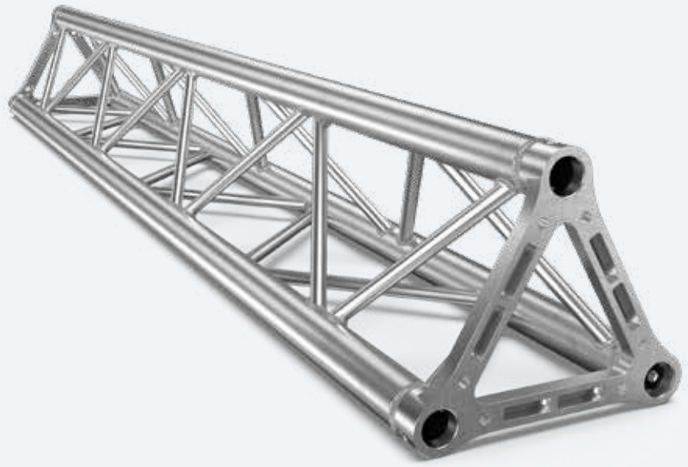
# END PLATED TRUSS
# TX30SA

Anti-torsion



## Triangular section aluminium truss with 29 cm sides

This is the triangular version of the lightest professional truss, yet it still provides a reasonable loading capacity and span.

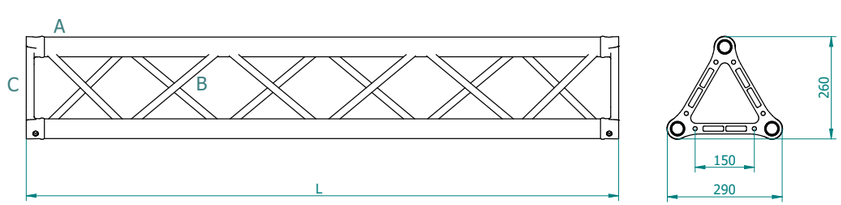
The slim diagonals are made from a single bent profile, reducing the visual impact of the structure, making it ideal for applications that require a low-profile appearance.

**Main tubes**: Ø50 × 2 mm aluminium
**Diagonals**: Ø18 × 2 mm aluminium

## LINEAR ELEMENTS

| Code | W × H × D (cm) | kg | Code | W × H × D (cm) | kg |
|---|---|---|---|---|---|
| TX30SA010M5 | 29 × 26 × 10.5 | 2.3 | TX30SA200 | 29 × 26 × 200 | 9.0 |
| TX30SA021 | 29 × 26 × 21 | 2.6 | TX30SA250 | 29 × 26 × 250 | 10.7 |
| TX30SA025 | 29 × 26 × 25 | 2.7 | TX30SA300 | 29 × 26 × 300 | 12.5 |
| TX30SA050 | 29 × 26 × 50 | 3.7 | TX30SA350 | 29 × 26 × 350 | 14.2 |
| TX30SA100 | 29 × 26 × 100 | 5.4 | TX30SA400 | 29 × 26 × 400 | 16.0 |
| TX30SA150 | 29 × 26 × 150 | 7.2 | | | |

| Chords A | Diagonals B | Ends C | Connection systems |
|---|---|---|---|
| Extruded tube Ø 50 × 2 mm<br>EN AW – 6082 T6 | Extruded tube Ø 18 × 2 mm<br>EN AW – 6082 T6 | Aluminium casting plate<br>EN AC – 42200 KT6 | QXFC: quick-fit kit<br>QXSM10: bolt connection kit |




