/3.2 | 35 | 20 | 22000 | 0.07 | 0.001 | 0 | 0.001 | 0 |
| DHZ46 | xx | 3.2/3.2 | 35 | 20 | 22000 | 0.07 | 0.001 | 0 | 0.001 | 0 |
| DHZ47 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ48 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DHZ49 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |

# 1. STORY

## 1. STORY Vertical Bond Beam Rigidity

| Vertical Bond Beam Name | Degree | Effective Height of X-X/Y-Y | Vertical Bond Beam Length | Vertical Bond Beam Thickness | Modulus Of Elasticity | Vertical Bond Beam Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| DH101 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DH102 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH103 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DH104 | xx | 3.2/3.2 | 60 | 20 | 22000 | 0.12 | 0.004 | 0 | 0.004 | 0 |
| DH105 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH106 | xx | 3.2/3.2 | 35 | 20 | 22000 | 0.07 | 0.001 | 0 | 0.001 | 0 |
| DH107 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH108 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH109 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH110 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH111 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH112 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH113 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH114 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH115 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH116 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH117 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH118 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH119 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH120 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH121 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |

# 1. STORY Vertical Bond Beam Rigidity

| Vertical Bond Beam Name | Degree | Effective Height of X-X/Y-Y | Vertical Bond Beam Length | Vertical Bond Beam Thickness | Modulus Of Elasticity | Vertical Bond Beam Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| DH122 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH123 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH124 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH125 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH126 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH127 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DH128 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DH129 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DH130 | xx | 3.2/3.2 | 20 | 60 | 22000 | 0.12 | 0.004 | 0 | 0 | 0.004 |
| DH131 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH132 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH133 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH134 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH135 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH136 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH137 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH138 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH139 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH140 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH141 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH142 | xx | 3.2/3.2 | 20 | 20 | 22000 | 0.04 | 0 | 0 | 0 | 0 |
| DH143 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DH144 | xx | 3.2/3.2 | 35 | 35 | 22000 | 0.122 | 0.001 | 0.001 | 0.001 | 0.001 |
| DH145 | xx | 3.2/3.2 | 35 | 20 | 22000 | 0.07 | 0.001 | 0 | 0.001 | 0 |
| DH146 | xx | 3.2/3.2 | 35 | 20 | 22000 | 0.07 | 0.001 | 0 | 0.001 | 0 |
| DH147 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |
| DH148 | xx | 3.2/3.2 | 20 | 35 | 22000 | 0.07 | 0.001 | 0 | 0 | 0.001 |

# BASEMENT STORY

## BASEMENT STORY VERTICAL BOND BEAM STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Vertical Bond Beam Name | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2(m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2(m3) | Formula |
|---|---|---|---|---|---|---|---|
| | 86334.0 | 514138. | 3061805 | 62114.1 | 1244257 | 2492468 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | 983377. | 1556862 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | 762872. | 9369434 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | 542367. | 4735833 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | 259747. | 1086209 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | 39242.7 | 24792.9 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | -181262. | 528963. | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | -401767. | 2598720 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | -842778. | 1143499 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | -131173 | 2770160 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | 1244257 | 2492468 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | 983377. | 1556862 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | 762872. | 9369434 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | 542367. | 4735833 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | 259747. | 1086209 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | 39242.7 | 24792.9 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | -181262. | 528963. | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | -401767. | 2598720 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | -842778. | 1143499 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | -105241 | 1783126 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | -131173 | 2770160 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 1244257 | 2492468 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 983377. | 1556862 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 983377. | 1556862 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 762872. | 9369434 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 762872. | 9369434 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 542367. | 4735833 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 542367. | 4735833 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 259747. | 1086209 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 259747. | 1086209 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 39242.7 | 24792.9 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | 39242.7 | 24792.9 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -181262. | 528963. | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -181262. | 528963. | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -401767. | 2598720 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | -131173 | 2770160 | k*A/H |

# BASEMENT STORY VERTICAL BOND BEAM STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Vertical Bond Beam Name | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2(m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2(m3) | Formula |
|---|---|---|---|---|---|---|---|
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -842778. | 1143499 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -842778. | 1143499 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -105241 | 1783126 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -105241 | 1783126 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -131173 | 2770160 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | -842778. | 1143499 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 1244257 | 2492468 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 983377. | 1556862 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 542367. | 4735833 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 762872. | 9369434 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 762872. | 9369434 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 259747. | 1086209 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 259747. | 1086209 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 39242.7 | 24792.9 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | 39242.7 | 24792.9 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | -181262. | 528963. | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | -181262. | 528963. | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | -401767. | 2598720 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | -105241 | 1783126 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | -105241 | 1783126 | k*A/H |
| | 86334.0 | -487337. | 2750911 | 62114.1 | -622272. | 6234063 | k*A/H |
| | 86334.0 | 514138. | 3061805 | 62114.1 | -622272. | 6234063 | k*A/H |
| | 86334.0 | 125634. | 182826. | 62114.1 | -622272. | 6234063 | k*A/H |
| | 86334.0 | -98833.6 | 113143. | 62114.1 | -622272. | 6234063 | k*A/H |
| **TOTAL** | 2089841 | -196270 | 4825105 | 2568070 | 4322644 | 5627564 | |

**ATTENTION:**

# GROUND STORY

# GROUND STORY VERTICAL BOND BEAM STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Vertical Bond Beam Name | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2(m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2(m3) | Formula |
|---|---|---|---|---|---|---|---|

# GROUND STORY VERTICAL BOND BEAM STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Vertical Bond Beam Name | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2(m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2(m3) | Formula |
|---|---|---|---|---|---|---|---|
| | 9725.94 | 57524.9 | 340236. | 9725.94 | 199549. | 4094208 | k*A/H |
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | -14076.7 | 186626. | k*A/H |
| | 9725.94 | -56754.9 | 331188. | 9725.94 | 199549. | 4094208 | k*A/H |
| | 26236.7 | 35146.4 | 47081.7 | 3185.32 | 64955.9 | 1324598 | k*A/H |
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | -6538.15 | 40260.3 | k*A/H |
| | 5557.68 | -7004.97 | 8829.14 | 1858.10 | 38123.2 | 782184. | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | -14076.7 | 186626. | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | -17660.2 | 293738. | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | 89713.4 | 1448177 | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | 69983.7 | 881252. | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | 50253.9 | 454408. | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | 24966.4 | 112155. | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | 5236.70 | 4934.27 | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | -14493.0 | 37794.3 | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | -34222.8 | 210735. | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | -73682.3 | 976863. | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | -92439.5 | 1537524 | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | -92439.5 | 1537524 | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | -73682.3 | 976863. | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | -34222.8 | 210735. | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | -14493.0 | 37794.3 | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | 5236.70 | 4934.27 | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | 24966.4 | 112155. | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | 50253.9 | 454408. | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | 69983.7 | 881252. | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | 89713.4 | 1448177 | k*A/H |
| | 3185.32 | 4267.02 | 5716.05 | 26236.7 | 237239. | 2145174 | k*A/H |
| | 3185.32 | -4014.82 | 5060.33 | 26236.7 | 237239. | 2145174 | k*A/H |
| | 3185.32 | 4267.02 | 5716.05 | 26236.7 | 117861. | 529464. | k*A/H |
| | 3185.32 | -4014.82 | 5060.33 | 26236.7 | 117861. | 529464. | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | 17139.4 | 276669. | k*A/H |
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | 17139.4 | 276669. | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | 13370.1 | 168360. | k*A/H |
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | 13370.1 | 168360. | k*A/H |
| | 1858.10 | -10842.8 | 63272.3 | 5557.68 | -53952.6 | 523758. | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | 1000.45 | 942.675 | k*A/H |
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | 1000.45 | 942.675 | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | -2768.85 | 7220.47 | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | -2768.85 | 7220.47 | k*A/H |

## GROUND STORY VERTICAL BOND BEAM STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Vertical Bond Beam Name | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2(m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2(m3) | Formula |
|---|---|---|---|---|---|---|---|
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | -2768.85 | 7220.47 | k*A/H |
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | -17660.2 | 293738. | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | -6538.15 | 40260.3 | k*A/H |
| | 9725.94 | 57524.9 | 340236. | 9725.94 | -203590. | 4261716 | k*A/H |
| | 9725.94 | -56754.9 | 331188. | 9725.94 | -203590. | 4261716 | k*A/H |
| | 5557.68 | 7445.00 | 9973.24 | 1858.10 | -38895.3 | 814186. | k*A/H |
| | 5557.68 | -7004.97 | 8829.14 | 1858.10 | -38895.3 | 814186. | k*A/H |
| | 1061.77 | -1338.27 | 1686.77 | 1061.77 | -10307.4 | 100062. | k*A/H |
| | 1061.77 | 1422.34 | 1905.35 | 1061.77 | -10307.4 | 100062. | k*A/H |
| | 1858.10 | 10989.9 | 65000.9 | 5557.68 | -53952.6 | 523758. | k*A/H |
| **TOTAL** | 1067013 | 773652. | 3132540 | 2927399 | 1335175 | 6461799 | |

**ATTENTION:**

# 1. STORY

## 1. STORY VERTICAL BOND BEAM STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Vertical Bond Beam Name | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2(m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2(m3) | Formula |
|---|---|---|---|---|---|---|---|
| | 9725.94 | 56214.0 | 324905. | 9725.94 | 198417. | 4047879 | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | -17783.8 | 297864. | k*A/H |
| | 9725.94 | -58065.8 | 346664. | 9725.94 | 198417. | 4047879 | k*A/H |
| | 26236.7 | 31610.0 | 38083.7 | 3185.32 | 64585.1 | 1309518 | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | -14200.3 | 189918. | k*A/H |
| | 5557.68 | -7754.08 | 10818.5 | 1858.10 | 37906.9 | 773333. | k*A/H |
| | 1061.77 | -1481.39 | 2066.83 | 1061.77 | -14200.3 | 189918. | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | -10431.0 | 102476. | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | 89066.4 | 1427364 | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | 69336.7 | 865033. | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | 49606.9 | 442783. | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | 24319.4 | 106417. | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | 4589.71 | 3790.32 | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | -15140.0 | 41244.0 | k*A/H |

# 1. STORY VERTICAL BOND BEAM STIFFNESS AND SHEAR STIFFNESS CENTER ANALYSIS

| Vertical Bond Beam Name | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2(m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2(m3) | Formula |
|---|---|---|---|---|---|---|---|
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | -34869.8 | 218779. | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | -74329.3 | 994093. | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | -93086.5 | 1559122 | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | -93086.5 | 1559122 | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | -74329.3 | 994093. | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | -34869.8 | 218779. | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | -15140.0 | 41244.0 | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | 4589.71 | 3790.32 | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | 24319.4 | 106417. | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | 49606.9 | 442783. | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | 69336.7 | 865033. | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | 89066.4 | 1427364 | k*A/H |
| | 3185.32 | 3837.68 | 4623.63 | 26236.7 | 234184. | 2090294 | k*A/H |
| | 3185.32 | -4444.17 | 6200.51 | 26236.7 | 234184. | 2090294 | k*A/H |
| | 3185.32 | 3837.68 | 4623.63 | 26236.7 | 114807. | 502378. | k*A/H |
| | 3185.32 | -4444.17 | 6200.51 | 26236.7 | 114807. | 502378. | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | 17015.8 | 272693. | k*A/H |
| | 1061.77 | -1481.39 | 2066.83 | 1061.77 | 17015.8 | 272693. | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | 13246.5 | 165261. | k*A/H |
| | 1061.77 | -1481.39 | 2066.83 | 1061.77 | 13246.5 | 165261. | k*A/H |
| | 1061.77 | -1481.39 | 2066.83 | 1061.77 | -10431.0 | 102476. | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | 876.848 | 724.129 | k*A/H |
| | 1061.77 | -1481.39 | 2066.83 | 1061.77 | 876.848 | 724.129 | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | -2892.45 | 7879.53 | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | -2892.45 | 7879.53 | k*A/H |
| | 1061.77 | -1481.39 | 2066.83 | 1061.77 | -2892.45 | 7879.53 | k*A/H |
| | 1061.77 | -1481.39 | 2066.83 | 1061.77 | -17783.8 | 297864. | k*A/H |
| | 1061.77 | 1279.22 | 1541.21 | 1061.77 | -6661.76 | 41797.0 | k*A/H |
| | 9725.94 | -58065.8 | 346664. | 9725.94 | -204723. | 4309250 | k*A/H |
| | 9725.94 | 56214.0 | 324905. | 9725.94 | -204723. | 4309250 | k*A/H |
| | 5557.68 | -7754.08 | 10818.5 | 1858.10 | -39111.6 | 823267. | k*A/H |
| | 5557.68 | 6695.89 | 8067.20 | 1858.10 | -39111.6 | 823267. | k*A/H |
| | 1858.10 | 10739.4 | 62072.1 | 5557.68 | -54599.6 | 536395. | k*A/H |
| | 1858.10 | -11093.2 | 66229.1 | 5557.68 | -54599.6 | 536395. | k*A/H |
| **TOTAL** | 1029863 | 722898. | 3205701 | 1587269 | -452661 | 4084873 | |

**ATTENTION:**

# BASEMENT STORY

## BASEMENT STORY JACKET RIGIDITY

| Jacket Name | Degree | Jacket Effective Height | Jacket Length | Jacket Thickness | Modulus Of Elasticity | Jacket Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| CB01 | 0 | 2.9 | 1.3 | 8 | 31800. | 0.104 | 0.015 | 0 | 0.015 | 0 |
| CB02 | 90 | 2.9 | 12.1 | 8 | 31800. | 0.968 | 11.81 | 0.001 | 0.001 | 11.81 |
| CB03 | 0 | 2.9 | 1.7 | 8 | 31800. | 0.136 | 0.033 | 0 | 0.033 | 0 |
| CB04 | 0 | 2.9 | 2.5 | 8 | 31800. | 0.2 | 0.104 | 0 | 0.104 | 0 |
| CB05 | 0 | 2.9 | 2.35 | 8 | 31800. | 0.188 | 0.087 | 0 | 0.087 | 0 |
| CB06 | 0 | 2.9 | 1.7 | 8 | 31800. | 0.136 | 0.033 | 0 | 0.033 | 0 |
| CB07 | 0 | 2.9 | 2.5 | 8 | 31800. | 0.2 | 0.104 | 0 | 0.104 | 0 |
| CB08 | 0 | 2.9 | 1.05 | 8 | 31800. | 0.084 | 0.008 | 0 | 0.008 | 0 |
| CB09 | 0 | 2.9 | 1.1 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| CB10 | 0 | 2.9 | 1.35 | 8 | 31800. | 0.108 | 0.016 | 0 | 0.016 | 0 |
| CB11 | 0 | 2.9 | 2.6 | 8 | 31800. | 0.208 | 0.117 | 0 | 0.117 | 0 |
| CB12 | 0 | 2.9 | 1.95 | 8 | 31800. | 0.156 | 0.049 | 0 | 0.049 | 0 |
| CB13 | 0 | 2.9 | 2.6 | 8 | 31800. | 0.208 | 0.117 | 0 | 0.117 | 0 |
| CB14 | 0 | 2.9 | 1.35 | 8 | 31800. | 0.108 | 0.016 | 0 | 0.016 | 0 |
| CB15 | 0 | 2.9 | 1.35 | 8 | 31800. | 0.108 | 0.016 | 0 | 0.016 | 0 |
| CB16 | 90 | 2.9 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CB17 | 0 | 2.9 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CB18 | 0 | 2.9 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CB19 | 0 | 2.9 | 1.35 | 8 | 31800. | 0.108 | 0.016 | 0 | 0.016 | 0 |
| CB20 | 0 | 2.9 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CB21 | 90 | 2.9 | 12.1 | 8 | 31800. | 0.968 | 11.81 | 0.001 | 0.001 | 11.81 |
| CB22 | 0 | 2.9 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CB23 | 90 | 2.9 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CB24 | 90 | 2.9 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CB25 | 90 | 2.9 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CB26 | 0 | 2.9 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CB27 | 0 | 2.9 | 1.25 | 8 | 31800. | 0.1 | 0.013 | 0 | 0.013 | 0 |
| CB28 | 0 | 2.9 | 2.2 | 8 | 31800. | 0.176 | 0.071 | 0 | 0.071 | 0 |
| CB29 | 0 | 2.9 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CB30 | 0 | 2.9 | 1.95 | 8 | 31800. | 0.156 | 0.049 | 0 | 0.049 | 0 |
| CB31 | 0 | 2.9 | 0.3 | 8 | 31800. | 0.024 | 0 | 0 | 0 | 0 |
| CB32 | 0 | 2.9 | 0.3 | 8 | 31800. | 0.024 | 0 | 0 | 0 | 0 |
| CB33 | 0 | 2.9 | 1.14 | 8 | 31800. | 0.091 | 0.01 | 0 | 0.01 | 0 |
| CB34 | 0 | 2.9 | 2.05 | 8 | 31800. | 0.164 | 0.057 | 0 | 0.057 | 0 |
| CB35 | 0 | 2.9 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CB36 | 90 | 2.9 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CB37 | 90 | 2.9 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |

## BASEMENT STORY JACKET RIGIDITY

| Jacket Name | Degree | Jacket Effective Height | Jacket Length | Jacket Thickness | Modulus Of Elasticity | Jacket Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| CB38 | 90 | 2.9 | 0.55 | 8 | 31800. | 0.044 | 0.001 | 0 | 0 | 0.001 |
| CB39 | 90 | 2.9 | 3.23 | 8 | 31800. | 0.258 | 0.225 | 0 | 0 | 0.225 |

# GROUND STORY

## GROUND STORY JACKET RIGIDITY

| Jacket Name | Degree | Jacket Effective Height | Jacket Length | Jacket Thickness | Modulus Of Elasticity | Jacket Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| CZ01 | 90 | 3.2 | 4.925 | 8 | 31800. | 0.394 | 0.796 | 0 | 0 | 0.796 |
| CZ02 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CZ03 | 0 | 3.2 | 1.225 | 8 | 31800. | 0.098 | 0.012 | 0 | 0.012 | 0 |
| CZ04 | 0 | 3.2 | 1.275 | 8 | 31800. | 0.102 | 0.014 | 0 | 0.014 | 0 |
| CZ05 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CZ06 | 90 | 3.2 | 5.1 | 8 | 31800. | 0.408 | 0.884 | 0 | 0 | 0.884 |
| CZ07 | 0 | 3.2 | 2.5 | 8 | 31800. | 0.2 | 0.104 | 0 | 0.104 | 0 |
| CZ08 | 0 | 3.2 | 1.225 | 8 | 31800. | 0.098 | 0.012 | 0 | 0.012 | 0 |
| CZ09 | 0 | 3.2 | 1.275 | 8 | 31800. | 0.102 | 0.014 | 0 | 0.014 | 0 |
| CZ10 | 0 | 3.2 | 2.6 | 8 | 31800. | 0.208 | 0.117 | 0 | 0.117 | 0 |
| CZ11 | 0 | 3.2 | 1.175 | 8 | 31800. | 0.094 | 0.011 | 0 | 0.011 | 0 |
| CZ12 | 0 | 3.2 | 1.275 | 8 | 31800. | 0.102 | 0.014 | 0 | 0.014 | 0 |
| CZ13 | 0 | 3.2 | 2.6 | 8 | 31800. | 0.208 | 0.117 | 0 | 0.117 | 0 |
| CZ14 | 0 | 3.2 | 1.35 | 8 | 31800. | 0.108 | 0.016 | 0 | 0.016 | 0 |
| CZ15 | 0 | 3.2 | 1.7 | 8 | 31800. | 0.136 | 0.033 | 0 | 0.033 | 0 |
| CZ16 | 0 | 3.2 | 1.7 | 8 | 31800. | 0.136 | 0.033 | 0 | 0.033 | 0 |
| CZ17 | 0 | 3.2 | 2.5 | 8 | 31800. | 0.2 | 0.104 | 0 | 0.104 | 0 |
| CZ18 | 0 | 3.2 | 1.223 | 8 | 31800. | 0.098 | 0.012 | 0 | 0.012 | 0 |
| CZ19 | 0 | 3.2 | 1.375 | 8 | 31800. | 0.11 | 0.017 | 0 | 0.017 | 0 |
| CZ20 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CZ21 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| CZ22 | 0 | 3.2 | 1.125 | 8 | 31800. | 0.09 | 0.009 | 0 | 0.009 | 0 |
| CZ23 | 90 | 3.2 | 5.05 | 8 | 31800. | 0.404 | 0.859 | 0 | 0 | 0.859 |
| CZ24 | 90 | 3.2 | 5.05 | 8 | 31800. | 0.404 | 0.859 | 0 | 0 | 0.859 |
| CZ25 | 90 | 3.2 | 4.875 | 8 | 31800. | 0.39 | 0.772 | 0 | 0 | 0.772 |
| CZ26 | 90 | 3.2 | 4.875 | 8 | 31800. | 0.39 | 0.772 | 0 | 0 | 0.772 |
| CZ27 | 90 | 3.2 | 4.925 | 8 | 31800. | 0.394 | 0.796 | 0 | 0 | 0.796 |
| CZ28 | 90 | 3.2 | 4.925 | 8 | 31800. | 0.394 | 0.796 | 0 | 0 | 0.796 |

# GROUND STORY JACKET RIGIDITY

| Jacket Name | Degree | Jacket Effective Height | Jacket Length | Jacket Thickness | Modulus Of Elasticity | Jacket Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| CZ29 | 90 | 3.2 | 4.597 | 8 | 31800. | 0.368 | 0.647 | 0 | 0 | 0.647 |
| CZ30 | 90 | 3.2 | 4.597 | 8 | 31800. | 0.368 | 0.647 | 0 | 0 | 0.647 |
| CZ31 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ32 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ33 | 90 | 3.2 | 4.6 | 8 | 31800. | 0.368 | 0.649 | 0 | 0 | 0.649 |
| CZ34 | 90 | 3.2 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CZ35 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ36 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ37 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ38 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ39 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ40 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ41 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ42 | 90 | 3.2 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CZ43 | 90 | 3.2 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| CZ44 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| CZ45 | 0 | 3.2 | 1.1 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| CZ46 | 0 | 3.2 | 1.95 | 8 | 31800. | 0.156 | 0.049 | 0 | 0.049 | 0 |
| CZ47 | 0 | 3.2 | 0.302 | 8 | 31800. | 0.024 | 0 | 0 | 0 | 0 |
| CZ48 | 0 | 3.2 | 0.3 | 8 | 31800. | 0.024 | 0 | 0 | 0 | 0 |
| CZ49 | 0 | 3.2 | 0.948 | 8 | 31800. | 0.076 | 0.006 | 0 | 0.006 | 0 |
| CZ50 | 0 | 3.2 | 1.1 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| CZ51 | 0 | 3.2 | 2.1 | 8 | 31800. | 0.168 | 0.062 | 0 | 0.062 | 0 |
| CZ52 | 0 | 3.2 | 1.1 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| CZ53 | 0 | 3.2 | 1.102 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| CZ54 | 0 | 3.2 | 2.475 | 8 | 31800. | 0.198 | 0.101 | 0 | 0.101 | 0 |
| CZ55 | 0 | 3.2 | 1.1 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| CZ56 | 0 | 3.2 | 1.95 | 8 | 31800. | 0.156 | 0.049 | 0 | 0.049 | 0 |
| CZ57 | 0 | 3.2 | 1.25 | 8 | 31800. | 0.1 | 0.013 | 0 | 0.013 | 0 |
| CZ58 | 0 | 3.2 | 1.425 | 8 | 31800. | 0.114 | 0.019 | 0 | 0.019 | 0 |
| CZ59 | 0 | 3.2 | 2.048 | 8 | 31800. | 0.164 | 0.057 | 0 | 0.057 | 0 |
| CZ60 | 0 | 3.2 | 2.25 | 8 | 31800. | 0.18 | 0.076 | 0 | 0.076 | 0 |
| CZ61 | 0 | 3.2 | 1.525 | 8 | 31800. | 0.122 | 0.024 | 0 | 0.024 | 0 |

# 1. STORY

# 1. STORY JACKET RIGIDITY

| Jacket Name | Degree | Jacket Effective Height | Jacket Length | Jacket Thickness | Modulus Of Elasticity | Jacket Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| C101 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| C102 | 0 | 3.2 | 1.35 | 8 | 31800. | 0.108 | 0.016 | 0 | 0.016 | 0 |
| C103 | 0 | 3.2 | 2.6 | 8 | 31800. | 0.208 | 0.117 | 0 | 0.117 | 0 |
| C104 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| C105 | 0 | 3.2 | 1.275 | 8 | 31800. | 0.102 | 0.014 | 0 | 0.014 | 0 |
| C106 | 0 | 3.2 | 1.225 | 8 | 31800. | 0.098 | 0.012 | 0 | 0.012 | 0 |
| C107 | 0 | 3.2 | 2.475 | 8 | 31800. | 0.198 | 0.101 | 0 | 0.101 | 0 |
| C108 | 0 | 3.2 | 1.102 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| C109 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| C110 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| C111 | 89.97 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| C112 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| C113 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| C114 | 90 | 3.2 | 4.5 | 8 | 31800. | 0.36 | 0.607 | 0 | 0 | 0.607 |
| C115 | 90 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| C116 | 89.97 | 3.2 | 4.575 | 8 | 31800. | 0.366 | 0.638 | 0 | 0 | 0.638 |
| C117 | 0 | 3.2 | 1.7 | 8 | 31800. | 0.136 | 0.033 | 0 | 0.033 | 0 |
| C118 | 0 | 3.2 | 2.5 | 8 | 31800. | 0.2 | 0.104 | 0 | 0.104 | 0 |
| C119 | 0 | 3.2 | 1.223 | 8 | 31800. | 0.098 | 0.012 | 0 | 0.012 | 0 |
| C120 | 0 | 3.2 | 1.275 | 8 | 31800. | 0.102 | 0.014 | 0 | 0.014 | 0 |
| C121 | 90 | 3.2 | 4.925 | 8 | 31800. | 0.394 | 0.796 | 0 | 0 | 0.796 |
| C122 | 90 | 3.2 | 4.925 | 8 | 31800. | 0.394 | 0.796 | 0 | 0 | 0.796 |
| C123 | 0 | 3.2 | 1.425 | 8 | 31800. | 0.114 | 0.019 | 0 | 0.019 | 0 |
| C124 | 90 | 3.2 | 5.1 | 8 | 31800. | 0.408 | 0.884 | 0 | 0 | 0.884 |
| C125 | 90 | 3.2 | 5.1 | 8 | 31800. | 0.408 | 0.884 | 0 | 0 | 0.884 |
| C126 | 0 | 3.2 | 1.1 | 8 | 31800. | 0.088 | 0.009 | 0 | 0.009 | 0 |
| C127 | 0 | 3.2 | 1.95 | 8 | 31800. | 0.156 | 0.049 | 0 | 0.049 | 0 |
| C128 | 0 | 3.2 | 1.25 | 8 | 31800. | 0.1 | 0.013 | 0 | 0.013 | 0 |
| C129 | 0 | 3.2 | 1.7 | 8 | 31800. | 0.136 | 0.033 | 0 | 0.033 | 0 |
| C130 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| C131 | 0 | 3.2 | 2.5 | 8 | 31800. | 0.2 | 0.104 | 0 | 0.104 | 0 |
| C132 | 0 | 3.2 | 1.95 | 8 | 31800. | 0.156 | 0.049 | 0 | 0.049 | 0 |
| C133 | 0 | 3.2 | 0.302 | 8 | 31800. | 0.024 | 0 | 0 | 0 | 0 |
| C134 | 0 | 3.2 | 0.3 | 8 | 31800. | 0.024 | 0 | 0 | 0 | 0 |
| C135 | 0 | 3.2 | 2.048 | 8 | 31800. | 0.164 | 0.057 | 0 | 0.057 | 0 |
| C136 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| C137 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| C138 | 0 | 3.2 | 2.15 | 8 | 31800. | 0.172 | 0.066 | 0 | 0.066 | 0 |
| C139 | 0 | 3.2 | 2.1 | 8 | 31800. | 0.168 | 0.062 | 0 | 0.062 | 0 |

# 1. STORY JACKET RIGIDITY

| Jacket Name | Degree | Jacket Effective Height | Jacket Length | Jacket Thickness | Modulus Of Elasticity | Jacket Area | Imajor | Iminor | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|---|
| C140 | 0 | 3.2 | 2.2 | 8 | 31800.[illegible] | 0.176 | 0.071 | 0 | 0.071 | 0 |
| C141 | 0 | 3.2 | 2.6 | 8 | 31800.[illegible] | 0.208 | 0.117 | 0 | 0.117 | 0 |
| C142 | 0 | 3.2 | 1.35 | 8 | 31800.[illegible] | 0.108 | 0.016 | 0 | 0.016 | 0 |

# BASEMENT STORY

## BASEMENT STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| CB01 | 2.9 | 142979.146 | 892935.937 | 5576579.571 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB02 | 2.9 | 0 | 0 | 0 | 3471840.454 | -74499502.335 | 1598626412.021 | Eb/((H/L)^3+3(H/L)) |
| CB03 | 2.9 | 252343.1 | 1575937.663 | 9842074.237 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB04 | 2.9 | 504687.788 | 3151885.247 | 19684210.431 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB05 | 2.9 | 455813.469 | -2440781.769 | 13069854.318 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB06 | 2.9 | 252343.1 | -1497601.289 | 8887937.195 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB07 | 2.9 | 504687.788 | -2995212.005 | 17775930.341 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB08 | 2.9 | 86669.336 | -514363.618 | 3052635.949 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB09 | 2.9 | 96980.43 | -575557.71 | 3415809.546 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB10 | 2.9 | 155533.02 | -923054.57 | 5478127.662 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB11 | 2.9 | 537430.155 | -3189530.82 | 18929170.148 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB12 | 2.9 | 328236.976 | -1948014.901 | 11561043.8 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB13 | 2.9 | 537430.155 | 3356368.471 | 20961252.735 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB14 | 2.9 | 155533.02 | 971337.614 | 6066215.134 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB15 | 2.9 | 155533.02 | 971337.614 | 6066215.134 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB16 | 2.9 | 0 | 0 | 0 | 1155886.236 | -7141314.819 | 44120585.385 | Eb/((H/L)^3+3(H/L)) |
| CB17 | 2.9 | 391364.53 | -2322663.177 | 13784499.651 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB18 | 2.9 | 391364.53 | -2322663.177 | 13784499.651 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB19 | 2.9 | 155533.02 | -923054.57 | 5478127.662 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB20 | 2.9 | 391364.53 | 2444156.804 | 15264292.029 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB21 | 2.9 | 0 | 0 | 0 | 3471840.454 | 70727583.857 | 1440847062.084 | Eb/((H/L)^3+3(H/L)) |
| CB22 | 2.9 | 391364.53 | 2444156.804 | 15264292.029 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB23 | 2.9 | 0 | 0 | 0 | 1155886.236 | 18634948.232 | 300428610.494 | Eb/((H/L)^3+3(H/L)) |
| CB24 | 2.9 | 0 | 0 | 0 | 1155886.236 | 10428155.96 | 94080570.727 | Eb/((H/L)^3+3(H/L)) |
| CB25 | 2.9 | 0 | 0 | 0 | 1155886.236 | 5168873.589 | 23114086.279 | Eb/((H/L)^3+3(H/L)) |

# BASEMENT STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| CB26 | 2.9 | 391364.53 | -2322663.177 | 13784499.651 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB27 | 2.9 | 130820.007 | -776388.224 | 4607694.866 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB28 | 2.9 | 407377.016 | 2544158.269 | 15888822.978 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB29 | 2.9 | 391364.53 | 2444156.804 | 15264292.029 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB30 | 2.9 | 328236.976 | 2049911.464 | 12802143.943 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB31 | 2.9 | 2728.831 | 17042.142 | 106431.891 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB32 | 2.9 | 2728.831 | 17042.142 | 106431.891 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB33 | 2.9 | 105592.087 | 659445.602 | 4118381.531 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB34 | 2.9 | 359594.518 | 2037181.331 | 11541076.314 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB35 | 2.9 | 391364.53 | -2095671.749 | 11221865.393 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CB36 | 2.9 | 0 | 0 | 0 | 1155886.236 | 14531552.096 | 182687534.328 | Eb/((H/L)^3+3(H/L)) |
| CB37 | 2.9 | 0 | 0 | 0 | 1155886.236 | -3708332.7 | 11897132.253 | Eb/((H/L)^3+3(H/L)) |
| CB38 | 2.9 | 0 | 0 | 0 | 15664.668 | -96779.704 | 597925.914 | Eb/((H/L)^3+3(H/L)) |
| CB39 | 2.9 | 0 | 0 | 0 | 744482.397 | -4599573.044 | 28417155.715 | Eb/((H/L)^3+3(H/L)) |
| TOTAL | --- | 20898418.284 | -1962704.727 | 482510578.797 | 25680708.544 | 43226447.071 | 5627564554 | |

***In this project Retrofit Jacket Stiffness is increased with (Jacket Young Modulus/Wall Young Modulus=6.66) factor.**

# GROUND STORY

# GROUND STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|

# GROUND STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| CZ01 | 3.2 | 0 | 0 | 0 | 1144155.876 | -24196326.263 | 511697939.767 | Eb/((H/L)^3+3(H/L)) |
| CZ02 | 3.2 | 327750.799 | -1983027.358 | 11998132.467 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ03 | 3.2 | 99137.074 | -599820.139 | 3629158.95 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ04 | 3.2 | 109005.67 | -659529.209 | 3990423.419 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ05 | 3.2 | 327750.799 | -1983027.358 | 11998132.467 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ06 | 3.2 | 0 | 0 | 0 | 1194752.524 | -25266331.691 | 534326150.653 | Eb/((H/L)^3+3(H/L)) |
| CZ07 | 3.2 | 428501.519 | 2626537.78 | 16099594.539 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ08 | 3.2 | 99137.074 | 607669.422 | 3724763.215 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ09 | 3.2 | 109005.67 | 668159.848 | 4095544.606 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ10 | 3.2 | 457842.463 | 2806385.683 | 17201988.089 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ11 | 3.2 | 89676.499 | 549679.995 | 3369311.917 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ12 | 3.2 | 109005.67 | -659529.209 | 3990423.419 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ13 | 3.2 | 457842.463 | -2770135.521 | 16760461.116 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ14 | 3.2 | 124530.231 | -753459.197 | 4558738.547 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ15 | 3.2 | 206555.037 | 1266097.283 | 7760654.75 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ16 | 3.2 | 206555.037 | -1249743.069 | 7561460.425 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ17 | 3.2 | 428501.519 | -2592610.719 | 15686362.928 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ18 | 3.2 | 98681.207 | -597061.953 | 3612470.789 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ19 | 3.2 | 129887.48 | 796156.743 | 4880112.84 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ20 | 3.2 | 327750.799 | 2008977.375 | 12314203.67 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ21 | 3.2 | 327750.799 | 2008977.375 | 12314203.67 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ22 | 3.2 | 80643.188 | 494309.522 | 3029913.728 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ23 | 3.2 | 0 | 0 | 0 | 1180314.444 | 24411554.452 | 504885790.292 | Eb/((H/L)^3+3(H/L)) |
| CZ24 | 3.2 | 0 | 0 | 0 | 1180314.444 | 24411554.452 | 504885790.292 | Eb/((H/L)^3+3(H/L)) |
| CZ25 | 3.2 | 0 | 0 | 0 | 1129666.766 | 22878289.988 | 463336771.773 | Eb/((H/L)^3+3(H/L)) |
| CZ26 | 3.2 | 0 | 0 | 0 | 1129666.766 | 22878289.988 | 463336771.773 | Eb/((H/L)^3+3(H/L)) |
| CZ27 | 3.2 | 0 | 0 | 0 | 1144155.876 | -23704339.236 | 491100653.603 | Eb/((H/L)^3+3(H/L)) |

