



G.S. Truss combines the lateral strength of Minibeam with high vertical loading. It is a 347mm OD square truss and comes in exactly the same lengths as Mini Beam, i.e. metric and imperial modules, and can be adapted to be used along side in certain circumstances. In addition, Slick's Mini Ladder Beam system can be used in conjunction with both Mini Beam and GS Truss giving greater flexibility to the designer.

GS Truss is widely used in tower applications and can be made into a self climbing tower with the addition of a purpose built steel base unit, head block and a variety of Sleeve Blocks.

















#### Load Tables

Span (metres)	2	4	6	8	10	12	14	16	18
UDL kg	3388	3366	2994	2207	1727	1399	1158	973	823
DEFL mm	1	9	27	47	72	101	132	166	200
CPL kg	3388	2273	1497	1104	863	699	579	486	412
DEFL mm	2	10	22	38	58	81	106	133	160
TPL kg	3388	3366	2245	1655	1295	1049	869	730	618
DEFL mm	2	12	28	48	74	103	135	170	204
QPL kg	3388	3366	2245	1655	1295	1049	869	730	618
DEFL mm	2	11	26	45	68	96	126	158	190

Connection: Fork End. Fixings: TP or GP pins & R3 Clips

#### Span (metres) **Cantilever Span** 3 UDL kg 1170 DEFL mm 11.5 **EPL** kq 580 DEFL mm 8.4 CPL kg 1170 DEFL mm 11.7





















- All loads are given in kilograms and are total safe working loads (unfactored) at node points
  of a chord members only
- Allowance has been made for self-weight of the truss
- Allowance has been made for frequent use factor of 85%
- The payload on a truss has been calculated as a permanent action. Should it be necessary
  to consider the payload as a variable action, the tabulated figures should be reduced to 90%
  of the given values
- No allowance for dynamic loading has been made
- Capacity has been calculated in accordance with BS EN 1999 Design of Aluminium Structures
- All loads applied are symmetrical between bottom 2 chords
- All deflections stated are theoretical deflections which do not account for any connection slippage. As such the values stated in these tables will be less than the actual deflection of the truss
- Care must be taken regarding the correct orientation of the bracing arrangement and support condition of the truss. The figures 1 and 2 show the acceptable orientations and supporting conditions of the truss and figures 3 and 4 show the orientation and support condition that should not be used.

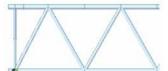


Figure 1: Orientation of the truss supported of bottom chords

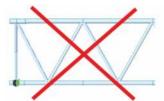


Figure 3: Not allowed orientation of the truss supported of bottom chords



Figure 2: Orientation of the truss supported of top chords

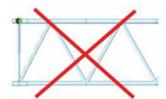


Figure 4: Not allowed orientation of the truss supported of top chords















Material Specifications

Main Cord: 48.4mm x 4.47 mm

25.44mm x 3.25mm Braces: Material Specifications: EN AW-6082 T6

Fork End: TP or GP pins & R3 Clips Fixings:

Accessories

Circles

Hinges and Swivels Bespoke Lengths Ladder Sections

### Item Codes, Weights and Dimensions

1G1	GS Truss 1ft Section	390mm x 347mm x 347mm	8 kg
1G2	GS Truss 2ft Section	666mm x 347mm x 347mm	9.5 kg
1G4	GS Truss 4ft Section	1243mm x 347mm x 347mm	14.5 kg
1G6	GS Truss 6ft Section	1820mm x 347mm x 347mm	20 kg
1G8	GS Truss 8ft Section	2400mm x 347mm x 347mm	25 kg
1G050	GS Truss 0.5mt Section	500mm x 347mm x 347mm	10 kg
1G100	GS Truss 1mt Section	1000mm x 347mm x 347mm	13.5 kg
1G200	GS Truss 2mt Section	2000mm x 347mm x 347mm	21.5 kg
1G300	GS Truss 3mt Section	3000mm x 347mm x 347mm	30 kg
1G400	GS Truss 4mt Section	4000mm x 347mm x 347mm	38 kg
1G4W	GS Truss 4 way Corner Section	447mm x 447mm x 447mm	12 kg

### Design Specification

Manufactured in accordance with

BS EN 1090-3:2008: Technical Requirements for aluminium structures

EN ISO 9001:2008: Quality management systems

BS EN 1999 Pt 1-1: Design of Aluminium Structures, General structural rules

EN17115: Entertainment Technology: Specifications for design, manufacture of aluminium

and steel trusses and towers















