

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
1	A	1.3	2.9	0.1	0.3	1.7	3.8	4.9	11.1	-4.0	-7.1	-0.5	-4.6
1	F	-1.3	2.9	-0.1	0.3	-1.7	3.8	-4.9	11.1	0.5	-4.6	4.0	-7.1

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
1	A	-3.7	-4.1	-0.1	-1.6	-0.9	-6.4	-1.1	-5.2	-0.1	-0.1	0.1	0.1
1	F	0.1	-1.6	3.7	-4.1	1.1	-5.2	0.9	-6.4	-0.1	0.1	0.1	-0.1

Frame Line	Column Line	MIN_SNOW Horiz	MIN_SNOW Vert	F1UNB_SL_L Horiz	F1UNB_SL_L Vert	F1UNB_SL_R Horiz	F1UNB_SL_R Vert
1	A	2.8	6.3	4.0	11.1	4.0	6.2
1	F	-2.8	6.3	-4.0	11.1	-4.0	6.2

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
2*	A	0.9	2.4	0.3	0.6	3.5	7.2	10.3	21.0	-8.1	-13.4	-1.4	-8.7
2*	F	-0.9	2.4	-0.3	0.6	-3.5	7.2	-10.3	21.0	1.4	-8.7	8.1	-13.4

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
2*	A	-7.2	-7.8	-0.4	-3.0	-2.1	-12.2	-2.5	-9.9	-0.2	-0.1	0.2	0.1
2*	F	0.4	-3.0	7.2	-7.8	2.5	-9.9	2.1	-12.2	-0.2	0.1	0.2	-0.1

Frame Line	Column Line	MIN_SNOW Horiz	MIN_SNOW Vert	F2UNB_SL_L Horiz	F2UNB_SL_L Vert	F2UNB_SL_R Horiz	F2UNB_SL_R Vert
2*	A	5.9	12.0	8.3	21.0	8.4	11.7
2*	F	-5.9	12.0	-8.4	21.0	-8.3	11.7

RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Load ID	Hmax H	Vmax V	Load ID	Hmin H	Vmin V	Anc. Bolt Qty	Anc. Bolt Dia	Base Plate (in) Width	Base Plate (in) Length	Thick	Grout (in)
1	A	2	6.3	14.3	3	-1.7	-2.5	4	0.750	8.000	8.500	0.625	0.0
		5	5.4	14.4									
1	F	4	1.7	-2.5	2	-6.3	14.3	4	0.750	8.000	8.500	0.625	0.0
		6	-5.4	14.4	4	1.7	-2.5						

RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Load ID	Hmax H	Vmax V	Load ID	Hmin H	Vmin V	Anc. Bolt Qty	Anc. Bolt Dia	Base Plate (in) Width	Base Plate (in) Length	Thick	Grout (in)
2*	A	1	11.5	24.0	3	-4.3	-6.6	4	0.750	8.000	9.000	0.625	0.0
		7	9.6	24.1									
2*	F	4	4.3	-6.6	2	-11.5	24.0	4	0.750	8.000	9.000	0.625	0.0
		8	-9.6	24.1	4	4.3	-6.6						

ENDWALL COLUMN REACTIONS(k)

MAXIMUM VERTICAL Dead+Collateral+Snow	= 8.9
MAXIMUM VERTICAL Dead+Wind	= -5.8
MAXIMUM HORIZONTAL Dead+Wind	= 6.0

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type	Total Len (in)	Bend Len (in)	Proj (in)
16	Endwall	3/4"	A307	3.75		2.50
4	Endwall	1/2"	A307		3.00	1.50
24	Frame	3/4"	A307			2.50