# GROUND STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| CZ28 | 3.2 | 0 | 0 | 0 | 1144155.876 | -23704339.236 | 491100653.603 | Eb/((H/L)^3+3(H/L)) |
| CZ29 | 3.2 | 0 | 0 | 0 | 1048719.989 | 13355036.547 | 170071137.227 | Eb/((H/L)^3+3(H/L)) |
| CZ30 | 3.2 | 0 | 0 | 0 | 1048719.989 | 13061394.95 | 162674536.408 | Eb/((H/L)^3+3(H/L)) |
| CZ31 | 3.2 | 0 | 0 | 0 | 1042416.794 | -2572427.534 | 6348116.665 | Eb/((H/L)^3+3(H/L)) |
| CZ32 | 3.2 | 0 | 0 | 0 | 1042416.794 | -2864304.237 | 7870401.561 | Eb/((H/L)^3+3(H/L)) |
| CZ33 | 3.2 | 0 | 0 | 0 | 1049708.523 | -2884340.11 | 7925455.2 | Eb/((H/L)^3+3(H/L)) |
| CZ34 | 3.2 | 0 | 0 | 0 | 1020518.589 | -2518388.168 | 6214760.836 | Eb/((H/L)^3+3(H/L)) |
| CZ35 | 3.2 | 0 | 0 | 0 | 1042416.794 | 13272307.731 | 168986295.651 | Eb/((H/L)^3+3(H/L)) |
| CZ36 | 3.2 | 0 | 0 | 0 | 1042416.794 | 12902249.769 | 159694327.738 | Eb/((H/L)^3+3(H/L)) |
| CZ37 | 3.2 | 0 | 0 | 0 | 1042416.794 | -13966043.09 | 187113600.596 | Eb/((H/L)^3+3(H/L)) |
| CZ38 | 3.2 | 0 | 0 | 0 | 1042416.794 | -13674166.388 | 179374341.942 | Eb/((H/L)^3+3(H/L)) |
| CZ39 | 3.2 | 0 | 0 | 0 | 1042416.794 | -13674166.388 | 179374341.942 | Eb/((H/L)^3+3(H/L)) |
| CZ40 | 3.2 | 0 | 0 | 0 | 1042416.794 | -13966043.09 | 187113600.596 | Eb/((H/L)^3+3(H/L)) |
| CZ41 | 3.2 | 0 | 0 | 0 | 1042416.794 | 16972887.349 | 276356738.184 | Eb/((H/L)^3+3(H/L)) |
| CZ42 | 3.2 | 0 | 0 | 0 | 1020518.589 | 9370653.4 | 86043650.795 | Eb/((H/L)^3+3(H/L)) |
| CZ43 | 3.2 | 0 | 0 | 0 | 1020518.589 | 4727293.818 | 21897990.953 | Eb/((H/L)^3+3(H/L)) |
| CZ44 | 3.2 | 0 | 0 | 0 | 1042416.794 | -6273007.152 | 37749409.803 | Eb/((H/L)^3+3(H/L)) |
| CZ45 | 3.2 | 76292.553 | 467641.921 | 2866452.321 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ46 | 3.2 | 272318.183 | 1669198.275 | 10231497.766 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ47 | 3.2 | 2076.346 | 12727.148 | 78012.172 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ48 | 3.2 | 2042.404 | 12519.094 | 76736.887 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ49 | 3.2 | 52405.668 | 321225.156 | 1968977.869 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ50 | 3.2 | 76292.553 | 467641.921 | 2866452.321 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ51 | 3.2 | 313707.823 | 1922899.719 | 11786583.103 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ52 | 3.2 | 76292.553 | 467641.921 | 2866452.321 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ53 | 3.2 | 76698.429 | -464057.096 | 2807736.606 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ54 | 3.2 | 421195.729 | -2548407.678 | 15418916.321 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |

# GROUND STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| CZ55 | 3.2 | 76292.553 | -461601.377 | 2792878.499 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ56 | 3.2 | 272318.183 | -1647637.194 | 9968883.804 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ57 | 3.2 | 104021.596 | -629373.511 | 3807969.028 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ58 | 3.2 | 140860.459 | -852263.81 | 5156547.159 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ59 | 3.2 | 299314.229 | 1705967.796 | 9723313.631 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ60 | 3.2 | 356143.028 | -498746.959 | 698451.212 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| CZ61 | 3.2 | 163770.532 | 933424.563 | 5320135.468 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| TOTAL | --- | 10670136.647 | 773652.783 | 313254036.083 | 29273998.722 | 13351756.739 | 6461799130 | |

***In this project Retrofit Jacket Stiffness is increased with (Jacket Young Modulus/Wall Young Modulus=6.66) factor.**

# 1. STORY

# 1. STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| C101 | 3.2 | 327750.799 | -2027204.527 | 12538667.201 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C102 | 3.2 | 124530.231 | -770244.49 | 4764116.888 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C103 | 3.2 | 457842.463 | -2831847.602 | 17515546.245 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C104 | 3.2 | 327750.799 | -2027204.527 | 12538667.201 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C105 | 3.2 | 109005.67 | -674221.963 | 4170198.269 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C106 | 3.2 | 99137.074 | -613182.716 | 3792658.268 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C107 | 3.2 | 421195.729 | -2605180.186 | 16113562.747 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |

# 1. STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| C108 | 3.2 | 76698.429 | -474395.192 | 2934229.555 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C109 | 3.2 | 0 | 0 | 0 | 1042416.794 | -13795519.388 | 182572226.687 | Eb/((H/L)^3+3(H/L)) |
| C110 | 3.2 | 0 | 0 | 0 | 1042416.794 | -13795519.388 | 182572226.687 | Eb/((H/L)^3+3(H/L)) |
| C111 | 3.2 | 2270.99 | -8363.539 | 30801.018 | 1042416.932 | 12860309.812 | 158657791.616 | Eb/((H/L)^3+3(H/L)) |
| C112 | 3.2 | 0 | 0 | 0 | 1042416.794 | 12859078.029 | 158627421.151 | Eb/((H/L)^3+3(H/L)) |
| C113 | 3.2 | 0 | 0 | 0 | 1042416.794 | 13150954.731 | 165910230.324 | Eb/((H/L)^3+3(H/L)) |
| C114 | 3.2 | 0 | 0 | 0 | 1020518.589 | -13791460.07 | 186380113.808 | Eb/((H/L)^3+3(H/L)) |
| C115 | 3.2 | 0 | 0 | 0 | 1042416.794 | -14087396.09 | 190379443.021 | Eb/((H/L)^3+3(H/L)) |
| C116 | 3.2 | 2270.99 | -8363.211 | 30798.602 | 1042416.932 | 13152186.514 | 165941289.618 | Eb/((H/L)^3+3(H/L)) |
| C117 | 3.2 | 206555.037 | -1277584.395 | 7902116.107 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C118 | 3.2 | 428501.519 | -2650367.966 | 16393058.244 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C119 | 3.2 | 98681.207 | -610363.084 | 3775218.278 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C120 | 3.2 | 109005.67 | -674221.963 | 4170198.269 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C121 | 3.2 | 0 | 0 | 0 | 1144155.876 | 23530517.078 | 483924651.779 | Eb/((H/L)^3+3(H/L)) |
| C122 | 3.2 | 0 | 0 | 0 | 1144155.876 | 23530517.078 | 483924651.779 | Eb/((H/L)^3+3(H/L)) |
| C123 | 3.2 | 140860.459 | -871250.236 | 5388857.717 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C124 | 3.2 | 0 | 0 | 0 | 1194752.524 | -25405418.862 | 540225104.847 | Eb/((H/L)^3+3(H/L)) |
| C125 | 3.2 | 0 | 0 | 0 | 1194752.524 | -25405418.862 | 540225104.847 | Eb/((H/L)^3+3(H/L)) |
| C126 | 3.2 | 76292.553 | -471884.766 | 2918702.067 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C127 | 3.2 | 272318.183 | -1684342.662 | 10417997.696 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C128 | 3.2 | 104021.596 | -643394.468 | 3979524.02 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C129 | 3.2 | 206555.037 | 1238255.957 | 7423095.737 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C130 | 3.2 | 327750.799 | 1964800.206 | 11778582.571 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C131 | 3.2 | 428501.519 | 2568780.533 | 15399323.311 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C132 | 3.2 | 272318.183 | 1632492.807 | 9786466.465 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C133 | 3.2 | 2076.346 | 12447.279 | 74618.939 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C134 | 3.2 | 2042.404 | 12243.8 | 73399.124 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |

# 1. STORY JACKET STIFFNESS AND SHEAR STIFFNESS CENTER

| Jacket Name | Jacket Effective Height (m) | Dx(m) | Dx*Y(m2) | Iox=Dx*Y2 (m3) | Dy(m) | Dy*X(m2) | Ioy=Dy*X2 (m3) | Formula |
|---|---|---|---|---|---|---|---|---|
| C135 | 3.2 | 299314.229 | 1794328.68 | 10756640.013 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C136 | 3.2 | 327750.799 | 1964800.206 | 11778582.571 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C137 | 3.2 | 327750.799 | 1964800.206 | 11778582.571 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C138 | 3.2 | 327750.799 | 1964800.206 | 11778582.571 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C139 | 3.2 | 313707.823 | 1880615.388 | 11273911.495 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C140 | 3.2 | 341899.1 | 2049616.426 | 12287038.769 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C141 | 3.2 | 457842.463 | 2744673.602 | 16453766.928 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| C142 | 3.2 | 124530.231 | 746533.718 | 4475319.684 | 0 | 0 | 0 | Eb/((H/L)^3+3(H/L)) |
| TOTAL | --- | 10298632.238 | 722898.725 | 320570121.937 | 15872697.122 | -4526617.089 | 4084873999 | |

***In this project Retrofit Jacket Stiffness is increased with (Jacket Young Modulus/Wall Young Modulus=6.66) factor.**

# BASEMENT STORY

## MASS CENTER COORDINATE

| | Wall | Gslab+n*Qslab | H.B.Beam | V.B.Beam | Window | Door |
|---|---|---|---|---|---|---|
| TOTAL W | 781.059 | 253.605 | 39.287 | 130.5 | 64.698 | 2.673 |
| TOTAL (W*Xort) | 15490.109 | 5243.283 | 782.14 | 2659.753 | 1379.152 | 49.633 |
| TOTAL (W*Yort) | 4703.544 | 1470.909 | 199.044 | 829.98 | 355.152 | 15.355 |

| | | | |
|---|---|---|---|
| Total(floor weight*X component) | 25604.07 | Mass Center X Coordinate Value | 20.13 |
| Total(floor weight*Y component) | 7573.984 | Mass Center Y Coordinate Value | 5.96 |
| Total Floor Weight | 1271.823 | | |

# GROUND STORY

## MASS CENTER COORDINATE

| | Wall | Gslab+n*Qslab | H.B.Beam | V.B.Beam | Window | Door |
|---|---|---|---|---|---|---|
| TOTAL W | 481.729 | 271.431 | 29.268 | 27.04 | 23.734 | 2.556 |
| TOTAL (W*Xort) | 9841.131 | 5618.34 | 563.201 | 538.53 | 482.275 | 41.305 |
| TOTAL (W*Yort) | 2831.834 | 1576.57 | 168.546 | 155.896 | 128.466 | 19.174 |

| | | | |
|---|---|---|---|
| Total(floor weight*X component) | 17084.782 | Mass Center X Coordinate Value | 20.44 |
| Total(floor weight*Y component) | 4880.486 | Mass Center Y Coordinate Value | 5.84 |
| Total Floor Weight | 835.759 | | |

# 1. STORY

## MASS CENTER COORDINATE

| | Wall | Gslab+n*Qslab | H.B.Beam | V.B.Beam | Window | Door |
|---|---|---|---|---|---|---|
| TOTAL W | 404.695 | 182.08 | 34.029 | 26.72 | 24.854 | 2.137 |
| TOTAL (W*Xort) | 8250.279 | 3764.635 | 648.279 | 530.018 | 482.247 | 34.621 |
| TOTAL (W*Yort) | 2278.57 | 1055.5 | 208.579 | 153.624 | 134.957 | 16.743 |

| | | | |
|---|---|---|---|
| Total(floor weight*X component) | 13710.078 | Mass Center X Coordinate Value | 20.33 |
| Total(floor weight*Y component) | 3847.973 | Mass Center Y Coordinate Value | 5.7 |
| Total Floor Weight | 674.515 | | |

# FOUNDATION ANALYSIS

| Foundation ID | Width (cm) | Height (cm) | Max Ground Stress (t/m2) | Min Ground Stress (t/m2) | Average Ground Stress (t/m2) | Vd(t/m) | Vcr(t/m) | Md(t/m) | Mcr(t/m) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| T001 | 240 | 50 | 5.39 | 3.85 | 4.36 | 5.12 | 20.38 | 2.43 | 6.14 | OK |
| T002 | 240 | 50 | 4.96 | 4.03 | 3.89 | 4.71 | 20.38 | 2.24 | 6.14 | OK |
| T003 | 240 | 50 | 5.39 | 3.47 | 4.32 | 5.12 | 20.38 | 2.43 | 6.14 | OK |
| T004 | 240 | 50 | 5.13 | 4.25 | 4.41 | 4.88 | 20.38 | 2.32 | 6.14 | OK |
| T005 | 240 | 50 | 5.66 | 5.66 | 4.8 | 5.38 | 20.38 | 2.56 | 6.14 | OK |
| T006 | 240 | 50 | 5.51 | 4.96 | 3.58 | 5.24 | 20.38 | 2.49 | 6.14 | OK |
| T007 | 240 | 50 | 5.99 | 5.21 | 3.81 | 5.69 | 20.38 | 2.7 | 6.14 | OK |
| T008 | 240 | 50 | 4.95 | 4.45 | 3.24 | 4.71 | 20.38 | 2.24 | 6.14 | OK |
| T009 | 240 | 50 | 4.95 | 4.45 | 3.24 | 4.71 | 20.38 | 2.24 | 6.14 | OK |
| T010 | 240 | 50 | 4.96 | 4.93 | 3.39 | 4.71 | 20.38 | 2.24 | 6.14 | OK |
| T011 | 240 | 50 | 4.7 | 4.7 | 1.92 | 4.46 | 20.38 | 2.12 | 6.14 | OK |
| T012 | 240 | 50 | 5.01 | 4.44 | 3.22 | 4.76 | 20.38 | 2.26 | 6.14 | OK |
| T013 | 240 | 50 | 1.44 | 1.44 | 1.44 | 0 | 20.38 | 0 | 6.14 | OK |
| T014 | 240 | 50 | 6.1 | 6.03 | 4.11 | 5.79 | 20.38 | 2.75 | 6.14 | OK |
| T015 | 240 | 50 | 5.68 | 5.68 | 4.81 | 5.4 | 20.38 | 2.56 | 6.14 | OK |

# BASEMENT STORY

**Storey Information**

| | | |
|---|---|---|
| **Xg:** | 20.13 | m |
| **Xc:** | 18.45 | m |
| **Lx:** | 41.75 | m |
| **ex:** | -1.68 | m |

| | | |
|---|---|---|
| **Qi:** | 679.87 | t |
| **Yg:** | 5.96 | m |
| **Yc:** | 6.05 | m |
| **Ly:** | 11.6 | m |
| **ey:** | 0.09 | m |

| | | |
|---|---|---|
| **Mb(+X):** | 63.85 | tm |
| **Mb(-X):** | 63.85 | tm |

| | | |
|---|---|---|
| **Mb(+Y):** | -1144.38 | tm |
| **Mb(-Y):** | -1144.38 | tm |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

**Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** Was Not Added

## BASEMENT STORY WALL SHEAR FORCES ANALYSIS

| Wall Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WB01 | 2.57 | 0 | -0.01 | 0 | -0.01 | 0 | 2.58 | 0 | 2.58 | 0 | 2.58 |
| WB02 | 2.57 | 0 | 0 | 0 | 0 | 0 | 2.57 | 0 | 2.57 | 0 | 2.57 |
| WB03 | 8.5 | 0 | 0 | 0 | 0 | 0 | 8.5 | 0 | 8.5 | 0 | 8.5 |
| WB04 | 8.5 | 0 | 0 | 0 | 0 | 0 | 8.5 | 0 | 8.5 | 0 | 8.5 |
| WB05 | 0.45 | 0 | 0 | 0 | 0 | 0 | 0.45 | 0 | 0.45 | 0 | 0.45 |
| WB06 | 0 | 25.27 | 0 | 3.33 | 0 | 3.33 | 0 | 21.94 | 0 | 21.94 | 21.94 |
| WB07 | 0 | 9.78 | 0 | 0.99 | 0 | 0.99 | 0 | 8.78 | 0 | 8.78 | 8.78 |
| WB08 | 0 | 9.78 | 0 | 0.99 | 0 | 0.99 | 0 | 8.78 | 0 | 8.78 | 8.78 |
| WB09 | 0 | 9.78 | 0 | 0.74 | 0 | 0.74 | 0 | 9.03 | 0 | 9.03 | 9.03 |
| WB10 | 0 | 9.78 | 0 | 0.74 | 0 | 0.74 | 0 | 9.03 | 0 | 9.03 | 9.03 |
| WB11 | 0 | 9.78 | 0 | 0.49 | 0 | 0.49 | 0 | 9.28 | 0 | 9.28 | 9.28 |
| WB12 | 0 | 9.78 | 0 | 0.49 | 0 | 0.49 | 0 | 9.28 | 0 | 9.28 | 9.28 |
| WB13 | 0 | 9.78 | 0 | 0.17 | 0 | 0.17 | 0 | 9.6 | 0 | 9.6 | 9.6 |
| WB14 | 0 | 9.78 | 0 | 0.17 | 0 | 0.17 | 0 | 9.6 | 0 | 9.6 | 9.6 |
| WB15 | 0 | 9.78 | 0 | -0.07 | 0 | -0.07 | 0 | 9.85 | 0 | 9.85 | 9.85 |
| WB16 | 0 | 9.78 | 0 | -0.07 | 0 | -0.07 | 0 | 9.85 | 0 | 9.85 | 9.85 |
| WB17 | 0 | 0.4 | 0 | -0.02 | 0 | -0.02 | 0 | 0.42 | 0 | 0.42 | 0.42 |
| WB18 | 0 | 9.78 | 0 | -0.57 | 0 | -0.57 | 0 | 10.35 | 0 | 10.35 | 10.35 |
| WB19 | 0 | 9.78 | 0 | -1.07 | 0 | -1.07 | 0 | 10.84 | 0 | 10.84 | 10.84 |
| WB20 | 0 | 9.78 | 0 | -1.07 | 0 | -1.07 | 0 | 10.84 | 0 | 10.84 | 10.84 |
| WB21 | 0 | 25.27 | 0 | -4.13 | 0 | -4.13 | 0 | 29.4 | 0 | 29.4 | 29.4 |
| WB22 | 0 | 9.78 | 0 | -0.32 | 0 | -0.32 | 0 | 10.1 | 0 | 10.1 | 10.1 |
| WB23 | 1.28 | 0 | 0 | 0 | 0 | 0 | 1.28 | 0 | 1.28 | 0 | 1.28 |
| WB24 | 4.07 | 0 | -0.01 | 0 | -0.01 | 0 | 4.07 | 0 | 4.07 | 0 | 4.07 |
| WB25 | 3.21 | 0 | -0.01 | 0 | -0.01 | 0 | 3.22 | 0 | 3.22 | 0 | 3.22 |
| WB26 | 2.73 | 0 | -0.01 | 0 | -0.01 | 0 | 2.74 | 0 | 2.74 | 0 | 2.74 |
| WB27 | 0.03 | 0 | 0 | 0 | 0 | 0 | 0.03 | 0 | 0.03 | 0 | 0.03 |
| WB28 | 0.03 | 0 | 0 | 0 | 0 | 0 | 0.03 | 0 | 0.03 | 0 | 0.03 |
| WB29 | 2.97 | 0 | -0.01 | 0 | -0.01 | 0 | 2.98 | 0 | 2.98 | 0 | 2.98 |
| WB30 | 3.21 | 0 | -0.01 | 0 | -0.01 | 0 | 3.22 | 0 | 3.22 | 0 | 3.22 |
| WB31 | 3.21 | 0 | -0.01 | 0 | -0.01 | 0 | 3.22 | 0 | 3.22 | 0 | 3.22 |

# BASEMENT STORY WALL SHEAR FORCES ANALYSIS

| Wall Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WB32 | 3.21 | 0 | -0.01 | 0 | -0.01 | 0 | 3.22 | 0 | 3.22 | 0 | 3.22 |
| WB33 | 3.09 | 0 | -0.01 | 0 | -0.01 | 0 | 3.1 | 0 | 3.1 | 0 | 3.1 |
| WB34 | 3.34 | 0 | -0.01 | 0 | -0.01 | 0 | 3.34 | 0 | 3.34 | 0 | 3.34 |
| WB35 | 4.31 | 0 | -0.01 | 0 | -0.01 | 0 | 4.32 | 0 | 4.32 | 0 | 4.32 |
| WB36 | 1.64 | 0 | 0 | 0 | 0 | 0 | 1.64 | 0 | 1.64 | 0 | 1.64 |
| WB37 | 1.64 | 0 | 0 | 0 | 0 | 0 | 1.64 | 0 | 1.64 | 0 | 1.64 |
| WB38 | 4.31 | 0 | 0.01 | 0 | 0.01 | 0 | 4.3 | 0 | 4.3 | 0 | 4.3 |
| WB39 | 3.7 | 0 | 0.01 | 0 | 0.01 | 0 | 3.69 | 0 | 3.69 | 0 | 3.69 |
| WB40 | 2.73 | 0 | 0 | 0 | 0 | 0 | 2.73 | 0 | 2.73 | 0 | 2.73 |
| WB41 | 4.07 | 0 | 0.01 | 0 | 0.01 | 0 | 4.06 | 0 | 4.06 | 0 | 4.06 |
| WB42 | 3.21 | 0 | 0.01 | 0 | 0.01 | 0 | 3.21 | 0 | 3.21 | 0 | 3.21 |
| WB43 | 13.89 | 0 | 0.03 | 0 | 0.03 | 0 | 13.86 | 0 | 13.86 | 0 | 13.86 |
| WB44 | 3.21 | 0 | 0.01 | 0 | 0.01 | 0 | 3.21 | 0 | 3.21 | 0 | 3.21 |
| WB45 | 3.21 | 0 | 0.01 | 0 | 0.01 | 0 | 3.21 | 0 | 3.21 | 0 | 3.21 |
| WB46 | 3.21 | 0 | 0.01 | 0 | 0.01 | 0 | 3.21 | 0 | 3.21 | 0 | 3.21 |
| WB47 | 5.8 | 0 | 0 | 0 | 0 | 0 | 5.8 | 0 | 5.8 | 0 | 5.8 |
| WB48 | 6.27 | 0 | 0 | 0 | 0 | 0 | 6.27 | 0 | 6.27 | 0 | 6.27 |
| WB49 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0.63 | 0 | 0.63 | 0 | 0.63 |
| WB50 | 5.66 | 0 | 0 | 0 | 0 | 0 | 5.66 | 0 | 5.66 | 0 | 5.66 |
| WB51 | 5.66 | 0 | 0 | 0 | 0 | 0 | 5.66 | 0 | 5.66 | 0 | 5.66 |
| WB52 | 10.83 | 0 | -0.01 | 0 | -0.01 | 0 | 10.84 | 0 | 10.84 | 0 | 10.84 |
| WB53 | 10.42 | 0 | -0.01 | 0 | -0.01 | 0 | 10.43 | 0 | 10.43 | 0 | 10.43 |
| WB54 | 19.62 | 0 | -0.01 | 0 | -0.01 | 0 | 19.63 | 0 | 19.63 | 0 | 19.63 |
| WB55 | 5.8 | 0 | 0 | 0 | 0 | 0 | 5.8 | 0 | 5.8 | 0 | 5.8 |
| WB56 | 6.37 | 0 | 0 | 0 | 0 | 0 | 6.37 | 0 | 6.37 | 0 | 6.37 |
| WB57 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0.63 | 0 | 0.63 | 0 | 0.63 |
| WB58 | 12.46 | 0 | 0 | 0 | 0 | 0 | 12.46 | 0 | 12.46 | 0 | 12.46 |
| WB59 | 1.28 | 0 | 0 | 0 | 0 | 0 | 1.28 | 0 | 1.28 | 0 | 1.28 |
| WB60 | 10.01 | 0 | 0 | 0 | 0 | 0 | 10.01 | 0 | 10.01 | 0 | 10.01 |
| WB61 | 19.14 | 0 | 0.01 | 0 | 0.01 | 0 | 19.14 | 0 | 19.14 | 0 | 19.14 |
| WB62 | 15.42 | 0 | 0.01 | 0 | 0.01 | 0 | 15.41 | 0 | 15.41 | 0 | 15.41 |
| WB63 | 0 | 5.87 | 0 | -0.34 | 0 | -0.34 | 0 | 6.21 | 0 | 6.21 | 6.21 |
| TOTAL | 238.14 | 193.65 | 0 | 0.45 | 0 | 0.45 | 238.14 | 193.2 | 238.14 | 193.2 | 431.33 |

# GROUND STORY

**Storey Information**

| | | |
|---|---|---|
| **Xg:** | 20.44 | m |
| **Xc:** | 19.99 | m |
| **Lx:** | 41.8 | m |
| **ex:** | -0.46 | m |

| | | |
|---|---|---|
| **Qi:** | 513.36 | t |
| **Yg:** | 5.84 | m |
| **Yc:** | 5.77 | m |
| **Ly:** | 11.75 | m |
| **ey:** | -0.07 | m |

| | | |
|---|---|---|
| **Mb(+X):** | -37.22 | tm |
| **Mb(-X):** | -37.22 | tm |

| | | |
|---|---|---|
| **Mb(+Y):** | -234.14 | tm |
| **Mb(-Y):** | -234.14 | tm |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

**Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** Was Not Added

## GROUND STORY WALL SHEAR FORCES ANALYSIS

| Wall Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ01 | 8.37 | 0 | 0 | 0 | 0 | 0 | 8.37 | 0 | 8.37 | 0 | 8.37 |
| WZ02 | 2.3 | 0 | 0 | 0 | 0 | 0 | 2.31 | 0 | 2.31 | 0 | 2.31 |
| WZ03 | 0 | 4.24 | 0 | -0.18 | 0 | -0.18 | 0 | 4.42 | 0 | 4.42 | 4.42 |
| WZ04 | 0 | 4.19 | 0 | 0.17 | 0 | 0.17 | 0 | 4.03 | 0 | 4.03 | 4.03 |
| WZ05 | 5.03 | 0 | 0 | 0 | 0 | 0 | 5.03 | 0 | 5.03 | 0 | 5.03 |
| WZ06 | 0.13 | 0 | 0 | 0 | 0 | 0 | 0.13 | 0 | 0.13 | 0 | 0.13 |
| WZ07 | 5.03 | 0 | 0 | 0 | 0 | 0 | 5.03 | 0 | 5.03 | 0 | 5.03 |
| WZ08 | 3.09 | 0 | 0 | 0 | 0 | 0 | 3.09 | 0 | 3.09 | 0 | 3.09 |
| WZ09 | 0 | 2.14 | 0 | 0.07 | 0 | 0.07 | 0 | 2.08 | 0 | 2.08 | 2.08 |
| WZ10 | 0 | 2.28 | 0 | 0.07 | 0 | 0.07 | 0 | 2.21 | 0 | 2.21 | 2.21 |
| WZ11 | 0 | 2.14 | 0 | 0.05 | 0 | 0.05 | 0 | 2.09 | 0 | 2.09 | 2.09 |
| WZ12 | 0 | 2.28 | 0 | 0.05 | 0 | 0.05 | 0 | 2.23 | 0 | 2.23 | 2.23 |
| WZ13 | 0 | 2.14 | 0 | 0.04 | 0 | 0.04 | 0 | 2.11 | 0 | 2.11 | 2.11 |
| WZ14 | 0 | 2.28 | 0 | 0.04 | 0 | 0.04 | 0 | 2.25 | 0 | 2.25 | 2.25 |
| WZ15 | 0 | 2.14 | 0 | 0.02 | 0 | 0.02 | 0 | 2.13 | 0 | 2.13 | 2.13 |
| WZ16 | 0 | 2.28 | 0 | 0.02 | 0 | 0.02 | 0 | 2.27 | 0 | 2.27 | 2.27 |
| WZ17 | 0 | 2.14 | 0 | 0 | 0 | 0 | 0 | 2.14 | 0 | 2.14 | 2.14 |
| WZ18 | 0 | 2.28 | 0 | 0 | 0 | 0 | 0 | 2.28 | 0 | 2.28 | 2.28 |
| WZ19 | 0 | 2.14 | 0 | -0.01 | 0 | -0.01 | 0 | 2.16 | 0 | 2.16 | 2.16 |
| WZ20 | 0 | 2.28 | 0 | -0.01 | 0 | -0.01 | 0 | 2.3 | 0 | 2.3 | 2.3 |
| WZ21 | 0 | 2.14 | 0 | -0.03 | 0 | -0.03 | 0 | 2.17 | 0 | 2.17 | 2.17 |
| WZ22 | 0 | 2.28 | 0 | -0.03 | 0 | -0.03 | 0 | 2.31 | 0 | 2.31 | 2.31 |
| WZ23 | 0 | 2.14 | 0 | -0.06 | 0 | -0.06 | 0 | 2.2 | 0 | 2.2 | 2.2 |
| WZ24 | 0 | 2.28 | 0 | -0.06 | 0 | -0.06 | 0 | 2.35 | 0 | 2.35 | 2.35 |
| WZ25 | 0 | 2.28 | 0 | -0.05 | 0 | -0.05 | 0 | 2.33 | 0 | 2.33 | 2.33 |
| WZ26 | 2.03 | 0 | 0 | 0 | 0 | 0 | 2.03 | 0 | 2.03 | 0 | 2.03 |
| WZ27 | 3.74 | 0 | 0 | 0 | 0 | 0 | 3.74 | 0 | 3.74 | 0 | 3.74 |
| WZ28 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ29 | 3.74 | 0 | 0 | 0 | 0 | 0 | 3.74 | 0 | 3.74 | 0 | 3.74 |
| WZ30 | 2.47 | 0 | 0 | 0 | 0 | 0 | 2.47 | 0 | 2.47 | 0 | 2.47 |
| WZ31 | 0.02 | 0 | 0 | 0 | 0 | 0 | 0.02 | 0 | 0.02 | 0 | 0.02 |

# GROUND STORY WALL SHEAR FORCES ANALYSIS

| Wall Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ32 | 0.02 | 0 | 0 | 0 | 0 | 0 | 0.02 | 0 | 0.02 | 0 | 0.02 |
| WZ33 | 2.7 | 0 | 0 | 0 | 0 | 0 | 2.69 | 0 | 2.69 | 0 | 2.69 |
| WZ34 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ35 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ36 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ37 | 2.81 | 0 | 0 | 0 | 0 | 0 | 2.81 | 0 | 2.81 | 0 | 2.81 |
| WZ38 | 1.44 | 0 | 0 | 0 | 0 | 0 | 1.44 | 0 | 1.44 | 0 | 1.44 |
| WZ39 | 3.98 | 0 | 0 | 0 | 0 | 0 | 3.97 | 0 | 3.97 | 0 | 3.97 |
| WZ40 | 3.04 | 0 | 0 | 0 | 0 | 0 | 3.04 | 0 | 3.04 | 0 | 3.04 |
| WZ41 | 0 | 4.24 | 0 | -0.18 | 0 | -0.18 | 0 | 4.42 | 0 | 4.42 | 4.42 |
| WZ42 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ43 | 3.68 | 0 | 0 | 0 | 0 | 0 | 3.69 | 0 | 3.69 | 0 | 3.69 |
| WZ44 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ45 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ46 | 2.93 | 0 | 0 | 0 | 0 | 0 | 2.93 | 0 | 2.93 | 0 | 2.93 |
| WZ47 | 2.47 | 0 | 0 | 0 | 0 | 0 | 2.47 | 0 | 2.47 | 0 | 2.47 |
| WZ48 | 1.44 | 0 | 0 | 0 | 0 | 0 | 1.44 | 0 | 1.44 | 0 | 1.44 |
| WZ49 | 3.98 | 0 | 0 | 0 | 0 | 0 | 3.98 | 0 | 3.98 | 0 | 3.98 |
| WZ50 | 3.39 | 0 | 0 | 0 | 0 | 0 | 3.39 | 0 | 3.39 | 0 | 3.39 |
| WZ51 | 3.8 | 0 | 0 | 0 | 0 | 0 | 3.8 | 0 | 3.8 | 0 | 3.8 |
| WZ52 | 3.43 | 0 | 0 | 0 | 0 | 0 | 3.43 | 0 | 3.43 | 0 | 3.43 |
| WZ53 | 0.37 | 0 | 0 | 0 | 0 | 0 | 0.37 | 0 | 0.37 | 0 | 0.37 |
| WZ54 | 3.4 | 0 | 0 | 0 | 0 | 0 | 3.4 | 0 | 3.4 | 0 | 3.4 |
| WZ55 | 3.35 | 0 | 0 | 0 | 0 | 0 | 3.35 | 0 | 3.35 | 0 | 3.35 |
| WZ56 | 6.49 | 0 | 0 | 0 | 0 | 0 | 6.49 | 0 | 6.49 | 0 | 6.49 |
| WZ57 | 3.35 | 0 | 0 | 0 | 0 | 0 | 3.35 | 0 | 3.35 | 0 | 3.35 |
| WZ58 | 2.92 | 0 | 0 | 0 | 0 | 0 | 2.92 | 0 | 2.92 | 0 | 2.92 |
| WZ59 | 8.37 | 0 | 0 | 0 | 0 | 0 | 8.37 | 0 | 8.37 | 0 | 8.37 |
| WZ60 | 3.43 | 0 | 0 | 0 | 0 | 0 | 3.43 | 0 | 3.43 | 0 | 3.43 |
| WZ61 | 0.37 | 0 | 0 | 0 | 0 | 0 | 0.37 | 0 | 0.37 | 0 | 0.37 |
| WZ62 | 3.4 | 0 | 0 | 0 | 0 | 0 | 3.4 | 0 | 3.4 | 0 | 3.4 |
| WZ63 | 0.76 | 0 | 0 | 0 | 0 | 0 | 0.76 | 0 | 0.76 | 0 | 0.76 |
| WZ64 | 5.92 | 0 | 0 | 0 | 0 | 0 | 5.92 | 0 | 5.92 | 0 | 5.92 |
| WZ65 | 3.35 | 0 | 0 | 0 | 0 | 0 | 3.35 | 0 | 3.35 | 0 | 3.35 |
| WZ66 | 3.35 | 0 | 0 | 0 | 0 | 0 | 3.35 | 0 | 3.35 | 0 | 3.35 |
| WZ67 | 9.2 | 0 | 0 | 0 | 0 | 0 | 9.2 | 0 | 9.2 | 0 | 9.2 |
| WZ68 | 0 | 4.19 | 0 | 0.17 | 0 | 0.17 | 0 | 4.03 | 0 | 4.03 | 4.03 |
| TOTAL | 153.61 | 54.58 | 0 | 0.08 | 0 | 0.08 | 153.62 | 54.5 | 153.62 | 54.5 | 208.11 |

# 1. STORY

**Storey Information**

| | | |
|---|---|---|
| **Xg:** | 20.33 | m |
| **Xc:** | 20.61 | m |
| **Lx:** | 41.8 | m |
| **ex:** | 0.29 | m |

| | | |
|---|---|---|
| **Qi:** | 283.2 | t |
| **Yg:** | 5.7 | m |
| **Yc:** | 5.63 | m |
| **Ly:** | 11.75 | m |
| **ey:** | -0.07 | m |

| | | |
|---|---|---|
| **Mb(+X):** | -19.88 | tm |
| **Mb(-X):** | -19.88 | tm |

| | | |
|---|---|---|
| **Mb(+Y):** | 80.76 | tm |
| **Mb(-Y):** | 80.76 | tm |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

**Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** Was Not Added

## 1. STORY WALL SHEAR FORCES ANALYSIS

| Wall Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W101 | 0 | 4.32 | 0 | 0.09 | 0 | 0.09 | 0 | 4.22 | 0 | 4.22 | 4.22 |
| W102 | 1.32 | 0 | 0 | 0 | 0 | 0 | 1.32 | 0 | 1.32 | 0 | 1.32 |
| W103 | 0 | 4.32 | 0 | 0.09 | 0 | 0.09 | 0 | 4.22 | 0 | 4.22 | 4.22 |
| W104 | 0 | 4.32 | 0 | -0.09 | 0 | -0.09 | 0 | 4.41 | 0 | 4.41 | 4.41 |
| W105 | 2.87 | 0 | 0 | 0 | 0 | 0 | 2.87 | 0 | 2.87 | 0 | 2.87 |
| W106 | 0.08 | 0 | 0 | 0 | 0 | 0 | 0.08 | 0 | 0.08 | 0 | 0.08 |
| W107 | 2.87 | 0 | 0 | 0 | 0 | 0 | 2.87 | 0 | 2.87 | 0 | 2.87 |
| W108 | 1.65 | 0 | 0 | 0 | 0 | 0 | 1.65 | 0 | 1.65 | 0 | 1.65 |
| W109 | 0 | 2.18 | 0 | -0.04 | 0 | -0.04 | 0 | 2.22 | 0 | 2.22 | 2.22 |
| W110 | 0 | 2.32 | 0 | -0.04 | 0 | -0.04 | 0 | 2.36 | 0 | 2.36 | 2.36 |
| W111 | 0 | 2.18 | 0 | -0.03 | 0 | -0.03 | 0 | 2.21 | 0 | 2.21 | 2.21 |
| W112 | 0 | 2.32 | 0 | -0.03 | 0 | -0.03 | 0 | 2.35 | 0 | 2.35 | 2.35 |
| W113 | 0 | 2.18 | 0 | -0.02 | 0 | -0.02 | 0 | 2.2 | 0 | 2.2 | 2.2 |
| W114 | 0.24 | 0 | 0 | 0 | 0 | 0 | 0.24 | 0 | 0.24 | 0 | 0.24 |
| W115 | 0 | 2.18 | 0 | -0.01 | 0 | -0.01 | 0 | 2.19 | 0 | 2.19 | 2.19 |
| W116 | 6.74 | 0 | 0 | 0 | 0 | 0 | 6.74 | 0 | 6.74 | 0 | 6.74 |
| W117 | 0 | 2.18 | 0 | 0 | 0 | 0 | 0 | 2.18 | 0 | 2.18 | 2.18 |
| W118 | 0 | 2.32 | 0 | 0 | 0 | 0 | 0 | 2.33 | 0 | 2.33 | 2.33 |
| W119 | 0 | 2.18 | 0 | 0.02 | 0 | 0.02 | 0 | 2.16 | 0 | 2.16 | 2.16 |
| W120 | 1.77 | 0 | 0 | 0 | 0 | 0 | 1.77 | 0 | 1.77 | 0 | 1.77 |
| W121 | 0 | 2.18 | 0 | 0.01 | 0 | 0.01 | 0 | 2.17 | 0 | 2.17 | 2.17 |
| W122 | 0.43 | 0 | 0 | 0 | 0 | 0 | 0.43 | 0 | 0.43 | 0 | 0.43 |
| W123 | 0 | 2.18 | 0 | 0.03 | 0 | 0.03 | 0 | 2.15 | 0 | 2.15 | 2.15 |
| W124 | 0 | 2.32 | 0 | 0.03 | 0 | 0.03 | 0 | 2.29 | 0 | 2.29 | 2.29 |
| W125 | 0 | 2.32 | 0 | 0.02 | 0 | 0.02 | 0 | 2.3 | 0 | 2.3 | 2.3 |
| W126 | 1.16 | 0 | 0 | 0 | 0 | 0 | 1.16 | 0 | 1.16 | 0 | 1.16 |
| W127 | 2.14 | 0 | 0 | 0 | 0 | 0 | 2.14 | 0 | 2.14 | 0 | 2.14 |
| W128 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.67 | 0 | 1.67 | 0 | 1.67 |
| W129 | 2.14 | 0 | 0 | 0 | 0 | 0 | 2.14 | 0 | 2.14 | 0 | 2.14 |
| W130 | 1.41 | 0 | 0 | 0 | 0 | 0 | 1.41 | 0 | 1.41 | 0 | 1.41 |
| W131 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0.01 | 0 | 0.01 | 0 | 0.01 |

# 1. STORY WALL SHEAR FORCES ANALYSIS

| Wall Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W132 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0.01 | 0 | 0.01 | 0 | 0.01 |
| W133 | 1.54 | 0 | 0 | 0 | 0 | 0 | 1.54 | 0 | 1.54 | 0 | 1.54 |
| W134 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.67 | 0 | 1.67 | 0 | 1.67 |
| W135 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.67 | 0 | 1.67 | 0 | 1.67 |
| W136 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.67 | 0 | 1.67 | 0 | 1.67 |
| W137 | 1.61 | 0 | 0 | 0 | 0 | 0 | 1.61 | 0 | 1.61 | 0 | 1.61 |
| W138 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0.82 | 0 | 0.82 | 0 | 0.82 |
| W139 | 2.27 | 0 | 0 | 0 | 0 | 0 | 2.27 | 0 | 2.27 | 0 | 2.27 |
| W140 | 1.74 | 0 | 0 | 0 | 0 | 0 | 1.74 | 0 | 1.74 | 0 | 1.74 |
| W141 | 0.04 | 0 | 0 | 0 | 0 | 0 | 0.04 | 0 | 0.04 | 0 | 0.04 |
| W142 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.68 | 0 | 1.68 | 0 | 1.68 |
| W143 | 2.11 | 0 | 0 | 0 | 0 | 0 | 2.11 | 0 | 2.11 | 0 | 2.11 |
| W144 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.68 | 0 | 1.68 | 0 | 1.68 |
| W145 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.68 | 0 | 1.68 | 0 | 1.68 |
| W146 | 1.67 | 0 | 0 | 0 | 0 | 0 | 1.68 | 0 | 1.68 | 0 | 1.68 |
| W147 | 1.41 | 0 | 0 | 0 | 0 | 0 | 1.42 | 0 | 1.42 | 0 | 1.42 |
| W148 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0.83 | 0 | 0.83 | 0 | 0.83 |
| W149 | 2.27 | 0 | 0 | 0 | 0 | 0 | 2.27 | 0 | 2.27 | 0 | 2.27 |
| W150 | 1.94 | 0 | 0 | 0 | 0 | 0 | 1.94 | 0 | 1.94 | 0 | 1.94 |
| W151 | 2.17 | 0 | 0 | 0 | 0 | 0 | 2.17 | 0 | 2.17 | 0 | 2.17 |
| W152 | 1.96 | 0 | 0 | 0 | 0 | 0 | 1.96 | 0 | 1.96 | 0 | 1.96 |
| W153 | 0.21 | 0 | 0 | 0 | 0 | 0 | 0.21 | 0 | 0.21 | 0 | 0.21 |
| W154 | 1.94 | 0 | 0 | 0 | 0 | 0 | 1.94 | 0 | 1.94 | 0 | 1.94 |
| W155 | 1.91 | 0 | 0 | 0 | 0 | 0 | 1.91 | 0 | 1.91 | 0 | 1.91 |
| W156 | 1.91 | 0 | 0 | 0 | 0 | 0 | 1.91 | 0 | 1.91 | 0 | 1.91 |
| W157 | 6.96 | 0 | 0 | 0 | 0 | 0 | 6.96 | 0 | 6.96 | 0 | 6.96 |
| W158 | 1.83 | 0 | 0 | 0 | 0 | 0 | 1.83 | 0 | 1.83 | 0 | 1.83 |
| W159 | 0.21 | 0 | 0 | 0 | 0 | 0 | 0.21 | 0 | 0.21 | 0 | 0.21 |
| W160 | 1.96 | 0 | 0 | 0 | 0 | 0 | 1.96 | 0 | 1.96 | 0 | 1.96 |
| W161 | 6.74 | 0 | 0 | 0 | 0 | 0 | 6.74 | 0 | 6.74 | 0 | 6.74 |
| W162 | 0 | 4.32 | 0 | -0.09 | 0 | -0.09 | 0 | 4.41 | 0 | 4.41 | 4.41 |
| TOTAL | 82.65 | 46.33 | -0.01 | -0.05 | -0.01 | -0.05 | 82.65 | 46.38 | 82.65 | 46.38 | 129.03 |

SYMBOLS USED IN TABLES AND EXPLANATIONS

Vx:Torsion-free shear force effecting the wall in X and Y direction respectively (ton)Vb:Shear Force effecting the wall only due to torsion (ton)Vt:Torsion shear force effecting the wall (ton)Vd:Shear force considered in design (ton)

# BASEMENT STORY Vertical Stress Calculations

## BASEMENT STORY

| Wall Name | WB01 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.7 | tef(m) | 0.5 | Mid(ton/m) | 0.26 | Mmd(ton/m) | 0.13 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.4 | Nmd(ton/m) | 12.2 | Nid(ton/m) | 14 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.031 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.876 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.7 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB02 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.7 | tef(m) | 0.5 | Mid(ton/m) | 0.26 | Mmd(ton/m) | 0.13 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 9.4 | Nmd(ton/m) | 11.2 | Nid(ton/m) | 13 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.034 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.865 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.62 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB03 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 3.15 | tef(m) | 0.5 | Mid(ton/m) | 0.09 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 7.9 | Nmd(ton/m) | 9.5 | Nid(ton/m) | 11.1 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB04 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 3.15 | tef(m) | 0.5 | Mid(ton/m) | 0.09 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 7.9 | Nmd(ton/m) | 9.5 | Nid(ton/m) | 11.1 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB05 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.65 | tef(m) | 0.5 | Mid(ton/m) | 0.1 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 8.6 | Nmd(ton/m) | 9.7 | Nid(ton/m) | 10.8 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB06 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 12.1 | tef(m) | 0.5 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.11 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 7.7 | Nmd(ton/m) | 9.7 | Nid(ton/m) | 11.7 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.035 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.859 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.57 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB07 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.25 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 6.3 | Nmd(ton/m) | 7.9 | Nid(ton/m) | 9.4 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.045 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.821 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.28 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WB08 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.25 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 6.9 | Nmd(ton/m) | 8.8 | Nid(ton/m) | 10.6 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.041 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.836 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.4 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB09 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 8.5 | Nmd(ton/m) | 10.1 | Nid(ton/m) | 11.6 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB10 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 6.3 | Nmd(ton/m) | 8.1 | Nid(ton/m) | 9.9 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WB11 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 6.3 | Nmd(ton/m) | 7.8 | Nid(ton/m) | 9.4 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.043 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.83 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.35 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WB12 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 6.5 | Nid(ton/m) | 8.3 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.055 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.779 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.96 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WB13 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 6.3 | Nmd(ton/m) | 7.8 | Nid(ton/m) | 9.4 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.043 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.83 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.35 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WB14 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 6.5 | Nid(ton/m) | 8.3 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.055 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.779 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.96 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB15 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 6.2 | Nmd(ton/m) | 7.8 | Nid(ton/m) | 9.3 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WB16 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 6.3 | Nmd(ton/m) | 7.8 | Nid(ton/m) | 9.4 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WB17 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.8 | tef(m) | 0.5 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 9.2 | Nmd(ton/m) | 10.6 | Nid(ton/m) | 12 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB18 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.6 | Mmd(ton/m) | 0.3 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 6.5 | Nid(ton/m) | 8.3 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.135 | ei | 0.052 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.462 | φi | 0.783 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 3.53 | Nrd(ton) | 5.99 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB19 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.76 | Mmd(ton/m) | 0.38 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 8.6 | Nmd(ton/m) | 10.2 | Nid(ton/m) | 11.7 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.094 | ei | 0.043 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.622 | φi | 0.818 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 4.76 | Nrd(ton) | 6.26 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB20 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 8.7 | Nmd(ton/m) | 10.3 | Nid(ton/m) | 11.9 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.898 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.87 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB21 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 12.1 | tef(m) | 0.5 | Mid(ton/m) | 0.45 | Mmd(ton/m) | 0.22 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 7.8 | Nmd(ton/m) | 9.8 | Nid(ton/m) | 11.8 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.062 | ei | 0.028 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.751 | φi | 0.878 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.74 | Nrd(ton) | 6.71 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB22 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5 | tef(m) | 0.5 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 5.2 | Nmd(ton/m) | 7 | Nid(ton/m) | 8.8 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WB23 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.1 | tef(m) | 0.5 | Mid(ton/m) | 0.53 | Mmd(ton/m) | 0.27 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 14.4 | Nmd(ton/m) | 16.2 | Nid(ton/m) | 17.9 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.042 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.833 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.37 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB24 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.5 | Mid(ton/m) | 0.25 | Mmd(ton/m) | 0.13 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.6 | Nmd(ton/m) | 12.7 | Nid(ton/m) | 14.7 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.029 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.882 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.75 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB25 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.8 | Nmd(ton/m) | 12.8 | Nid(ton/m) | 14.9 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB26 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.95 | tef(m) | 0.5 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.1 | Nmd(ton/m) | 13.2 | Nid(ton/m) | 15.2 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.027 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.894 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.84 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB27 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.3 | tef(m) | 0.5 | Mid(ton/m) | 0.3 | Mmd(ton/m) | 0.15 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 24.6 | Nmd(ton/m) | 26.7 | Nid(ton/m) | 28.7 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB28 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.3 | tef(m) | 0.5 | Mid(ton/m) | 0.3 | Mmd(ton/m) | 0.15 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 22 | Nmd(ton/m) | 24 | Nid(ton/m) | 26 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB29 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.05 | tef(m) | 0.5 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.12 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.3 | Nmd(ton/m) | 13.7 | Nid(ton/m) | 16.1 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.026 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.895 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.85 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB30 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.7 | Nmd(ton/m) | 12.8 | Nid(ton/m) | 14.8 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB31 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.5 | Nmd(ton/m) | 12.6 | Nid(ton/m) | 14.6 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB32 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.6 | Nmd(ton/m) | 12.5 | Nid(ton/m) | 14.5 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 18.35 | Nrd(ton) | 18.17 | Nrd(ton) | 18.35 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WB33 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.1 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.7 | Nmd(ton/m) | 12.5 | Nid(ton/m) | 14.3 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 18.35 | Nrd(ton) | 18.17 | Nrd(ton) | 18.35 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WB34 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.2 | tef(m) | 0.5 | Mid(ton/m) | 0.37 | Mmd(ton/m) | 0.18 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.7 | Nmd(ton/m) | 13.7 | Nid(ton/m) | 15.7 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.037 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.851 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.51 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB35 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.6 | tef(m) | 0.5 | Mid(ton/m) | 0.56 | Mmd(ton/m) | 0.28 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 12.3 | Nmd(ton/m) | 14.3 | Nid(ton/m) | 16.4 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.051 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.796 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.09 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB36 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.35 | tef(m) | 0.5 | Mid(ton/m) | 0.45 | Mmd(ton/m) | 0.23 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.9 | Nmd(ton/m) | 13.6 | Nid(ton/m) | 15.3 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.044 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.825 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.31 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB37 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.35 | tef(m) | 0.5 | Mid(ton/m) | 0.45 | Mmd(ton/m) | 0.23 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.1 | Nmd(ton/m) | 12.8 | Nid(ton/m) | 14.5 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.047 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.814 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.22 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB38 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.6 | tef(m) | 0.5 | Mid(ton/m) | 0.56 | Mmd(ton/m) | 0.28 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 12.3 | Nmd(ton/m) | 14.3 | Nid(ton/m) | 16.4 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.051 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.796 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.09 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB39 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.35 | tef(m) | 0.5 | Mid(ton/m) | 0.51 | Mmd(ton/m) | 0.26 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 12 | Nmd(ton/m) | 14.3 | Nid(ton/m) | 16.6 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.049 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.806 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.16 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB40 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.95 | tef(m) | 0.5 | Mid(ton/m) | 0.48 | Mmd(ton/m) | 0.24 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.4 | Nmd(ton/m) | 13.4 | Nid(ton/m) | 15.5 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.047 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.81 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.2 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB41 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.5 | Mid(ton/m) | 0.25 | Mmd(ton/m) | 0.13 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.3 | Nmd(ton/m) | 13.3 | Nid(ton/m) | 15.4 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.028 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.888 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.79 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB42 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 11.6 | Nmd(ton/m) | 13.8 | Nid(ton/m) | 16 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB43 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 6.7 | tef(m) | 0.5 | Mid(ton/m) | 0.26 | Mmd(ton/m) | 0.13 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 8 | Nmd(ton/m) | 9.9 | Nid(ton/m) | 11.8 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.038 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.849 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 17.31 | Nrd(ton) | 18.17 | Nrd(ton) | 18.35 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WB44 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.7 | Nmd(ton/m) | 12.8 | Nid(ton/m) | 14.8 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB45 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.4 | Nmd(ton/m) | 12.4 | Nid(ton/m) | 14.5 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB46 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.5 | Mid(ton/m) | 0.33 | Mmd(ton/m) | 0.17 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 10.5 | Nmd(ton/m) | 12.5 | Nid(ton/m) | 14.6 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.037 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.851 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.51 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB47 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.7 | tef(m) | 0.5 | Mid(ton/m) | 0.12 | Mmd(ton/m) | 0.06 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 9.1 | Nmd(ton/m) | 10.9 | Nid(ton/m) | 12.6 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB48 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.5 | Mid(ton/m) | 0.15 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 7.4 | Nmd(ton/m) | 8.9 | Nid(ton/m) | 10.5 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.899 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB49 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.8 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 14 | Nmd(ton/m) | 15.7 | Nid(ton/m) | 17.5 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB50 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 9.1 | Nmd(ton/m) | 10.8 | Nid(ton/m) | 12.6 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB51 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 9.3 | Nmd(ton/m) | 11.1 | Nid(ton/m) | 12.9 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB52 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.5 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 8.1 | Nmd(ton/m) | 9.8 | Nid(ton/m) | 11.6 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.898 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.87 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB53 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.35 | tef(m) | 0.5 | Mid(ton/m) | 0.1 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 7.9 | Nmd(ton/m) | 9.6 | Nid(ton/m) | 11.4 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB54 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 6.55 | tef(m) | 0.5 | Mid(ton/m) | 0.59 | Mmd(ton/m) | 0.3 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.7 | Nmd(ton/m) | 7.4 | Nid(ton/m) | 9.1 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.108 | ei | 0.045 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.566 | φi | 0.816 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 4.33 | Nrd(ton) | 6.24 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB55 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.7 | tef(m) | 0.5 | Mid(ton/m) | 0.12 | Mmd(ton/m) | 0.06 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 9.1 | Nmd(ton/m) | 10.9 | Nid(ton/m) | 12.6 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB56 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.9 | tef(m) | 0.5 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.06 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 7.4 | Nmd(ton/m) | 9.2 | Nid(ton/m) | 11 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB57 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.8 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 13.3 | Nmd(ton/m) | 15 | Nid(ton/m) | 16.8 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB58 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.1 | tef(m) | 0.5 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 6.3 | Nid(ton/m) | 8.1 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WB59 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.1 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 12.1 | Nmd(ton/m) | 13.8 | Nid(ton/m) | 15.6 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.9 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# BASEMENT STORY Vertical Stress Calculations

| Wall Name | WB60 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.2 | tef(m) | 0.5 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.08 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 8.1 | Nmd(ton/m) | 9.8 | Nid(ton/m) | 11.6 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.898 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.87 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB61 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 6.4 | tef(m) | 0.5 | Mid(ton/m) | 0.59 | Mmd(ton/m) | 0.3 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 8.5 | Nmd(ton/m) | 10.2 | Nid(ton/m) | 11.9 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.075 | ei | 0.034 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.701 | φi | 0.86 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.36 | Nrd(ton) | 6.57 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB62 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 6.2 | tef(m) | 0.5 | Mid(ton/m) | 0.39 | Mmd(ton/m) | 0.2 | Mid(ton/m) | 0 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 8.3 | Nmd(ton/m) | 10 | Nid(ton/m) | 11.8 |
| Thickness(m) | 0.5 | einit | 0 | ei | 0.052 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 4.2 | φi | 0.791 | φi | 0.895 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.05 | Nrd(ton) | 6.85 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WB63 | fd | 0.15 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 3.3 | tef(m) | 0.5 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.5 | hef(m) | 2.5 | Nid(ton/m) | 7.4 | Nmd(ton/m) | 9.3 | Nid(ton/m) | 11.2 |
| Thickness(m) | 0.5 | einit | 0.01 | ei | 0.025 | ei | 0.025 | ei | 0.025 |
| pt | 1 | Slenderness | 5 | φi | 0.9 | φi | 0.891 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.88 | Nrd(ton) | 6.81 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

# GROUND STORY

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ01 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.12 | Mmd(ton/m) | 0.24 | Mid(ton/m) | 0.59 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.3 | Nmd(ton/m) | 6.1 | Nid(ton/m) | 6.9 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.028 | ei | 0.043 | ei | 0.09 |
| pt | 1 | Slenderness | 10.5 | φi | 0.723 | φi | 0.482 | φi | 0.1 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.9 | Nrd(ton) | 3.93 | Nrd(ton) | 0.82 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ02 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.7 | tef(m) | 0.35 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0.26 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.1 | Nmd(ton/m) | 6.6 | Nid(ton/m) | 8 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.04 | ei | 0.017 | ei | 0.039 |
| pt | 1 | Slenderness | 7.71 | φi | 0.774 | φi | 0.868 | φi | 0.778 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.04 | Nrd(ton) | 12.39 | Nrd(ton) | 11.1 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ03 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.1 | tef(m) | 0.35 | Mid(ton/m) | 0.37 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.45 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 4.7 | Nmd(ton/m) | 6.6 | Nid(ton/m) | 8.4 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.085 | ei | 0.017 | ei | 0.059 |
| pt | 1 | Slenderness | 7.71 | φi | 0.516 | φi | 0.868 | φi | 0.664 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.36 | Nrd(ton) | 12.39 | Nrd(ton) | 9.48 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ04 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.05 | tef(m) | 0.35 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 4.8 | Nmd(ton/m) | 6.6 | Nid(ton/m) | 8.5 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.042 | ei | 0.017 | ei | 0.033 |
| pt | 1 | Slenderness | 7.71 | φi | 0.759 | φi | 0.868 | φi | 0.811 |
| pn | 1 | ehe | 0 | Nrd(ton) | 10.83 | Nrd(ton) | 12.39 | Nrd(ton) | 11.57 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ05 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 3.15 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.09 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 5.3 | Nid(ton/m) | 6.1 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.011 | ei | 0.019 |
| pt | 1 | Slenderness | 10.5 | φi | 0.9 | φi | 0.821 | φi | 0.808 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.7 | Nrd(ton) | 6.59 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ06 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.5 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.1 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 6.6 | Nmd(ton/m) | 7.2 | Nid(ton/m) | 7.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.01 | ei | 0.018 |
| pt | 1 | Slenderness | 10.5 | φi | 0.9 | φi | 0.83 | φi | 0.82 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.77 | Nrd(ton) | 6.69 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ07 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 3.15 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.09 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.5 | Nmd(ton/m) | 5.3 | Nid(ton/m) | 6 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.011 | ei | 0.019 |
| pt | 1 | Slenderness | 10.5 | φi | 0.9 | φi | 0.815 | φi | 0.807 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.65 | Nrd(ton) | 6.59 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ08 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.2 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.02 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 5.3 | Nid(ton/m) | 6 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.011 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 10.5 | φi | 0.885 | φi | 0.83 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.22 | Nrd(ton) | 6.77 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ09 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.06 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0.25 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 4 | Nmd(ton/m) | 4.7 | Nid(ton/m) | 5.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.021 | ei | 0.026 | ei | 0.052 |
| pt | 1 | Slenderness | 13.5 | φi | 0.786 | φi | 0.61 | φi | 0.484 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.41 | Nrd(ton) | 4.97 | Nrd(ton) | 3.95 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ10 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.04 | Mmd(ton/m) | 0.1 | Mid(ton/m) | 0.25 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.8 | Nmd(ton/m) | 4.8 | Nid(ton/m) | 5.8 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.016 | ei | 0.028 | ei | 0.048 |
| pt | 1 | Slenderness | 13.5 | φi | 0.842 | φi | 0.589 | φi | 0.516 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.87 | Nrd(ton) | 4.81 | Nrd(ton) | 4.21 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ11 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.2 | Nmd(ton/m) | 6.5 | Nid(ton/m) | 7.8 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ12 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.01 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.8 | Nmd(ton/m) | 4.5 | Nid(ton/m) | 5.1 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ13 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.05 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.9 | Nmd(ton/m) | 4.7 | Nid(ton/m) | 5.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.019 | ei | 0.025 | ei | 0.049 |
| pt | 1 | Slenderness | 13.5 | φi | 0.809 | φi | 0.613 | φi | 0.508 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.6 | Nrd(ton) | 5 | Nrd(ton) | 4.15 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ14 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0.11 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.5 | Nmd(ton/m) | 2.4 | Nid(ton/m) | 3.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.02 | ei | 0.049 | ei | 0.073 |
| pt | 1 | Slenderness | 13.5 | φi | 0.799 | φi | 0.364 | φi | 0.265 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.52 | Nrd(ton) | 2.97 | Nrd(ton) | 2.16 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ15 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.05 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.9 | Nmd(ton/m) | 4.7 | Nid(ton/m) | 5.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.019 | ei | 0.025 | ei | 0.049 |
| pt | 1 | Slenderness | 13.5 | φi | 0.809 | φi | 0.613 | φi | 0.508 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.6 | Nrd(ton) | 5 | Nrd(ton) | 4.15 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ16 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.06 | Mmd(ton/m) | 0.09 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.5 | Nmd(ton/m) | 2.4 | Nid(ton/m) | 3.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.046 | ei | 0.041 | ei | 0.074 |
| pt | 1 | Slenderness | 13.5 | φi | 0.539 | φi | 0.445 | φi | 0.265 |
| pn | 1 | ehe | 0 | Nrd(ton) | 4.4 | Nrd(ton) | 3.63 | Nrd(ton) | 2.16 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ17 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.9 | Nmd(ton/m) | 4.6 | Nid(ton/m) | 5.3 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ18 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.8 | Nmd(ton/m) | 4.5 | Nid(ton/m) | 5.1 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ19 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.5 | Nmd(ton/m) | 2.8 | Nid(ton/m) | 4.2 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ20 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.4 | Nmd(ton/m) | 2.7 | Nid(ton/m) | 4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ21 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.9 | Nmd(ton/m) | 4.6 | Nid(ton/m) | 5.3 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ22 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0.3 | Mid(ton/m) | 0.6 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.4 | Nmd(ton/m) | 2.4 | Nid(ton/m) | 3.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.09 | ei | 0.09 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.019 | φi | 0.1 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 0.16 | Nrd(ton) | 0.82 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ23 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.2 | Mmd(ton/m) | 0.28 | Mid(ton/m) | 0.76 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.2 | Nmd(ton/m) | 6.6 | Nid(ton/m) | 7.9 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.045 | ei | 0.049 | ei | 0.09 |
| pt | 1 | Slenderness | 13.5 | φi | 0.551 | φi | 0.366 | φi | 0.1 |
| pn | 1 | ehe | 0 | Nrd(ton) | 4.5 | Nrd(ton) | 2.99 | Nrd(ton) | 0.82 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WZ24 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.2 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.17 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5 | Nmd(ton/m) | 6.3 | Nid(ton/m) | 7.6 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.045 | ei | 0.01 | ei | 0.029 |
| pt | 1 | Slenderness | 13.5 | φi | 0.551 | φi | 0.776 | φi | 0.711 |
| pn | 1 | ehe | 0 | Nrd(ton) | 4.5 | Nrd(ton) | 6.33 | Nrd(ton) | 5.8 |
| | | Slend. Con. | √ | Control | X | Control | √ | Control | X |

| Wall Name | WZ25 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 3.9 | Nmd(ton/m) | 4.6 | Nid(ton/m) | 5.3 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ26 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.75 | tef(m) | 0.35 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.26 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.4 | Nmd(ton/m) | 7.2 | Nid(ton/m) | 9.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.039 | ei | 0.017 | ei | 0.035 |
| pt | 1 | Slenderness | 7.71 | φi | 0.778 | φi | 0.868 | φi | 0.799 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.11 | Nrd(ton) | 12.39 | Nrd(ton) | 11.4 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ27 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.35 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.25 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.1 | Nmd(ton/m) | 7.7 | Nid(ton/m) | 9.3 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.033 | ei | 0.017 | ei | 0.033 |
| pt | 1 | Slenderness | 7.71 | φi | 0.811 | φi | 0.868 | φi | 0.81 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.58 | Nrd(ton) | 12.39 | Nrd(ton) | 11.56 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ28 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.9 | Nmd(ton/m) | 7.5 | Nid(ton/m) | 9.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.026 | ei | 0.017 | ei | 0.026 |
| pt | 1 | Slenderness | 7.71 | φi | 0.854 | φi | 0.868 | φi | 0.851 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.19 | Nrd(ton) | 12.39 | Nrd(ton) | 12.15 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ29 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.35 | Mid(ton/m) | 0.16 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0.25 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.8 | Nmd(ton/m) | 7.4 | Nid(ton/m) | 9 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.034 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.805 | φi | 0.868 | φi | 0.804 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.49 | Nrd(ton) | 12.39 | Nrd(ton) | 11.48 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ30 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.95 | tef(m) | 0.35 | Mid(ton/m) | 0.15 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6 | Nmd(ton/m) | 7.6 | Nid(ton/m) | 9.2 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.031 | ei | 0.017 | ei | 0.031 |
| pt | 1 | Slenderness | 7.71 | φi | 0.826 | φi | 0.868 | φi | 0.82 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.79 | Nrd(ton) | 12.39 | Nrd(ton) | 11.71 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ31 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.3 | tef(m) | 0.35 | Mid(ton/m) | 0.19 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0.3 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 13.6 | Nmd(ton/m) | 15.2 | Nid(ton/m) | 16.8 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.02 | ei | 0.017 | ei | 0.024 |
| pt | 1 | Slenderness | 7.71 | φi | 0.887 | φi | 0.868 | φi | 0.865 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.66 | Nrd(ton) | 12.39 | Nrd(ton) | 12.35 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WZ32 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.3 | tef(m) | 0.35 | Mid(ton/m) | 0.19 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0.3 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 12.3 | Nmd(ton/m) | 13.9 | Nid(ton/m) | 15.5 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.021 | ei | 0.017 | ei | 0.025 |
| pt | 1 | Slenderness | 7.71 | φi | 0.879 | φi | 0.868 | φi | 0.857 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.54 | Nrd(ton) | 12.39 | Nrd(ton) | 12.23 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ33 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.05 | tef(m) | 0.35 | Mid(ton/m) | 0.15 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.8 | Nmd(ton/m) | 7.7 | Nid(ton/m) | 9.7 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.032 | ei | 0.017 | ei | 0.03 |
| pt | 1 | Slenderness | 7.71 | φi | 0.819 | φi | 0.868 | φi | 0.827 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.69 | Nrd(ton) | 12.39 | Nrd(ton) | 11.81 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ34 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.9 | Nmd(ton/m) | 7.4 | Nid(ton/m) | 9 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.026 | ei | 0.017 | ei | 0.026 |
| pt | 1 | Slenderness | 7.71 | φi | 0.854 | φi | 0.868 | φi | 0.851 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.19 | Nrd(ton) | 12.39 | Nrd(ton) | 12.14 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ35 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.7 | Nmd(ton/m) | 7.2 | Nid(ton/m) | 8.8 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.026 | ei | 0.017 | ei | 0.027 |
| pt | 1 | Slenderness | 7.71 | φi | 0.85 | φi | 0.868 | φi | 0.848 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.14 | Nrd(ton) | 12.39 | Nrd(ton) | 12.11 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ36 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.7 | Nmd(ton/m) | 7.3 | Nid(ton/m) | 8.8 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.026 | ei | 0.017 | ei | 0.027 |
| pt | 1 | Slenderness | 7.71 | φi | 0.85 | φi | 0.868 | φi | 0.848 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.14 | Nrd(ton) | 12.39 | Nrd(ton) | 12.11 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ37 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.1 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.8 | Nmd(ton/m) | 7.3 | Nid(ton/m) | 8.9 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.026 | ei | 0.017 | ei | 0.026 |
| pt | 1 | Slenderness | 7.71 | φi | 0.852 | φi | 0.868 | φi | 0.849 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.17 | Nrd(ton) | 12.39 | Nrd(ton) | 12.12 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ38 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.35 | tef(m) | 0.35 | Mid(ton/m) | 0.31 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.45 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.6 | Nmd(ton/m) | 8.3 | Nid(ton/m) | 9.9 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.054 | ei | 0.017 | ei | 0.052 |
| pt | 1 | Slenderness | 7.71 | φi | 0.692 | φi | 0.868 | φi | 0.705 |
| pn | 1 | ehe | 0 | Nrd(ton) | 9.88 | Nrd(ton) | 12.39 | Nrd(ton) | 10.06 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ39 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.6 | tef(m) | 0.35 | Mid(ton/m) | 0.36 | Mmd(ton/m) | 0.1 | Mid(ton/m) | 0.56 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.9 | Nmd(ton/m) | 8.5 | Nid(ton/m) | 10 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.058 | ei | 0.018 | ei | 0.061 |
| pt | 1 | Slenderness | 7.71 | φi | 0.666 | φi | 0.867 | φi | 0.649 |
| pn | 1 | ehe | 0 | Nrd(ton) | 9.51 | Nrd(ton) | 12.38 | Nrd(ton) | 9.26 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ40 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.2 | tef(m) | 0.35 | Mid(ton/m) | 0.24 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.37 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.4 | Nmd(ton/m) | 8 | Nid(ton/m) | 9.6 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.043 | ei | 0.017 | ei | 0.044 |
| pt | 1 | Slenderness | 7.71 | φi | 0.753 | φi | 0.868 | φi | 0.746 |
| pn | 1 | ehe | 0 | Nrd(ton) | 10.75 | Nrd(ton) | 12.39 | Nrd(ton) | 10.65 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ41 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.1 | tef(m) | 0.35 | Mid(ton/m) | 0.37 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.45 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 4.7 | Nmd(ton/m) | 6.6 | Nid(ton/m) | 8.4 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.085 | ei | 0.017 | ei | 0.059 |
| pt | 1 | Slenderness | 7.71 | φi | 0.516 | φi | 0.868 | φi | 0.663 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.36 | Nrd(ton) | 12.39 | Nrd(ton) | 9.47 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ42 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.3 | Nmd(ton/m) | 7.9 | Nid(ton/m) | 9.5 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.029 | ei | 0.017 | ei | 0.025 |
| pt | 1 | Slenderness | 7.71 | φi | 0.837 | φi | 0.868 | φi | 0.856 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.95 | Nrd(ton) | 12.39 | Nrd(ton) | 12.22 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ43 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.48 | tef(m) | 0.35 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.26 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.1 | Nmd(ton/m) | 7.7 | Nid(ton/m) | 9.3 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.035 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.802 | φi | 0.868 | φi | 0.806 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.44 | Nrd(ton) | 12.39 | Nrd(ton) | 11.51 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ44 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.9 | Nmd(ton/m) | 7.4 | Nid(ton/m) | 9 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.026 | ei | 0.017 | ei | 0.026 |
| pt | 1 | Slenderness | 7.71 | φi | 0.854 | φi | 0.868 | φi | 0.851 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.19 | Nrd(ton) | 12.39 | Nrd(ton) | 12.14 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ45 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.5 | Nmd(ton/m) | 7.1 | Nid(ton/m) | 8.7 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.027 | ei | 0.017 | ei | 0.027 |
| pt | 1 | Slenderness | 7.71 | φi | 0.847 | φi | 0.868 | φi | 0.846 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.09 | Nrd(ton) | 12.39 | Nrd(ton) | 12.08 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ46 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.11 | Mid(ton/m) | 0.33 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.2 | Nmd(ton/m) | 6.8 | Nid(ton/m) | 8.4 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.028 | ei | 0.022 | ei | 0.045 |
| pt | 1 | Slenderness | 7.71 | φi | 0.84 | φi | 0.842 | φi | 0.74 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12 | Nrd(ton) | 12.01 | Nrd(ton) | 10.57 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ47 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.95 | tef(m) | 0.35 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.18 | Mid(ton/m) | 0.48 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 5.7 | Nmd(ton/m) | 7.2 | Nid(ton/m) | 8.8 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.026 | ei | 0.031 | ei | 0.06 |
| pt | 1 | Slenderness | 7.71 | φi | 0.85 | φi | 0.789 | φi | 0.657 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.13 | Nrd(ton) | 11.26 | Nrd(ton) | 9.38 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ48 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.35 | tef(m) | 0.35 | Mid(ton/m) | 0.31 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.45 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.2 | Nmd(ton/m) | 7.7 | Nid(ton/m) | 9.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.056 | ei | 0.017 | ei | 0.056 |
| pt | 1 | Slenderness | 7.71 | φi | 0.678 | φi | 0.868 | φi | 0.68 |
| pn | 1 | ehe | 0 | Nrd(ton) | 9.68 | Nrd(ton) | 12.39 | Nrd(ton) | 9.71 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ49 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.6 | tef(m) | 0.35 | Mid(ton/m) | 0.36 | Mmd(ton/m) | 0.1 | Mid(ton/m) | 0.56 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.9 | Nmd(ton/m) | 8.5 | Nid(ton/m) | 10 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.058 | ei | 0.018 | ei | 0.061 |
| pt | 1 | Slenderness | 7.71 | φi | 0.666 | φi | 0.867 | φi | 0.649 |
| pn | 1 | ehe | 0 | Nrd(ton) | 9.51 | Nrd(ton) | 12.38 | Nrd(ton) | 9.26 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ50 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.35 | tef(m) | 0.35 | Mid(ton/m) | 0.23 | Mmd(ton/m) | 0.14 | Mid(ton/m) | 0.51 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.4 | Nmd(ton/m) | 8 | Nid(ton/m) | 9.6 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.042 | ei | 0.024 | ei | 0.059 |
| pt | 1 | Slenderness | 7.71 | φi | 0.761 | φi | 0.832 | φi | 0.661 |
| pn | 1 | ehe | 0 | Nrd(ton) | 10.87 | Nrd(ton) | 11.87 | Nrd(ton) | 9.43 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ51 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.52 | tef(m) | 0.35 | Mid(ton/m) | 0.16 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0.26 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 6.1 | Nmd(ton/m) | 7.7 | Nid(ton/m) | 9.3 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.032 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.82 | φi | 0.868 | φi | 0.807 |
| pn | 1 | ehe | 0 | Nrd(ton) | 11.71 | Nrd(ton) | 12.39 | Nrd(ton) | 11.52 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ52 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.7 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0.12 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.3 | Nmd(ton/m) | 6.1 | Nid(ton/m) | 6.8 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.013 | ei | 0.023 |
| pt | 1 | Slenderness | 10.5 | φi | 0.9 | φi | 0.8 | φi | 0.771 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.52 | Nrd(ton) | 6.29 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ53 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.8 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.17 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 8.2 | Nmd(ton/m) | 8.9 | Nid(ton/m) | 9.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.012 | ei | 0.022 |
| pt | 1 | Slenderness | 10.5 | φi | 0.9 | φi | 0.807 | φi | 0.78 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.59 | Nrd(ton) | 6.37 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WZ54 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.35 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.06 | Mid(ton/m) | 0.15 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 5.3 | Nid(ton/m) | 6 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.012 | ei | 0.016 | ei | 0.03 |
| pt | 1 | Slenderness | 10.5 | φi | 0.885 | φi | 0.767 | φi | 0.7 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.22 | Nrd(ton) | 6.26 | Nrd(ton) | 5.71 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ55 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.17 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.3 | Nmd(ton/m) | 6 | Nid(ton/m) | 6.8 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.011 | ei | 0.016 | ei | 0.029 |
| pt | 1 | Slenderness | 10.5 | φi | 0.891 | φi | 0.769 | φi | 0.705 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.27 | Nrd(ton) | 6.27 | Nrd(ton) | 5.75 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ56 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.55 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.17 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 5.3 | Nid(ton/m) | 6 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.012 | ei | 0.017 | ei | 0.032 |
| pt | 1 | Slenderness | 10.5 | φi | 0.882 | φi | 0.753 | φi | 0.676 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.19 | Nrd(ton) | 6.14 | Nrd(ton) | 5.51 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ57 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.2 | Mid(ton/m) | 0.09 | Mmd(ton/m) | 0.25 | Mid(ton/m) | 0.59 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.7 | Nmd(ton/m) | 6.4 | Nid(ton/m) | 7.2 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.021 | ei | 0.044 | ei | 0.088 |
| pt | 1 | Slenderness | 10.5 | φi | 0.788 | φi | 0.48 | φi | 0.124 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.43 | Nrd(ton) | 3.92 | Nrd(ton) | 1.01 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ58 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.4 | tef(m) | 0.2 | Mid(ton/m) | 0.11 | Mmd(ton/m) | 0.24 | Mid(ton/m) | 0.59 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 3.4 | Nmd(ton/m) | 4.2 | Nid(ton/m) | 4.9 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.036 | ei | 0.063 | ei | 0.09 |
| pt | 1 | Slenderness | 10.5 | φi | 0.642 | φi | 0.278 | φi | 0.1 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.23 | Nrd(ton) | 2.27 | Nrd(ton) | 0.82 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ59 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.23 | Mid(ton/m) | 0.59 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 2.2 | Nmd(ton/m) | 2.9 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.07 | ei | 0.082 | ei | 0.09 |
| pt | 1 | Slenderness | 10.5 | φi | 0.299 | φi | 0.103 | φi | 0.1 |
| pn | 1 | ehe | 0 | Nrd(ton) | 2.44 | Nrd(ton) | 0.84 | Nrd(ton) | 0.82 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ60 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.7 | tef(m) | 0.2 | Mid(ton/m) | 0.01 | Mmd(ton/m) | 0.05 | Mid(ton/m) | 0.12 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.3 | Nmd(ton/m) | 6 | Nid(ton/m) | 6.8 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.014 | ei | 0.023 |
| pt | 1 | Slenderness | 10.5 | φi | 0.9 | φi | 0.791 | φi | 0.771 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.46 | Nrd(ton) | 6.29 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ61 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.8 | tef(m) | 0.2 | Mid(ton/m) | 0.05 | Mmd(ton/m) | 0.06 | Mid(ton/m) | 0.17 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 7.5 | Nmd(ton/m) | 8.2 | Nid(ton/m) | 9 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.011 | ei | 0.012 | ei | 0.023 |
| pt | 1 | Slenderness | 10.5 | φi | 0.891 | φi | 0.809 | φi | 0.766 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.27 | Nrd(ton) | 6.6 | Nrd(ton) | 6.25 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | X |

