

Steel Design Report

Project: L3_Done (C:\DCC\Fram15e\Projects\L3_Done)
 Description: (New imported project)
 Date: 10/31/2002 02:58 PM

Company:
 User:
 Software: Digital Canal Frame Analysis & Design

Design Results (LRFD)

GROUP DESIGN SUMMARY

ID	Section Description	Section Name	Governing Criteria	Stress Ratio	Load Combination
2	Beam	W8x67	Total Deflection Y	0.91	Total_Deflect
2	"	W10x45	Total Deflection Y	0.998	Total_Deflect
2	"	W12x35	Total Deflection Y	0.868	Total_Deflect
9	"	W14x30 ✓	Axial-Bending	0.941	Comb1
14	"	W16x36	Axial-Bending	0.727	Comb1
14	"	W18x35	Axial-Bending	0.985	Comb1
	Brace	(No solution)			
8	Column	W8x31 ✓	Axial-Bending	0.8	Comb1
8	"	W10x33	Axial-Bending	0.726	Comb1
8	"	W12x35	Axial-Bending	0.871	Comb1

CRITICAL STRESS SUMMARY

ID	Ref. #	Section Name	Governing Criteria	Stress Ratio	Load Combination	Distance (ft)
1	1	W8x31	Axial-Bending	0.7000	Comb1	12.000
1	2	W10x33	Axial-Bending	0.6330	Comb1	12.000
1	3	W12x30 ✓	Axial-Bending	0.9139	Comb1	12.000
2	1	W8x67	Total Deflection Y	0.9096	Total_Deflect	9.9024
2	2	W10x45	Total Deflection Y	0.9977	Total_Deflect	9.9024
2	3	W12x35	Total Deflection Y	0.8682	Total_Deflect	9.9024
2	4	W14x30 ✓	Axial-Bending	0.8617	Comb1	10.035
2	5	W16x36	Axial-Bending	0.6434	Comb1	11.000
2	6	W18x35	Axial-Bending	0.7019	Comb2	11.000
3	1	W8x28 ✓	Axial-Bending	0.9929	Comb2	0.0000
3	2	W10x33	Axial-Bending	0.6243	Comb2	0.0000
3	3	W12x30	Axial-Bending	0.8954	Comb2	0.0000
8	1	W8x31 ✓	Axial-Bending	0.8000	Comb1	0.0000
8	2	W10x33	Axial-Bending	0.7260	Comb1	0.0000
8	3	W12x35	Axial-Bending	0.8705	Comb1	0.0000
9	1	W8x67	Total Deflection Y	0.8853	Total_Deflect	9.7492
9	2	W10x45	Total Deflection Y	0.9710	Total_Deflect	9.7492
9	3	W12x35	Total Deflection Y	0.8449	Total_Deflect	9.7492
9	4	W14x30 ✓	Axial-Bending	0.9414	Comb1	11.000
9	5	W16x36	Axial-Bending	0.7122	Comb1	11.000
9	6	W18x35	Axial-Bending	0.7917	Comb2	11.000
10	1	W8x28 ✓	Axial-Bending	0.9053	Comb1	12.000
10	2	W10x33	Axial-Bending	0.5641	Comb1	12.000
10	3	W12x30	Axial-Bending	0.8445	Comb1	12.000
11	1	W6x15 ✓	Total Deflection X	0.3801	Total_Deflect	10.261
11	2	W8x18	Total Deflection X	0.4445	Total_Deflect	10.261
11	3	W10x17	Total Deflection X	0.9952	Total_Deflect	10.261
11	4	W12x19	Total Deflection X	0.9422	Total_Deflect	10.261
11	5	W14x22	Total Deflection X	0.5061	Total_Deflect	10.261
11	6	W16x26	Total Deflection X	0.3694	Total_Deflect	10.261
11	7	W18x35	Total Deflection X	0.2316	Total_Deflect	10.261
12	1	W6x20 ✓	Total Deflection X	0.8734	Total_Deflect	12.588
12	2	W8x24	Total Deflection X	0.6347	Total_Deflect	12.588
12	3	W10x26	Total Deflection X	0.8238	Total_Deflect	12.588
12	4	W12x26	Total Deflection X	0.6714	Total_Deflect	12.588
12	5	W14x30	Total Deflection X	0.5926	Total_Deflect	12.588

12	6	W16x36	Total Deflection X	0.4741	Total_Deflect	12.588
12	7	W18x35	Total Deflection X	0.7592	Total_Deflect	12.588
13	1	W6x25	Axial-Bending	0.9769	Comb1	0.0000
13	2	W8x24 ✓	Axial-Bending	0.9516	Comb1	0.0000
13	3	W10x30	Axial-Bending	0.8945	Comb1	0.0000
13	4	W12x26	Axial-Bending	0.9582	Comb1	0.0000
13	5	W14x30	Axial-Bending	0.8703	Comb1	0.0000
13	6	W16x36	Axial-Bending	0.7191	Comb1	0.0000
13	7	W18x35	Axial-Bending	0.9779	Comb1	5.0000
14	1	W6x25	Axial-Bending	0.9503	Comb1	0.0000
14	2	W8x24 ✓	Axial-Bending	0.9345	Comb1	0.0000
14	3	W10x30	Axial-Bending	0.8955	Comb1	0.0000
14	4	W12x26	Axial-Bending	0.9610	Comb1	0.0000
14	5	W14x30	Axial-Bending	0.8771	Comb1	0.0000
14	6	W16x36	Axial-Bending	0.7267	Comb1	0.0000
14	7	W18x35	Axial-Bending	0.9852	Comb1	0.0000

SELECTED LOAD COMBINATIONS

Load Combination	Code Check	Total	Live	Dependent	Conditional
Comb1	x			-	-
Comb2	x			-	-
Total_Deflect	x	x		-	-
Wind_Deflect	x		x	-	-