Beam Summary

RAM Steel v11.2
DataBase: VCU
Building Code: IBC

04/02/08 21:24:41
Steel Code: AISC LRFD

STEEL BEAM DESIGN SUMMARY:

Floor Type: Second FLoor

Bm #	Length ft	+Mu kip-ft	-Mu kip-ft	Mn kip-ft	Fy ksi	Beam Size	Studs
1	10.50	36.8	0.0	65.7	50.0	W8X10	4
2	24.00	43.8	0.0	99.1	50.0	W10X12	8
3	24.00	82.8	0.0	135.9	50.0	W12X14	10
6	24.00	82.8	0.0	135.9	50.0	W12X14	10
7	24.00	82.8	0.0	135.9	50.0	W12X14	10
8	24.00	82.8	0.0	135.9	50.0	W12X14	10
11	24.00	82.8	0.0	135.9	50.0	W12X14	10
12	24.00	82.8	0.0	135.9	50.0	W12X14	10
13	24.00	82.8	0.0	135.9	50.0	W12X14	10
16	24.00	82.8	0.0	135.9	50.0	W12X14	10
17	24.00	82.8	0.0	135.9	50.0	W12X14	10
18	24.00	82.8	0.0	135.9	50.0	W12X14	10
21	24.00	82.8	0.0	135.9	50.0	W12X14	10
22	24.00	82.8	0.0	135.9	50.0	W12X14	10
23	24.00	82.8	0.0	135.9	50.0	W12X14	10
24	21.00	147.8	0.0	211.8	50.0	W14X22 u	8
25	24.00	82.8	0.0	135.9	50.0	W12X14	10
26	24.00	82.8	0.0	135.9	50.0	W12X14	10
27	24.00	82.8	0.0	135.9	50.0	W12X14	10
28	24.00	82.8	0.0	135.9	50.0	W12X14	10
29	21.00	147.8	0.0	211.8	50.0	W14X22 u	8
30	24.00	82.8	0.0	135.9	50.0	W12X14	10
31	24.00	82.8	0.0	135.9	50.0	W12X14	10
32	24.00	82.8	0.0	135.9	50.0	W12X14	10
33	24.00	82.8	0.0	135.9	50.0	W12X14	10
36	24.00	82.8	0.0	135.9	50.0	W12X14	10
37	24.00	82.8	0.0	135.9	50.0	W12X14	10
38	24.00	82.8	0.0	135.9	50.0	W12X14	10
41	24.00	82.8	0.0	135.9	50.0	W12X14	10
42	24.00	82.8	0.0	135.9	50.0	W12X14	10
43	24.00	82.8	0.0	135.9	50.0	W12X14	10
44	23.25	181.6	0.0	282.7	50.0	W16X26	10
46	24.00	91.7	0.0	137.7	50.0	W12X16	8
47	24.00	91.7	0.0	137.7	50.0	W12X16	8
48	24.00	91.7	0.0	137.7	50.0	W12X16	8
49	13.04	50.7	0.0	98.4	50.0	W10X12	3, 1, 3
50	24.00	80.1	0.0	125.7	50.0	W12X14	8
51	24.00	68.7	0.0	125.6	50.0	W12X14	8
52	24.00	68.7	0.0	125.6	50.0	W12X14	8
53	24.00	36.8	0.0	98.9	50.0	W10X12	8

