



# FD32 Ladder Truss

The FD32 Ladder truss, a truss for vertical and horizontal rigs, this truss made out of two main tubes combined with the eurotruss bracing pattern is already a great start. Together with the Tolerance free conical connector system the straight elements lend themselves perfectly to use a a span exposed to bending stress.

Combined with FD34 Truss they possess a broad range of applications.

Made with the fast connection system and approved according the DIN EN 1999-1-1 & 1999-1-1/A2 (Eurocode 9).

## Facts

- TÜV approved
- Also available in any non-standard length and shape
- Tolerance free conical connector system
- Compatible with FD34

## Specifications FD32

|               | Metric        | Imperial       |
|---------------|---------------|----------------|
| Height:       | 290 mm        | 11.42 in       |
| Width:        | 50 mm         | 1.97 in        |
| Main Tube:    | 50 x 2 mm     | 1.97 x 0.08 in |
| Braces:       | 20 x 2 mm     | 0.79 x 0.08 in |
| Weight:       | ~3 kg/m       | ~2 lbs/ft      |
| Pin Position: | Diagonal      |                |
| Material:     | EN AW-6082 T6 |                |
| Connection:   | CS1 - CON     |                |



## FD32 Loading charts

### Metric loading charts

| Span* | UDL  |      | CPL |    | 1/3 Point Load |    | 1/4 Point Load |    | 1/5 Point Load |    |
|-------|------|------|-----|----|----------------|----|----------------|----|----------------|----|
|       | kg/m | mm** | kg  | mm | kg (2x)        | mm | kg (3x)        | mm | kg (4x)        | mm |
| 2     | 570  | 2    | 855 | 2  | 570            | 3  | 380            | 2  | 285            | 2  |
| 3     | 379  | 6    | 687 | 6  | 426            | 7  | 322            | 7  | 262            | 7  |
| 4     | 284  | 15   | 565 | 12 | 368            | 13 | 286            | 15 | 236            | 15 |
| 6     | 127  | 35   | 380 | 28 | 282            | 35 | 190            | 33 | 158            | 35 |
| 8     | 70   | 62   | 280 | 50 | 210            | 63 | 140            | 59 | 117            | 62 |
| 10    | 44   | 97   | 219 | 79 | 164            | 99 | 110            | 92 | 91             | 97 |

These values are usable for a lateral supported main tube. To reach full load capacity the maximum distance without lateral stabilization is: 1200 mm.

\* in meters / \*\* mm is the deflection of the truss at the given load

### Imperial loading charts

| Span* | UDL    |      | CPL    |      | 1/3 Point Load |      | 1/4 Point Load |      | 1/5 Point Load |      |
|-------|--------|------|--------|------|----------------|------|----------------|------|----------------|------|
|       | lbs/ft | in** | lbs/ft | in   | lbs/ft (2x)    | in   | lbs/ft (3x)    | in   | lbs/ft (4x)    | in   |
| 6,56  | 383,0  | 0.08 | 1881,0 | 0.08 | 1254,0         | 0.12 | 836,0          | 0.08 | 627,0          | 0.08 |
| 9,84  | 254,7  | 0.24 | 1511,4 | 0.24 | 937,2          | 0.28 | 708,4          | 0.28 | 576,4          | 0.28 |
| 13,12 | 190,8  | 0.59 | 1243,0 | 0.47 | 809,6          | 0.51 | 629,2          | 0.59 | 519,2          | 0.59 |
| 19,69 | 85,3   | 1.38 | 836,0  | 1.10 | 620,4          | 1.38 | 418,0          | 1.30 | 347,6          | 1.38 |
| 26,25 | 47,0   | 2.44 | 616,0  | 1.97 | 462,0          | 2.48 | 308,0          | 2.32 | 257,4          | 2.44 |
| 32,81 | 29,6   | 3.82 | 481,8  | 3.11 | 360,8          | 3.90 | 242,0          | 3.62 | 200,2          | 3.82 |

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\* in feet / \*\* in is the deflection of the truss at the given load

Loading figures are based on Eurocode 9 standards and calculated according DIN EN 1991-1-1 (& /A2); to comply to ANSI, the loading data needs to be multiplied by 0,85.