BUILDING BRACING REACTIONS

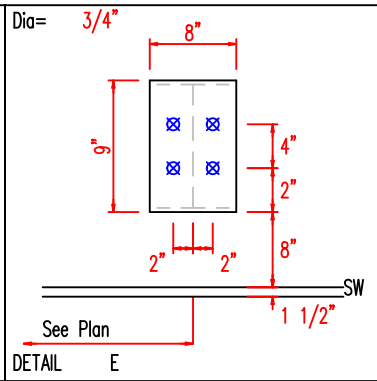
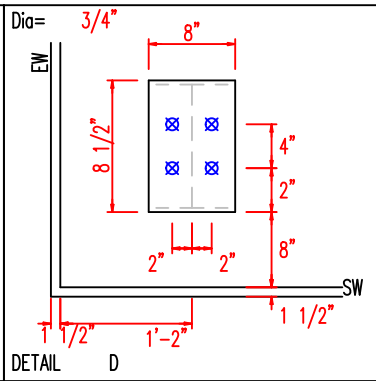
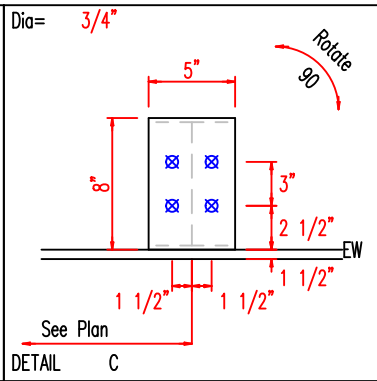
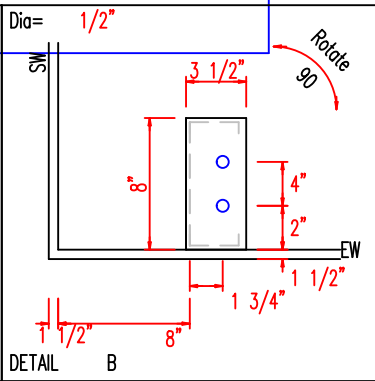
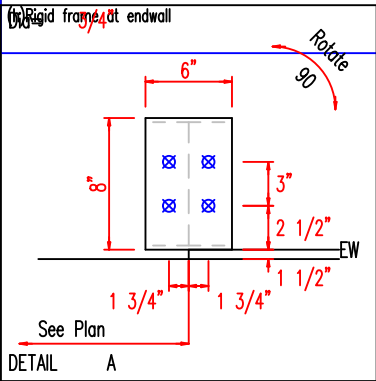
Loc	Wall Line	Col Line	Reactions (k) Wind Horiz	Reactions (k) Seismic Horiz	Reactions (k) Wind Vert	Reactions (k) Seismic Vert	Panel Shear (lb/ft) Wind	Panel Shear (lb/ft) Seis	Note
L_EW	1								(h)
F_SW	F				68	6			
R_EW	4				23	2			
B_SW	A				68	6			

NOTES FOR REACTIONS

Building reactions are based on the following building data:

- Width (ft) = 60.0
- Length (ft) = 60.0
- Eave Height (ft) = 20.0/ 20.0
- Roof Slope (rise/12) = 1.0/ 1.0
- Dead Load (psf) = 2.0
- Collateral Load (psf) = 1.0
- Roof Live Load (psf) = 20.0
- Frame Live Load (psf) = 12.0
- Snow Load (psf) = 35.0
- Wind Speed (mph) = 115.0
- Wind Code = IBC 12
- Exposure = C
- Closed/Open = C
- Importance Wind = 1.00
- Importance Seismic = 1.00
- Seismic Zone = A
- Seismic Coeff (Fa*Ss) = 0.09

ID	Description
1	Dead+Collateral+Snow+Snow_Drift
2	Dead+Collateral+Snow+Slide_Snow
3	0.6Dead+0.6Wind_Left1
4	0.6Dead+0.6Wind_Right1
5	Dead+Collateral+F1UNB_SL_L
6	Dead+Collateral+F1UNB_SL_R
7	Dead+Collateral+F2UNB_SL_L
8	Dead+Collateral+F2UNB_SL_R
9	0.6Dead+0.6Wind_Right2+0.6Wind_Suction
10	0.6Dead+0.6Wind_Pressure+0.6Wind_Long2
11	1.01Dead+1.01Collateral+0.52Seismic_Left+0.75E1UNB_SL_R
12	0.6Dead+0.6Wind_Suction+0.6Wind_Long1
13	0.6Dead+0.6Wind_Pressure+0.6Wind_Long1
14	Dead+Collateral+E2UNB_SL_L
15	0.6Dead+0.6Wind_Left2+0.6Wind_Suction
16	Dead+Collateral+E2UNB_SL_R
17	0.6Dead+0.6Wind_Suction+0.6Wind_Long2



Metal Building Software, Inc.				
PROJECT	Your New Building	ANCHOR BOLT DETAILS & REACTIONS		
ID	020614	DESIGN:	DRAFT:	CHECK:
PROJECT ADDRESS	1234 Opportunity Boulevard Fargo, North Dakota 58104	DATE: 4/23/2015	SHEET	OF