Beam Summary

Bm #	Length	+Mu	-Mu	Mn	Fy	Beam Size	Studs
54	10.50	50.0	0.0	66.0	50.0	W8X10	4
55	9.08	6.3	0.0	37.0	50.0	W8X10	
56	9.08	11.8	0.0	37.0	50.0	W8X10	
57	21.00	200.9	0.0	238.7	50.0	W14X22	12
59	9.08	11.8	0.0	37.0	50.0	W8X10	
60	9.08	11.8	0.0	37.0	50.0	W8X10	
61	9.08	11.8	0.0	37.0	50.0	W8X10	
62	21.00	200.9	0.0	238.7	50.0	W14X22	12
64	9.08	11.8	0.0	37.0	50.0	W8X10	
65	9.08	11.8	0.0	37.0	50.0	W8X10	
66	9.08	11.8	0.0	37.0	50.0	W8X10	
67	21.00	200.9	0.0	238.7	50.0	W14X22	12
69	9.08	11.8	0.0	37.0	50.0	W8X10	
70	9.08	11.8	0.0	37.0	50.0	W8X10	
71	9.08	11.8	0.0	37.0	50.0	W8X10	
72	21.00	200.9	0.0	238.7	50.0	W14X22	12
74	9.08	11.8	0.0	37.0	50.0	W8X10	
75	9.08	11.8	0.0	37.0	50.0	W8X10	
76	9.08	11.8	0.0	37.0	50.0	W8X10	
77	21.00	200.9	0.0	238.7	50.0	W14X22	12
78	9.08	11.8	0.0	37.0	50.0	W8X10	
79	9.08	11.8	0.0	37.0	50.0	W8X10	
80	9.08	11.8	0.0	37.0	50.0	W8X10	
81	9.08	11.8	0.0	37.0	50.0	W8X10	
82	21.00	254.0	0.0	311.3	50.0	W16X26	14
83	9.08	11.8	0.0	37.0	50.0	W8X10	
84	23.08	45.6	0.0	125.7	50.0	W12X14	11
85	23.08	45.6	0.0	125.7	50.0	W12X14	11
86	23.08	45.6	0.0	125.7	50.0	W12X14	11
87	21.00	254.0	0.0	311.3	50.0	W16X26	14
89	23.08	45.6	0.0	125.7	50.0	W12X14	11
90	23.08	45.6	0.0	125.7	50.0	W12X14	11
91	23.08	45.6	0.0	125.7	50.0	W12X14	11
92	21.00	254.0	0.0	311.3	50.0	W16X26	14
94	23.08	45.6	0.0	125.7	50.0	W12X14	11
95	23.08	45.6	0.0	125.7	50.0	W12X14	11
96	23.08	45.6	0.0	125.7	50.0	W12X14	11
97	10.50	40.2	0.0	65.7	50.0	W8X10	2, 2
99	25.79	227.1	0.0	309.4	50.0	W16X26	15
100	10.50	50.0	0.0	66.0	50.0	W8X10	4
101	24.00	43.8	0.0	99.1	50.0	W10X12	8
102	24.00	82.8	0.0	135.9	50.0	W12X14	10
103	21.00	56.1	0.0	99.0	50.0	W10X12	6
105	21.00	200.9	0.0	238.7	50.0	W14X22	12
107	24.00	82.8	0.0	135.9	50.0	W12X14	10

Bm #	Length	+Mu	-Mu	Mn	Fy	Beam Size	Studs
108	24.00	82.8	0.0	135.9	50.0	W12X14	10
109	24.00	82.8	0.0	135.9	50.0	W12X14	10
110	21.00	200.9	0.0	238.7	50.0	W14X22	12
112	24.00	82.8	0.0	135.9	50.0	W12X14	10
113	24.00	82.8	0.0	135.9	50.0	W12X14	10
114	24.00	82.8	0.0	135.9	50.0	W12X14	10
115	21.00	200.9	0.0	238.7	50.0	W14X22	12
117	24.00	82.8	0.0	135.9	50.0	W12X14	10
118	24.00	82.8	0.0	135.9	50.0	W12X14	10
119	24.00	82.8	0.0	135.9	50.0	W12X14	10
120	21.00	156.6	0.0	212.8	50.0	W14X22	8
121	24.00	82.8	0.0	135.9	50.0	W12X14	10
122	24.00	82.8	0.0	135.9	50.0	W12X14	10
123	24.00	57.1	0.0	125.7	50.0	W12X14	8
124	24.00	40.7	0.0	125.7	50.0	W12X14	9
125	14.00	12.3	0.0	37.0	50.0	W8X10	
126	8.50	13.8	0.0	65.3	50.0	W8X10	4
127	13.75	22.0	0.0	37.0	50.0	W8X10	
128	13.75	11.4	0.0	37.0	50.0	W8X10	
129	21.00	72.2	0.0	171.8	50.0	W12X19	8
130	10.00	5.6	0.0	37.0	50.0	W8X10	
131	21.00	68.8	0.0	137.1	50.0	W12X16	6
133	10.50	36.8	0.0	65.7	50.0	W8X10	4
138	24.42	125.6	0.0	212.1	50.0	W14X22	2, 2, 2, 3

