

Load Data & Graphs

300mm-Tril Truss bolted version

Medium Duty - alloy construction 300mm triangular profile

APEX UP DATA ONLY

300mm triangular truss has been the back bone of entertainment production for decades, and is still the most widely used truss in the industry. Its light weight and ease of assembly allow for quick set up by a minimal crew, essential for today's hectic scheduling and rapid bump in/out times. 300mm tri truss is perfectly suited to most small to medium corporate events, exhibitions and live production. By utilising the wide range of standard corners and section lengths available, any number of configurations and aspects are possible, providing the building blocks for a high strength structure, which can easily be tailored to suit both the scenic & rigging requirements of each individual production. A recommended max. span of 15 mtrs. is achievable when supported at each end. *SWL's have been calculated for vertical static loads only and a safety factor of 1.85:1 has been applied. All load data derived from calculations based on a 3 metre length.

main chords: 50.0×3.0 mm aluminium alloy diagonals & secondary 90 deg. bracing: 19×3 mm aluminium alloy end plates: 31.75×6 mm SHS aluminium alloy Connections via: 43mm CHS spigot pins and 1/2" UNC Gr 8.8 boltsets

	max. allowable STATIC uniform loads		max. allowable STATIC point loads		
			Centre point	Third point	Quarter point Under the point of the point
SPAN in metres	LOAD kg/metre	LOAD kg	LOAD kg	LOAD kg	LOAD kg
3	395	1185	1181	593	395
6	110	660	330	248	165
9	41	369	183	138	92
12	20	240	123	92	61
15	11	165	82	62	41
Sleeve pins & $1/2$ "unc gr 8.8 boltsets (bolt/nut/2washers) thru 14mm holes in endplates					

Copyright 2007

Data used in this chart prepared from independent calculations produced by:

A. F. Colafella & Associates structural & civil engineers.

All computations and computer analysis carried out in accordance with AS - 1664 (Aluminium Structures code)
All fabrication in accordance with AS- 1664 (Aluminium Structures code). Fabricated by fully certified welders.
Proposed loads & rigging method should be referred to and verified by a site engineer and/or a fully certified rigger
All points should be installed by a certified rigger. Loads have been calculated for INDOOR USE ONLY
ie NO WINDLOADS are considered, and assume a minimum of two lifting points: ie one at each end of the overall span.

METAL FARRICATION FOR THE ENTERTAINMENT INDUSTRY