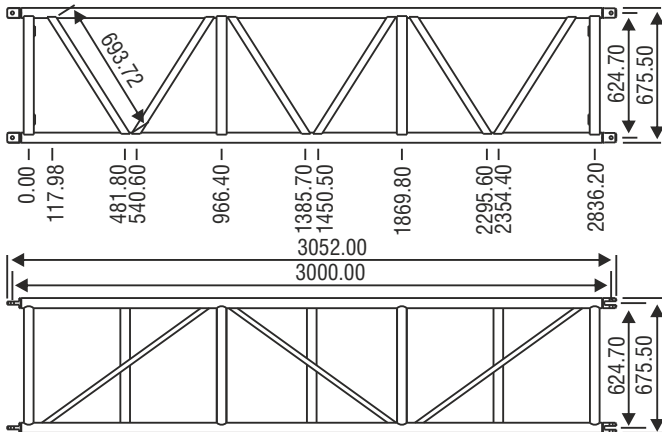
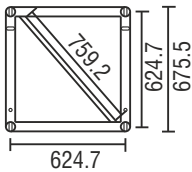
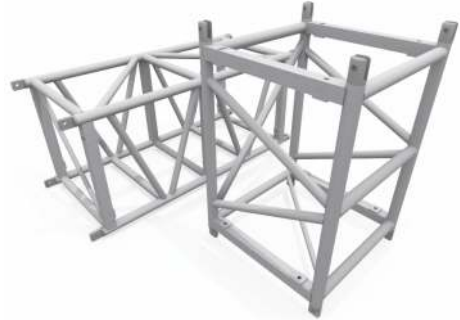


## TFL Serious Truss Extra Heavy Duty



Extra Heavy Duty Truss has exceptionally high load handling capabilities making it ideal for use in the larger outdoor roof structures. Additional facilities allow other roof interface components to work efficiently with this truss.



## TFL Serious Truss Extra Heavy Duty



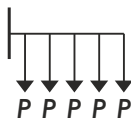
### Load Table

| Span (metres) |           | 2    | 4    | 6    | 8    | 10   | 12   | 14   | 16   | 18   | 20   | 22   | 24   | 26   | 28   | 30  | 32  |
|---------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|
| <b>UDL</b>    | <b>kg</b> | 6015 | 5970 | 5924 | 5791 | 4551 | 3710 | 3096 | 2624 | 2247 | 1937 | 1674 | 1448 | 1250 | 1074 | 915 | 770 |
| <b>DEFL</b>   | <b>mm</b> | 1    | 4    | 13   | 31   | 48   | 67   | 89   | 113  | 138  | 163  | 187  | 210  | 231  | 248  | 259 | 265 |
| <b>CPL</b>    | <b>kg</b> | 3087 | 3042 | 2996 | 2895 | 2276 | 1855 | 1548 | 1312 | 1124 | 968  | 837  | 724  | 625  | 537  | 457 | 385 |
| <b>DEFL</b>   | <b>mm</b> | 0.5  | 3    | 11   | 25   | 38   | 54   | 71   | 90   | 110  | 130  | 150  | 168  | 185  | 198  | 208 | 212 |
| <b>TPL</b>    | <b>kg</b> | 4155 | 4110 | 4064 | 4019 | 3357 | 2782 | 2322 | 1968 | 1686 | 1453 | 1256 | 1086 | 938  | 805  | 686 | 578 |
| <b>DEFL</b>   | <b>mm</b> | 0.4  | 4    | 13   | 29   | 48   | 69   | 91   | 115  | 141  | 166  | 191  | 215  | 236  | 253  | 265 | 271 |
| <b>QPL</b>    | <b>kg</b> | 4155 | 4110 | 4064 | 4019 | 3357 | 2782 | 2322 | 1968 | 1686 | 1453 | 1256 | 1086 | 938  | 805  | 686 | 578 |
| <b>DEFL</b>   | <b>mm</b> | 0.3  | 3    | 12   | 27   | 45   | 64   | 85   | 107  | 131  | 155  | 178  | 200  | 219  | 235  | 246 | 252 |

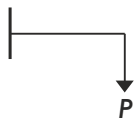
Connection: Fork fitting. Fixings: TTF truss pin and R3 R Clip

| Span (metres)   |           |      |
|-----------------|-----------|------|
| Cantilever Span |           | 3    |
| <b>UDL</b>      | <b>kg</b> | 3330 |
| <b>DEFL</b>     | <b>mm</b> | 6.3  |
| <b>EPL</b>      | <b>kg</b> | 1660 |
| <b>DEFL</b>     | <b>mm</b> | 7.7  |
| <b>CPL</b>      | <b>kg</b> | 2830 |
| <b>DEFL</b>     | <b>mm</b> | 5.1  |

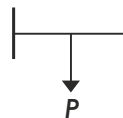
Uniform Load (UDL)



Point Load (Edge)



Point Load (Central)



## TFL Serious Truss Extra Heavy Duty



- 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.

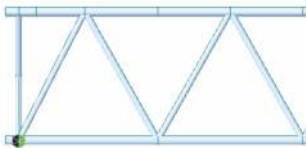


Figure 1: Orientation of the truss supported of bottom chords

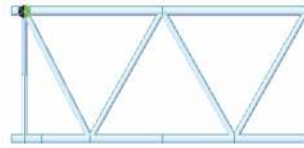


Figure 2: Orientation of the truss supported of top chords

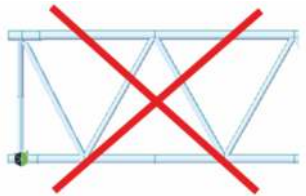


Figure 3: Not allowed orientation of the truss supported of bottom chords

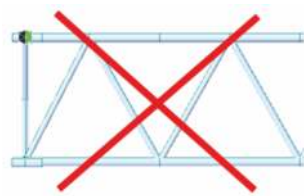


Figure 4: Not allowed orientation of the truss supported of top chords

## TFL Serious Truss Extra Heavy Duty



### Material Specifications

|            |                                |
|------------|--------------------------------|
| Main Cord: | 50.8mm x 6.25mm                |
| Braces:    | 38.1mm x 3.25mm                |
| Material:  | EN AW-6082 T6                  |
| Fixings:   | Fork End : TFT pins & R3 Clips |

### Accessories

Circles  
Angled Corners  
Bespoke Lengths  
Hinges and Swivels

### Item Codes, Weights and Dimensions

|         |                               |                        |         |
|---------|-------------------------------|------------------------|---------|
| EHD0.5M | Extra HD 5ft Truss Section    | 500mm x 676mm x 676mm  | 12.5 kg |
| EHD1M   | Extra HD 8ft Truss Section    | 1000mm x 676mm x 676mm | 21 kg   |
| EHD1.5M | Extra HD 10ft Truss Section   | 1500mm x 676mm x 676mm | 27 kg   |
| EHD2M   | Extra HD 1M Truss Section     | 2000mm x 676mm x 676mm | 38 kg   |
| EHD2.5M | Extra HD 2M Truss Section     | 2500mm x 676mm x 676mm | 46.5 kg |
| EHD3M   | Extra HD 3M Truss Section     | 3000mm x 676mm x 676mm | 55 kg   |
| EHD4M   | Extra HD 4M Truss Section     | 4000mm x 676mm x 676mm | 63.5 kg |
| EHDC4   | Extra HD 4 Way Corner Section | 825mm x 825mm x 676mm  | 39 kg   |
| EHDS4   | Extra HD Sleeve Section       | 825mm x 825mm x 676mm  | 48 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

