



Mark: J15

Project: WEST MIAMI SIX MODEL B
01/24/05 17:07:30

F O R C E S I N M E M B E R S [kips]									
(THE SHOWN FORCES ARE REALS) (FY = 50 Ksi U/N)									
Left Reaction = 3.99/		0.00 kips		Right Reaction = 3.99/		0.00 kips		(Eff. depth = 18.46 in)	
REQUIRED MATERIAL									
x = tied at mid-length									
No	Tension	Compress.		slend.	Util.	Length	REQUIRED WELD	Eff.Throat Pa.Side	Remarks
Top Chord									
1.1	0.00	-4.04	Top Hambro	0 0.25	2'-4"				
1.2	0.00	-1.92	do	0 0.24	1'-0 1/2"				
1.3	0.00	-5.72	do	0 0.35	2'-0"				
1.4	0.00	-7.26	do	0 0.45	do				
1.5	0.00	-8.02	Top Hambro	0 0.49	2'-0"				
Bottom Chord									
2.1	0.00	0.00	LL 1.5 x .109	z 104 0.31	2'-8 1/2"				
2.2	0.00	0.00	do	z 67 0.44	1'-8"				
2.3	0.00	0.00	do	z 81 0.52	2'-0"				
2.4	11.42	0.00	do	z 81 0.60	do				
2.5	11.99	0.00	LL 1.5 x .109	z 81 0.63	2'-0"				
End Diagonal									
3.1	7.31	0.00	RD 9/16"	z 189 0.98	2'-9 3/8"	.178 - 1"			
Diagonal Towards End									
4.1	0.00	0.00	RD 9/16"	z 116 0.36	1'-8"	.178 - 0 3/4"			
4.2	1.62	0.00	do	z 116 0.22	do	do			
4.3	1.25	0.00	RD 9/16"	z 116 0.17	1'-8"	.178 - 0 3/4"			
Diagonal Towards Center									
5.1	0.00	-3.14	RD 9/16"	z 105 0.93	1'-5 7/8"	.178 - 0 3/4"			
5.2	0.00	-2.69	do	z 116 0.98	1'-8"	do			
5.3	0.00	-1.62	do	z 116 0.59	do	do			
5.4	0.00	-1.25	RD 9/16"	z 116 0.45	1'-8"	.178 - 0 3/4"			
Secondary Web Member									
7.1	0.00	-0.76	RD 9/16"	z 98 0.20	1'-4 5/8"	.178 - 0 3/4"			
----- VIBRATION (ALLEN-MURRAY) -----									
- Full height partition between floor									

- Full height partition between floor = (.29 % a/g)
- Demorable partition on all the surface = (.48 % a/g)
- Without partition = (.73 % a/g)
- Frequency = 8.34 Hz

BRIDGING

Maximum spacing between rows of bridging
@ Top Chord: Roll Bars spaced at 21" C/C (533 mm). Laterals supports
@ Bottom Chord: ==> 1 Row(s) Minimum

POSITION
9'-4 1/2"
0 Bottom Chord

VI.6.3.1

Keep 1/3 stress increase for wind : No
From the end of the bridge
-LL = 2 angles short legs back to back, RL = 2 angles welded in box, BR = Round bar
-U = 1 U profile, UU = 2 U profiles one inside the other, -CL = Crimped angle
The welding length of web members is calculated according to non continuous joints.

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