

## 10ft Stick Allowable Load Tables

### Tyler Truss

### 12"x12" Custom Spigot Truss (Horizontal Spigot)

Table 1: 12" x 12" Custom Spigot Truss Load Capacity Table (Single Use)								
Span (ft)	Uniformly Distributed Load		Center Point Load		3rd Point Load		Quarter Point Load	
	Load (plf)	Defl (in)	Load (lbs)	Defl (in)	Load (lbs)	Defl (in)	Load (lbs)	Defl (in)
10'-0"	841	0.174	6350	0.212	4200	0.240	2800	0.223
20'-0"	311	1.052	3100	0.855	2300	1.090	1550	1.011
30'-0"	111	2.003	1950	1.941	1150	2.000	850	2.000
40'-0"	41	2.671	1000	2.670	575	2.655	425	2.667

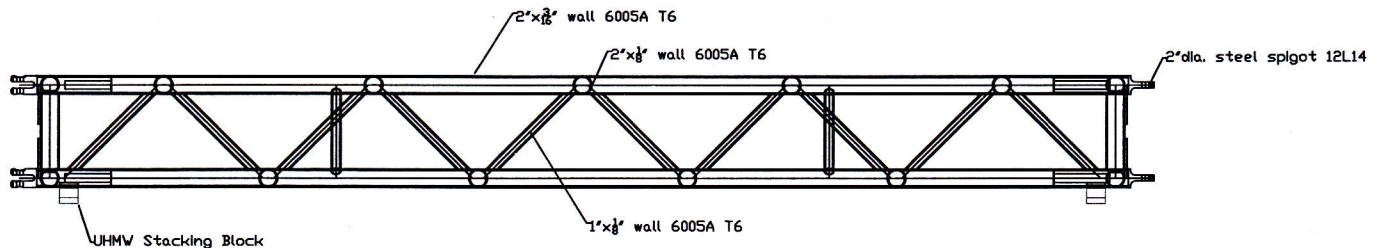
**Table Usage Notes:**

- 1) The truss is supporting vertical loads only, i.e. the truss diagonals are oriented vertically and no lateral loads are applied to the truss;
- 2) The truss is analyzed as a simple span beam. Truss support points are located at truss panel points
- 3) The truss will be analyzed for static loads only
- 4) All loads are applied at the centroid of the truss between the two ladder trusses below the truss
- 5) All loads are applied at the panel points of the truss as to not induce local bending stresses in the chords
- 6) Selfweight has been considered
- 7) Maximum deflection based on span/180
- 8) 2ft, 4ft, 5ft, 6ft, 8ft and 10ft sticks of truss have the same allowable capacities. The allowable loads shown in the table above applies to any configuration of the 12x12 custom spigot truss for the spans shown.

Table 2: 12" x 12" Custom Spigot Truss Load Capacity Table (Repetitive Use)								
Span (ft)	Uniformly Distributed Load		Center Point Load		3rd Point Load		Quarter Point Load	
	Load (plf)	Defl (in)	Load (lbs)	Defl (in)	Load (lbs)	Defl (in)	Load (lbs)	Defl (in)
10'-0"	715	0.15	5398	0.18	3570	0.20	2380	0.19
20'-0"	264	0.89	2635	0.73	1955	0.93	1318	0.86
30'-0"	94	1.70	1658	1.65	978	1.70	723	1.70
40'-0"	35	2.27	850	2.27	489	2.26	361	2.27

**Table Usage Notes:**

- 1) The truss is supporting vertical loads only, i.e. the truss diagonals are oriented vertically and no lateral loads are applied to the truss;
- 2) The truss is analyzed as a simple span beam. Truss support points are located at truss panel points
- 3) The truss will be analyzed for static loads only
- 4) All loads are applied at the centroid of the truss between the two ladder trusses below the truss
- 5) All loads are applied at the panel points of the truss as to not induce local bending stresses in the chords
- 6) All capacities are reduced by 0.85 per ANSI E1.2-2006 for repetitive use members
- 7) Selfweight has been considered
- 8) Maximum deflection based on span/180
- 8) 2ft, 4ft, 5ft, 6ft, 8ft and 10ft sticks of truss have the same allowable capacities. The allowable loads shown in the table above applies to any configuration of the 12x12 custom spigot truss for the spans shown.



\*LOAD TABLES ACCOUNT FOR USE OF "GATE" MEMBERS. NO REDUCTION IN CAPACITY IS NEEDED WHEN USING "GATE" MEMBERS.