

RIGID FRAME: BASIC COLUMN REACTIONS (UNFACTORED) (k)

Frame Line	Column Line	Dead		Collateral		Live		Wind_L1		Wind_R1		Wind_L2	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
4	I	0.18	1.54	0.18	1.37	2.02	15.46	-4.77	-11.55	3.57	-6.35	-6.08	-3.52
4	F	-0.18	1.73	-0.18	1.44	-2.01	16.19	-4.69	-4.74	1.02	-9.94	0.24	1.68

Frame Line	Column Line	Wind_R2		Seismic_L		Seismic_R		LnWind_L		LnWind_R	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
4	I	2.25	1.68	-0.81	-0.80	0.81	0.80	0.81	-15.71	0.81	-15.71
4	F	5.94	-3.52	-0.35	0.80	0.35	-0.80	-4.35	-13.28	-4.35	-13.28

ENDWALL COLUMN: REACTIONS (UNFACTORED), ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Column_Reactions (k)										Anc. Bolt NoD(in)	Base Plate (in)			Grout (in)
		Dead Vert	Coll Vert	Live Vert	Wind-Left Horiz	Wind-Left Vert	Wind-Right Horiz	Wind-Right Vert	Out-Of-Plane Wd P Horiz	Out-Of-Plane Wd S Horiz	Wid		Len	Thk		
3	F	0.9	0.3	5.9	0.0	4.6	2.4	-6.5	-2.6	2.8	2	0.750	8.000	8.000	0.375	0.0
3	H	1.5	0.8	15.0	3.6	-12.0	0.0	-0.9	-4.6	4.9	2	0.750	8.000	8.500	0.375	0.0
3	I	0.8	0.2	3.9	0.0	-1.4	0.0	-1.4	-2.2	2.3	2	0.750	8.000	8.000	0.375	0.0

RIGID FRAME: MAXIMUM REACTIONS (FACTORED), ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column Reactions (k)								Anc. Bolt No D(in)	Base Plate (in)			Grout (in)
		Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin	Wid	Len		Thk			
4	I	3	4.5	9.7	4	-6.0	-2.6	4	0.750	6.000	12.75	0.375	15.0	0.0
		1	2.4	18.4	6	0.9	-14.8							
4	F	5	5.8	-2.5	2	-5.4	11.8	4	0.750	6.000	13.00	0.375	72.0	0.0
		1	-2.4	19.4	6	-4.5	-12.2							

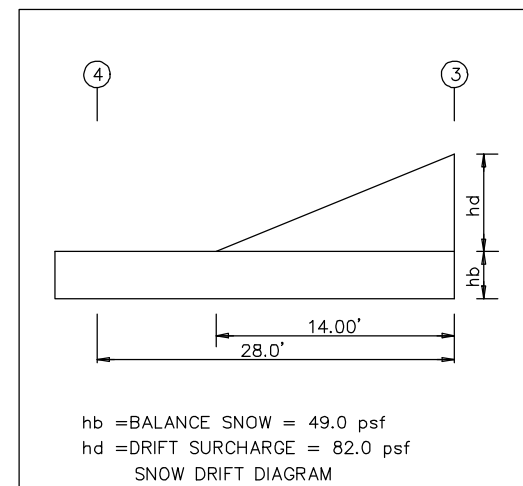
BRACING REACTIONS (UNFACTORED), PANEL SHEAR

Wall Loc	Col Line	± Reactions (k)				Panel Shear (lb/ft)	
		Wind Horiz	Wind Vert	Seismic Horiz	Seismic Vert		
L_EW	3	H	2.7	5.0	0.8	1.5	
		F	1.8	3.3	0.8	1.5	
F_SW	3	F	3.4	3.9	0.6	0.9	
R_EW	4	Rigid Frame At Endwall					
B_SW	1	4	3	4.0	6.7	0.6	0.9

NOTES FOR REACTIONS

- All loading conditions are examined and only maximum/minimum H or V and the corresponding H or V are reported.
- Positive reactions are as shown in the sketch. Foundation loads are in opposite directions.
- Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.
- Building reactions are based on the following building data:
 - Width (ft) = 28.0
 - Length (ft) = 18.0
 - Eave Height (ft) = 32.3/30.0
 - Roof Slope (rise/12) = 1.0
 - Dead Load (psf) = 4.0
 - Collateral Load (psf) = 5.0
 - Live Load (psf) = 49.0
 - Snow Load (psf) = 49.0
 - Wind Speed (mph) = 100.0
 - Wind Code = IBC 03
 - Exposure = C
 - Closed/Open = P
 - Importance - Wind = 1.10
 - Importance - Seismic = 1.00
 - Seismic Coeff (Fa*Ss) = 0.60

5. Loading conditions are:
- DL+CL+LL
 - DL+CL+0.75LL+0.75WL1
 - DL+CL+0.75LL+0.75WR1
 - 0.6ODL+WL2
 - 0.6ODL+WR2
 - 0.6ODL+LnWdL
 - 0.6ODL+WR1+WS
 - 0.6ODL+WP
 - DL+CL+0.75LL+0.75WL2+0.75WS



GENERAL NOTES

- INFORMATION ON THIS DRAWING IS INTENDED FOR CONSTRUCTION ONLY WHEN BEARING A STEELWAY ENGINEERS SIGNED PROFESSIONAL SEAL AND WHEN FREE OF ANY NOTATIONS STATING OTHERWISE.
- FOUNDATION DESIGN AND CONSTRUCTION IS NOT THE RESPONSIBILITY OF STEELWAY BUILDING SYSTEMS.
- THE BUILDING REACTION DATA REPORTS THE LOADS WHICH THIS BUILDING PLACES ON THE FOUNDATIONS.
- THE ENDWALL WIND LOAD REACTIONS INCLUDE REACTIONS FROM ENDWALL BRACING.
- COLUMN BASE PLATES ARE DESIGNED ASSUMING A MINIMUM SPECIFIED COMPRESSIVE STRENGTH (fc') OF CONCRETE OF 2,900 P.S.I. (20 MPA) AT 28 DAYS.
- ANCHOR BOLT DIAMETER, QUANTITY AND PLACEMENT SHOULD BE AS SHOWN.
- THE EMBEDMENT OF THE ANCHOR BOLTS IN THE CONCRETE IS THE RESPONSIBILITY OF THE FOUNDATION DESIGNER. THE FRAME REACTIONS LISTED ARE THE MINIMUM LOADS TO BE DEVELOPED.
- ALL ANCHOR BOLTS ARE TO BE ASTM A307 OR EQUAL.
- ALL REACTIONS ARE IN KIPS OR KIP-FEET.
- MAXIMUM RIGID FRAME REACTIONS INCLUDE WIND AND SEISMIC REACTIONS FROM SIDEWALL BRACING.