| Wall Name | WZ62 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.35 | tef(m) | 0.2 | Mid(ton/m) | 0.05 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.11 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.4 | Nmd(ton/m) | 5.4 | Nid(ton/m) | 6.4 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.017 | ei | 0.01 | ei | 0.022 |
| pt | 1 | Slenderness | 10.5 | φi | 0.835 | φi | 0.827 | φi | 0.777 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.81 | Nrd(ton) | 6.74 | Nrd(ton) | 6.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ63 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.1 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.17 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 7.1 | Nmd(ton/m) | 7.8 | Nid(ton/m) | 8.5 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.013 | ei | 0.024 |
| pt | 1 | Slenderness | 10.5 | φi | 0.9 | φi | 0.796 | φi | 0.757 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.49 | Nrd(ton) | 6.18 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ64 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.2 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.17 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.6 | Nmd(ton/m) | 5.3 | Nid(ton/m) | 6.1 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.012 | ei | 0.017 | ei | 0.032 |
| pt | 1 | Slenderness | 10.5 | φi | 0.882 | φi | 0.754 | φi | 0.678 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.2 | Nrd(ton) | 6.15 | Nrd(ton) | 5.53 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | X |

| Wall Name | WZ65 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.18 | Mid(ton/m) | 0.39 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.8 | Nmd(ton/m) | 6.5 | Nid(ton/m) | 7.3 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.01 | ei | 0.032 | ei | 0.059 |
| pt | 1 | Slenderness | 10.5 | φi | 0.897 | φi | 0.597 | φi | 0.411 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.32 | Nrd(ton) | 4.87 | Nrd(ton) | 3.35 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

# GROUND STORY Vertical Stress Calculations

| Wall Name | WZ66 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.18 | Mid(ton/m) | 0.39 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 5.4 | Nmd(ton/m) | 6.1 | Nid(ton/m) | 6.8 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.011 | ei | 0.034 | ei | 0.062 |
| pt | 1 | Slenderness | 10.5 | φi | 0.892 | φi | 0.576 | φi | 0.376 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.28 | Nrd(ton) | 4.7 | Nrd(ton) | 3.07 |
| | | Slend. Con. | √ | Control | √ | Control | X | Control | X |

| Wall Name | WZ67 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 6.25 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.1 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 4.7 | Nmd(ton/m) | 5.4 | Nid(ton/m) | 6.2 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.012 | ei | 0.01 | ei | 0.02 |
| pt | 1 | Slenderness | 10.5 | φi | 0.883 | φi | 0.826 | φi | 0.798 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.21 | Nrd(ton) | 6.73 | Nrd(ton) | 6.51 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | WZ68 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.05 | tef(m) | 0.35 | Mid(ton/m) | 0.21 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.25 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 4.8 | Nmd(ton/m) | 6.6 | Nid(ton/m) | 8.5 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.05 | ei | 0.017 | ei | 0.035 |
| pt | 1 | Slenderness | 7.71 | φi | 0.712 | φi | 0.868 | φi | 0.798 |
| pn | 1 | ehe | 0 | Nrd(ton) | 10.17 | Nrd(ton) | 12.39 | Nrd(ton) | 11.39 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY

| Wall Name | W101 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.1 | tef(m) | 0.35 | Mid(ton/m) | 0.51 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.37 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.7 | Nmd(ton/m) | 2.2 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.036 | ei | 0.106 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.76 | φi | 0.392 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 10.85 | Nrd(ton) | 5.59 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W102 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.7 | tef(m) | 0.35 | Mid(ton/m) | 0.21 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.17 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.8 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.052 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.701 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.01 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W103 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.1 | tef(m) | 0.35 | Mid(ton/m) | 0.51 | Mmd(ton/m) | 0.07 | Mid(ton/m) | 0.37 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.7 | Nmd(ton/m) | 2.2 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.036 | ei | 0.106 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.76 | φi | 0.392 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 10.85 | Nrd(ton) | 5.59 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W104 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.1 | tef(m) | 0.35 | Mid(ton/m) | 0.2 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.17 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.7 | Nmd(ton/m) | 2.2 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.053 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.699 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 9.98 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W105 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 3.15 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.02 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.3 | Nmd(ton/m) | 2 | Nid(ton/m) | 2.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.018 | ei | 0.01 | ei | 0.013 |
| pt | 1 | Slenderness | 10.5 | φi | 0.82 | φi | 0.83 | φi | 0.872 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.69 | Nrd(ton) | 6.77 | Nrd(ton) | 7.12 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W106 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.5 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 2.2 | Nmd(ton/m) | 2.8 | Nid(ton/m) | 3.4 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.014 | ei | 0.01 | ei | 0.012 |
| pt | 1 | Slenderness | 10.5 | φi | 0.86 | φi | 0.83 | φi | 0.877 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.02 | Nrd(ton) | 6.77 | Nrd(ton) | 7.15 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W107 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 3.15 | tef(m) | 0.2 | Mid(ton/m) | 0.01 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.02 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.3 | Nmd(ton/m) | 2 | Nid(ton/m) | 2.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.015 | ei | 0.01 | ei | 0.011 |
| pt | 1 | Slenderness | 10.5 | φi | 0.852 | φi | 0.83 | φi | 0.893 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.95 | Nrd(ton) | 6.77 | Nrd(ton) | 7.28 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W108 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.1 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.4 | Nmd(ton/m) | 2.1 | Nid(ton/m) | 2.8 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.024 | ei | 0.01 | ei | 0.016 |
| pt | 1 | Slenderness | 10.5 | φi | 0.763 | φi | 0.83 | φi | 0.843 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.22 | Nrd(ton) | 6.77 | Nrd(ton) | 6.88 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W109 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.05 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.06 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.7 | Nid(ton/m) | 2.5 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.054 | ei | 0.01 | ei | 0.031 |
| pt | 1 | Slenderness | 13.5 | φi | 0.464 | φi | 0.776 | φi | 0.69 |
| pn | 1 | ehe | 0 | Nrd(ton) | 3.78 | Nrd(ton) | 6.33 | Nrd(ton) | 5.63 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W110 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.04 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.7 | Nid(ton/m) | 2.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.036 | ei | 0.01 | ei | 0.022 |
| pt | 1 | Slenderness | 13.5 | φi | 0.636 | φi | 0.776 | φi | 0.78 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.19 | Nrd(ton) | 6.33 | Nrd(ton) | 6.37 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W111 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W112 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.01 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.01 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.7 | Nid(ton/m) | 2.3 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.012 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.883 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.2 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W113 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.04 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.05 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.8 | Nid(ton/m) | 2.5 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.046 | ei | 0.01 | ei | 0.027 |
| pt | 1 | Slenderness | 13.5 | φi | 0.538 | φi | 0.776 | φi | 0.729 |
| pn | 1 | ehe | 0 | Nrd(ton) | 4.39 | Nrd(ton) | 6.33 | Nrd(ton) | 5.95 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W114 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.85 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.09 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 3 | Nmd(ton/m) | 3.7 | Nid(ton/m) | 4.5 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.011 | ei | 0.015 | ei | 0.026 |
| pt | 1 | Slenderness | 10.5 | φi | 0.891 | φi | 0.781 | φi | 0.744 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.26 | Nrd(ton) | 6.37 | Nrd(ton) | 6.07 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W115 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.04 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.05 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.8 | Nid(ton/m) | 2.5 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.046 | ei | 0.01 | ei | 0.027 |
| pt | 1 | Slenderness | 13.5 | φi | 0.538 | φi | 0.776 | φi | 0.729 |
| pn | 1 | ehe | 0 | Nrd(ton) | 4.39 | Nrd(ton) | 6.33 | Nrd(ton) | 5.95 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W116 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 6.65 | tef(m) | 0.2 | Mid(ton/m) | 0.1 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.09 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.5 | Nmd(ton/m) | 2.2 | Nid(ton/m) | 2.9 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.072 | ei | 0.01 | ei | 0.037 |
| pt | 1 | Slenderness | 10.5 | φi | 0.282 | φi | 0.83 | φi | 0.63 |
| pn | 1 | ehe | 0 | Nrd(ton) | 2.3 | Nrd(ton) | 6.77 | Nrd(ton) | 5.14 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W117 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.7 | Nid(ton/m) | 2.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W118 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.7 | Nid(ton/m) | 2.3 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W119 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.7 | Nid(ton/m) | 2.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W120 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.2 | Mid(ton/m) | 0.16 | Mmd(ton/m) | 0.06 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.6 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3.1 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.09 | ei | 0.032 | ei | 0.015 |
| pt | 1 | Slenderness | 10.5 | φi | 0.1 | φi | 0.602 | φi | 0.847 |
| pn | 1 | ehe | 0 | Nrd(ton) | 0.82 | Nrd(ton) | 4.91 | Nrd(ton) | 6.91 |
| | | Slend. Con. | √ | Control | X | Control | √ | Control | √ |

| Wall Name | W121 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0 | Mmd(ton/m) | 0 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 1.7 | Nid(ton/m) | 2.4 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.01 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.9 | φi | 0.776 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 6.33 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W122 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.1 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 2.3 | Nmd(ton/m) | 3.1 | Nid(ton/m) | 3.8 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.016 | ei | 0.01 | ei | 0.013 |
| pt | 1 | Slenderness | 10.5 | φi | 0.841 | φi | 0.83 | φi | 0.867 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.86 | Nrd(ton) | 6.77 | Nrd(ton) | 7.07 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W123 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.6 | tef(m) | 0.2 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.2 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.4 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.09 | ei | 0.013 | ei | 0.061 |
| pt | 1 | Slenderness | 13.5 | φi | 0.1 | φi | 0.745 | φi | 0.391 |
| pn | 1 | ehe | 0 | Nrd(ton) | 0.82 | Nrd(ton) | 6.07 | Nrd(ton) | 3.19 |
| | | Slend. Con. | √ | Control | X | Control | √ | Control | X |

| Wall Name | W124 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 0.16 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.2 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3.6 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.09 | ei | 0.013 | ei | 0.061 |
| pt | 1 | Slenderness | 13.5 | φi | 0.1 | φi | 0.745 | φi | 0.39 |
| pn | 1 | ehe | 0 | Nrd(ton) | 0.82 | Nrd(ton) | 6.07 | Nrd(ton) | 3.19 |
| | | Slend. Con. | √ | Control | X | Control | √ | Control | X |

| Wall Name | W125 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 4.85 | tef(m) | 0.2 | Mid(ton/m) | 1.09 | Mmd(ton/m) | 0.54 | Mid(ton/m) | 0 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.1 | Nmd(ton/m) | 1.8 | Nid(ton/m) | 2.5 |
| Thickness(m) | 0.2 | einit | 0.01 | ei | 0.09 | ei | 0.09 | ei | 0.01 |
| pt | 1 | Slenderness | 13.5 | φi | 0.1 | φi | 0.019 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 0.82 | Nrd(ton) | 0.16 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | √ |

| Wall Name | W126 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.75 | tef(m) | 0.35 | Mid(ton/m) | 0.21 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.8 | Nmd(ton/m) | 2.4 | Nid(ton/m) | 4 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.05 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.712 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.17 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W127 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.35 | Mid(ton/m) | 0.2 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.17 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.046 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.736 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.51 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W128 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.144 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.175 | φi | 0.868 | φi | 0.808 |
| pn | 1 | ehe | 0 | Nrd(ton) | 2.5 | Nrd(ton) | 12.39 | Nrd(ton) | 11.53 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W129 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.5 | tef(m) | 0.35 | Mid(ton/m) | 0.2 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.16 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.045 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.74 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.57 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W130 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.95 | tef(m) | 0.35 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.15 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.5 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.042 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.76 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.85 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W131 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.3 | tef(m) | 0.35 | Mid(ton/m) | 0.22 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.19 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 2.8 | Nmd(ton/m) | 4.4 | Nid(ton/m) | 6 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.085 | ei | 0.017 | ei | 0.037 |
| pt | 1 | Slenderness | 7.71 | φi | 0.512 | φi | 0.868 | φi | 0.786 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.31 | Nrd(ton) | 12.39 | Nrd(ton) | 11.22 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W132 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.3 | tef(m) | 0.35 | Mid(ton/m) | 0.22 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.19 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 2.8 | Nmd(ton/m) | 4.4 | Nid(ton/m) | 6 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.085 | ei | 0.017 | ei | 0.037 |
| pt | 1 | Slenderness | 7.71 | φi | 0.514 | φi | 0.868 | φi | 0.787 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.34 | Nrd(ton) | 12.39 | Nrd(ton) | 11.23 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W133 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.05 | tef(m) | 0.35 | Mid(ton/m) | 0.18 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.15 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.9 | Nmd(ton/m) | 2.5 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.042 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.759 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.83 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W134 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.144 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.175 | φi | 0.868 | φi | 0.808 |
| pn | 1 | ehe | 0 | Nrd(ton) | 2.5 | Nrd(ton) | 12.39 | Nrd(ton) | 11.53 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W135 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.144 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.175 | φi | 0.868 | φi | 0.808 |
| pn | 1 | ehe | 0 | Nrd(ton) | 2.5 | Nrd(ton) | 12.39 | Nrd(ton) | 11.54 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W136 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.144 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.175 | φi | 0.868 | φi | 0.808 |
| pn | 1 | ehe | 0 | Nrd(ton) | 2.5 | Nrd(ton) | 12.39 | Nrd(ton) | 11.53 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W137 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.1 | tef(m) | 0.35 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.9 | Nmd(ton/m) | 2.4 | Nid(ton/m) | 4 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.803 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 11.46 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W138 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.35 | tef(m) | 0.35 | Mid(ton/m) | 0.38 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.31 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.3 | Nmd(ton/m) | 2.9 | Nid(ton/m) | 4.5 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.077 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.562 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 8.03 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W139 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.6 | tef(m) | 0.35 | Mid(ton/m) | 0.43 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.36 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.4 | Nmd(ton/m) | 3 | Nid(ton/m) | 4.6 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.018 | ei | 0.085 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.867 | φi | 0.516 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.37 | Nrd(ton) | 7.36 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W140 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.2 | tef(m) | 0.35 | Mid(ton/m) | 0.28 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.24 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.1 | Nmd(ton/m) | 2.7 | Nid(ton/m) | 4.3 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.062 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.649 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 9.26 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W141 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.4 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.11 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 2.6 | Nmd(ton/m) | 3.1 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.012 | ei | 0.019 | ei | 0.034 |
| pt | 1 | Slenderness | 10.5 | φi | 0.877 | φi | 0.739 | φi | 0.66 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.15 | Nrd(ton) | 6.03 | Nrd(ton) | 5.39 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W142 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.17 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.14 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.2 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.04 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.772 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 11.02 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W143 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.48 | tef(m) | 0.35 | Mid(ton/m) | 0.21 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.18 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.2 | Nmd(ton/m) | 2.8 | Nid(ton/m) | 4.3 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.046 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.735 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.49 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W144 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.14 | Mmd(ton/m) | 0.01 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1 | Nmd(ton/m) | 2.6 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.144 | ei | 0.017 | ei | 0.034 |
| pt | 1 | Slenderness | 7.71 | φi | 0.175 | φi | 0.868 | φi | 0.808 |
| pn | 1 | ehe | 0 | Nrd(ton) | 2.5 | Nrd(ton) | 12.39 | Nrd(ton) | 11.53 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W145 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0.07 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.6 | Nmd(ton/m) | 2.2 | Nid(ton/m) | 3.8 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.112 | ei | 0.017 | ei | 0.036 |
| pt | 1 | Slenderness | 7.71 | φi | 0.362 | φi | 0.868 | φi | 0.793 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5.16 | Nrd(ton) | 12.39 | Nrd(ton) | 11.32 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W146 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.15 | tef(m) | 0.35 | Mid(ton/m) | 0 | Mmd(ton/m) | 0.06 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.3 | Nmd(ton/m) | 1.9 | Nid(ton/m) | 3.5 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.017 | ei | 0.036 | ei | 0.039 |
| pt | 1 | Slenderness | 7.71 | φi | 0.9 | φi | 0.758 | φi | 0.779 |
| pn | 1 | ehe | 0 | Nrd(ton) | 12.85 | Nrd(ton) | 10.82 | Nrd(ton) | 11.11 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W147 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.95 | tef(m) | 0.35 | Mid(ton/m) | 0.06 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.11 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.7 | Nmd(ton/m) | 2.2 | Nid(ton/m) | 3.8 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.101 | ei | 0.017 | ei | 0.036 |
| pt | 1 | Slenderness | 7.71 | φi | 0.422 | φi | 0.868 | φi | 0.795 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.03 | Nrd(ton) | 12.39 | Nrd(ton) | 11.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W148 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 1.35 | tef(m) | 0.35 | Mid(ton/m) | 0.37 | Mmd(ton/m) | 0.03 | Mid(ton/m) | 0.31 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.3 | Nmd(ton/m) | 2.7 | Nid(ton/m) | 4.1 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.082 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.531 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 7.58 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W149 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.6 | tef(m) | 0.35 | Mid(ton/m) | 0.43 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.36 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.4 | Nmd(ton/m) | 3 | Nid(ton/m) | 4.6 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.018 | ei | 0.085 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.867 | φi | 0.516 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.37 | Nrd(ton) | 7.36 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W150 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.35 | tef(m) | 0.35 | Mid(ton/m) | 0.27 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.23 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.2 | Nmd(ton/m) | 2.8 | Nid(ton/m) | 4.4 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.058 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.668 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 9.54 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W151 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.52 | tef(m) | 0.35 | Mid(ton/m) | 0.19 | Mmd(ton/m) | 0.02 | Mid(ton/m) | 0.16 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 1.2 | Nmd(ton/m) | 2.8 | Nid(ton/m) | 4.4 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.017 | ei | 0.042 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.868 | φi | 0.762 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 12.39 | Nrd(ton) | 10.87 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W152 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.7 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.02 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.6 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3.1 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.016 | ei | 0.01 | ei | 0.012 |
| pt | 1 | Slenderness | 10.5 | φi | 0.836 | φi | 0.83 | φi | 0.877 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.82 | Nrd(ton) | 6.77 | Nrd(ton) | 7.15 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W153 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.8 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 2.8 | Nmd(ton/m) | 3.5 | Nid(ton/m) | 4.3 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.014 | ei | 0.01 | ei | 0.012 |
| pt | 1 | Slenderness | 10.5 | φi | 0.86 | φi | 0.83 | φi | 0.877 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.02 | Nrd(ton) | 6.77 | Nrd(ton) | 7.15 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W154 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.35 | tef(m) | 0.2 | Mid(ton/m) | 0.02 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.3 | Nmd(ton/m) | 2 | Nid(ton/m) | 2.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.024 | ei | 0.01 | ei | 0.016 |
| pt | 1 | Slenderness | 10.5 | φi | 0.76 | φi | 0.83 | φi | 0.837 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.2 | Nrd(ton) | 6.77 | Nrd(ton) | 6.83 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W155 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.6 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.021 | ei | 0.01 | ei | 0.015 |
| pt | 1 | Slenderness | 10.5 | φi | 0.787 | φi | 0.83 | φi | 0.846 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.42 | Nrd(ton) | 6.77 | Nrd(ton) | 6.9 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W156 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.65 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.6 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.021 | ei | 0.01 | ei | 0.015 |
| pt | 1 | Slenderness | 10.5 | φi | 0.787 | φi | 0.83 | φi | 0.846 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.42 | Nrd(ton) | 6.77 | Nrd(ton) | 6.9 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W157 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 8.15 | tef(m) | 0.2 | Mid(ton/m) | 0.03 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.2 | Nmd(ton/m) | 1.9 | Nid(ton/m) | 2.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.026 | ei | 0.01 | ei | 0.017 |
| pt | 1 | Slenderness | 10.5 | φi | 0.738 | φi | 0.83 | φi | 0.831 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.02 | Nrd(ton) | 6.77 | Nrd(ton) | 6.78 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W158 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.25 | tef(m) | 0.2 | Mid(ton/m) | 0.04 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.05 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.3 | Nmd(ton/m) | 2 | Nid(ton/m) | 2.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.039 | ei | 0.01 | ei | 0.024 |
| pt | 1 | Slenderness | 10.5 | φi | 0.613 | φi | 0.83 | φi | 0.765 |
| pn | 1 | ehe | 0 | Nrd(ton) | 5 | Nrd(ton) | 6.77 | Nrd(ton) | 6.24 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W159 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 0.8 | tef(m) | 0.2 | Mid(ton/m) | 0.04 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.05 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 2.5 | Nmd(ton/m) | 3.3 | Nid(ton/m) | 4 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.02 | ei | 0.01 | ei | 0.016 |
| pt | 1 | Slenderness | 10.5 | φi | 0.805 | φi | 0.83 | φi | 0.836 |
| pn | 1 | ehe | 0 | Nrd(ton) | 6.57 | Nrd(ton) | 6.77 | Nrd(ton) | 6.82 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W160 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 2.7 | tef(m) | 0.2 | Mid(ton/m) | 0.01 | Mmd(ton/m) | 0 | Mid(ton/m) | 0.01 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.6 | Nmd(ton/m) | 2.3 | Nid(ton/m) | 3.1 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.012 | ei | 0.01 | ei | 0.01 |
| pt | 1 | Slenderness | 10.5 | φi | 0.883 | φi | 0.83 | φi | 0.9 |
| pn | 1 | ehe | 0 | Nrd(ton) | 7.2 | Nrd(ton) | 6.77 | Nrd(ton) | 7.34 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

| Wall Name | W161 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 7.9 | tef(m) | 0.2 | Mid(ton/m) | 0.77 | Mmd(ton/m) | 0.37 | Mid(ton/m) | 0.03 |
| Height(m) | 2.1 | hef(m) | 2.1 | Nid(ton/m) | 1.2 | Nmd(ton/m) | 1.9 | Nid(ton/m) | 2.7 |
| Thickness(m) | 0.2 | einit | 0 | ei | 0.09 | ei | 0.09 | ei | 0.017 |
| pt | 1 | Slenderness | 10.5 | φi | 0.1 | φi | 0.041 | φi | 0.831 |
| pn | 1 | ehe | 0 | Nrd(ton) | 0.82 | Nrd(ton) | 0.33 | Nrd(ton) | 6.78 |
| | | Slend. Con. | √ | Control | X | Control | X | Control | √ |

# 1. STORY Vertical Stress Calculations

| Wall Name | W162 | fd | 0.4 | Top of Wall | | Middle of the Wall Height | | Bottom of Wall | |
|---|---|---|---|---|---|---|---|---|---|
| Lenght(m) | 5.1 | tef(m) | 0.35 | Mid(ton/m) | 0.28 | Mmd(ton/m) | 0.04 | Mid(ton/m) | 0.21 |
| Height(m) | 2.7 | hef(m) | 2.7 | Nid(ton/m) | 0.7 | Nmd(ton/m) | 2.2 | Nid(ton/m) | 3.7 |
| Thickness(m) | 0.35 | einit | 0.01 | ei | 0.158 | ei | 0.022 | ei | 0.063 |
| pt | 1 | Slenderness | 7.71 | φi | 0.1 | φi | 0.839 | φi | 0.639 |
| pn | 1 | ehe | 0 | Nrd(ton) | 1.43 | Nrd(ton) | 11.98 | Nrd(ton) | 9.12 |
| | | Slend. Con. | √ | Control | √ | Control | √ | Control | √ |

SYMBOLS AND THEIR DESCRIPTIONS

t: Thickness
l: Length
h: Height
pt: Stiffness coefficient
pn: Reduction factor
fd: Design compressive strength of the masonry
tef = t*pt : Effective thickness
hef = h*pn : Effective height of the wall
einit = hef/450 : Initial eccentricity
ehe: Eccentricity of the top or bottom of the wall resulting from horizontal
Mid: Design value of the bending moment at the top or the bottom of the wall
Mmd: Design value of the greatest moment at the mid-height of the wall
Nid = (1,35g+1,5q)/l : Design value of the vertical load at the top or the bottom of the wall
Nmd = (1,35g+1,5q)/l : Design value of the vertical load at the mid-height of the wa
ei = init+ehe+(Mid/Nid): Eccentricity of the wall
φi = 1-(2*ei/t) : Capacity reduction factor
Nrd = t*fd*i : Design vertical load resistance to a concentrated load

# BASEMENT STORY

**Storey Information:**

| | | |
|---|---|---|
| **Qi:** | 679.87 | ton |
| **ex:** | -1.68 | m |
| **ey:** | 0.09 | m |

| | | |
|---|---|---|
| **Mb(+X):** | 63.85 | tm |
| **Mb(-X):** | 63.85 | tm |
| **Mb(+Y):** | -1144.38 | tm |
| **Mb(-Y):** | -1144.38 | tm |

