



Memorandum

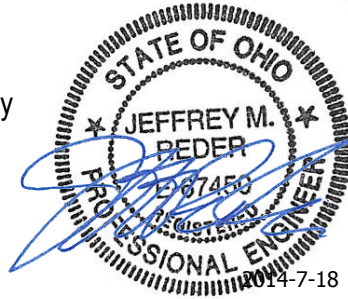
To: Aaron Hurley

From: Jeff Reder

Date: 7/18/2014

CRE Proj. #: 14.413.20

Re: GT Truss – Spigot Rotated 90 degrees



The attached load tables have been provided by Tyler Truss for the 14x24 GT Truss with the spigots oriented such that the plates are vertical. We have determined that the load capacity of the truss will be unaffected if the spigots are rotated 90 degrees such that the plates are oriented horizontally. It is acceptable to use the attached load tables for the spigots oriented in either the vertical or horizontal direction.

14x24x120 Truss Allowable Service Loads And Associated Deflections (Notes 1, 2, 3)

Span (ft.)	Uniform Load			Point Load at Center		Point Loads at 1/3 Points		Point Loads at 1/4 Points		Selfweight	
	Load (lbs./ft)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)
10	690	6,900	0.297	1,630	0.122	2,125	0.263	1,745	0.286	-	0.003
20	400	8,000	1.176	3,740	0.971	2,235	0.902	1,455	0.844	-	0.026
30	150	4,500	1.991	1,445	1.120	1,665	2.000	1,175	1.995	-	0.111
40	62.5	2,500	2.679	1,520	2.669	920	2.678	650	2.665	-	0.335
50	28	1,400	3.291	880	3.337	520	3.321	375	3.337	-	0.796
60	13	780	3.998	485	4.009	285	3.987	205	4.000	-	1.629

Notes:

- 1) The load shown is the allowable load that the truss can support at the given span based on either truss strength or truss deflection limited to span/180.
- 2) The trusses indicated are standalone only. They have not been analysed in a stage configuration.
- 3) The truss capacities are meant for lighting and equipment loads only. Occupancy loads have not been considered and the trusses are not modeled as a work platform or a catwalk.

14x24x96 Truss Allowable Service Loads And Associated Deflections (Notes 1, 2, 3)

Span (ft.)	Uniform Load			Point Load at Center		Point Loads at 1/3 Points		Point Loads at 1/4 Points		Selfweight	
	Load (lbs./ft)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)	Load (lbs.)	Maximum Deflection (in.)
8	665	5,320	0.187	2,065	0.142	1,690	0.166	1,335	0.180	-	0.001
16	555	8,880	0.677	4,345	0.602	1,490	0.328	2,070	0.627	-	0.011
24	295	7,080	1.584	2,085	0.865	2,550	1.545	1,440	1.240	-	0.048
32	125	4,000	2.083	2,490	2.131	1,335	1.948	1,070	2.132	-	0.144
40	63	2,520	2.665	1,520	2.661	935	2.659	635	2.662	-	0.342
48	33	1,584	3.186	980	3.189	580	3.179	425	3.242	-	0.699

Notes:

- 1) The load shown is the allowable load that the truss can support at the given span based on either truss strength or truss deflection limited to span/180.
- 2) The trusses indicated are standalone only. They have not been analysed in a stage configuration.
- 3) The truss capacities are meant for lighting and equipment loads only. Occupancy loads have not been considered and the trusses are not modeled as a work platform or a catwalk.