

Load Data 12" Tower

	K=1.0	K=1.25	K=1.5	K=2.0
height (ft)	axial load (lbs)	axial load (lbs)	axial load (lbs)	axial load (lbs)
10	17977	14732	14732	14732
15	17952	13084	13084	13084
20	17926	11436	11436	8764
25	17901	9788	8542	4749
30	17875	7098	4882	2679
35	17850	4106	2797	1495
40	13650	2279	1520	766
45	10717	1102	695	290

If a point is "held in position, but not restrained in direction", then it can be considered as "pinned".

If a point is "held in position and restrained in direction", then it can be considered as "fixed".

Table 1: Factors to determine effective lengths of towers.

Effectively held in position at both ends, but not restrained in direction. $K = 1.0$

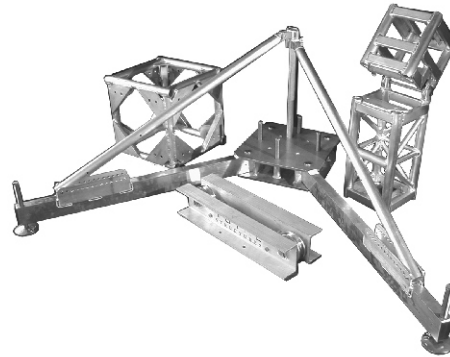
Effectively held in position at one end, and restrained in direction at both ends. $K = 1.25$

Effectively held in position and restrained in direction at one end, and partially restrained in direction but not held in position at the other end. $K = 1.5$

Effectively held in position and restrained in direction at one end, but not held in position or restrained at the other end. $K = 2.0$

Truss manufactured by Total Structures Inc. is designed in accordance with the "Specifications for Aluminum Structures" by the Aluminum Association Inc.

The user should refer to "Operating manual for Modular Aluminum Truss and Tower Sections" and the "Operating manual for Demountable Aluminum Roof Top Structures" where applicable.



Ground Support is the industry standard means of supporting truss grids, where flying points are not available. The 12 inch tower interfaces with most types of Total Structures truss in both indoor grids and outdoor roof structures. A full set of associated parts are available and include headblocks, bases, stabilizers and hinges. Please refer to structural calculations for allowable loads for various applications.

Component Weights

Part No	Description	WT (lbs)
GST10F	10ft. Tower Bolted Connection	66
GST8F	8ft. Tower Bolted Connection	56
GST5F	5ft. Tower Bolted Connection	41
GST3M	3m Tower Bolted Connection	66
GST2M	2m Tower Bolted Connection	49
GST1M	1m Tower Bolted Connection	32
GSTHN	Hinge tower section Bolted Connection	56
HGSTPN	Head Block	31
GSTB	Base unit	40
GSTS	Set of adjustable stabilizers W/braces (4 per set)	53