Qi:Seismic Forces Effecting the Storey

e:Projection Distance Between Rigidity Center and Storey Center of Mass

Mbi:Storey Torsional Moment

## BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB01 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 227.67 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 1.7 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 25.27 | 31.59 | 0.08 | 1.7 | 68.53 | √ |
| **-X** | 25.27 | 31.59 | 0.08 | 1.7 | 68.53 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.16 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.16 | √ |
| **Major** | 25.27 | 31.59 | 0.08 | 1.7 | 68.53 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB02 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 210.45 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 1.7 | **σ:** | 0.18 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 25.18 | 31.47 | 0.09 | 1.7 | 65.43 | √ |
| **-X** | 25.18 | 31.47 | 0.09 | 1.7 | 65.43 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 19.24 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 19.24 | √ |
| **Major** | 25.18 | 31.47 | 0.09 | 1.7 | 65.43 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB03 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 317.34 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 3.15 | **σ:** | 0.14 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 83.36 | 87.53 | 0.09 | 3.15 | 109.97 | √ |
| **-X** | 83.36 | 87.53 | 0.09 | 3.15 | 109.97 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.46 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.46 | √ |
| **Major** | 83.36 | 87.53 | 0.09 | 3.15 | 109.97 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB04 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 318.14 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 3.15 | **σ:** | 0.14 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 83.43 | 87.6 | 0.09 | 3.15 | 110.12 | √ |
| **-X** | 83.43 | 87.6 | 0.09 | 3.15 | 110.12 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.48 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.48 | √ |
| **Major** | 83.43 | 87.6 | 0.09 | 3.15 | 110.12 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB05 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 62.72 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 0.65 | **σ:** | 0.15 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 4.41 | 4.63 | 0.11 | 0.65 | 23.43 | √ |
| **-X** | 4.41 | 4.63 | 0.11 | 0.65 | 23.43 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 18.02 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 18.02 | √ |
| **Major** | 4.41 | 4.63 | 0.11 | 0.65 | 23.43 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB06 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 1356.67 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 12.1 | **σ:** | 0.15 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 17.87 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 17.87 | √ |
| **+Y** | 215.22 | 269.02 | 0.02 | 12.1 | 432.37 | √ |
| **-Y** | 215.22 | 269.02 | 0.02 | 12.1 | 432.37 | √ |
| **Major** | 215.22 | 269.02 | 0.02 | 12.1 | 432.37 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB07 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 430 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.11 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 16.21 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 16.21 | √ |
| **+Y** | 86.18 | 107.72 | 0.05 | 5 | 162.09 | √ |
| **-Y** | 86.18 | 107.72 | 0.05 | 5 | 162.09 | √ |
| **Major** | 86.18 | 107.72 | 0.05 | 5 | 162.09 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB08 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 488.46 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.12 | **fvk:** | 0.15 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 16.8 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 16.8 | √ |
| **+Y** | 86.18 | 107.72 | 0.04 | 5 | 168 | √ |
| **-Y** | 86.18 | 107.72 | 0.04 | 5 | 168 | √ |
| **Major** | 86.18 | 107.72 | 0.04 | 5 | 168 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB09 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 541.81 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.15 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 18.22 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 18.22 | √ |
| **+Y** | 88.62 | 110.77 | 0.04 | 5 | 182.22 | √ |
| **-Y** | 88.62 | 110.77 | 0.04 | 5 | 182.22 | √ |
| **Major** | 88.62 | 110.77 | 0.04 | 5 | 182.22 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB10 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 456.05 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.11 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 16.22 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 16.22 | √ |
| **+Y** | 88.62 | 110.77 | 0.05 | 5 | 162.17 | √ |
| **-Y** | 88.62 | 110.77 | 0.05 | 5 | 162.17 | √ |
| **Major** | 88.62 | 110.77 | 0.05 | 5 | 162.17 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB11 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 428.68 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.11 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 16.19 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 16.19 | √ |
| **+Y** | 91.05 | 113.82 | 0.05 | 5 | 161.85 | √ |
| **-Y** | 91.05 | 113.82 | 0.05 | 5 | 161.85 | √ |
| **Major** | 91.05 | 113.82 | 0.05 | 5 | 161.85 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB12 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 384.39 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.08 | **fvk:** | 0.13 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 14.93 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 14.93 | √ |
| **+Y** | 91.05 | 113.82 | 0.06 | 5 | 149.27 | √ |
| **-Y** | 91.05 | 113.82 | 0.06 | 5 | 149.27 | √ |
| **Major** | 91.05 | 113.82 | 0.06 | 5 | 149.27 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB13 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 428.68 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.11 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 16.19 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 16.19 | √ |
| **+Y** | 94.18 | 117.72 | 0.05 | 5 | 161.85 | √ |
| **-Y** | 94.18 | 117.72 | 0.05 | 5 | 161.85 | √ |
| **Major** | 94.18 | 117.72 | 0.05 | 5 | 161.85 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB14 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 384.3 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.08 | **fvk:** | 0.13 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 14.93 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 14.93 | √ |
| **+Y** | 94.18 | 117.72 | 0.06 | 5 | 149.25 | √ |
| **-Y** | 94.18 | 117.72 | 0.06 | 5 | 149.25 | √ |
| **Major** | 94.18 | 117.72 | 0.06 | 5 | 149.25 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB15 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 426.61 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.11 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 16.15 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 16.15 | √ |
| **+Y** | 96.62 | 120.77 | 0.06 | 5 | 161.48 | √ |
| **-Y** | 96.62 | 120.77 | 0.06 | 5 | 161.48 | √ |
| **Major** | 96.62 | 120.77 | 0.06 | 5 | 161.48 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB16 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 430.29 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.11 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 16.21 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 16.21 | √ |
| **+Y** | 96.62 | 120.77 | 0.06 | 5 | 162.14 | √ |
| **-Y** | 96.62 | 120.77 | 0.06 | 5 | 162.14 | √ |
| **Major** | 96.62 | 120.77 | 0.06 | 5 | 162.14 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB17 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 86.91 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 0.8 | **σ:** | 0.16 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 18.55 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 18.55 | √ |
| **+Y** | 4.13 | 5.17 | 0.07 | 0.8 | 29.68 | √ |
| **-Y** | 4.13 | 5.17 | 0.07 | 0.8 | 29.68 | √ |
| **Major** | 4.13 | 5.17 | 0.07 | 0.8 | 29.68 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB18 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 383.31 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.08 | **fvk:** | 0.13 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 14.91 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 14.91 | √ |
| **+Y** | 101.49 | 126.86 | 0.07 | 5 | 149.08 | √ |
| **-Y** | 101.49 | 126.86 | 0.07 | 5 | 149.08 | √ |
| **Major** | 101.49 | 126.86 | 0.07 | 5 | 149.08 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB19 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 545.23 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.16 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 18.28 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 18.28 | √ |
| **+Y** | 106.37 | 132.96 | 0.05 | 5 | 182.83 | √ |
| **-Y** | 106.37 | 132.96 | 0.05 | 5 | 182.83 | √ |
| **Major** | 106.37 | 132.96 | 0.05 | 5 | 182.83 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB20 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 551.78 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.16 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 18.4 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 18.4 | √ |
| **+Y** | 106.37 | 132.96 | 0.05 | 5 | 184.01 | √ |
| **-Y** | 106.37 | 132.96 | 0.05 | 5 | 184.01 | √ |
| **Major** | 106.37 | 132.96 | 0.05 | 5 | 184.01 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB21 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 1370.64 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 12.1 | **σ:** | 0.15 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 17.97 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 17.97 | √ |
| **+Y** | 288.43 | 360.54 | 0.02 | 12.1 | 434.88 | √ |
| **-Y** | 288.43 | 360.54 | 0.02 | 12.1 | 434.88 | √ |
| **Major** | 288.43 | 360.54 | 0.02 | 12.1 | 434.88 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB22 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 411.39 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 5 | **σ:** | 0.09 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 15.41 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 15.41 | √ |
| **+Y** | 99.05 | 123.82 | 0.06 | 5 | 154.13 | √ |
| **-Y** | 99.05 | 123.82 | 0.06 | 5 | 154.13 | √ |
| **Major** | 99.05 | 123.82 | 0.06 | 5 | 154.13 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB23 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 175.51 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 1.1 | **σ:** | 0.25 | **fvk:** | 0.2 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 12.58 | 13.2 | 0.07 | 1.1 | 49.5 | √ |
| **-X** | 12.58 | 13.2 | 0.07 | 1.1 | 49.5 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 22.5 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 22.5 | √ |
| **Major** | 12.58 | 13.2 | 0.07 | 1.1 | 49.5 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB24 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 351.14 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.5 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 39.97 | 49.96 | 0.06 | 2.5 | 101.44 | √ |
| **-X** | 39.97 | 49.96 | 0.06 | 2.5 | 101.44 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.29 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.29 | √ |
| **Major** | 39.97 | 49.96 | 0.06 | 2.5 | 101.44 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB25 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 305.85 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.59 | 39.49 | 0.06 | 2.15 | 87.94 | √ |
| **-X** | 31.59 | 39.49 | 0.06 | 2.15 | 87.94 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.45 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.45 | √ |
| **Major** | 31.59 | 39.49 | 0.06 | 2.15 | 87.94 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB26 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 283.84 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 1.95 | **σ:** | 0.21 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 26.86 | 33.57 | 0.06 | 1.95 | 80.92 | √ |
| **-X** | 26.86 | 33.57 | 0.06 | 1.95 | 80.92 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.75 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.75 | √ |
| **Major** | 26.86 | 33.57 | 0.06 | 1.95 | 80.92 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB27 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 81.5 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 0.3 | **σ:** | 0.46 | **fvk:** | 0.29 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.26 | 0.33 | 0.01 | 0.3 | 19.26 | √ |
| **-X** | 0.26 | 0.33 | 0.01 | 0.3 | 19.26 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 32.1 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 32.1 | √ |
| **Major** | 0.26 | 0.33 | 0.01 | 0.3 | 19.26 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB28 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 73.5 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 0.3 | **σ:** | 0.41 | **fvk:** | 0.26 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.26 | 0.33 | 0.02 | 0.3 | 17.82 | √ |
| **-X** | 0.26 | 0.33 | 0.02 | 0.3 | 17.82 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 29.7 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 29.7 | √ |
| **Major** | 0.26 | 0.33 | 0.02 | 0.3 | 17.82 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB29 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 316.64 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.05 | **σ:** | 0.22 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 29.22 | 36.52 | 0.06 | 2.05 | 85.8 | √ |
| **-X** | 29.22 | 36.52 | 0.06 | 2.05 | 85.8 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.93 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.93 | √ |
| **Major** | 29.22 | 36.52 | 0.06 | 2.05 | 85.8 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB30 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 304.73 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.59 | 39.49 | 0.06 | 2.15 | 87.74 | √ |
| **-X** | 31.59 | 39.49 | 0.06 | 2.15 | 87.74 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.4 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.4 | √ |
| **Major** | 31.59 | 39.49 | 0.06 | 2.15 | 87.74 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB31 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 301.27 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.59 | 39.49 | 0.06 | 2.15 | 87.11 | √ |
| **-X** | 31.59 | 39.49 | 0.06 | 2.15 | 87.11 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.26 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.26 | √ |
| **Major** | 31.59 | 39.49 | 0.06 | 2.15 | 87.11 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB32 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 299.55 kN | **fvko:** | 0.2 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.2 | **fvk:** | 0.28 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.59 | 39.49 | 0.06 | 2.15 | 135.57 | √ |
| **-X** | 31.59 | 39.49 | 0.06 | 2.15 | 135.57 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 31.53 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 31.53 | √ |
| **Major** | 31.59 | 39.49 | 0.06 | 2.15 | 135.57 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB33 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 287.23 kN | **fvko:** | 0.2 | **Ho:** | 1.25 m |
| **Length:** | 2.1 | **σ:** | 0.2 | **fvk:** | 0.28 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 30.4 | 38.01 | 0.06 | 2.1 | 132.76 | √ |
| **-X** | 30.4 | 38.01 | 0.06 | 2.1 | 132.76 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 31.61 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 31.61 | √ |
| **Major** | 30.4 | 38.01 | 0.06 | 2.1 | 132.76 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB34 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 328.07 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.2 | **σ:** | 0.22 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 32.79 | 40.98 | 0.06 | 2.2 | 92.7 | √ |
| **-X** | 32.79 | 40.98 | 0.06 | 2.2 | 92.7 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 21.07 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 21.07 | √ |
| **Major** | 32.79 | 40.98 | 0.06 | 2.2 | 92.7 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB35 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 398.63 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.6 | **σ:** | 0.23 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 42.37 | 52.96 | 0.05 | 2.6 | 111.52 | √ |
| **-X** | 42.37 | 52.96 | 0.05 | 2.6 | 111.52 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 21.45 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 21.45 | √ |
| **Major** | 42.37 | 52.96 | 0.05 | 2.6 | 111.52 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB36 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 194.87 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 1.35 | **σ:** | 0.22 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.11 | 20.14 | 0.08 | 1.35 | 57.27 | √ |
| **-X** | 16.11 | 20.14 | 0.08 | 1.35 | 57.27 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 21.21 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 21.21 | √ |
| **Major** | 16.11 | 20.14 | 0.08 | 1.35 | 57.27 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB37 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 183.52 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 1.35 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.05 | 20.07 | 0.08 | 1.35 | 55.23 | √ |
| **-X** | 16.05 | 20.07 | 0.08 | 1.35 | 55.23 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.45 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.45 | √ |
| **Major** | 16.05 | 20.07 | 0.08 | 1.35 | 55.23 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB38 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 398.63 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.6 | **σ:** | 0.23 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 42.21 | 52.76 | 0.05 | 2.6 | 111.52 | √ |
| **-X** | 42.21 | 52.76 | 0.05 | 2.6 | 111.52 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 21.45 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 21.45 | √ |
| **Major** | 42.21 | 52.76 | 0.05 | 2.6 | 111.52 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB39 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 369.02 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.35 | **σ:** | 0.22 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 36.24 | 45.3 | 0.05 | 2.35 | 99.96 | √ |
| **-X** | 36.24 | 45.3 | 0.05 | 2.35 | 99.96 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 21.27 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 21.27 | √ |
| **Major** | 36.24 | 45.3 | 0.05 | 2.35 | 99.96 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB40 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 287.21 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 1.95 | **σ:** | 0.21 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 26.75 | 33.44 | 0.06 | 1.95 | 81.52 | √ |
| **-X** | 26.75 | 33.44 | 0.06 | 1.95 | 81.52 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.9 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.9 | √ |
| **Major** | 26.75 | 33.44 | 0.06 | 1.95 | 81.52 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB41 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 368.03 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.5 | **σ:** | 0.21 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 39.82 | 49.78 | 0.05 | 2.5 | 104.48 | √ |
| **-X** | 39.82 | 49.78 | 0.05 | 2.5 | 104.48 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.9 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.9 | √ |
| **Major** | 39.82 | 49.78 | 0.05 | 2.5 | 104.48 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB42 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 329.69 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.22 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.48 | 39.34 | 0.06 | 2.15 | 91.15 | √ |
| **-X** | 31.48 | 39.34 | 0.06 | 2.15 | 91.15 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 21.2 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 21.2 | √ |
| **Major** | 31.48 | 39.34 | 0.06 | 2.15 | 91.15 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB43 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 751.87 kN | **fvko:** | 0.2 | **Ho:** | 1.25 m |
| **Length:** | 6.7 | **σ:** | 0.15 | **fvk:** | 0.26 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 135.98 | 169.98 | 0.03 | 6.7 | 392.57 | √ |
| **-X** | 135.98 | 169.98 | 0.03 | 6.7 | 392.57 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 29.3 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 29.3 | √ |
| **Major** | 135.98 | 169.98 | 0.03 | 6.7 | 392.57 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB44 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 304.73 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.48 | 39.34 | 0.06 | 2.15 | 87.74 | √ |
| **-X** | 31.48 | 39.34 | 0.06 | 2.15 | 87.74 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.4 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.4 | √ |
| **Major** | 31.48 | 39.34 | 0.06 | 2.15 | 87.74 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB45 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 298.74 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.48 | 39.34 | 0.06 | 2.15 | 86.66 | √ |
| **-X** | 31.48 | 39.34 | 0.06 | 2.15 | 86.66 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.15 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.15 | √ |
| **Major** | 31.48 | 39.34 | 0.06 | 2.15 | 86.66 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB46 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 0 | **P:** | 301.35 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 2.15 | **σ:** | 0.2 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 31.48 | 39.34 | 0.06 | 2.15 | 87.13 | √ |
| **-X** | 31.48 | 39.34 | 0.06 | 2.15 | 87.13 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.26 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.26 | √ |
| **Major** | 31.48 | 39.34 | 0.06 | 2.15 | 87.13 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB47 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 309.28 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 2.7 | **σ:** | 0.16 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 56.94 | 59.79 | 0.07 | 2.7 | 99.64 | √ |
| **-X** | 56.94 | 59.79 | 0.07 | 2.7 | 99.64 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 18.45 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 18.45 | √ |
| **Major** | 56.94 | 59.79 | 0.07 | 2.7 | 99.64 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB48 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 239.32 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 2.5 | **σ:** | 0.13 | **fvk:** | 0.15 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 61.55 | 64.63 | 0.11 | 2.5 | 85.34 | √ |
| **-X** | 61.55 | 64.63 | 0.11 | 2.5 | 85.34 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.07 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.07 | √ |
| **Major** | 61.55 | 64.63 | 0.11 | 2.5 | 85.34 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB49 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 125.44 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 0.8 | **σ:** | 0.24 | **fvk:** | 0.2 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 6.15 | 6.46 | 0.06 | 0.8 | 35.61 | √ |
| **-X** | 6.15 | 6.46 | 0.06 | 0.8 | 35.61 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 22.25 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 22.25 | √ |
| **Major** | 6.15 | 6.46 | 0.06 | 0.8 | 35.61 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB50 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 302.04 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.16 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 55.53 | 58.31 | 0.07 | 2.65 | 97.52 | √ |
| **-X** | 55.53 | 58.31 | 0.07 | 2.65 | 97.52 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 18.4 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 18.4 | √ |
| **Major** | 55.53 | 58.31 | 0.07 | 2.65 | 97.52 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB51 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 309.46 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.16 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 55.53 | 58.31 | 0.07 | 2.65 | 98.86 | √ |
| **-X** | 55.53 | 58.31 | 0.07 | 2.65 | 98.86 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 18.65 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 18.65 | √ |
| **Major** | 55.53 | 58.31 | 0.07 | 2.65 | 98.86 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB52 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 474.34 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 4.5 | **σ:** | 0.14 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 106.32 | 111.63 | 0.05 | 4.5 | 158.66 | √ |
| **-X** | 106.32 | 111.63 | 0.05 | 4.5 | 158.66 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.63 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.63 | √ |
| **Major** | 106.32 | 111.63 | 0.05 | 4.5 | 158.66 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB53 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 449.93 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 4.35 | **σ:** | 0.14 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 102.29 | 107.4 | 0.05 | 4.35 | 151.82 | √ |
| **-X** | 102.29 | 107.4 | 0.05 | 4.35 | 151.82 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.45 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.45 | √ |
| **Major** | 102.29 | 107.4 | 0.05 | 4.35 | 151.82 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB54 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 538.17 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 6.55 | **σ:** | 0.1 | **fvk:** | 0.14 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 192.59 | 202.21 | 0.06 | 6.55 | 205.09 | √ |
| **-X** | 192.59 | 202.21 | 0.06 | 6.55 | 205.09 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 15.66 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 15.66 | √ |
| **Major** | 192.59 | 202.21 | 0.06 | 6.55 | 205.09 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB55 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 308.91 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 2.7 | **σ:** | 0.16 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 56.89 | 59.74 | 0.07 | 2.7 | 99.57 | √ |
| **-X** | 56.89 | 59.74 | 0.07 | 2.7 | 99.57 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 18.44 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 18.44 | √ |
| **Major** | 56.89 | 59.74 | 0.07 | 2.7 | 99.57 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB56 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 290.9 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 2.9 | **σ:** | 0.13 | **fvk:** | 0.15 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 62.5 | 65.63 | 0.08 | 2.9 | 99.59 | √ |
| **-X** | 62.5 | 65.63 | 0.08 | 2.9 | 99.59 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.17 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.17 | √ |
| **Major** | 62.5 | 65.63 | 0.08 | 2.9 | 99.59 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WB57 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 120.9 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 0.8 | **σ:** | 0.23 | **fvk:** | 0.19 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 6.14 | 6.45 | 0.07 | 0.8 | 34.79 | √ |
| **-X** | 6.14 | 6.45 | 0.07 | 0.8 | 34.79 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 21.74 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 21.74 | √ |
| **Major** | 6.14 | 6.45 | 0.07 | 0.8 | 34.79 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB58 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 376.9 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 5.1 | **σ:** | 0.08 | **fvk:** | 0.13 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 122.22 | 128.34 | 0.07 | 5.1 | 150.89 | √ |
| **-X** | 122.22 | 128.34 | 0.07 | 5.1 | 150.89 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 14.79 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 14.79 | √ |
| **Major** | 122.22 | 128.34 | 0.07 | 5.1 | 150.89 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB59 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 154.08 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 1.1 | **σ:** | 0.21 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 12.58 | 13.2 | 0.08 | 1.1 | 45.65 | √ |
| **-X** | 12.58 | 13.2 | 0.08 | 1.1 | 45.65 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 20.75 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 20.75 | √ |
| **Major** | 12.58 | 13.2 | 0.08 | 1.1 | 45.65 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB60 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 442.15 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 4.2 | **σ:** | 0.14 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 98.16 | 103.07 | 0.06 | 4.2 | 147.98 | √ |
| **-X** | 98.16 | 103.07 | 0.06 | 4.2 | 147.98 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.62 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.62 | √ |
| **Major** | 98.16 | 103.07 | 0.06 | 4.2 | 147.98 | √ |
| | | | | | Result: | √ |

# BASEMENT STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB61 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 682.81 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 6.4 | **σ:** | 0.15 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 187.72 | 197.11 | 0.05 | 6.4 | 228.68 | √ |
| **-X** | 187.72 | 197.11 | 0.05 | 6.4 | 228.68 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.87 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.87 | √ |
| **Major** | 187.72 | 197.11 | 0.05 | 6.4 | 228.68 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB62 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 662.4 kN | **fvko:** | 0.1 | **Ho:** | 1.05 m |
| **Length:** | 6.2 | **σ:** | 0.14 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 151.2 | 158.76 | 0.04 | 6.2 | 220.19 | √ |
| **-X** | 151.2 | 158.76 | 0.04 | 6.2 | 220.19 | √ |
| **+Y** | 0 | 0 | 0 | 0.5 | 17.76 | √ |
| **-Y** | 0 | 0 | 0 | 0.5 | 17.76 | √ |
| **Major** | 151.2 | 158.76 | 0.04 | 6.2 | 220.19 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WB63 | **Width:** | 0.5 | **μ:** | 0.4 | **Hw:** | 2.5 m |
| **Angle:** | 90 | **P:** | 339 kN | **fvko:** | 0.1 | **Ho:** | 1.25 m |
| **Length:** | 3.3 | **σ:** | 0.13 | **fvk:** | 0.15 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.4σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.5 | 17.14 | √ |
| **-X** | 0 | 0 | 0 | 0.5 | 17.14 | √ |
| **+Y** | 60.91 | 76.14 | 0.07 | 3.3 | 113.11 | √ |
| **-Y** | 60.91 | 76.14 | 0.07 | 3.3 | 113.11 | √ |
| **Major** | 60.91 | 76.14 | 0.07 | 3.3 | 113.11 | √ |
| | | | | | Result: | √ |

# GROUND STORY

**Storey Information:**

| | | |
|---|---|---|
| **Qi:** | 513.36 | ton |
| **ex:** | -0.46 | m |
| **ey:** | -0.07 | m |

| | | |
|---|---|---|
| **Mb(+X):** | -37.22 | tm |
| **Mb(-X):** | -37.22 | tm |
| **Mb(+Y):** | -234.14 | tm |
| **Mb(-Y):** | -234.14 | tm |

Qi:Seismic Forces Effecting the Storey

e:Projection Distance Between Rigidity Center and Storey Center of Mass

Mbi:Storey Torsional Moment

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ01 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 294.46 kN | **fvko:** | 0.2 | **Ho:** | 1.05 m |
| **Length:** | 4.85 | **σ:** | 0.23 | **fvk:** | 0.31 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 82.09 | 86.19 | 0.06 | 4.85 | 137.04 | √ |
| **-X** | 82.09 | 86.19 | 0.06 | 4.85 | 137.04 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.65 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.65 | √ |
| **Major** | 82.09 | 86.19 | 0.06 | 4.85 | 137.04 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ02 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 130.06 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.7 | **σ:** | 0.14 | **fvk:** | 0.22 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 22.62 | 30.53 | 0.14 | 1.7 | 58.55 | √ |
| **-X** | 22.62 | 30.53 | 0.14 | 1.7 | 58.55 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.06 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.06 | √ |
| **Major** | 22.62 | 30.53 | 0.14 | 1.7 | 58.55 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ03 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 411.84 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.1 | **σ:** | 0.13 | **fvk:** | 0.21 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 11.78 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 11.78 | √ |
| **+Y** | 43.36 | 58.54 | 0.03 | 5.1 | 171.63 | √ |
| **-Y** | 43.36 | 58.54 | 0.03 | 5.1 | 171.63 | √ |
| **Major** | 43.36 | 58.54 | 0.03 | 5.1 | 171.63 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ04 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 408.79 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.05 | **σ:** | 0.13 | **fvk:** | 0.21 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 11.79 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 11.79 | √ |
| **+Y** | 39.5 | 53.33 | 0.03 | 5.05 | 170.18 | √ |
| **-Y** | 39.5 | 53.33 | 0.03 | 5.05 | 170.18 | √ |
| **Major** | 39.5 | 53.33 | 0.03 | 5.05 | 170.18 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ05 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 170.92 kN | **fvko:** | 0.2 | **Ho:** | 1.05 m |
| **Length:** | 3.15 | **σ:** | 0.2 | **fvk:** | 0.3 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 49.32 | 51.79 | 0.1 | 3.15 | 84.65 | √ |
| **-X** | 49.32 | 51.79 | 0.1 | 3.15 | 84.65 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.37 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.37 | √ |
| **Major** | 49.32 | 51.79 | 0.1 | 3.15 | 84.65 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ06 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 34.16 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.5 | **σ:** | 0.28 | **fvk:** | 0.29 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 1.31 | 1.37 | 0.08 | 0.5 | 13.14 | √ |
| **-X** | 1.31 | 1.37 | 0.08 | 0.5 | 13.14 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.25 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.25 | √ |
| **Major** | 1.31 | 1.37 | 0.08 | 0.5 | 13.14 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ07 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 170.12 kN | **fvko:** | 0.2 | **Ho:** | 1.05 m |
| **Length:** | 3.15 | **σ:** | 0.2 | **fvk:** | 0.3 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 49.34 | 51.8 | 0.1 | 3.15 | 84.47 | √ |
| **-X** | 49.34 | 51.8 | 0.1 | 3.15 | 84.47 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.36 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.36 | √ |
| **Major** | 49.34 | 51.8 | 0.1 | 3.15 | 84.47 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ08 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 117.92 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.2 | **σ:** | 0.2 | **fvk:** | 0.25 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 30.35 | 31.86 | 0.12 | 2.2 | 49.4 | √ |
| **-X** | 30.35 | 31.86 | 0.12 | 2.2 | 49.4 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.49 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.49 | √ |
| **Major** | 30.35 | 31.86 | 0.12 | 2.2 | 49.4 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ09 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 221.88 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.17 | **fvk:** | 0.24 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.25 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.25 | √ |
| **+Y** | 20.38 | 27.51 | 0.03 | 4.6 | 97.74 | √ |
| **-Y** | 20.38 | 27.51 | 0.03 | 4.6 | 97.74 | √ |
| **Major** | 20.38 | 27.51 | 0.03 | 4.6 | 97.74 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ10 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 254.16 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.17 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.19 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.19 | √ |
| **+Y** | 21.71 | 29.31 | 0.02 | 4.85 | 101.68 | √ |
| **-Y** | 21.71 | 29.31 | 0.02 | 4.85 | 101.68 | √ |
| **Major** | 21.71 | 29.31 | 0.02 | 4.85 | 101.68 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ11 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 333.71 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.23 | **fvk:** | 0.27 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.79 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.79 | √ |
| **+Y** | 20.53 | 27.71 | 0.02 | 4.6 | 110.19 | √ |
| **-Y** | 20.53 | 27.71 | 0.02 | 4.6 | 110.19 | √ |
| **Major** | 20.53 | 27.71 | 0.02 | 4.6 | 110.19 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ12 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 223.42 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.17 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.17 | √ |
| **+Y** | 21.87 | 29.53 | 0.03 | 4.85 | 101.22 | √ |
| **-Y** | 21.87 | 29.53 | 0.03 | 4.85 | 101.22 | √ |
| **Major** | 21.87 | 29.53 | 0.03 | 4.85 | 101.22 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ13 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 220.48 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.17 | **fvk:** | 0.24 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.24 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.24 | √ |
| **+Y** | 20.68 | 27.91 | 0.03 | 4.6 | 97.42 | √ |
| **-Y** | 20.68 | 27.91 | 0.03 | 4.6 | 97.42 | √ |
| **Major** | 20.68 | 27.91 | 0.03 | 4.6 | 97.42 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ14 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 150.02 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.23 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.23 | √ |
| **+Y** | 22.03 | 29.74 | 0.04 | 4.85 | 78.35 | √ |
| **-Y** | 22.03 | 29.74 | 0.04 | 4.85 | 78.35 | √ |
| **Major** | 22.03 | 29.74 | 0.04 | 4.85 | 78.35 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ15 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 220.48 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.17 | **fvk:** | 0.24 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.24 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.24 | √ |
| **+Y** | 20.86 | 28.17 | 0.03 | 4.6 | 97.42 | √ |
| **-Y** | 20.86 | 28.17 | 0.03 | 4.6 | 97.42 | √ |
| **Major** | 20.86 | 28.17 | 0.03 | 4.6 | 97.42 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ16 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 149.93 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.23 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.23 | √ |
| **+Y** | 22.23 | 30.01 | 0.04 | 4.85 | 78.33 | √ |
| **-Y** | 22.23 | 30.01 | 0.04 | 4.85 | 78.33 | √ |
| **Major** | 22.23 | 30.01 | 0.04 | 4.85 | 78.33 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ17 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 219.61 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.17 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.23 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.23 | √ |
| **+Y** | 21.01 | 28.37 | 0.03 | 4.6 | 97.23 | √ |
| **-Y** | 21.01 | 28.37 | 0.03 | 4.6 | 97.23 | √ |
| **Major** | 21.01 | 28.37 | 0.03 | 4.6 | 97.23 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ18 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 223.27 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.17 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.17 | √ |
| **+Y** | 22.39 | 30.22 | 0.03 | 4.85 | 101.19 | √ |
| **-Y** | 22.39 | 30.22 | 0.03 | 4.85 | 101.19 | √ |
| **Major** | 22.39 | 30.22 | 0.03 | 4.85 | 101.19 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ19 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 175.08 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.23 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.23 | √ |
| **+Y** | 21.16 | 28.56 | 0.04 | 4.6 | 74.35 | √ |
| **-Y** | 21.16 | 28.56 | 0.04 | 4.6 | 74.35 | √ |
| **Major** | 21.16 | 28.56 | 0.04 | 4.6 | 74.35 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ20 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 177.65 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.22 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.22 | √ |
| **+Y** | 22.54 | 30.43 | 0.04 | 4.85 | 78 | √ |
| **-Y** | 22.54 | 30.43 | 0.04 | 4.85 | 78 | √ |
| **Major** | 22.54 | 30.43 | 0.04 | 4.85 | 78 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ21 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 219.32 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.17 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.22 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.22 | √ |
| **+Y** | 21.31 | 28.76 | 0.03 | 4.6 | 97.16 | √ |
| **-Y** | 21.31 | 28.76 | 0.03 | 4.6 | 97.16 | √ |
| **Major** | 21.31 | 28.76 | 0.03 | 4.6 | 97.16 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ22 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 148.93 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.22 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.22 | √ |
| **+Y** | 22.7 | 30.64 | 0.04 | 4.85 | 78 | √ |
| **-Y** | 22.7 | 30.64 | 0.04 | 4.85 | 78 | √ |
| **Major** | 22.7 | 30.64 | 0.04 | 4.85 | 78 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ23 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 335.93 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.23 | **fvk:** | 0.27 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.81 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.81 | √ |
| **+Y** | 21.6 | 29.16 | 0.02 | 4.6 | 110.69 | √ |
| **-Y** | 21.6 | 29.16 | 0.02 | 4.6 | 110.69 | √ |
| **Major** | 21.6 | 29.16 | 0.02 | 4.6 | 110.69 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ24 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 341.25 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.23 | **fvk:** | 0.26 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.73 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.73 | √ |
| **+Y** | 23.01 | 31.07 | 0.02 | 4.85 | 114.81 | √ |
| **-Y** | 23.01 | 31.07 | 0.02 | 4.85 | 114.81 | √ |
| **Major** | 23.01 | 31.07 | 0.02 | 4.85 | 114.81 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ25 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 229.05 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.17 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 4.23 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 4.23 | √ |
| **+Y** | 22.86 | 30.86 | 0.03 | 4.85 | 102.49 | √ |
| **-Y** | 22.86 | 30.86 | 0.03 | 4.85 | 102.49 | √ |
| **Major** | 22.86 | 30.86 | 0.03 | 4.85 | 102.49 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ26 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 151.4 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.75 | **σ:** | 0.14 | **fvk:** | 0.22 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 19.9 | 26.86 | 0.1 | 1.75 | 61.14 | √ |
| **-X** | 19.9 | 26.86 | 0.1 | 1.75 | 61.14 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.22 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.22 | √ |
| **Major** | 19.9 | 26.86 | 0.1 | 1.75 | 61.14 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ27 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 221.64 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.5 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 36.74 | 49.59 | 0.09 | 2.5 | 91.51 | √ |
| **-X** | 36.74 | 49.59 | 0.09 | 2.5 | 91.51 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.81 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.81 | √ |
| **Major** | 36.74 | 49.59 | 0.09 | 2.5 | 91.51 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ28 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 186.02 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.72 | 38.77 | 0.1 | 2.15 | 77.42 | √ |
| **-X** | 28.72 | 38.77 | 0.1 | 2.15 | 77.42 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.6 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.6 | √ |
| **Major** | 28.72 | 38.77 | 0.1 | 2.15 | 77.42 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ29 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 213.52 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.5 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 36.69 | 49.53 | 0.09 | 2.5 | 89.69 | √ |
| **-X** | 36.69 | 49.53 | 0.09 | 2.5 | 89.69 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.56 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.56 | √ |
| **Major** | 36.69 | 49.53 | 0.09 | 2.5 | 89.69 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ30 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 171.06 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.95 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 24.25 | 32.73 | 0.1 | 1.95 | 70.97 | √ |
| **-X** | 24.25 | 32.73 | 0.1 | 1.95 | 70.97 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.74 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.74 | √ |
| **Major** | 24.25 | 32.73 | 0.1 | 1.95 | 70.97 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ31 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 47.61 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 0.3 | **σ:** | 0.36 | **fvk:** | 0.33 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.22 | 0.3 | 0.02 | 0.3 | 15.74 | √ |
| **-X** | 0.22 | 0.3 | 0.02 | 0.3 | 15.74 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 18.26 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 18.26 | √ |
| **Major** | 0.22 | 0.3 | 0.02 | 0.3 | 15.74 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ32 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 43.48 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 0.3 | **σ:** | 0.33 | **fvk:** | 0.31 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.22 | 0.29 | 0.02 | 0.3 | 14.78 | √ |
| **-X** | 0.22 | 0.29 | 0.02 | 0.3 | 14.78 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 17.24 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 17.24 | √ |
| **Major** | 0.22 | 0.29 | 0.02 | 0.3 | 14.78 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ33 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 188.69 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.05 | **σ:** | 0.15 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 26.44 | 35.69 | 0.09 | 2.05 | 73.29 | √ |
| **-X** | 26.44 | 35.69 | 0.09 | 2.05 | 73.29 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.52 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.52 | √ |
| **Major** | 26.44 | 35.69 | 0.09 | 2.05 | 73.29 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ34 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 184.92 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.72 | 38.77 | 0.1 | 2.15 | 77.42 | √ |
| **-X** | 28.72 | 38.77 | 0.1 | 2.15 | 77.42 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.6 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.6 | √ |
| **Major** | 28.72 | 38.77 | 0.1 | 2.15 | 77.42 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ35 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 181.45 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.15 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.72 | 38.77 | 0.1 | 2.15 | 76.64 | √ |
| **-X** | 28.72 | 38.77 | 0.1 | 2.15 | 76.64 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.48 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.48 | √ |
| **Major** | 28.72 | 38.77 | 0.1 | 2.15 | 76.64 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ36 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 181.93 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.15 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.72 | 38.77 | 0.1 | 2.15 | 76.64 | √ |
| **-X** | 28.72 | 38.77 | 0.1 | 2.15 | 76.64 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.48 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.48 | √ |
| **Major** | 28.72 | 38.77 | 0.1 | 2.15 | 76.64 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ37 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 179.06 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.1 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 27.59 | 37.25 | 0.1 | 2.1 | 75.27 | √ |
| **-X** | 27.59 | 37.25 | 0.1 | 2.1 | 75.27 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.54 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.54 | √ |
| **Major** | 27.59 | 37.25 | 0.1 | 2.1 | 75.27 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ38 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 125.56 kN | **fvko:** | 0.2 | **Ho:** | 1.35 m |
| **Length:** | 1.35 | **σ:** | 0.17 | **fvk:** | 0.29 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 14.08 | 19.01 | 0.11 | 1.35 | 60.7 | √ |
| **-X** | 14.08 | 19.01 | 0.11 | 1.35 | 60.7 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 15.77 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 15.77 | √ |
| **Major** | 14.08 | 19.01 | 0.11 | 1.35 | 60.7 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ39 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 243.66 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.6 | **σ:** | 0.18 | **fvk:** | 0.24 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 38.98 | 52.62 | 0.08 | 2.6 | 98.13 | √ |
| **-X** | 38.98 | 52.62 | 0.08 | 2.6 | 98.13 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 13.21 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 13.21 | √ |
| **Major** | 38.98 | 52.62 | 0.08 | 2.6 | 98.13 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ40 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 199.33 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.2 | **σ:** | 0.17 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 29.85 | 40.3 | 0.09 | 2.2 | 81.25 | √ |
| **-X** | 29.85 | 40.3 | 0.09 | 2.2 | 81.25 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.93 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.93 | √ |
| **Major** | 29.85 | 40.3 | 0.09 | 2.2 | 81.25 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ41 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 410.74 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.1 | **σ:** | 0.13 | **fvk:** | 0.21 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 11.78 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 11.78 | √ |
| **+Y** | 43.36 | 58.54 | 0.03 | 5.1 | 171.63 | √ |
| **-Y** | 43.36 | 58.54 | 0.03 | 5.1 | 171.63 | √ |
| **Major** | 43.36 | 58.54 | 0.03 | 5.1 | 171.63 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ42 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 195.11 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.17 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.76 | 38.82 | 0.09 | 2.15 | 79.47 | √ |
| **-X** | 28.76 | 38.82 | 0.09 | 2.15 | 79.47 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.94 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.94 | √ |
| **Major** | 28.76 | 38.82 | 0.09 | 2.15 | 79.47 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ43 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 217.66 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.48 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 36.16 | 48.82 | 0.09 | 2.48 | 90.2 | √ |
| **-X** | 36.16 | 48.82 | 0.09 | 2.48 | 90.2 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.76 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.76 | √ |
| **Major** | 36.16 | 48.82 | 0.09 | 2.48 | 90.2 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ44 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 184.92 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.76 | 38.82 | 0.1 | 2.15 | 77.42 | √ |
| **-X** | 28.76 | 38.82 | 0.1 | 2.15 | 77.42 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.6 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.6 | √ |
| **Major** | 28.76 | 38.82 | 0.1 | 2.15 | 77.42 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ45 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 178.93 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.15 | **fvk:** | 0.22 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.76 | 38.82 | 0.1 | 2.15 | 76.07 | √ |
| **-X** | 28.76 | 38.82 | 0.1 | 2.15 | 76.07 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.38 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.38 | √ |
| **Major** | 28.76 | 38.82 | 0.1 | 2.15 | 76.07 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ46 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 175.32 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.14 | **fvk:** | 0.22 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.76 | 38.82 | 0.1 | 2.15 | 75.02 | √ |
| **-X** | 28.76 | 38.82 | 0.1 | 2.15 | 75.02 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.21 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.21 | √ |
| **Major** | 28.76 | 38.82 | 0.1 | 2.15 | 75.02 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ47 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 164.93 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.95 | **σ:** | 0.15 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 24.28 | 32.78 | 0.1 | 1.95 | 69.59 | √ |
| **-X** | 24.28 | 32.78 | 0.1 | 1.95 | 69.59 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.49 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.49 | √ |
| **Major** | 24.28 | 32.78 | 0.1 | 1.95 | 69.59 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ48 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 114.35 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.35 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 14.17 | 19.13 | 0.12 | 1.35 | 49.19 | √ |
| **-X** | 14.17 | 19.13 | 0.12 | 1.35 | 49.19 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.75 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.75 | √ |
| **Major** | 14.17 | 19.13 | 0.12 | 1.35 | 49.19 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ49 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 243.66 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.6 | **σ:** | 0.18 | **fvk:** | 0.24 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 39.03 | 52.69 | 0.08 | 2.6 | 98.13 | √ |
| **-X** | 39.03 | 52.69 | 0.08 | 2.6 | 98.13 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 13.21 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 13.21 | √ |
| **Major** | 39.03 | 52.69 | 0.08 | 2.6 | 98.13 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ50 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 213.39 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.35 | **σ:** | 0.17 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 33.3 | 44.96 | 0.09 | 2.35 | 86.91 | √ |
| **-X** | 33.3 | 44.96 | 0.09 | 2.35 | 86.91 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.94 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.94 | √ |
| **Major** | 33.3 | 44.96 | 0.09 | 2.35 | 86.91 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ51 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 223.41 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.52 | **σ:** | 0.16 | **fvk:** | 0.23 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 37.31 | 50.37 | 0.09 | 2.52 | 92.08 | √ |
| **-X** | 37.31 | 50.37 | 0.09 | 2.52 | 92.08 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 12.76 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 12.76 | √ |
| **Major** | 37.31 | 50.37 | 0.09 | 2.52 | 92.08 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ52 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 163.57 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.7 | **σ:** | 0.23 | **fvk:** | 0.27 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 33.66 | 35.34 | 0.08 | 2.7 | 64.47 | √ |
| **-X** | 33.66 | 35.34 | 0.08 | 2.7 | 64.47 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.78 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.78 | √ |
| **Major** | 33.66 | 35.34 | 0.08 | 2.7 | 64.47 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ53 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 68.33 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.8 | **σ:** | 0.35 | **fvk:** | 0.33 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 3.64 | 3.82 | 0.07 | 0.8 | 23.57 | √ |
| **-X** | 3.64 | 3.82 | 0.07 | 0.8 | 23.57 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.89 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.89 | √ |
| **Major** | 3.64 | 3.82 | 0.07 | 0.8 | 23.57 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ54 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 125.32 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.35 | **σ:** | 0.2 | **fvk:** | 0.25 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 33.37 | 35.03 | 0.12 | 2.35 | 52.6 | √ |
| **-X** | 33.37 | 35.03 | 0.12 | 2.35 | 52.6 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.48 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.48 | √ |
| **Major** | 33.37 | 35.03 | 0.12 | 2.35 | 52.6 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ55 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 159.48 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.23 | **fvk:** | 0.26 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 32.83 | 34.47 | 0.08 | 2.65 | 63.04 | √ |
| **-X** | 32.83 | 34.47 | 0.08 | 2.65 | 63.04 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.76 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.76 | √ |
| **Major** | 32.83 | 34.47 | 0.08 | 2.65 | 63.04 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ56 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 245.48 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 4.55 | **σ:** | 0.2 | **fvk:** | 0.25 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 63.65 | 66.83 | 0.06 | 4.55 | 101.85 | √ |
| **-X** | 63.65 | 66.83 | 0.06 | 4.55 | 101.85 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.48 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.48 | √ |
| **Major** | 63.65 | 66.83 | 0.06 | 4.55 | 101.85 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ57 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 167.13 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.24 | **fvk:** | 0.27 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 32.84 | 34.48 | 0.08 | 2.65 | 64.76 | √ |
| **-X** | 32.84 | 34.48 | 0.08 | 2.65 | 64.76 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.89 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.89 | √ |
| **Major** | 32.84 | 34.48 | 0.08 | 2.65 | 64.76 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ58 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 102.99 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.4 | **σ:** | 0.14 | **fvk:** | 0.22 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.64 | 30.08 | 0.12 | 2.4 | 47.76 | √ |
| **-X** | 28.64 | 30.08 | 0.12 | 2.4 | 47.76 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.98 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.98 | √ |
| **Major** | 28.64 | 30.08 | 0.12 | 2.4 | 47.76 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ59 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 158.08 kN | **fvko:** | 0.25 | **Ho:** | 1.05 m |
| **Length:** | 4.85 | **σ:** | 0.09 | **fvk:** | 0.29 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 82.06 | 86.17 | 0.11 | 4.85 | 128.18 | √ |
| **-X** | 82.06 | 86.17 | 0.11 | 4.85 | 128.18 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.29 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.29 | √ |
| **Major** | 82.06 | 86.17 | 0.11 | 4.85 | 128.18 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | WZ60 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 163.2 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.7 | **σ:** | 0.23 | **fvk:** | 0.26 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 33.67 | 35.36 | 0.08 | 2.7 | 64.39 | √ |
| **-X** | 33.67 | 35.36 | 0.08 | 2.7 | 64.39 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.77 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.77 | √ |
| **Major** | 33.67 | 35.36 | 0.08 | 2.7 | 64.39 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ61 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 63.79 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.8 | **σ:** | 0.33 | **fvk:** | 0.31 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 3.64 | 3.82 | 0.07 | 0.8 | 22.55 | √ |
| **-X** | 3.64 | 3.82 | 0.07 | 0.8 | 22.55 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.64 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.64 | √ |
| **Major** | 3.64 | 3.82 | 0.07 | 0.8 | 22.55 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ62 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 135.72 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.35 | **σ:** | 0.19 | **fvk:** | 0.24 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 33.38 | 35.04 | 0.11 | 2.35 | 51.76 | √ |
| **-X** | 33.38 | 35.04 | 0.11 | 2.35 | 51.76 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.41 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.41 | √ |
| **Major** | 33.38 | 35.04 | 0.11 | 2.35 | 51.76 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ63 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 83.11 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 1.1 | **σ:** | 0.31 | **fvk:** | 0.3 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 7.44 | 7.81 | 0.09 | 1.1 | 29.97 | √ |
| **-X** | 7.44 | 7.81 | 0.09 | 1.1 | 29.97 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 5.45 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 5.45 | √ |
| **Major** | 7.44 | 7.81 | 0.09 | 1.1 | 29.97 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/γm**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ64 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 228 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 4.2 | **σ:** | 0.2 | **fvk:** | 0.25 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 58.1 | 61 | 0.06 | 4.2 | 94.33 | √ |
| **-X** | 58.1 | 61 | 0.06 | 4.2 | 94.33 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.49 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.49 | √ |
| **Major** | 58.1 | 61 | 0.06 | 4.2 | 94.33 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ65 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 172.33 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.25 | **fvk:** | 0.28 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 32.84 | 34.48 | 0.08 | 2.65 | 65.93 | √ |
| **-X** | 32.84 | 34.48 | 0.08 | 2.65 | 65.93 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.98 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.98 | √ |
| **Major** | 32.84 | 34.48 | 0.08 | 2.65 | 65.93 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ66 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 161.85 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.23 | **fvk:** | 0.27 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 32.84 | 34.48 | 0.08 | 2.65 | 63.57 | √ |
| **-X** | 32.84 | 34.48 | 0.08 | 2.65 | 63.57 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.8 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.8 | √ |
| **Major** | 32.84 | 34.48 | 0.08 | 2.65 | 63.57 | √ |
| | | | | | Result: | √ |