Floor Type: First Floor

Bm #	Length	+Mu	-Mu	Mn	Fy	Beam Size	Studs
	ft	kip-ft	kip-ft	kip-ft	ksi		
1	10.50	44.3	0.0	66.0	50.0	W8X10	4
2	24.00	56.2	0.0	125.5	50.0	W12X14	8
3	24.00	98.0	0.0	148.3	50.0	W12X16	10
6	24.00	98.0	0.0	148.3	50.0	W12X16	10
7	24.00	98.0	0.0	148.3	50.0	W12X16	10
8	24.00	98.0	0.0	148.3	50.0	W12X16	10
11	24.00	98.0	0.0	148.3	50.0	W12X16	10
12	24.00	98.0	0.0	148.3	50.0	W12X16	10
13	24.00	98.0	0.0	148.3	50.0	W12X16	10
16	24.00	98.0	0.0	148.3	50.0	W12X16	10
17	24.00	98.0	0.0	148.3	50.0	W12X16	10
18	24.00	98.0	0.0	148.3	50.0	W12X16	10
21	24.00	98.0	0.0	148.3	50.0	W12X16	10
22	24.00	98.0	0.0	148.3	50.0	W12X16	10
23	24.00	98.0	0.0	148.3	50.0	W12X16	10
24	24.00	56.2	0.0	125.5	50.0	W12X14	8
25	10.50	56.7	0.0	76.5	50.0	W8X10	6

Beam Summary

Bm #	Length	+Mu	-Mu	Mn	Fy	Beam Size	Studs
26	9.08	6.9	0.0	37.0	50.0	W8X10	
27	9.08	11.8	0.0	37.0	50.0	W8X10	
28	21.00	227.9	0.0	284.0	50.0	W16X26	10
30	9.08	11.8	0.0	37.0	50.0	W8X10	
31	9.08	11.8	0.0	37.0	50.0	W8X10	
32	9.08	11.8	0.0	37.0	50.0	W8X10	
33	21.00	227.9	0.0	284.0	50.0	W16X26	10
35	9.08	11.8	0.0	37.0	50.0	W8X10	
36	9.08	11.8	0.0	37.0	50.0	W8X10	
37	9.08	11.8	0.0	37.0	50.0	W8X10	
38	21.00	227.9	0.0	284.0	50.0	W16X26	10
40	9.08	11.8	0.0	37.0	50.0	W8X10	
41	9.08	11.8	0.0	37.0	50.0	W8X10	
42	9.08	11.8	0.0	37.0	50.0	W8X10	
43	21.00	227.9	0.0	284.0	50.0	W16X26	10
45	9.08	11.8	0.0	37.0	50.0	W8X10	
46	9.08	11.8	0.0	37.0	50.0	W8X10	
47	9.08	11.8	0.0	37.0	50.0	W8X10	
48	9.08	6.9	0.0	37.0	50.0	W8X10	
49	10.50	56.7	0.0	76.5	50.0	W8X10	6
50	24.00	56.2	0.0	125.5	50.0	W12X14	8
51	24.00	98.0	0.0	148.3	50.0	W12X16	10
52	21.00	56.1	0.0	99.0	50.0	W10X12	6
54	21.00	227.9	0.0	284.0	50.0	W16X26	10
56	24.00	98.0	0.0	148.3	50.0	W12X16	10
57	24.00	98.0	0.0	148.3	50.0	W12X16	10
58	24.00	98.0	0.0	148.3	50.0	W12X16	10
59	21.00	227.9	0.0	284.0	50.0	W16X26	10
61	24.00	98.0	0.0	148.3	50.0	W12X16	10
62	24.00	98.0	0.0	148.3	50.0	W12X16	10
63	24.00	98.0	0.0	148.3	50.0	W12X16	10
64	21.00	227.9	0.0	284.0	50.0	W16X26	10
66	24.00	98.0	0.0	148.3	50.0	W12X16	10
67	24.00	98.0	0.0	148.3	50.0	W12X16	10
68	24.00	98.0	0.0	148.3	50.0	W12X16	10
69	24.00	56.2	0.0	125.5	50.0	W12X14	8
70	8.50	16.3	0.0	65.3	50.0	W8X10	4
71	13.75	26.0	0.0	52.5	50.0	W10X12	
72	13.75	13.5	0.0	37.0	50.0	W8X10	
73	10.50	44.3	0.0	66.0	50.0	W8X10	4

* after Size denotes beam failed stress/capacity criteria.
# after Size denotes beam failed deflection criteria.
u after Size denotes this size has been assigned by the User.