# GROUND STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ67 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 344.47 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 6.25 | **σ:** | 0.2 | **fvk:** | 0.25 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 90.24 | 94.75 | 0.04 | 6.25 | 141.55 | √ |
| **-X** | 90.24 | 94.75 | 0.04 | 6.25 | 141.55 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 4.53 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 4.53 | √ |
| **Major** | 90.24 | 94.75 | 0.04 | 6.25 | 141.55 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | WZ68 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 408.93 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.05 | **σ:** | 0.13 | **fvk:** | 0.21 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 11.8 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 11.8 | √ |
| **+Y** | 39.5 | 53.33 | 0.03 | 5.05 | 170.22 | √ |
| **-Y** | 39.5 | 53.33 | 0.03 | 5.05 | 170.22 | √ |
| **Major** | 39.5 | 53.33 | 0.03 | 5.05 | 170.22 | √ |
| | | | | | Result: | √ |

# 1. STORY

**Storey Information:**

| | | | | | |
|---|---|---|---|---|---|
| **Qi:** | 283.2 | ton | **Mb(+X):** | -19.88 | tm |
| **ex:** | 0.29 | m | **Mb(-X):** | -19.88 | tm |
| **ey:** | -0.07 | m | **Mb(+Y):** | 80.76 | tm |
| | | | **Mb(-Y):** | 80.76 | tm |

Qi:Seismic Forces Effecting the Storey

e:Projection Distance Between Rigidity Center and Storey Center of Mass

Mbi:Storey Torsional Moment

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W101 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 180.55 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.1 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **+Y** | 41.43 | 55.93 | 0.06 | 5.1 | 126.55 | √ |
| **-Y** | 41.43 | 55.93 | 0.06 | 5.1 | 126.55 | √ |
| **Major** | 41.43 | 55.93 | 0.06 | 5.1 | 126.55 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W102 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 60.2 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.7 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 12.93 | 17.46 | 0.17 | 1.68 | 42.33 | √ |
| **-X** | 12.93 | 17.46 | 0.17 | 1.68 | 42.33 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.82 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.82 | √ |
| **Major** | 12.93 | 17.46 | 0.17 | 1.7 | 42.83 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W103 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 180.55 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.1 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **+Y** | 41.43 | 55.93 | 0.06 | 5.1 | 126.55 | √ |
| **-Y** | 41.43 | 55.93 | 0.06 | 5.1 | 126.55 | √ |
| **Major** | 41.43 | 55.93 | 0.06 | 5.1 | 126.55 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W104 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 179.34 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.1 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **+Y** | 43.23 | 58.36 | 0.06 | 5.1 | 126.52 | √ |
| **-Y** | 43.23 | 58.36 | 0.06 | 5.1 | 126.52 | √ |
| **Major** | 43.23 | 58.36 | 0.06 | 5.1 | 126.52 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W105 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 75.55 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 3.15 | **σ:** | 0.05 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.19 | 29.6 | 0.12 | 3.15 | 49.85 | √ |
| **-X** | 28.19 | 29.6 | 0.12 | 3.15 | 49.85 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.16 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.16 | √ |
| **Major** | 28.19 | 29.6 | 0.12 | 3.15 | 49.85 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W106 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 15.1 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.5 | **σ:** | 0.09 | **fvk:** | 0.2 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.75 | 0.78 | 0.1 | 0.5 | 8.85 | √ |
| **-X** | 0.75 | 0.78 | 0.1 | 0.5 | 8.85 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.54 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.54 | √ |
| **Major** | 0.75 | 0.78 | 0.1 | 0.5 | 8.85 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W107 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 75.23 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 3.15 | **σ:** | 0.05 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 28.2 | 29.61 | 0.12 | 3.15 | 49.77 | √ |
| **-X** | 28.2 | 29.61 | 0.12 | 3.15 | 49.77 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.16 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.16 | √ |
| **Major** | 28.2 | 29.61 | 0.12 | 3.15 | 49.77 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W108 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 53.37 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.1 | **σ:** | 0.05 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.19 | 17 | 0.15 | 2.1 | 33.53 | √ |
| **-X** | 16.19 | 17 | 0.15 | 2.1 | 33.53 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.19 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.19 | √ |
| **Major** | 16.19 | 17 | 0.15 | 2.1 | 33.53 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W109 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 101.06 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **+Y** | 21.76 | 29.37 | 0.06 | 4.6 | 70.55 | √ |
| **-Y** | 21.76 | 29.37 | 0.06 | 4.6 | 70.55 | √ |
| **Major** | 21.76 | 29.37 | 0.06 | 4.6 | 70.55 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W110 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 102.68 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **+Y** | 23.18 | 31.29 | 0.06 | 4.85 | 74.06 | √ |
| **-Y** | 23.18 | 31.29 | 0.06 | 4.85 | 74.06 | √ |
| **Major** | 23.18 | 31.29 | 0.06 | 4.85 | 74.06 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W111 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 156.65 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **+Y** | 21.68 | 29.27 | 0.04 | 4.6 | 70.35 | √ |
| **-Y** | 21.68 | 29.27 | 0.04 | 4.6 | 70.35 | √ |
| **Major** | 21.68 | 29.27 | 0.04 | 4.6 | 70.35 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W112 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 101.87 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **+Y** | 23.1 | 31.18 | 0.06 | 4.85 | 73.88 | √ |
| **-Y** | 23.1 | 31.18 | 0.06 | 4.85 | 73.88 | √ |
| **Major** | 23.1 | 31.18 | 0.06 | 4.85 | 73.88 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W113 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 101.11 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **+Y** | 21.6 | 29.16 | 0.06 | 4.6 | 70.57 | √ |
| **-Y** | 21.6 | 29.16 | 0.06 | 4.6 | 70.57 | √ |
| **Major** | 21.6 | 29.16 | 0.06 | 4.6 | 70.57 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W114 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 33.35 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.85 | **σ:** | 0.12 | **fvk:** | 0.21 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 2.4 | 2.52 | 0.09 | 0.85 | 16.21 | √ |
| **-X** | 2.4 | 2.52 | 0.09 | 0.85 | 16.21 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.81 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.81 | √ |
| **Major** | 2.4 | 2.52 | 0.09 | 0.85 | 16.21 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W115 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 101.11 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **+Y** | 21.5 | 29.03 | 0.06 | 4.6 | 70.57 | √ |
| **-Y** | 21.5 | 29.03 | 0.06 | 4.6 | 70.57 | √ |
| **Major** | 21.5 | 29.03 | 0.06 | 4.6 | 70.57 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W116 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 170.5 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 6.65 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 66.16 | 69.47 | 0.06 | 6.65 | 107.07 | √ |
| **-X** | 66.16 | 69.47 | 0.06 | 6.65 | 107.07 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.22 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.22 | √ |
| **Major** | 66.16 | 69.47 | 0.06 | 6.65 | 107.07 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W117 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 100.14 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **+Y** | 21.42 | 28.92 | 0.06 | 4.6 | 70.35 | √ |
| **-Y** | 21.42 | 28.92 | 0.06 | 4.6 | 70.35 | √ |
| **Major** | 21.42 | 28.92 | 0.06 | 4.6 | 70.35 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W118 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 101.81 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **+Y** | 22.82 | 30.81 | 0.06 | 4.85 | 73.86 | √ |
| **-Y** | 22.82 | 30.81 | 0.06 | 4.85 | 73.86 | √ |
| **Major** | 22.82 | 30.81 | 0.06 | 4.85 | 73.86 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W119 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 99.95 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **+Y** | 21.19 | 28.6 | 0.06 | 4.6 | 70.31 | √ |
| **-Y** | 21.19 | 28.6 | 0.06 | 4.6 | 70.31 | √ |
| **Major** | 21.19 | 28.6 | 0.06 | 4.6 | 70.31 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W120 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 68.47 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.5 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 17.34 | 18.2 | 0.11 | 2.5 | 41.02 | √ |
| **-X** | 17.34 | 18.2 | 0.11 | 2.5 | 41.02 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.28 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.28 | √ |
| **Major** | 17.34 | 18.2 | 0.11 | 2.5 | 41.02 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W121 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 100.14 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.06 | √ |
| **+Y** | 21.27 | 28.71 | 0.06 | 4.6 | 70.35 | √ |
| **-Y** | 21.27 | 28.71 | 0.06 | 4.6 | 70.35 | √ |
| **Major** | 21.27 | 28.71 | 0.06 | 4.6 | 70.35 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W122 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 36.96 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 1.1 | **σ:** | 0.1 | **fvk:** | 0.2 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 4.25 | 4.47 | 0.11 | 1.1 | 19.59 | √ |
| **-X** | 4.25 | 4.47 | 0.11 | 1.1 | 19.59 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.56 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.56 | √ |
| **Major** | 4.25 | 4.47 | 0.11 | 1.1 | 19.59 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W123 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 157.43 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.6 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.07 | √ |
| **+Y** | 21.11 | 28.5 | 0.04 | 4.6 | 70.52 | √ |
| **-Y** | 21.11 | 28.5 | 0.04 | 4.6 | 70.52 | √ |
| **Major** | 21.11 | 28.5 | 0.04 | 4.6 | 70.52 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W124 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 159.77 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.05 | √ |
| **+Y** | 22.49 | 30.36 | 0.04 | 4.85 | 74.08 | √ |
| **-Y** | 22.49 | 30.36 | 0.04 | 4.85 | 74.08 | √ |
| **Major** | 22.49 | 30.36 | 0.04 | 4.85 | 74.08 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W125 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 107.6 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 4.85 | **σ:** | 0.04 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.2 | 3.1 | √ |
| **-X** | 0 | 0 | 0 | 0.2 | 3.1 | √ |
| **+Y** | 22.57 | 30.47 | 0.06 | 4.85 | 75.16 | √ |
| **-Y** | 22.57 | 30.47 | 0.06 | 4.85 | 75.16 | √ |
| **Major** | 22.57 | 30.47 | 0.06 | 4.85 | 75.16 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W126 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 65.97 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.75 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 11.37 | 15.35 | 0.13 | 1.75 | 44.08 | √ |
| **-X** | 11.37 | 15.35 | 0.13 | 1.75 | 44.08 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.81 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.81 | √ |
| **Major** | 11.37 | 15.35 | 0.13 | 1.75 | 44.08 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W127 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 97.78 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.5 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 21 | 28.36 | 0.12 | 2.5 | 63.65 | √ |
| **-X** | 21 | 28.36 | 0.12 | 2.5 | 63.65 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.91 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.91 | √ |
| **Major** | 21 | 28.36 | 0.12 | 2.5 | 63.65 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W128 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 84.52 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **-X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **Major** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W129 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 98.05 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.5 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 20.96 | 28.3 | 0.12 | 2.5 | 63.7 | √ |
| **-X** | 20.96 | 28.3 | 0.12 | 2.5 | 63.7 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.92 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.92 | √ |
| **Major** | 20.96 | 28.3 | 0.12 | 2.5 | 63.7 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W130 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 76.13 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.95 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 13.85 | 18.7 | 0.13 | 1.95 | 49.61 | √ |
| **-X** | 13.85 | 18.7 | 0.13 | 1.95 | 49.61 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.9 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.9 | √ |
| **Major** | 13.85 | 18.7 | 0.13 | 1.95 | 49.61 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W131 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 16.68 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 0.3 | **σ:** | 0.07 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.13 | 0.17 | 0.03 | 0.3 | 8.78 | √ |
| **-X** | 0.13 | 0.17 | 0.03 | 0.3 | 8.78 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 10.18 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 10.18 | √ |
| **Major** | 0.13 | 0.17 | 0.03 | 0.3 | 8.78 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W132 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 16.62 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 0.3 | **σ:** | 0.07 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.12 | 0.17 | 0.03 | 0.3 | 8.74 | √ |
| **-X** | 0.12 | 0.17 | 0.03 | 0.3 | 8.74 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 10.19 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 10.19 | √ |
| **Major** | 0.12 | 0.17 | 0.03 | 0.3 | 8.74 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W133 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 79.55 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.05 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 15.11 | 20.39 | 0.13 | 2.05 | 52.02 | √ |
| **-X** | 15.11 | 20.39 | 0.13 | 2.05 | 52.02 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.89 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.89 | √ |
| **Major** | 15.11 | 20.39 | 0.13 | 2.05 | 52.02 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W134 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 84.52 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **-X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **Major** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W135 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 84.52 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **-X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **Major** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W136 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 84.52 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **-X** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **Major** | 16.41 | 22.15 | 0.12 | 2.15 | 54.83 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W137 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 80.48 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.1 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 15.77 | 21.29 | 0.13 | 2.1 | 53.09 | √ |
| **-X** | 15.77 | 21.29 | 0.13 | 2.1 | 53.09 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.85 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.85 | √ |
| **Major** | 15.77 | 21.29 | 0.13 | 2.1 | 53.09 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W138 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 56.07 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.35 | **σ:** | 0.03 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 8.05 | 10.86 | 0.14 | 1.35 | 35.05 | √ |
| **-X** | 8.05 | 10.86 | 0.14 | 1.35 | 35.05 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.11 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.11 | √ |
| **Major** | 8.05 | 10.86 | 0.14 | 1.35 | 35.05 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W139 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 110.72 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.6 | **σ:** | 0.03 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 22.27 | 30.07 | 0.1 | 2.6 | 68.22 | √ |
| **-X** | 22.27 | 30.07 | 0.1 | 2.6 | 68.22 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.18 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.18 | √ |
| **Major** | 22.27 | 30.07 | 0.1 | 2.6 | 68.22 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W140 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 88.76 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.2 | **σ:** | 0.03 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 17.06 | 23.03 | 0.12 | 2.2 | 56.62 | √ |
| **-X** | 17.06 | 23.03 | 0.12 | 2.2 | 56.62 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.01 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.01 | √ |
| **Major** | 17.06 | 23.03 | 0.12 | 2.2 | 56.62 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W141 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 12.85 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.4 | **σ:** | 0.11 | **fvk:** | 0.2 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0.4 | 0.42 | 0.08 | 0.4 | 7.32 | √ |
| **-X** | 0.4 | 0.42 | 0.08 | 0.4 | 7.32 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.66 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.66 | √ |
| **Major** | 0.4 | 0.42 | 0.08 | 0.4 | 7.32 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W142 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 85.29 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.44 | 22.2 | 0.12 | 2.15 | 54.76 | √ |
| **-X** | 16.44 | 22.2 | 0.12 | 2.15 | 54.76 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.91 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.91 | √ |
| **Major** | 16.44 | 22.2 | 0.12 | 2.15 | 54.76 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W143 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 101.57 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.48 | **σ:** | 0.03 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 20.68 | 27.91 | 0.11 | 2.48 | 64.08 | √ |
| **-X** | 20.68 | 27.91 | 0.11 | 2.48 | 64.08 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.06 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.06 | √ |
| **Major** | 20.68 | 27.91 | 0.11 | 2.48 | 64.08 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W144 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 84.52 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.44 | 22.2 | 0.12 | 2.15 | 54.83 | √ |
| **-X** | 16.44 | 22.2 | 0.12 | 2.15 | 54.83 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.93 | √ |
| **Major** | 16.44 | 22.2 | 0.12 | 2.15 | 54.83 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W145 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 78.53 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.44 | 22.2 | 0.13 | 2.15 | 53.48 | √ |
| **-X** | 16.44 | 22.2 | 0.13 | 2.15 | 53.48 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.71 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.71 | √ |
| **Major** | 16.44 | 22.2 | 0.13 | 2.15 | 53.48 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W146 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 73.8 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.15 | **σ:** | 0.01 | **fvk:** | 0.15 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 16.44 | 22.2 | 0.14 | 2.15 | 52.17 | √ |
| **-X** | 16.44 | 22.2 | 0.14 | 2.15 | 52.17 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.49 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.49 | √ |
| **Major** | 16.44 | 22.2 | 0.14 | 2.15 | 52.17 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W147 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 71.83 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.95 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 13.88 | 18.74 | 0.13 | 1.95 | 48.65 | √ |
| **-X** | 13.88 | 18.74 | 0.13 | 1.95 | 48.65 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 8.73 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 8.73 | √ |
| **Major** | 13.88 | 18.74 | 0.13 | 1.95 | 48.65 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W148 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 51.84 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 1.35 | **σ:** | 0.03 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 8.1 | 10.94 | 0.16 | 1.35 | 35.12 | √ |
| **-X** | 8.1 | 10.94 | 0.16 | 1.35 | 35.12 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.11 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.11 | √ |
| **Major** | 8.1 | 10.94 | 0.16 | 1.35 | 35.12 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W149 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 110.72 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.6 | **σ:** | 0.03 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 22.32 | 30.13 | 0.1 | 2.6 | 68.22 | √ |
| **-X** | 22.32 | 30.13 | 0.1 | 2.6 | 68.22 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.18 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.18 | √ |
| **Major** | 22.32 | 30.13 | 0.1 | 2.6 | 68.22 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W150 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 97.32 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.35 | **σ:** | 0.03 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 19.04 | 25.71 | 0.11 | 2.35 | 60.8 | √ |
| **-X** | 19.04 | 25.71 | 0.11 | 2.35 | 60.8 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.05 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.05 | √ |
| **Major** | 19.04 | 25.71 | 0.11 | 2.35 | 60.8 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W151 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 0 | **P:** | 104.38 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 2.52 | **σ:** | 0.03 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 21.33 | 28.8 | 0.11 | 2.52 | 65.3 | √ |
| **-X** | 21.33 | 28.8 | 0.11 | 2.52 | 65.3 | √ |
| **+Y** | 0 | 0 | 0 | 0.35 | 9.05 | √ |
| **-Y** | 0 | 0 | 0 | 0.35 | 9.05 | √ |
| **Major** | 21.33 | 28.8 | 0.11 | 2.52 | 65.3 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W152 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 73.63 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.7 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 19.24 | 20.2 | 0.1 | 2.7 | 44.23 | √ |
| **-X** | 19.24 | 20.2 | 0.1 | 2.7 | 44.23 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.28 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.28 | √ |
| **Major** | 19.24 | 20.2 | 0.1 | 2.7 | 44.23 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W153 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 30.2 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.8 | **σ:** | 0.12 | **fvk:** | 0.21 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 2.08 | 2.18 | 0.09 | 0.8 | 14.99 | √ |
| **-X** | 2.08 | 2.18 | 0.09 | 0.8 | 14.99 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.75 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.75 | √ |
| **Major** | 2.08 | 2.18 | 0.09 | 0.8 | 14.99 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W154 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 56.74 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.35 | **σ:** | 0.05 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 19.07 | 20.02 | 0.15 | 2.35 | 37.17 | √ |
| **-X** | 19.07 | 20.02 | 0.15 | 2.35 | 37.17 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.16 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.16 | √ |
| **Major** | 19.07 | 20.02 | 0.15 | 2.35 | 37.17 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W155 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 71.85 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 18.76 | 19.7 | 0.1 | 2.65 | 43.32 | √ |
| **-X** | 18.76 | 19.7 | 0.1 | 2.65 | 43.32 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.27 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.27 | √ |
| **Major** | 18.76 | 19.7 | 0.1 | 2.65 | 43.32 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W156 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 71.85 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.65 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 18.76 | 19.7 | 0.1 | 2.65 | 43.32 | √ |
| **-X** | 18.76 | 19.7 | 0.1 | 2.65 | 43.32 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.27 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.27 | √ |
| **Major** | 18.76 | 19.7 | 0.1 | 2.65 | 43.32 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W157 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 195.65 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 8.15 | **σ:** | 0.05 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 68.27 | 71.69 | 0.04 | 8.15 | 127.53 | √ |
| **-X** | 68.27 | 71.69 | 0.04 | 8.15 | 127.53 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.13 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.13 | √ |
| **Major** | 68.27 | 71.69 | 0.04 | 8.15 | 127.53 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W158 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 55.25 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.25 | **σ:** | 0.05 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 17.92 | 18.82 | 0.15 | 2.25 | 35.49 | √ |
| **-X** | 17.92 | 18.82 | 0.15 | 2.25 | 35.49 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.15 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.15 | √ |
| **Major** | 17.92 | 18.82 | 0.15 | 2.25 | 35.49 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W159 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 28.38 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 0.8 | **σ:** | 0.11 | **fvk:** | 0.2 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 2.08 | 2.18 | 0.1 | 0.8 | 14.58 | √ |
| **-X** | 2.08 | 2.18 | 0.1 | 0.8 | 14.58 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.65 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.65 | √ |
| **Major** | 2.08 | 2.18 | 0.1 | 0.8 | 14.58 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall** | W160 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 73.48 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 2.7 | **σ:** | 0.06 | **fvk:** | 0.18 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 19.25 | 20.21 | 0.1 | 2.7 | 44.2 | √ |
| **-X** | 19.25 | 20.21 | 0.1 | 2.7 | 44.2 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.27 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.27 | √ |
| **Major** | 19.25 | 20.21 | 0.1 | 2.7 | 44.2 | √ |
| | | | | | Result: | √ |

# 1. STORY WALL SHEAR CAPACITY CONTROLS

**fvk=(fvko+μ*σ)*Knowladge Coeff.** **Vrd=fvko*Wall Area/ym**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W161 | **Width:** | 0.2 | **μ:** | 0.5 | **Hw:** | 2.1 m |
| **Angle:** | 0 | **P:** | 190.02 kN | **fvko:** | 0.15 | **Ho:** | 1.05 m |
| **Length:** | 7.9 | **σ:** | 0.05 | **fvk:** | 0.17 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 66.11 | 69.42 | 0.05 | 7.9 | 123.7 | √ |
| **-X** | 66.11 | 69.42 | 0.05 | 7.9 | 123.7 | √ |
| **+Y** | 0 | 0 | 0 | 0.2 | 3.13 | √ |
| **-Y** | 0 | 0 | 0 | 0.2 | 3.13 | √ |
| **Major** | 66.11 | 69.42 | 0.05 | 7.9 | 123.7 | √ |
| | | | | | Result: | √ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Wall Name:** | W162 | **Width:** | 0.35 | **μ:** | 0.5 | **Hw:** | 2.7 m |
| **Angle:** | 90 | **P:** | 179.39 kN | **fvko:** | 0.15 | **Ho:** | 1.35 m |
| **Length:** | 5.1 | **σ:** | 0.02 | **fvk:** | 0.16 | Wall Rigidity Option: | Fixed |
| Shear Formula: fvk=(fvko+0.5σd)*bdk | | | | fvk,lim=N/A | | | |

| Earthquake Direction | Ved (t) | Med (kNm) | e/l | lc (m) | Vrd | Sufficiency Status |
|---|---|---|---|---|---|---|
| **+X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **-X** | 0 | 0 | 0 | 0.35 | 8.68 | √ |
| **+Y** | 43.23 | 58.36 | 0.06 | 5.1 | 126.54 | √ |
| **-Y** | 43.23 | 58.36 | 0.06 | 5.1 | 126.54 | √ |
| **Major** | 43.23 | 58.36 | 0.06 | 5.1 | 126.54 | √ |
| | | | | | Result: | √ |

SYMBOLS AND THEIR DESCRIPTIONS

Wall Angle: Wall`s horizontal angle (degree)

Nd:Vertical load on the wall (critical sections are calculated in the top of the wall where vertical load is less beacause of shear safety)

σd:Vertical Stress on the wall (critical sections are calculated in the top of the wall where vertical load is less beacause of shear safety)

μ:Wall Friction Coefficient

fvkd: Wall Cracking Safety Stress

fvk:Wall Shear Safety Stress

Vr:Wall Shear Capacity (ton)

P:Vertical Load On The Wall kN (for earthquake load combinations and actions) :

Hw:Net Height of the wall (Storey Height-Horizontal Bond Beam Height+Upper Elevation-Bottom Elevation):

Design Height of the Wall for Med (0.5*Hw for fixed wall and 1*Hw for cantilever wall):

Ved:Design value of a shear load:

Md:design bending moment at the bottom of a core:

e/l: Eccentricity at the bottom of a wall from Eartquke / Length of a wall (between openings); :

lc:length of the compressed part of a wall:

VRd: design value of the shear resistance:

# BASEMENT STORY

**Storey Information:**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Xg:** | 20.13 | m | **Qi:** | 679.87 | t | **Mb(+X):** | 63.85 | tm | **Mb(+Y):** | -1144.38 | tm |
| **Xc:** | 18.45 | m | **Yg:** | 5.96 | m | **Mb(-X):** | 63.85 | tm | **Mb(-Y):** | -1144.38 | tm |
| **Lx:** | 41.75 | m | **Yc:** | 6.05 | m | | | | | | |
| **ex:** | -1.68 | m | **Ly:** | 11.6 | m | | | | | | |
| | | | **ey:** | 0.09 | m | | | | | | |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

**Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** Was Not Added

## BASEMENT STORY VERTICAL BOND BEAM SHEAR FORCES

| Vertical Bond Beam | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vdx(t) | Vdy(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DHB01 | 2.81 | 1.64 | -0.01 | 0.22 | -0.01 | 0.22 | 2.81 | 1.43 | 2.81 | 1.43 | 2.81 | 1.43 |
| DHB02 | 2.81 | 1.64 | -0.01 | 0.17 | -0.01 | 0.17 | 2.81 | 1.48 | 2.81 | 1.48 | 2.81 | 1.48 |
| DHB03 | 2.81 | 1.64 | -0.01 | 0.12 | -0.01 | 0.12 | 2.81 | 1.52 | 2.81 | 1.52 | 2.81 | 1.52 |
| DHB04 | 2.81 | 1.64 | -0.01 | 0.08 | -0.01 | 0.08 | 2.81 | 1.56 | 2.81 | 1.56 | 2.81 | 1.56 |
| DHB05 | 2.81 | 1.64 | -0.01 | 0.03 | -0.01 | 0.03 | 2.81 | 1.62 | 2.81 | 1.62 | 2.81 | 1.62 |
| DHB06 | 2.81 | 1.64 | -0.01 | -0.01 | -0.01 | -0.01 | 2.81 | 1.66 | 2.81 | 1.66 | 2.81 | 1.66 |
| DHB07 | 2.81 | 1.64 | -0.01 | -0.05 | -0.01 | -0.05 | 2.81 | 1.7 | 2.81 | 1.7 | 2.81 | 1.7 |
| DHB08 | 2.81 | 1.64 | -0.01 | -0.1 | -0.01 | -0.1 | 2.81 | 1.74 | 2.81 | 1.74 | 2.81 | 1.74 |
| DHB09 | 2.81 | 1.64 | -0.01 | -0.18 | -0.01 | -0.18 | 2.81 | 1.82 | 2.81 | 1.82 | 2.81 | 1.82 |
| DHB10 | 2.81 | 1.64 | -0.01 | -0.27 | -0.01 | -0.27 | 2.81 | 1.91 | 2.81 | 1.91 | 2.81 | 1.91 |
| DHB11 | 2.81 | 1.64 | 0 | 0.22 | 0 | 0.22 | 2.81 | 1.43 | 2.81 | 1.43 | 2.81 | 1.43 |
| DHB12 | 2.81 | 1.64 | 0 | 0.17 | 0 | 0.17 | 2.81 | 1.48 | 2.81 | 1.48 | 2.81 | 1.48 |
| DHB13 | 2.81 | 1.64 | 0 | 0.12 | 0 | 0.12 | 2.81 | 1.52 | 2.81 | 1.52 | 2.81 | 1.52 |
| DHB14 | 2.81 | 1.64 | 0 | 0.08 | 0 | 0.08 | 2.81 | 1.56 | 2.81 | 1.56 | 2.81 | 1.56 |
| DHB15 | 2.81 | 1.64 | 0 | 0.03 | 0 | 0.03 | 2.81 | 1.62 | 2.81 | 1.62 | 2.81 | 1.62 |
| DHB16 | 2.81 | 1.64 | 0 | -0.01 | 0 | -0.01 | 2.81 | 1.66 | 2.81 | 1.66 | 2.81 | 1.66 |
| DHB17 | 2.81 | 1.64 | 0 | -0.05 | 0 | -0.05 | 2.81 | 1.7 | 2.81 | 1.7 | 2.81 | 1.7 |
| DHB18 | 2.81 | 1.64 | 0 | -0.1 | 0 | -0.1 | 2.81 | 1.74 | 2.81 | 1.74 | 2.81 | 1.74 |
| DHB19 | 2.81 | 1.64 | 0 | -0.18 | 0 | -0.18 | 2.81 | 1.82 | 2.81 | 1.82 | 2.81 | 1.82 |
| DHB20 | 2.81 | 1.64 | 0 | -0.22 | 0 | -0.22 | 2.81 | 1.86 | 2.81 | 1.86 | 2.81 | 1.86 |
| DHB21 | 2.81 | 1.64 | 0 | -0.27 | 0 | -0.27 | 2.81 | 1.91 | 2.81 | 1.91 | 2.81 | 1.91 |
| DHB22 | 2.81 | 1.64 | 0 | 0.22 | 0 | 0.22 | 2.81 | 1.43 | 2.81 | 1.43 | 2.81 | 1.43 |
| DHB23 | 2.81 | 1.64 | 0 | 0.17 | 0 | 0.17 | 2.81 | 1.48 | 2.81 | 1.48 | 2.81 | 1.48 |
| DHB24 | 2.81 | 1.64 | 0 | 0.17 | 0 | 0.17 | 2.81 | 1.48 | 2.81 | 1.48 | 2.81 | 1.48 |
| DHB25 | 2.81 | 1.64 | 0 | 0.12 | 0 | 0.12 | 2.81 | 1.52 | 2.81 | 1.52 | 2.81 | 1.52 |
| DHB26 | 2.81 | 1.64 | 0 | 0.12 | 0 | 0.12 | 2.81 | 1.52 | 2.81 | 1.52 | 2.81 | 1.52 |
| DHB27 | 2.81 | 1.64 | 0 | 0.08 | 0 | 0.08 | 2.81 | 1.56 | 2.81 | 1.56 | 2.81 | 1.56 |
| DHB28 | 2.81 | 1.64 | 0 | 0.08 | 0 | 0.08 | 2.81 | 1.56 | 2.81 | 1.56 | 2.81 | 1.56 |
| DHB29 | 2.81 | 1.64 | 0 | 0.03 | 0 | 0.03 | 2.81 | 1.62 | 2.81 | 1.62 | 2.81 | 1.62 |
| DHB30 | 2.81 | 1.64 | 0 | 0.03 | 0 | 0.03 | 2.81 | 1.62 | 2.81 | 1.62 | 2.81 | 1.62 |
| DHB31 | 2.81 | 1.64 | 0 | -0.01 | 0 | -0.01 | 2.81 | 1.66 | 2.81 | 1.66 | 2.81 | 1.66 |

# BASEMENT STORY VERTICAL BOND BEAM SHEAR FORCES

| Vertical Bond Beam Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vdx(t) | Vdy(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DHB32 | 2.81 | 1.64 | 0 | -0.01 | 0 | -0.01 | 2.81 | 1.66 | 2.81 | 1.66 | 2.81 | 1.66 |
| DHB33 | 2.81 | 1.64 | 0 | -0.05 | 0 | -0.05 | 2.81 | 1.7 | 2.81 | 1.7 | 2.81 | 1.7 |
| DHB34 | 2.81 | 1.64 | 0 | -0.05 | 0 | -0.05 | 2.81 | 1.7 | 2.81 | 1.7 | 2.81 | 1.7 |
| DHB35 | 2.81 | 1.64 | 0 | -0.1 | 0 | -0.1 | 2.81 | 1.74 | 2.81 | 1.74 | 2.81 | 1.74 |
| DHB36 | 2.81 | 1.64 | 0.01 | -0.27 | 0.01 | -0.27 | 2.8 | 1.91 | 2.8 | 1.91 | 2.8 | 1.91 |
| DHB37 | 2.81 | 1.64 | 0 | -0.18 | 0 | -0.18 | 2.81 | 1.82 | 2.81 | 1.82 | 2.81 | 1.82 |
| DHB38 | 2.81 | 1.64 | 0 | -0.18 | 0 | -0.18 | 2.81 | 1.82 | 2.81 | 1.82 | 2.81 | 1.82 |
| DHB39 | 2.81 | 1.64 | 0 | -0.22 | 0 | -0.22 | 2.81 | 1.86 | 2.81 | 1.86 | 2.81 | 1.86 |
| DHB40 | 2.81 | 1.64 | 0 | -0.22 | 0 | -0.22 | 2.81 | 1.86 | 2.81 | 1.86 | 2.81 | 1.86 |
| DHB41 | 2.81 | 1.64 | 0 | -0.27 | 0 | -0.27 | 2.81 | 1.91 | 2.81 | 1.91 | 2.81 | 1.91 |
| DHB42 | 2.81 | 1.64 | 0.01 | -0.18 | 0.01 | -0.18 | 2.8 | 1.82 | 2.8 | 1.82 | 2.8 | 1.82 |
| DHB43 | 2.81 | 1.64 | 0.01 | 0.22 | 0.01 | 0.22 | 2.8 | 1.43 | 2.8 | 1.43 | 2.8 | 1.43 |
| DHB44 | 2.81 | 1.64 | 0.01 | 0.17 | 0.01 | 0.17 | 2.8 | 1.48 | 2.8 | 1.48 | 2.8 | 1.48 |
| DHB45 | 2.81 | 1.64 | 0.01 | 0.08 | 0.01 | 0.08 | 2.8 | 1.56 | 2.8 | 1.56 | 2.8 | 1.56 |
| DHB46 | 2.81 | 1.64 | 0.01 | 0.12 | 0.01 | 0.12 | 2.8 | 1.52 | 2.8 | 1.52 | 2.8 | 1.52 |
| DHB47 | 2.81 | 1.64 | 0.01 | 0.12 | 0.01 | 0.12 | 2.8 | 1.52 | 2.8 | 1.52 | 2.8 | 1.52 |
| DHB48 | 2.81 | 1.64 | 0.01 | 0.03 | 0.01 | 0.03 | 2.8 | 1.62 | 2.8 | 1.62 | 2.8 | 1.62 |
| DHB49 | 2.81 | 1.64 | 0.01 | 0.03 | 0.01 | 0.03 | 2.8 | 1.62 | 2.8 | 1.62 | 2.8 | 1.62 |
| DHB50 | 2.81 | 1.64 | 0.01 | -0.01 | 0.01 | -0.01 | 2.8 | 1.66 | 2.8 | 1.66 | 2.8 | 1.66 |
| DHB51 | 2.81 | 1.64 | 0.01 | -0.01 | 0.01 | -0.01 | 2.8 | 1.66 | 2.8 | 1.66 | 2.8 | 1.66 |
| DHB52 | 2.81 | 1.64 | 0.01 | -0.05 | 0.01 | -0.05 | 2.8 | 1.7 | 2.8 | 1.7 | 2.8 | 1.7 |
| DHB53 | 2.81 | 1.64 | 0.01 | -0.05 | 0.01 | -0.05 | 2.8 | 1.7 | 2.8 | 1.7 | 2.8 | 1.7 |
| DHB54 | 2.81 | 1.64 | 0.01 | -0.1 | 0.01 | -0.1 | 2.8 | 1.74 | 2.8 | 1.74 | 2.8 | 1.74 |
| DHB55 | 2.81 | 1.64 | -0.01 | -0.22 | -0.01 | -0.22 | 2.81 | 1.86 | 2.81 | 1.86 | 2.81 | 1.86 |
| DHB56 | 2.81 | 1.64 | 0.01 | -0.22 | 0.01 | -0.22 | 2.8 | 1.86 | 2.8 | 1.86 | 2.8 | 1.86 |
| DHB57 | 2.81 | 1.64 | 0.01 | -0.14 | 0.01 | -0.14 | 2.8 | 1.78 | 2.8 | 1.78 | 2.8 | 1.78 |
| DHB58 | 2.81 | 1.64 | -0.01 | -0.14 | -0.01 | -0.14 | 2.81 | 1.78 | 2.81 | 1.78 | 2.81 | 1.78 |
| DHB59 | 2.81 | 1.64 | 0 | -0.14 | 0 | -0.14 | 2.81 | 1.78 | 2.81 | 1.78 | 2.81 | 1.78 |
| DHB60 | 2.81 | 1.64 | 0 | -0.14 | 0 | -0.14 | 2.81 | 1.78 | 2.81 | 1.78 | 2.81 | 1.78 |

# GROUND STORY

**Storey Information:**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Xg:** | 20.44 | m | **Qi:** | 513.36 | t | **Mb(+X):** | -37.22 | tm | **Mb(+Y):** | -234.14 | tm |
| **Xc:** | 19.99 | m | **Yg:** | 5.84 | m | **Mb(-X):** | -37.22 | tm | **Mb(-Y):** | -234.14 | tm |
| **Lx:** | 41.8 | m | **Yc:** | 5.77 | m | | | | | | |
| **ex:** | -0.46 | m | **Ly:** | 11.75 | m | | | | | | |
| | | | **ey:** | -0.07 | m | | | | | | |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

**Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** Was Not Added

# GROUND STORY VERTICAL BOND BEAM SHEAR FORCES

| Vertical Bond Beam Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vdx(t) | Vdy(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DHZ01 | 0.47 | 0.17 | 0 | 0.01 | 0 | 0.01 | 0.47 | 0.16 | 0.47 | 0.16 | 0.47 | 0.16 |
| DHZ02 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ03 | 0.47 | 0.17 | 0 | 0.01 | 0 | 0.01 | 0.47 | 0.16 | 0.47 | 0.16 | 0.47 | 0.16 |
| DHZ04 | 1.26 | 0.06 | 0 | 0 | 0 | 0 | 1.26 | 0.05 | 1.26 | 0.05 | 1.26 | 0.05 |
| DHZ05 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ06 | 0.27 | 0.03 | 0 | 0 | 0 | 0 | 0.27 | 0.03 | 0.27 | 0.03 | 0.27 | 0.03 |
| DHZ07 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ08 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ09 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| DHZ10 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ11 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ12 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ13 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ14 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ15 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ16 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ17 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ18 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ19 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ20 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ21 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ22 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ23 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ24 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ25 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ26 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| DHZ27 | 0.15 | 0.46 | 0 | 0.01 | 0 | 0.01 | 0.15 | 0.45 | 0.15 | 0.45 | 0.15 | 0.45 |
| DHZ28 | 0.15 | 0.46 | 0 | 0.01 | 0 | 0.01 | 0.15 | 0.45 | 0.15 | 0.45 | 0.15 | 0.45 |
| DHZ29 | 0.15 | 0.46 | 0 | 0 | 0 | 0 | 0.15 | 0.46 | 0.15 | 0.46 | 0.15 | 0.46 |
| DHZ30 | 0.15 | 0.46 | 0 | 0 | 0 | 0 | 0.15 | 0.46 | 0.15 | 0.46 | 0.15 | 0.46 |
| DHZ31 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ32 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ33 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ34 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ35 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |
| DHZ36 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ37 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ38 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ39 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ40 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ41 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ42 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ43 | 0.47 | 0.17 | 0 | -0.01 | 0 | -0.01 | 0.47 | 0.18 | 0.47 | 0.18 | 0.47 | 0.18 |

## GROUND STORY VERTICAL BOND BEAM SHEAR FORCES

| Vertical Bond Beam Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vdx(t) | Vdy(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DHZ44 | 0.47 | 0.17 | 0 | -0.01 | 0 | -0.01 | 0.47 | 0.18 | 0.47 | 0.18 | 0.47 | 0.18 |
| DHZ45 | 0.27 | 0.03 | 0 | 0 | 0 | 0 | 0.27 | 0.03 | 0.27 | 0.03 | 0.27 | 0.03 |
| DHZ46 | 0.27 | 0.03 | 0 | 0 | 0 | 0 | 0.27 | 0.03 | 0.27 | 0.03 | 0.27 | 0.03 |
| DHZ47 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ48 | 0.05 | 0.02 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 |
| DHZ49 | 0.09 | 0.1 | 0 | 0 | 0 | 0 | 0.09 | 0.1 | 0.09 | 0.1 | 0.09 | 0.1 |

## 1. STORY

**Storey Information:**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Xg:** | 20.33 | m | **Qi:** | 283.2 | t | **Mb(+X):** | -19.88 | tm | **Mb(+Y):** | 80.76 | tm |
| **Xc:** | 20.61 | m | **Yg:** | 5.7 | m | **Mb(-X):** | -19.88 | tm | **Mb(-Y):** | 80.76 | tm |
| **Lx:** | 41.8 | m | **Yc:** | 5.63 | m | | | | | | |
| **ex:** | 0.29 | m | **Ly:** | 11.75 | m | | | | | | |
| | | | **ey:** | -0.07 | m | | | | | | |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

| | |
|---|---|
| **Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** | Was Not Added |

## 1. STORY VERTICAL BOND BEAM SHEAR FORCES

| Vertical Bond Beam Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vdx(t) | Vdy(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DH101 | 0.27 | 0.17 | 0 | 0 | 0 | 0 | 0.27 | 0.18 | 0.27 | 0.18 | 0.27 | 0.18 |
| DH102 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH103 | 0.27 | 0.17 | 0 | 0 | 0 | 0 | 0.27 | 0.18 | 0.27 | 0.18 | 0.27 | 0.18 |
| DH104 | 0.72 | 0.06 | 0 | 0 | 0 | 0 | 0.72 | 0.06 | 0.72 | 0.06 | 0.72 | 0.06 |
| DH105 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH106 | 0.15 | 0.03 | 0 | 0 | 0 | 0 | 0.15 | 0.03 | 0.15 | 0.03 | 0.15 | 0.03 |
| DH107 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH108 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH109 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH110 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH111 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH112 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH113 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH114 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH115 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH116 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH117 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH118 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH119 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH120 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH121 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |

# 1. STORY VERTICAL BOND BEAM SHEAR FORCES

| Vertical Bond Beam Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vdx(t) | Vdy(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DH122 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH123 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH124 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH125 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH126 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH127 | 0.09 | 0.47 | 0 | 0 | 0 | 0 | 0.09 | 0.47 | 0.09 | 0.47 | 0.09 | 0.47 |
| DH128 | 0.09 | 0.47 | 0 | 0 | 0 | 0 | 0.09 | 0.47 | 0.09 | 0.47 | 0.09 | 0.47 |
| DH129 | 0.09 | 0.47 | 0 | 0 | 0 | 0 | 0.09 | 0.47 | 0.09 | 0.47 | 0.09 | 0.47 |
| DH130 | 0.09 | 0.47 | 0 | 0 | 0 | 0 | 0.09 | 0.47 | 0.09 | 0.47 | 0.09 | 0.47 |
| DH131 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH132 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH133 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH134 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH135 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH136 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH137 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH138 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH139 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH140 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH141 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH142 | 0.03 | 0.02 | 0 | 0 | 0 | 0 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| DH143 | 0.27 | 0.17 | 0 | 0 | 0 | 0 | 0.27 | 0.17 | 0.27 | 0.17 | 0.27 | 0.17 |
| DH144 | 0.27 | 0.17 | 0 | 0 | 0 | 0 | 0.27 | 0.17 | 0.27 | 0.17 | 0.27 | 0.17 |
| DH145 | 0.15 | 0.03 | 0 | 0 | 0 | 0 | 0.15 | 0.03 | 0.15 | 0.03 | 0.15 | 0.03 |
| DH146 | 0.15 | 0.03 | 0 | 0 | 0 | 0 | 0.15 | 0.03 | 0.15 | 0.03 | 0.15 | 0.03 |
| DH147 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |
| DH148 | 0.05 | 0.1 | 0 | 0 | 0 | 0 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.1 |

# BASEMENT STORY

## BASEMENT STORY VERTICAL BOND BEAM STRESS CONTROL

| Vertical Bond Beam ID | B/H (cm) | Vdmajor(t) | Vdminor(t) | Vmax-major(t) | Vmak-minor(t) | Stirrup | Vrmajor(t) | Vrminor(t) | Nd/Ncr | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| DHB01 | 50/60 | 2.81 | 1.43 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.22 | √ |
| DHB02 | 50/60 | 2.81 | 1.48 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB03 | 50/60 | 2.81 | 1.52 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB04 | 50/60 | 2.81 | 1.56 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB05 | 50/60 | 2.81 | 1.62 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB06 | 50/60 | 2.81 | 1.66 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB07 | 50/60 | 2.81 | 1.7 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %4.91 | √ |
| DHB08 | 50/60 | 2.81 | 1.74 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB09 | 50/60 | 2.81 | 1.82 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB10 | 50/60 | 2.81 | 1.91 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.22 | √ |
| DHB11 | 50/60 | 2.81 | 1.43 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.18 | √ |
| DHB12 | 50/60 | 2.81 | 1.48 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.19 | √ |
| DHB13 | 50/60 | 2.81 | 1.52 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.19 | √ |
| DHB14 | 50/60 | 2.81 | 1.56 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %10.29 | √ |
| DHB15 | 50/60 | 2.81 | 1.62 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %10.29 | √ |
| DHB16 | 50/60 | 2.81 | 1.66 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.19 | √ |
| DHB17 | 50/60 | 2.81 | 1.7 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %7.38 | √ |
| DHB18 | 50/60 | 2.81 | 1.74 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.19 | √ |
| DHB19 | 50/60 | 2.81 | 1.82 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %4.14 | √ |
| DHB20 | 50/60 | 2.81 | 1.86 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %6.58 | √ |
| DHB21 | 50/60 | 2.81 | 1.91 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %5.01 | √ |
| DHB22 | 50/60 | 2.81 | 1.43 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB23 | 50/60 | 2.81 | 1.48 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB24 | 50/60 | 2.81 | 1.48 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB25 | 50/60 | 2.81 | 1.52 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB26 | 50/60 | 2.81 | 1.52 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB27 | 50/60 | 2.81 | 1.56 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %7.24 | √ |
| DHB28 | 50/60 | 2.81 | 1.56 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %7.24 | √ |
| DHB29 | 50/60 | 2.81 | 1.62 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %7.22 | √ |
| DHB30 | 50/60 | 2.81 | 1.62 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %7.22 | √ |
| DHB31 | 50/60 | 2.81 | 1.66 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB32 | 50/60 | 2.81 | 1.66 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB33 | 50/60 | 2.81 | 1.7 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.26 | √ |
| DHB34 | 50/60 | 2.81 | 1.7 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.26 | √ |
| DHB35 | 50/60 | 2.81 | 1.74 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB36 | 50/60 | 2.8 | 1.91 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.22 | √ |
| DHB37 | 50/60 | 2.81 | 1.82 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |

# BASEMENT STORY VERTICAL BOND BEAM STRESS CONTROL

| Vertical Bond Beam ID | B/H (cm) | Vdmajor(t) | Vdminor(t) | Vmax-major(t) | Vmak-minor(t) | Stirrup | Vrmajor(t) | Vrminor(t) | Nd/Ncr | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| DHB38 | 50/60 | 2.81 | 1.82 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB39 | 50/60 | 2.81 | 1.86 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB40 | 50/60 | 2.81 | 1.86 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %1.94 | √ |
| DHB41 | 50/60 | 2.81 | 1.91 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB42 | 50/60 | 2.8 | 1.82 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB43 | 50/60 | 2.8 | 1.43 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.22 | √ |
| DHB44 | 50/60 | 2.8 | 1.48 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB45 | 50/60 | 2.8 | 1.56 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %5 | √ |
| DHB46 | 50/60 | 2.8 | 1.52 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.13 | √ |
| DHB47 | 50/60 | 2.8 | 1.52 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.13 | √ |
| DHB48 | 50/60 | 2.8 | 1.62 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.32 | √ |
| DHB49 | 50/60 | 2.8 | 1.62 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.32 | √ |
| DHB50 | 50/60 | 2.8 | 1.66 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.13 | √ |
| DHB51 | 50/60 | 2.8 | 1.66 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.13 | √ |
| DHB52 | 50/60 | 2.8 | 1.7 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.45 | √ |
| DHB53 | 50/60 | 2.8 | 1.7 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %3.45 | √ |
| DHB54 | 50/60 | 2.8 | 1.74 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %8.47 | √ |
| DHB55 | 50/60 | 2.81 | 1.86 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB56 | 50/60 | 2.8 | 1.86 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB57 | 50/60 | 2.8 | 1.78 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.56 | √ |
| DHB58 | 50/60 | 2.81 | 1.78 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %9.88 | √ |
| DHB59 | 50/60 | 2.81 | 1.78 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %9.51 | √ |
| DHB60 | 50/60 | 2.81 | 1.78 | 41.43 | 40.92 | Ø8/20 | 16.27 | 15.18 | %2.19 | √ |

# GROUND STORY

# GROUND STORY VERTICAL BOND BEAM STRESS CONTROL

| Vertical Bond Beam ID | B/H (cm) | Vdmajor(t) | Vdminor(t) | Vmax-major(t) | Vmak-minor(t) | Stirrup | Vrmajor(t) | Vrminor(t) | Nd/Ncr | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| DHZ01 | 35/35 | 0.47 | 0.16 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %3.73 | √ |
| DHZ02 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ03 | 35/35 | 0.47 | 0.16 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %3.73 | √ |
| DHZ04 | 20/60 | 1.26 | 0.05 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %3.73 | √ |
| DHZ05 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DHZ06 | 20/35 | 0.27 | 0.03 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ07 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %18.37 | √ |

# GROUND STORY VERTICAL BOND BEAM STRESS CONTROL

| Vertical Bond Beam ID | B/H (cm) | Vdmajor(t) | Vdminor(t) | Vmax-major(t) | Vmak-minor(t) | Stirrup | Vrmajor(t) | Vrminor(t) | Nd/Ncr | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| DHZ08 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %36.69 | √ |
| DHZ09 | 20/35 | 0.09 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ10 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ11 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ12 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ13 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ14 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %13.78 | √ |
| DHZ15 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ16 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ17 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ18 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ19 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ20 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %29.03 | √ |
| DHZ21 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %15.05 | √ |
| DHZ22 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ23 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %13.99 | √ |
| DHZ24 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %14.18 | √ |
| DHZ25 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ26 | 20/35 | 0.09 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ27 | 20/60 | 0.45 | 0.15 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %11.48 | √ |
| DHZ28 | 20/60 | 0.45 | 0.15 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %17.58 | √ |
| DHZ29 | 20/60 | 0.46 | 0.15 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %11.48 | √ |
| DHZ30 | 20/60 | 0.46 | 0.15 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %17.47 | √ |
| DHZ31 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ32 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ33 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ34 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ35 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ36 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ37 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ38 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %21.31 | √ |
| DHZ39 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %21.31 | √ |
| DHZ40 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %23.53 | √ |
| DHZ41 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ42 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ43 | 35/35 | 0.47 | 0.18 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %3.73 | √ |
| DHZ44 | 35/35 | 0.47 | 0.18 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %3.73 | √ |
| DHZ45 | 20/35 | 0.27 | 0.03 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %14.2 | √ |
| DHZ46 | 20/35 | 0.27 | 0.03 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |
| DHZ47 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |

## GROUND STORY VERTICAL BOND BEAM STRESS CONTROL

| Vertical Bond Beam ID | B/H (cm) | Vdmajor(t) | Vdminor(t) | Vmax-major(t) | Vmak-minor(t) | Stirrup | Vrmajor(t) | Vrminor(t) | Nd/Ncr | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| DHZ48 | 20/20 | 0.05 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %3.73 | √ |
| DHZ49 | 20/35 | 0.1 | 0.09 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %3.73 | √ |

# 1. STORY

## 1. STORY VERTICAL BOND BEAM STRESS CONTROL

| Vertical Bond Beam ID | B/H (cm) | Vdmajor(t) | Vdminor(t) | Vmax-major(t) | Vmak-minor(t) | Stirrup | Vrmajor(t) | Vrminor(t) | Nd/Ncr | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| DH101 | 35/35 | 0.27 | 0.18 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %1.87 | √ |
| DH102 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH103 | 35/35 | 0.27 | 0.18 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %1.87 | √ |
| DH104 | 20/60 | 0.72 | 0.06 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %1.87 | √ |
| DH105 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH106 | 20/35 | 0.15 | 0.03 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH107 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH108 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH109 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH110 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH111 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH112 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH113 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH114 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH115 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH116 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH117 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH118 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH119 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH120 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH121 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH122 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH123 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH124 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH125 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH126 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH127 | 20/60 | 0.47 | 0.09 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %1.87 | √ |
| DH128 | 20/60 | 0.47 | 0.09 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %1.87 | √ |

# 1. STORY VERTICAL BOND BEAM STRESS CONTROL

| Vertical Bond Beam ID | B/H (cm) | Vdmajor(t) | Vdminor(t) | Vmax-major(t) | Vmak-minor(t) | Stirrup | Vrmajor(t) | Vrminor(t) | Nd/Ncr | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| DH129 | 20/60 | 0.47 | 0.09 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %1.87 | √ |
| DH130 | 20/60 | 0.47 | 0.09 | 16.57 | 14.52 | Ø8/20 | 9.77 | 5.39 | %1.87 | √ |
| DH131 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH132 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH133 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH134 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH135 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH136 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH137 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH138 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH139 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH140 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH141 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH142 | 20/20 | 0.03 | 0.02 | 4.84 | 4.84 | Ø8/20 | 2.85 | 2.85 | %1.87 | √ |
| DH143 | 35/35 | 0.27 | 0.17 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %1.87 | √ |
| DH144 | 35/35 | 0.27 | 0.17 | 16.17 | 16.17 | Ø8/20 | 7.26 | 7.26 | %1.87 | √ |
| DH145 | 20/35 | 0.15 | 0.03 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH146 | 20/35 | 0.15 | 0.03 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH147 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |
| DH148 | 20/35 | 0.1 | 0.05 | 9.24 | 8.47 | Ø8/20 | 5.45 | 3.8 | %1.87 | √ |

# BASEMENT STORY

**Storey Information**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Xg:** | 20.13 | m | **Qi:** | 679.87 | t | **Mb(+X):** | 63.85 | tm | **Mb(+Y):** | -1144.38 | tm |
| **Xc:** | 18.45 | m | **Yg:** | 5.96 | m | **Mb(-X):** | 63.85 | tm | **Mb(-Y):** | -1144.38 | tm |
| **Lx:** | 41.75 | m | **Yc:** | 6.05 | m | | | | | | |
| **ex:** | -1.68 | m | **Ly:** | 11.6 | m | | | | | | |
| | | | **ey:** | 0.09 | m | | | | | | |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

**Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** Was Not Added

## BASEMENT STORY JACKET SHEAR FORCES

| Jacket Name | Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4.65 | 0 | -0.01 | 0 | -0.01 | 0 | 4.66 | 0 | 4.66 | 0 | 4.66 |
| | 0 | 91.91 | 0 | -15.23 | 0 | -15.23 | 0 | 107.14 | 0 | 107.14 | 107.14 |
| | 8.21 | 0 | -0.02 | 0 | -0.02 | 0 | 8.23 | 0 | 8.23 | 0 | 8.23 |
| | 16.42 | 0 | -0.03 | 0 | -0.03 | 0 | 16.45 | 0 | 16.45 | 0 | 16.45 |
| | 14.83 | 0 | 0.03 | 0 | 0.03 | 0 | 14.8 | 0 | 14.8 | 0 | 14.8 |
| C142 | 8.21 | 0 | 0.02 | 0 | 0.02 | 0 | 8.19 | 0 | 8.19 | 0 | 8.19 |
| | 16.42 | 0 | 0.03 | 0 | 0.03 | 0 | 16.39 | 0 | 16.39 | 0 | 16.39 |
| | 2.82 | 0 | 0.01 | 0 | 0.01 | 0 | 2.81 | 0 | 2.81 | 0 | 2.81 |
| | 3.16 | 0 | 0.01 | 0 | 0.01 | 0 | 3.15 | 0 | 3.15 | 0 | 3.15 |
| | 5.06 | 0 | 0.01 | 0 | 0.01 | 0 | 5.05 | 0 | 5.05 | 0 | 5.05 |
| | 17.48 | 0 | 0.03 | 0 | 0.03 | 0 | 17.45 | 0 | 17.45 | 0 | 17.45 |
| | 10.68 | 0 | 0.02 | 0 | 0.02 | 0 | 10.66 | 0 | 10.66 | 0 | 10.66 |
| | 17.48 | 0 | -0.04 | 0 | -0.04 | 0 | 17.52 | 0 | 17.52 | 0 | 17.52 |
| | 5.06 | 0 | -0.01 | 0 | -0.01 | 0 | 5.07 | 0 | 5.07 | 0 | 5.07 |
| | 5.06 | 0 | -0.01 | 0 | -0.01 | 0 | 5.07 | 0 | 5.07 | 0 | 5.07 |
| | 0 | 30.6 | 0 | -1.72 | 0 | -1.72 | 0 | 32.32 | 0 | 32.32 | 32.32 |
| | 12.73 | 0 | 0.02 | 0 | 0.02 | 0 | 12.71 | 0 | 12.71 | 0 | 12.71 |
| | 12.73 | 0 | 0.02 | 0 | 0.02 | 0 | 12.71 | 0 | 12.71 | 0 | 12.71 |
| | 5.06 | 0 | 0.01 | 0 | 0.01 | 0 | 5.05 | 0 | 5.05 | 0 | 5.05 |
| | 12.73 | 0 | -0.03 | 0 | -0.03 | 0 | 12.76 | 0 | 12.76 | 0 | 12.76 |
| | 0 | 91.91 | 0 | 12.3 | 0 | 12.3 | 0 | 79.61 | 0 | 79.61 | 79.61 |
| | 12.73 | 0 | -0.03 | 0 | -0.03 | 0 | 12.76 | 0 | 12.76 | 0 | 12.76 |
| | 0 | 30.6 | 0 | 3.16 | 0 | 3.16 | 0 | 27.44 | 0 | 27.44 | 27.44 |
| | 0 | 30.6 | 0 | 1.61 | 0 | 1.61 | 0 | 28.99 | 0 | 28.99 | 28.99 |
| | 0 | 30.6 | 0 | 0.61 | 0 | 0.61 | 0 | 29.99 | 0 | 29.99 | 29.99 |
| | 12.73 | 0 | 0.02 | 0 | 0.02 | 0 | 12.71 | 0 | 12.71 | 0 | 12.71 |
| | 4.26 | 0 | 0.01 | 0 | 0.01 | 0 | 4.25 | 0 | 4.25 | 0 | 4.25 |
| | 13.25 | 0 | -0.03 | 0 | -0.03 | 0 | 13.28 | 0 | 13.28 | 0 | 13.28 |
| | 12.73 | 0 | -0.03 | 0 | -0.03 | 0 | 12.76 | 0 | 12.76 | 0 | 12.76 |
| | 10.68 | 0 | -0.02 | 0 | -0.02 | 0 | 10.7 | 0 | 10.7 | 0 | 10.7 |
| | 0.09 | 0 | 0 | 0 | 0 | 0 | 0.09 | 0 | 0.09 | 0 | 0.09 |

# BASEMENT STORY JACKET SHEAR FORCES

| Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.09 | 0 | 0 | 0 | 0 | 0 | 0.09 | 0 | 0.09 | 0 | 0.09 |
| 3.44 | 0 | -0.01 | 0 | -0.01 | 0 | 3.44 | 0 | 3.44 | 0 | 3.44 |
| 11.7 | 0 | -0.02 | 0 | -0.02 | 0 | 11.72 | 0 | 11.72 | 0 | 11.72 |
| 12.73 | 0 | 0.02 | 0 | 0.02 | 0 | 12.71 | 0 | 12.71 | 0 | 12.71 |
| 0 | 30.6 | 0 | 2.39 | 0 | 2.39 | 0 | 28.22 | 0 | 28.22 | 28.22 |
| 0 | 30.6 | 0 | -1.07 | 0 | -1.07 | 0 | 31.67 | 0 | 31.67 | 31.67 |
| 0 | 0.41 | 0 | -0.02 | 0 | -0.02 | 0 | 0.44 | 0 | 0.44 | 0.44 |
| 0 | 19.71 | 0 | -1.11 | 0 | -1.11 | 0 | 20.82 | 0 | 20.82 | 20.82 |

# GROUND STORY

**Storey Information**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Xg:** | 20.44 | m | **Qi:** | 513.36 | t | **Mb(+X):** | -37.22 | tm | **Mb(+Y):** | -234.14 | tm |
| **Xc:** | 19.99 | m | **Yg:** | 5.84 | m | **Mb(-X):** | -37.22 | tm | **Mb(-Y):** | -234.14 | tm |
| **Lx:** | 41.8 | m | **Yc:** | 5.77 | m | | | | | | |
| **ex:** | -0.46 | m | **Ly:** | 11.75 | m | | | | | | |
| | | | **ey:** | -0.07 | m | | | | | | |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

**Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** Was Not Added

# GROUND STORY JACKET SHEAR FORCES

| Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.06 | 0 | -0.86 | 0 | -0.86 | 0 | 20.92 | 0 | 20.92 | 20.92 |
| 15.77 | 0 | -0.01 | 0 | -0.01 | 0 | 15.78 | 0 | 15.78 | 0 | 15.78 |
| 4.77 | 0 | 0 | 0 | 0 | 0 | 4.77 | 0 | 4.77 | 0 | 4.77 |
| 5.24 | 0 | 0 | 0 | 0 | 0 | 5.25 | 0 | 5.25 | 0 | 5.25 |
| 15.77 | 0 | -0.01 | 0 | -0.01 | 0 | 15.78 | 0 | 15.78 | 0 | 15.78 |
| 0 | 20.95 | 0 | -0.89 | 0 | -0.89 | 0 | 21.84 | 0 | 21.84 | 21.84 |
| 20.62 | 0 | 0.01 | 0 | 0.01 | 0 | 20.6 | 0 | 20.6 | 0 | 20.6 |
| 4.77 | 0 | 0 | 0 | 0 | 0 | 4.77 | 0 | 4.77 | 0 | 4.77 |
| 5.24 | 0 | 0 | 0 | 0 | 0 | 5.24 | 0 | 5.24 | 0 | 5.24 |
| 22.03 | 0 | 0.02 | 0 | 0.02 | 0 | 22.01 | 0 | 22.01 | 0 | 22.01 |
| 4.31 | 0 | 0 | 0 | 0 | 0 | 4.31 | 0 | 4.31 | 0 | 4.31 |
| 5.24 | 0 | 0 | 0 | 0 | 0 | 5.25 | 0 | 5.25 | 0 | 5.25 |
| 22.03 | 0 | -0.02 | 0 | -0.02 | 0 | 22.04 | 0 | 22.04 | 0 | 22.04 |
| 5.99 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 6 |
| 9.94 | 0 | 0.01 | 0 | 0.01 | 0 | 9.93 | 0 | 9.93 | 0 | 9.93 |
| 9.94 | 0 | -0.01 | 0 | -0.01 | 0 | 9.94 | 0 | 9.94 | 0 | 9.94 |
| 20.62 | 0 | -0.01 | 0 | -0.01 | 0 | 20.63 | 0 | 20.63 | 0 | 20.63 |
| 4.75 | 0 | 0 | 0 | 0 | 0 | 4.75 | 0 | 4.75 | 0 | 4.75 |
| 6.25 | 0 | 0 | 0 | 0 | 0 | 6.24 | 0 | 6.24 | 0 | 6.24 |

# GROUND STORY JACKET SHEAR FORCES

| Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|
| 15.77 | 0 | 0.01 | 0 | 0.01 | 0 | 15.76 | 0 | 15.76 | 0 | 15.76 |
| 15.77 | 0 | 0.01 | 0 | 0.01 | 0 | 15.76 | 0 | 15.76 | 0 | 15.76 |
| 3.88 | 0 | 0 | 0 | 0 | 0 | 3.88 | 0 | 3.88 | 0 | 3.88 |
| 0 | 20.7 | 0 | 0.83 | 0 | 0.83 | 0 | 19.87 | 0 | 19.87 | 19.87 |
| 0 | 20.7 | 0 | 0.83 | 0 | 0.83 | 0 | 19.87 | 0 | 19.87 | 19.87 |
| 0 | 19.81 | 0 | 0.77 | 0 | 0.77 | 0 | 19.04 | 0 | 19.04 | 19.04 |
| 0 | 19.81 | 0 | 0.77 | 0 | 0.77 | 0 | 19.04 | 0 | 19.04 | 19.04 |
| 0 | 20.06 | 0 | -0.84 | 0 | -0.84 | 0 | 20.9 | 0 | 20.9 | 20.9 |
| 0 | 20.06 | 0 | -0.84 | 0 | -0.84 | 0 | 20.9 | 0 | 20.9 | 20.9 |
| 0 | 18.39 | 0 | 0.45 | 0 | 0.45 | 0 | 17.95 | 0 | 17.95 | 17.95 |
| 0 | 18.39 | 0 | 0.44 | 0 | 0.44 | 0 | 17.96 | 0 | 17.96 | 17.96 |
| 0 | 18.28 | 0 | -0.11 | 0 | -0.11 | 0 | 18.39 | 0 | 18.39 | 18.39 |
| 0 | 18.28 | 0 | -0.12 | 0 | -0.12 | 0 | 18.4 | 0 | 18.4 | 18.4 |
| 0 | 18.41 | 0 | -0.12 | 0 | -0.12 | 0 | 18.52 | 0 | 18.52 | 18.52 |
| 0 | 17.9 | 0 | -0.1 | 0 | -0.1 | 0 | 18 | 0 | 18 | 18 |
| 0 | 18.28 | 0 | 0.44 | 0 | 0.44 | 0 | 17.84 | 0 | 17.84 | 17.84 |
| 0 | 18.28 | 0 | 0.43 | 0 | 0.43 | 0 | 17.85 | 0 | 17.85 | 17.85 |
| 0 | 18.28 | 0 | -0.5 | 0 | -0.5 | 0 | 18.78 | 0 | 18.78 | 18.78 |
| 0 | 18.28 | 0 | -0.49 | 0 | -0.49 | 0 | 18.77 | 0 | 18.77 | 18.77 |
| 0 | 18.28 | 0 | -0.49 | 0 | -0.49 | 0 | 18.77 | 0 | 18.77 | 18.77 |
| 0 | 18.28 | 0 | -0.5 | 0 | -0.5 | 0 | 18.78 | 0 | 18.78 | 18.78 |
| 0 | 18.28 | 0 | 0.57 | 0 | 0.57 | 0 | 17.71 | 0 | 17.71 | 17.71 |
| 0 | 17.9 | 0 | 0.31 | 0 | 0.31 | 0 | 17.59 | 0 | 17.59 | 17.59 |
| 0 | 17.9 | 0 | 0.15 | 0 | 0.15 | 0 | 17.75 | 0 | 17.75 | 17.75 |
| 0 | 18.28 | 0 | -0.23 | 0 | -0.23 | 0 | 18.51 | 0 | 18.51 | 18.51 |
| 3.67 | 0 | 0 | 0 | 0 | 0 | 3.67 | 0 | 3.67 | 0 | 3.67 |
| 13.1 | 0 | 0.01 | 0 | 0.01 | 0 | 13.09 | 0 | 13.09 | 0 | 13.09 |
| 0.1 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0.1 |
| 0.1 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0.1 |
| 2.52 | 0 | 0 | 0 | 0 | 0 | 2.52 | 0 | 2.52 | 0 | 2.52 |
| 3.67 | 0 | 0 | 0 | 0 | 0 | 3.67 | 0 | 3.67 | 0 | 3.67 |
| 15.09 | 0 | 0.01 | 0 | 0.01 | 0 | 15.08 | 0 | 15.08 | 0 | 15.08 |
| 3.67 | 0 | 0 | 0 | 0 | 0 | 3.67 | 0 | 3.67 | 0 | 3.67 |
| 3.69 | 0 | 0 | 0 | 0 | 0 | 3.69 | 0 | 3.69 | 0 | 3.69 |
| 20.26 | 0 | -0.01 | 0 | -0.01 | 0 | 20.28 | 0 | 20.28 | 0 | 20.28 |
| 3.67 | 0 | 0 | 0 | 0 | 0 | 3.67 | 0 | 3.67 | 0 | 3.67 |
| 13.1 | 0 | -0.01 | 0 | -0.01 | 0 | 13.11 | 0 | 13.11 | 0 | 13.11 |
| 5 | 0 | 0 | 0 | 0 | 0 | 5.01 | 0 | 5.01 | 0 | 5.01 |
| 6.78 | 0 | 0 | 0 | 0 | 0 | 6.78 | 0 | 6.78 | 0 | 6.78 |
| 14.4 | 0 | 0.01 | 0 | 0.01 | 0 | 14.39 | 0 | 14.39 | 0 | 14.39 |
| 17.13 | 0 | 0 | 0 | 0 | 0 | 17.14 | 0 | 17.14 | 0 | 17.14 |
| 7.88 | 0 | 0.01 | 0 | 0.01 | 0 | 7.87 | 0 | 7.87 | 0 | 7.87 |

# 1. STORY

**Storey Information**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Xg:** | 20.33 | m | **Qi:** | 283.2 | t | **Mb(+X):** | -19.88 | tm | **Mb(+Y):** | 80.76 | tm |
| **Xc:** | 20.61 | m | **Yg:** | 5.7 | m | **Mb(-X):** | -19.88 | tm | **Mb(-Y):** | 80.76 | tm |
| **Lx:** | 41.8 | m | **Yc:** | 5.63 | m | | | | | | |
| **ex:** | 0.29 | m | **Ly:** | 11.75 | m | | | | | | |
| | | | **ey:** | -0.07 | m | | | | | | |

Xg,Yg:X and Y coordinates of the center of mass of the storeyXc,Yc:X and Y coordinates of the shear rigidity center of the storeyLx,Ly:X and Y Size of the Storeyex,ey:Eccentricity used in torsion calculationMb(X),Mb(Y):Torsion moment originating from earthquake and storey eccentricity

| **Option to add %5 additional eccentricity to Current Eccentricity in Seismic Load Calculation:** | Was Not Added |
|---|---|

## 1. STORY JACKET SHEAR FORCES

| Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|
| 9.01 | 0 | -0.01 | 0 | -0.01 | 0 | 9.02 | 0 | 9.02 | 0 | 9.02 |
| 3.42 | 0 | 0 | 0 | 0 | 0 | 3.43 | 0 | 3.43 | 0 | 3.43 |
| 12.59 | 0 | -0.01 | 0 | -0.01 | 0 | 12.6 | 0 | 12.6 | 0 | 12.6 |
| 9.01 | 0 | -0.01 | 0 | -0.01 | 0 | 9.02 | 0 | 9.02 | 0 | 9.02 |
| 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 3 |
| 2.73 | 0 | 0 | 0 | 0 | 0 | 2.73 | 0 | 2.73 | 0 | 2.73 |
| 11.58 | 0 | -0.01 | 0 | -0.01 | 0 | 11.59 | 0 | 11.59 | 0 | 11.59 |
| 2.11 | 0 | 0 | 0 | 0 | 0 | 2.11 | 0 | 2.11 | 0 | 2.11 |
| 0 | 18.6 | 0 | 0.25 | 0 | 0.25 | 0 | 18.35 | 0 | 18.35 | 18.35 |
| 0 | 18.6 | 0 | 0.25 | 0 | 0.25 | 0 | 18.35 | 0 | 18.35 | 18.35 |
| 0.06 | 18.6 | 0 | -0.24 | 0 | -0.24 | 0.06 | 18.84 | 0.06 | 18.84 | 18.84 |
| 0 | 18.6 | 0 | -0.24 | 0 | -0.24 | 0 | 18.84 | 0 | 18.84 | 18.84 |
| 0 | 18.6 | 0 | -0.25 | 0 | -0.25 | 0 | 18.85 | 0 | 18.85 | 18.85 |
| 0 | 18.21 | 0 | 0.25 | 0 | 0.25 | 0 | 17.96 | 0 | 17.96 | 17.96 |
| 0 | 18.6 | 0 | 0.25 | 0 | 0.25 | 0 | 18.35 | 0 | 18.35 | 18.35 |
| 0.06 | 18.6 | 0 | -0.25 | 0 | -0.25 | 0.06 | 18.85 | 0.06 | 18.85 | 18.85 |
| 5.68 | 0 | -0.01 | 0 | -0.01 | 0 | 5.69 | 0 | 5.69 | 0 | 5.69 |
| 11.78 | 0 | -0.01 | 0 | -0.01 | 0 | 11.8 | 0 | 11.8 | 0 | 11.8 |
| 2.71 | 0 | 0 | 0 | 0 | 0 | 2.72 | 0 | 2.72 | 0 | 2.72 |
| 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 3 |
| 0 | 20.41 | 0 | -0.44 | 0 | -0.44 | 0 | 20.85 | 0 | 20.85 | 20.85 |
| 0 | 20.41 | 0 | -0.44 | 0 | -0.44 | 0 | 20.85 | 0 | 20.85 | 20.85 |
| 3.87 | 0 | 0 | 0 | 0 | 0 | 3.88 | 0 | 3.88 | 0 | 3.88 |
| 0 | 21.32 | 0 | 0.46 | 0 | 0.46 | 0 | 20.86 | 0 | 20.86 | 20.86 |
| 0 | 21.32 | 0 | 0.46 | 0 | 0.46 | 0 | 20.86 | 0 | 20.86 | 20.86 |
| 2.1 | 0 | 0 | 0 | 0 | 0 | 2.1 | 0 | 2.1 | 0 | 2.1 |
| 7.49 | 0 | -0.01 | 0 | -0.01 | 0 | 7.5 | 0 | 7.5 | 0 | 7.5 |
| 2.86 | 0 | 0 | 0 | 0 | 0 | 2.86 | 0 | 2.86 | 0 | 2.86 |
| 5.68 | 0 | 0.01 | 0 | 0.01 | 0 | 5.67 | 0 | 5.67 | 0 | 5.67 |
| 9.01 | 0 | 0.01 | 0 | 0.01 | 0 | 9 | 0 | 9 | 0 | 9 |
| 11.78 | 0 | 0.01 | 0 | 0.01 | 0 | 11.77 | 0 | 11.77 | 0 | 11.77 |

# 1. STORY JACKET SHEAR FORCES

| Vx(t) | Vy(t) | Vb(+x)(t) | Vb(+y)(t) | Vb(-x)(t) | Vb(-y)(t) | Vt(+x)(t) | Vt(+y)(t) | Vt(-x)(t) | Vt(-y)(t) | Vd(t) |
|---|---|---|---|---|---|---|---|---|---|---|
| 7.49 | 0 | 0.01 | 0 | 0.01 | 0 | 7.48 | 0 | 7.48 | 0 | 7.48 |
| 0.06 | 0 | 0 | 0 | 0 | 0 | 0.06 | 0 | 0.06 | 0 | 0.06 |
| 0.06 | 0 | 0 | 0 | 0 | 0 | 0.06 | 0 | 0.06 | 0 | 0.06 |
| 8.23 | 0 | 0.01 | 0 | 0.01 | 0 | 8.22 | 0 | 8.22 | 0 | 8.22 |
| 9.01 | 0 | 0.01 | 0 | 0.01 | 0 | 9 | 0 | 9 | 0 | 9 |
| 9.01 | 0 | 0.01 | 0 | 0.01 | 0 | 9 | 0 | 9 | 0 | 9 |
| 9.01 | 0 | 0.01 | 0 | 0.01 | 0 | 9 | 0 | 9 | 0 | 9 |
| 8.63 | 0 | 0.01 | 0 | 0.01 | 0 | 8.62 | 0 | 8.62 | 0 | 8.62 |
| 9.4 | 0 | 0.01 | 0 | 0.01 | 0 | 9.39 | 0 | 9.39 | 0 | 9.39 |
| 12.59 | 0 | 0.01 | 0 | 0.01 | 0 | 12.58 | 0 | 12.58 | 0 | 12.58 |
| 3.42 | 0 | 0 | 0 | 0 | 0 | 3.42 | 0 | 3.42 | 0 | 3.42 |

# BASEMENT STORY

## BASEMENT STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WB01 | CB03 | | 8.23 | Q106 | 0 | | | 10.8 | 21.54 | 73.55 | %50 | OK |
| WB02 | CB06 | | 8.19 | Q106 | 0 | | | 10.76 | 20.92 | 72.93 | %51 | OK |
| WB03 | | | 0 | | | | | 8.5 | 21.99 | 21.99 | %39 | OK |
| WB04 | | | 0 | | | | | 8.5 | 22.02 | 22.02 | %39 | OK |
| WB05 | | | 0 | | | | | 0.45 | 4.69 | 4.69 | %10 | OK |
| WB06 | CB21 | | 79.61 | Q106 | 0 | | | 101.55 | 142.24 | 512.39 | %71 | OK |
| WB07 | | | 0 | | | | | 8.78 | 32.42 | 32.42 | %27 | OK |
| WB08 | CB23 | | 27.44 | Q106 | 0 | | | 36.22 | 56.64 | 192 | %64 | OK |
| WB09 | | | 0 | | | | | 9.03 | 36.44 | 36.44 | %25 | OK |
| WB10 | CB36 | | 28.22 | Q106 | 0 | | | 37.25 | 55.48 | 190.83 | %67 | OK |
| WB11 | | | 0 | | | | | 9.28 | 32.37 | 32.37 | %29 | OK |
| WB12 | CB24 | | 28.99 | Q106 | 0 | | | 38.27 | 52.9 | 188.25 | %72 | OK |
| WB13 | | | 0 | | | | | 9.6 | 32.37 | 32.37 | %30 | OK |
| WB14 | CB25 | | 29.99 | Q106 | 0 | | | 39.59 | 52.89 | 188.25 | %75 | OK |
| WB15 | | | 0 | | | | | 9.85 | 32.3 | 32.3 | %30 | OK |
| WB16 | | | 0 | | | | | 9.85 | 32.43 | 32.43 | %30 | OK |
| WB17 | CB38 | | 0.44 | Q106 | 0 | | | 0.86 | 9.62 | 25.3 | %9 | OK |
| WB18 | CB16 | | 32.32 | Q106 | 0 | | | 42.67 | 52.86 | 188.22 | %81 | OK |
| WB19 | | | 0 | | | | | 10.84 | 36.57 | 36.57 | %30 | OK |
| WB20 | | | 0 | | | | | 10.84 | 36.8 | 36.8 | %29 | OK |
| WB21 | CB02 | | 107.14 | Q106 | 0 | | | 136.55 | 142.74 | 512.9 | %96 | OK |
| WB22 | CB37 | | 31.67 | Q106 | 0 | | | 41.77 | 53.87 | 189.23 | %78 | OK |
| WB23 | | | 0 | | | | | 1.28 | 9.9 | 9.9 | %13 | OK |
| WB24 | CB04 | | 16.45 | Q106 | 0 | | | 20.53 | 31.81 | 108.29 | %65 | OK |
| WB25 | CB29 | | 12.76 | Q106 | 0 | | | 15.98 | 27.5 | 93.27 | %58 | OK |
| WB26 | CB30 | | 10.7 | Q106 | 0 | | | 13.44 | 25.17 | 84.82 | %53 | OK |
| WB27 | CB31 | | 0.09 | Q106 | 0 | | | 0.12 | 5.23 | 14.41 | %2 | OK |
| WB28 | CB32 | | 0.09 | Q106 | 0 | | | 0.12 | 4.95 | 14.12 | %2 | OK |
| WB29 | CB34 | | 11.72 | Q106 | 0 | | | 14.7 | 26.61 | 89.14 | %55 | OK |
| WB30 | CB20 | | 12.76 | Q106 | 0 | | | 15.98 | 27.46 | 93.23 | %58 | OK |
| WB31 | CB22 | | 12.76 | Q106 | 0 | | | 15.98 | 27.33 | 93.1 | %58 | OK |
| WB32 | | | 0 | | | | | 3.22 | 27.11 | 27.11 | %12 | OK |
| WB33 | | | 0 | | | | | 3.1 | 26.55 | 26.55 | %12 | OK |
| WB34 | CB28 | | 13.28 | Q106 | 0 | | | 16.62 | 28.68 | 95.98 | %58 | OK |
| WB35 | CB13 | | 17.52 | Q106 | 0 | | | 21.84 | 34.29 | 113.82 | %64 | OK |
| WB36 | CB14 | | 5.07 | Q106 | 0 | | | 6.71 | 17.68 | 58.97 | %38 | OK |
| WB37 | CB10 | | 5.05 | Q106 | 0 | | | 6.69 | 17.27 | 58.57 | %39 | OK |

## BASEMENT STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WB38 | CB11 | | 17.45 | Q106 | 0 | | | 21.75 | 34.29 | 113.82 | %63 | OK |
| WB39 | CB05 | | 14.8 | Q106 | 0 | | | 18.5 | 30.82 | 102.54 | %60 | OK |
| WB40 | CB12 | | 10.66 | Q106 | 0 | | | 13.39 | 25.29 | 84.94 | %53 | OK |
| WB41 | CB07 | | 16.39 | Q106 | 0 | | | 20.45 | 32.42 | 108.9 | %63 | OK |
| WB42 | CB35 | | 12.71 | Q106 | 0 | | | 15.92 | 28.14 | 93.73 | %57 | OK |
| WB43 | | | 0 | | | | | 13.86 | 78.51 | 78.51 | %18 | OK |
| WB44 | CB18 | | 12.71 | Q106 | 0 | | | 15.92 | 27.46 | 93.23 | %58 | OK |
| WB45 | CB17 | | 12.71 | Q106 | 0 | | | 15.92 | 27.24 | 93.01 | %58 | OK |
| WB46 | CB26 | | 12.71 | Q106 | 0 | | | 15.92 | 27.33 | 93.11 | %58 | OK |
| WB47 | | | 0 | | | | | 5.8 | 19.93 | 19.93 | %29 | OK |
| WB48 | | | 0 | | | | | 6.27 | 17.07 | 17.07 | %37 | OK |
| WB49 | | | 0 | | | | | 0.63 | 7.12 | 7.12 | %9 | OK |
| WB50 | | | 0 | | | | | 5.66 | 19.5 | 19.5 | %29 | OK |
| WB51 | | | 0 | | | | | 5.66 | 19.77 | 19.77 | %29 | OK |
| WB52 | | | 0 | | | | | 10.84 | 31.73 | 31.73 | %34 | OK |
| WB53 | | | 0 | | | | | 10.43 | 30.36 | 30.36 | %34 | OK |
| WB54 | | | 0 | | | | | 19.63 | 41.02 | 41.02 | %48 | OK |
| WB55 | | | 0 | | | | | 5.8 | 19.91 | 19.91 | %29 | OK |
| WB56 | | | 0 | | | | | 6.37 | 19.92 | 19.92 | %32 | OK |
| WB57 | | | 0 | | | | | 0.63 | 6.96 | 6.96 | %9 | OK |
| WB58 | | | 0 | | | | | 12.46 | 30.18 | 30.18 | %41 | OK |
| WB59 | | | 0 | | | | | 1.28 | 9.13 | 9.13 | %14 | OK |
| WB60 | | | 0 | | | | | 10.01 | 29.6 | 29.6 | %34 | OK |
| WB61 | | | 0 | | | | | 19.14 | 45.74 | 45.74 | %42 | OK |
| WB62 | | | 0 | | | | | 15.41 | 44.04 | 44.04 | %35 | OK |
| WB63 | CB39 | | 20.82 | Q106 | 0 | | | 27.03 | 37.83 | 136.32 | %71 | OK |

## GROUND STORY

## GROUND STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ01 | | | 0 | | | | | 8.37 | 27.41 | 27.41 | %31 | OK |
| WZ02 | CZ16 | | 9.94 | Q106 | 0 | | | 12.25 | 19.55 | 71.55 | %63 | OK |
| WZ03 | CZ06 | CZ27 | 21.84 | Q106 | 20.9 | Q106 | 4.42 | 47.17 | 81.34 | 387.14 | %58 | OK |
| WZ04 | CZ23 | CZ25 | 19.87 | Q106 | 19.04 | Q106 | 4.027 | 42.94 | 80.58 | 383.33 | %53 | OK |
| WZ05 | | | 0 | | | | | 5.03 | 16.93 | 16.93 | %30 | OK |

# GROUND STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ06 | | | 0 | | | | | 0.13 | 2.63 | 2.63 | %5 | OK |
| WZ07 | | | 0 | | | | | 5.03 | 16.89 | 16.89 | %30 | OK |
| WZ08 | | | 0 | | | | | 3.09 | 9.88 | 9.88 | %31 | OK |
| WZ09 | | | 0 | | | | | 2.08 | 19.55 | 19.55 | %11 | OK |
| WZ10 | CZ41 | | 17.71 | Q106 | 0 | | | 19.92 | 42.69 | 181.38 | %47 | OK |
| WZ11 | CZ35 | CZ36 | 17.84 | Q106 | 17.85 | Q106 | 2.093 | 37.78 | 64.44 | 344.12 | %59 | OK |
| WZ12 | | | 0 | | | | | 2.23 | 20.24 | 20.24 | %11 | OK |
| WZ13 | | | 0 | | | | | 2.11 | 19.48 | 19.48 | %11 | OK |
| WZ14 | CZ42 | | 17.59 | Q106 | 0 | | | 19.83 | 38.02 | 174.07 | %52 | OK |
| WZ15 | | | 0 | | | | | 2.13 | 19.48 | 19.48 | %11 | OK |
| WZ16 | CZ43 | | 17.75 | Q106 | 0 | | | 20.01 | 38.02 | 174.07 | %53 | OK |
| WZ17 | | | 0 | | | | | 2.14 | 19.45 | 19.45 | %11 | OK |
| WZ18 | | | 0 | | | | | 2.28 | 20.24 | 20.24 | %11 | OK |
| WZ19 | CZ33 | CZ34 | 18.52 | Q106 | 18 | Q106 | 2.157 | 38.68 | 57.27 | 335.12 | %68 | OK |
| WZ20 | CZ31 | CZ32 | 18.39 | Q106 | 18.4 | Q106 | 2.298 | 39.08 | 60.3 | 337.68 | %65 | OK |
| WZ21 | | | 0 | | | | | 2.17 | 19.43 | 19.43 | %11 | OK |
| WZ22 | CZ44 | | 18.51 | Q106 | 0 | | | 20.83 | 37.95 | 176.64 | %55 | OK |
| WZ23 | CZ39 | CZ40 | 18.77 | Q106 | 18.78 | Q106 | 2.202 | 39.75 | 64.54 | 344.22 | %62 | OK |
| WZ24 | CZ37 | CZ38 | 18.78 | Q106 | 18.77 | Q106 | 2.346 | 39.9 | 67.67 | 345.04 | %59 | OK |
| WZ25 | | | 0 | | | | | 2.33 | 20.5 | 20.5 | %11 | OK |
| WZ26 | | | 0 | | | | | 2.03 | 12.23 | 12.23 | %17 | OK |
| WZ27 | CZ17 | | 20.63 | Q106 | 0 | | | 24.38 | 29.82 | 106.3 | %82 | OK |
| WZ28 | | | 0 | | | | | 2.93 | 15.48 | 15.48 | %19 | OK |
| WZ29 | CZ07 | | 20.6 | Q106 | 0 | | | 24.34 | 29.46 | 105.94 | %83 | OK |
| WZ30 | CZ46 | | 13.09 | Q106 | 0 | | | 15.56 | 23.18 | 82.83 | %67 | OK |
| WZ31 | CZ47 | | 0.1 | Q106 | 0 | | | 0.12 | 4.54 | 13.77 | %3 | OK |
| WZ32 | CZ48 | | 0.1 | Q106 | 0 | | | 0.12 | 4.34 | 13.52 | %3 | OK |
| WZ33 | CZ59 | | 14.39 | Q106 | 0 | | | 17.09 | 24.1 | 86.69 | %71 | OK |
| WZ34 | CZ20 | | 15.76 | Q106 | 0 | | | 18.69 | 25.39 | 91.16 | %74 | OK |
| WZ35 | CZ21 | | 15.76 | Q106 | 0 | | | 18.69 | 25.24 | 91.01 | %74 | OK |
| WZ36 | | | 0 | | | | | 2.93 | 15.33 | 15.33 | %19 | OK |
| WZ37 | CZ51 | | 15.08 | Q106 | 0 | | | 17.9 | 24.73 | 88.97 | %72 | OK |
| WZ38 | | | 0 | | | | | 1.44 | 12.14 | 12.14 | %12 | OK |
| WZ39 | CZ10 | | 22.01 | Q106 | 0 | | | 25.99 | 31.61 | 111.15 | %82 | OK |
| WZ40 | | | 0 | | | | | 3.04 | 16.25 | 16.25 | %19 | OK |
| WZ41 | CZ01 | CZ28 | 20.92 | Q295 | 20.9 | Q295 | 4.42 | 46.24 | 165.15 | 380.98 | %28 | OK |
| WZ42 | | | 0 | | | | | 2.93 | 15.89 | 15.89 | %18 | OK |
| WZ43 | CZ54 | | 20.28 | Q106 | 0 | | | 23.97 | 29.45 | 105.16 | %81 | OK |
| WZ44 | CZ02 | | 15.78 | Q106 | 0 | | | 18.71 | 25.39 | 91.16 | %74 | OK |
| WZ45 | CZ05 | | 15.78 | Q106 | 0 | | | 18.71 | 25.12 | 90.89 | %74 | OK |

## GROUND STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WZ46 | | | 0 | | | | | 2.93 | 15 | 15 | %20 | OK |
| WZ47 | CZ56 | | 13.11 | Q106 | 0 | | | 15.59 | 22.91 | 82.56 | %68 | OK |
| WZ48 | CZ14 | | 6 | Q106 | 0 | | | 7.44 | 16.06 | 57.36 | %46 | OK |
| WZ49 | CZ13 | | 22.04 | Q106 | 0 | | | 26.02 | 31.61 | 111.15 | %82 | OK |
| WZ50 | | | 0 | | | | | 3.39 | 17.38 | 17.38 | %20 | OK |
| WZ51 | | | 0 | | | | | 3.8 | 18.42 | 18.42 | %21 | OK |
| WZ52 | | | 0 | | | | | 3.43 | 12.89 | 12.89 | %27 | OK |
| WZ53 | | | 0 | | | | | 0.37 | 4.71 | 4.71 | %8 | OK |
| WZ54 | | | 0 | | | | | 3.4 | 10.52 | 10.52 | %32 | OK |
| WZ55 | | | 0 | | | | | 3.35 | 12.61 | 12.61 | %27 | OK |
| WZ56 | | | 0 | | | | | 6.49 | 20.37 | 20.37 | %32 | OK |
| WZ57 | | | 0 | | | | | 3.35 | 12.95 | 12.95 | %26 | OK |
| WZ58 | | | 0 | | | | | 2.92 | 9.55 | 9.55 | %31 | OK |
| WZ59 | | | 0 | | | | | 8.37 | 25.64 | 25.64 | %33 | OK |
| WZ60 | | | 0 | | | | | 3.43 | 12.88 | 12.88 | %27 | OK |
| WZ61 | | | 0 | | | | | 0.37 | 4.51 | 4.51 | %8 | OK |
| WZ62 | CZ60 | | 17.14 | Q106 | 0 | | | 20.54 | 21.18 | 89.55 | %97 | OK |
| WZ63 | | | 0 | | | | | 0.76 | 5.99 | 5.99 | %13 | OK |
| WZ64 | | | 0 | | | | | 5.92 | 18.87 | 18.87 | %31 | OK |
| WZ65 | | | 0 | | | | | 3.35 | 13.19 | 13.19 | %25 | OK |
| WZ66 | | | 0 | | | | | 3.35 | 12.71 | 12.71 | %26 | OK |
| WZ67 | | | 0 | | | | | 9.2 | 28.31 | 28.31 | %32 | OK |
| WZ68 | CZ24 | CZ26 | 19.87 | Q106 | 19.04 | Q106 | 4.027 | 42.94 | 80.59 | 383.33 | %53 | OK |

# 1. STORY

## 1. STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W101 | C125 | | 20.86 | Q106 | 0 | | | 25.08 | 48.81 | 204.83 | %51 | OK |
| W102 | C117 | | 5.69 | Q106 | 0 | | | 7 | 16.4 | 68.41 | %43 | OK |
| W103 | C124 | | 20.86 | Q106 | 0 | | | 25.08 | 48.81 | 204.83 | %51 | OK |
| W104 | C122 | | 20.85 | Q106 | 0 | | | 25.26 | 48.81 | 198.66 | %52 | OK |
| W105 | | | 0 | | | | | 2.87 | 9.97 | 9.97 | %29 | OK |
| W106 | | | 0 | | | | | 0.08 | 1.77 | 1.77 | %4 | OK |
| W107 | | | 0 | | | | | 2.87 | 9.95 | 9.95 | %29 | OK |
| W108 | | | 0 | | | | | 1.65 | 6.71 | 6.71 | %25 | OK |

# 1. STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W109 | | | 0 | | | | | 2.22 | 14.11 | 14.11 | %16 | OK |
| W110 | | | 0 | | | | | 2.36 | 14.81 | 14.81 | %16 | OK |
| W111 | C112 | C113 | 18.84 | Q106 | 18.85 | Q106 | 2.21 | 39.9 | 56.47 | 336.15 | %71 | OK |
| W112 | | | 0 | | | | | 2.35 | 14.78 | 14.78 | %16 | OK |
| W113 | | | 0 | | | | | 2.2 | 14.11 | 14.11 | %16 | OK |
| W114 | | | 0 | | | | | 0.24 | 3.24 | 3.24 | %8 | OK |
| W115 | | | 0 | | | | | 2.19 | 14.11 | 14.11 | %16 | OK |
| W116 | | | 0 | | | | | 6.74 | 21.41 | 21.41 | %31 | OK |
| W117 | | | 0 | | | | | 2.18 | 14.07 | 14.07 | %16 | OK |
| W118 | | | 0 | | | | | 2.33 | 14.77 | 14.77 | %16 | OK |
| W119 | | | 0 | | | | | 2.16 | 14.06 | 14.06 | %15 | OK |
| W120 | | | 0 | | | | | 1.77 | 8.2 | 8.2 | %22 | OK |
| W121 | | | 0 | | | | | 2.17 | 14.07 | 14.07 | %15 | OK |
| W122 | | | 0 | | | | | 0.43 | 3.92 | 3.92 | %11 | OK |
| W123 | C109 | C115 | 18.35 | Q106 | 18.35 | Q106 | 2.152 | 38.85 | 56.5 | 336.18 | %69 | OK |
| W124 | C110 | C114 | 18.35 | Q106 | 17.96 | Q106 | 2.293 | 38.6 | 59.52 | 334.26 | %65 | OK |
| W125 | | | 0 | | | | | 2.3 | 15.03 | 15.03 | %15 | OK |
| W126 | | | 0 | | | | | 1.16 | 8.82 | 8.82 | %13 | OK |
| W127 | C118 | | 11.8 | Q106 | 0 | | | 13.94 | 24.25 | 100.73 | %57 | OK |
| W128 | C130 | | 9 | Q106 | 0 | | | 10.68 | 20.87 | 86.65 | %51 | OK |
| W129 | C131 | | 11.77 | Q106 | 0 | | | 13.91 | 24.26 | 100.74 | %57 | OK |
| W130 | C132 | | 7.48 | Q106 | 0 | | | 8.89 | 18.91 | 78.56 | %47 | OK |
| W131 | C133 | | 0.06 | Q106 | 0 | | | 0.07 | 3.15 | 12.37 | %2 | OK |
| W132 | C134 | | 0.06 | Q106 | 0 | | | 0.07 | 3.13 | 12.31 | %2 | OK |
| W133 | C135 | | 8.22 | Q106 | 0 | | | 9.76 | 19.84 | 82.5 | %49 | OK |
| W134 | C136 | | 9 | Q106 | 0 | | | 10.68 | 20.87 | 86.65 | %51 | OK |
| W135 | C137 | | 9 | Q106 | 0 | | | 10.68 | 20.87 | 86.65 | %51 | OK |
| W136 | C138 | | 9 | Q106 | 0 | | | 10.68 | 20.87 | 86.65 | %51 | OK |
| W137 | C139 | | 8.62 | Q106 | 0 | | | 10.23 | 20.3 | 84.54 | %50 | OK |
| W138 | | | 0 | | | | | 0.82 | 7.01 | 7.01 | %12 | OK |
| W139 | C141 | | 12.58 | Q106 | 0 | | | 14.85 | 25.63 | 105.16 | %58 | OK |
| W140 | C140 | | 9.39 | Q106 | 0 | | | 11.13 | 21.46 | 88.76 | %52 | OK |
| W141 | | | 0 | | | | | 0.04 | 1.46 | 1.46 | %3 | OK |
| W142 | | | 0 | | | | | 1.68 | 10.95 | 10.95 | %15 | OK |
| W143 | C107 | | 11.59 | Q106 | 0 | | | 13.7 | 24.22 | 99.94 | %57 | OK |
| W144 | C104 | | 9.02 | Q106 | 0 | | | 10.7 | 20.87 | 86.65 | %51 | OK |
| W145 | C101 | | 9.02 | Q106 | 0 | | | 10.7 | 20.61 | 86.38 | %52 | OK |
| W146 | | | 0 | | | | | 1.68 | 10.43 | 10.43 | %16 | OK |
| W147 | C127 | | 7.5 | Q106 | 0 | | | 8.91 | 18.72 | 78.37 | %48 | OK |
| W148 | C102 | | 3.43 | Q106 | 0 | | | 4.25 | 13.25 | 54.54 | %32 | OK |

# 1. STORY STRENGTHENED STATUS STRESS CONTROL

| Wall Name | 1. Wall Jacket Name | 2. Wall Jacket Name | VDjacket1 (t) | Jacket1 Steel | VDjacket2 (t) | Jacket2 Steel | VDwall (t) | VDcomposite (t) | VRcomposite (t) | VMAXcomposite (t) | KKKO | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W149 | C103 | | 12.6 | Q106 | 0 | | | 14.88 | 25.63 | 105.16 | %58 | OK |
| W150 | | | 0 | | | | | 1.94 | 12.16 | 12.16 | %16 | OK |
| W151 | | | 0 | | | | | 2.17 | 13.06 | 13.06 | %17 | OK |
| W152 | | | 0 | | | | | 1.96 | 8.85 | 8.85 | %22 | OK |
| W153 | | | 0 | | | | | 0.21 | 3 | 3 | %7 | OK |
| W154 | | | 0 | | | | | 1.94 | 7.43 | 7.43 | %26 | OK |
| W155 | | | 0 | | | | | 1.91 | 8.66 | 8.66 | %22 | OK |
| W156 | | | 0 | | | | | 1.91 | 8.66 | 8.66 | %22 | OK |
| W157 | | | 0 | | | | | 6.96 | 25.51 | 25.51 | %27 | OK |
| W158 | | | 0 | | | | | 1.83 | 7.1 | 7.1 | %26 | OK |
| W159 | | | 0 | | | | | 0.21 | 2.92 | 2.92 | %7 | OK |
| W160 | | | 0 | | | | | 1.96 | 8.84 | 8.84 | %22 | OK |
| W161 | | | 0 | | | | | 6.74 | 24.74 | 24.74 | %27 | OK |
| W162 | C121 | | 20.85 | Q106 | 0 | | | 25.26 | 48.81 | 198.67 | %52 | OK |

# STRENGTHENED BUILDING EARTQUAKE PERFORMANCE REPORT

| | |
|---|---|
| **Seismic Performance Evaluation Option :** | Calculate with ( Non-providing Total Ve)/Qbi formula |
| **Chose a Regulation For Seismic Performance Evaluation :** | DBYBHY 2007 |
| **Building Earthquake Performance Level :** | |

## READY FOR USAGE

### REVIEW AND STRENGHENING OPTIONS OF THE EXISTING BUILDING :

| | |
|---|---|
| **Type Of Analysis :** | STRENGTHENED BUILDING EARTQUAKE PERFORMANCE REPORT |
| **Knowledge Level Of The Building :** | Medium |
| **knowledge level coefficient :** | 0.9 |
| **Acceleration Spectrum Multiplier For 7.8.1 :** | 1 Account For Probability of Earthquake in 50 Years is %10 |

### ANALYSIS OPTIONS :

| | |
|---|---|
| **Take %5 Additional Eccentricity Into Account In Current Eccentricity When Calculating Seismic Load :** | Was Not Added |
| **Earthquake Direction :** | |

Earthquake Forces applied only the X and Y directions

| | |
|---|---|
| **Option To Take Vertical Bond Beam Rigidity :** | Yes |
| **Relative Vertical Bond Beam Rigidity Cofficient According To Wall :** | 6.66 |

# PROJECT ANALYSIS OPTIONS (SUMMARY)

## LOAD COMBINATIONS

Load Factors Used For Compressive Stress Controls

| | | | |
|---|---|---|---|
| 1 | *G+ | 1 | *Q |

Load Factors Used for Reinforced Concrete Slab Calculation

| | | | |
|---|---|---|---|
| 1.4 | *G+ | 1.6 | *Q |

Load Factors used for Shear Safety Stress Calculation

| | | | |
|---|---|---|---|
| 1 | *G+ | HYKK | *Q |

Load factors used for Shear Stress Calculation

| | | | | | |
|---|---|---|---|---|---|
| 1.0 | *G+ | LLRF | *Q+ | 1.0 | *E |

G:Dead Load.Q:Live Load.HYKK: Live Load Entrainment Coefficient.E:Seismic Load.

## PROJECT PARAMETER

| | | |
|---|---|---|
| **Number Of Storey :** | 3 | (Basement And Ground Storey Storey Included) |
| **I:** | 1 | Building Importance Coefficient |
| **R:** | : 2 | Carrier System Behavior Coefficient |
| **A:** | 0.2 | Effective Ground Acceleration Coefficient |
| **S(T):** | 2.5 | Spectrum Coefficient |

## Strengthening Options

| | |
|---|---|
| **Relative Rigidity Coefficient of Strengthening Jacket According to Walls :** | 6.66 |
| **Strengthening Jacket Contribution ToTthe Wall compression Safety Stress :** | Were Taken Into Account |
| **Calculate Strengthening Jacket Shear Capacity With Concrete Strength :** | No |
| **Calculate Strengthened Wall Shear Capacity With Strength Of Reinforcement Mesh :** | Yes |

| | |
|---|---|
| **Seismic Performance Evaluation Option :** | Calculate with ( Non-providing Total Ve)/Qbi formula |
| **Chose a Regulation For Seismic Performance Evaluation :** | DBYBHY 2007 |
| **Building Earthquake Performance Level :** | |

# READY FOR USAGE

| Story Name | Earthquake Direction | Qi (ton) | e (m) | Mbi (tm) | ΣVr (Wall) (ton) | ΣWa | ΣWn | ΣInadequate Wn | ΣWL | ΣInadequate Vr(ton) | ΣInadequate Ve (ton) | Yetersiz ΣVe/Qi (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BASEMENT STORY | +X | 679.87 | -1.68 | 63.85 | 1132.18 | 58.78 | 45 | 0 | 117.55 | 0 | 0 | 0 |
| | -X | | | 63.85 | | | | | | | 0 | 0 |
| | +Y | | 0.09 | -1144.38 | 928.77 | 49.15 | 18 | 0 | 98.3 | 0 | 0 | 0 |
| | -Y | | | -1144.38 | | | | | | | 0 | 0 |
| GROUND STORY | +X | 513.36 | -0.46 | -37.22 | 831.25 | 30.01 | 47 | 0 | 111.25 | 0 | 0 | 0 |
| | -X | | | -37.22 | | | | | | | 0 | 0 |
| | +Y | | -0.07 | -234.14 | 1036.94 | 23.2 | 21 | 0 | 100.75 | 0 | 0 | 0 |
| | -Y | | | -234.14 | | | | | | | 0 | 0 |
| 1. STORY | +X | 283.2 | 0.29 | -19.88 | 618.9 | 28.78 | 45 | 0 | 105.1 | 0 | 0 | 0 |
| | -X | | | -19.88 | | | | | | | 0 | 0 |
| | +Y | | -0.07 | 80.76 | 511.68 | 19.35 | 17 | 0 | 81.45 | 0 | 0 | 0 |
| | -Y | | | 80.76 | | | | | | | 0 | 0 |

SYMBOLS AND THEIR DESCRİPTİONS

Qi:Seismic Forces Effecting the Storey(torsion-free )(ton)
e:Projection Distance Between Rigidity Center and Storey Center of Mass
Mbi:Storey Torsional Moment
Vr (Wall): Wall Shear Force Bearing Capacity (Vr=Tem*Wall length*Wall width)
ΣVe:Total Shear Force Effecting the Wall (torsion included)
InsufficientΣVr:Total Shear Capacity of the Walls with Insufficient Capacity
InsufficientΣVe:Total Shear Force on the Walls with Insufficient Capacity(torsion included)
ΣWa:Wall Area Component in the Related Direction of the Storey
ΣWn:Wall Number in the Storey Related Direction of the Storey
InsufficientΣWn:Number of Walls with Insufficient Shear Capacity
InsufficientΣWn:Number of Walls with Insufficient Shear Capacity

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