## Load table / Spigot connection

| span | Unif. distributed load | | | Centre point load | | | Third point load | | | Quarter point load | | | Fifth point load | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Point load | Full load | Central deflection | Point load | Full load | Central deflection | Point load | Full load | Central deflection | Point load | Full load | Central deflection | Point load | Full load | Central deflection |
| [m] | [kg/m] | [kg] | mm | [kg] | [kg] | mm | [kg] | [kg] | mm | [kg] | [kg] | mm | [kg] | [kg] | mm |
| 1 | 1819 | 1819 | 0 | 1461 | 1461 | 0 | 909 | 1819 | 1 | 606 | 1819 | 0 | 455 | 1819 | 0 |
| 2 | 781 | 1563 | 3 | 781 | 781 | 2 | 586 | 1172 | 3 | 391 | 1172 | 2 | 326 | 1302 | 3 |
| 3 | 345 | 1034 | 6 | 517 | 517 | 5 | 388 | 776 | 6 | 259 | 776 | 6 | 215 | 862 | 6 |
| 4 | 192 | 768 | 10 | 384 | 384 | 8 | 288 | 576 | 11 | 192 | 576 | 10 | 160 | 640 | 10 |
| 5 | 121 | 606 | 16 | 303 | 303 | 13 | 227 | 454 | 17 | 151 | 454 | 15 | 126 | 505 | 16 |
| 6 | 83 | 497 | 23 | 248 | 248 | 19 | 186 | 372 | 24 | 124 | 372 | 22 | 103 | 414 | 24 |
| 7 | 60 | 417 | 32 | 209 | 209 | 26 | 156 | 313 | 33 | 104 | 313 | 30 | 87 | 348 | 32 |
| 8 | 45 | 356 | 42 | 178 | 178 | 34 | 134 | 267 | 43 | 89 | 267 | 40 | 74 | 297 | 42 |
| 9 | 34 | 308 | 53 | 154 | 154 | 44 | 116 | 231 | 54 | 77 | 231 | 51 | 64 | 257 | 53 |
| 10 | 27 | 268 | 66 | 134 | 134 | 55 | 101 | 201 | 67 | 67 | 201 | 63 | 56 | 224 | 66 |
| 11 | 21 | 234 | 79 | 117 | 117 | 67 | 88 | 176 | 81 | 59 | 176 | 76 | 49 | 195 | 80 |
| 12 | 17 | 205 | 94 | 102 | 102 | 80 | 77 | 154 | 96 | 51 | 154 | 91 | 43 | 171 | 95 |
| 13 | 14 | 179 | 111 | 90 | 90 | 95 | 67 | 134 | 113 | 45 | 134 | 107 | 37 | 149 | 112 |
| 14 | 11 | 157 | 129 | 78 | 78 | 111 | 59 | 118 | 131 | 39 | 118 | 124 | 33 | 131 | 129 |
| 15 | 9 | 136 | 148 | 68 | 68 | 129 | 51 | 102 | 150 | 34 | 102 | 143 | 28 | 114 | 148 |
| 16 | 7 | 118 | 168 | 59 | 59 | 148 | 44 | 89 | 170 | 30 | 89 | 163 | 25 | 99 | 169 |

## Cantilever load table / Spigot connection

| span | Unif. distributed load | | | Centre point load | |
|---|---|---|---|---|---|
| [m] | [kg/m] | [kg] | mm | [kg] | mm |
| 1 | 727 | 727 | 1 | 420 | 2 |
| 2 | 207 | 414 | 7 | 214 | 9 |
| 3 | 92 | 275 | 15 | 139 | 21 |
| 4 | 50 | 200 | 28 | 101 | 37 |
| 5 | 30 | 152 | 44 | 77 | 57 |
| 6 | 20 | 119 | 64 | 60 | 81 |

## Axial load table

| span | | |
|---|---|---|
| [m] | [kg] | [kg] |
| 1.0 | 6391 | 5841 |
| 2.0 | 6078 | 3920 |
| 3.0 | 5527 | 2299 |
| 4.0 | 4754 | 1429 |
| 6.0 | 3146 | |
| 9.0 | 1688 | |

Load table has been prepared in accordance with EN 1999-1-1. When calculating the allowable loads it is assumed that the load is suspended from the bottom chord and the truss is supported from the top chord at each end.

The values shown in the table are the allowable static loads that can be applied the the truss. This is the live load or the payload.

The self weight of the truss has been taken into account when calculating the values in the table. It should be noted that this are idealised loading conditions and the User shall re-analyze the truss for the loading conditions which prevail for the application being considered.

# Connections

End Plated Truss **TX30SA**



End-plated trusses are compatible with two connection options: the **spigotted connection**, which is the preferred solution for temporary setups and the most widely used by professionals, and the common **nut and bolt system**. Load data in the tables of this catalogue refer to the spigot connection. **The bolted connection reduces performance**. Please contact our Technical Office for guidance.



**KSG**

Aluminium spigot,
set of 10



**KCP**

R-spring,
set of 100

**KSP**

Steel Pin,
set of 10



**K370**

Half truss spigot + 1 steel pin +
1 R-spring (not for Dado)



**KSFH**

Threaded pin, set of 12



**KSFHZ1**

Stainless steel pin with self-locking nut and rubber damper. Recommended for permanent installations. Set of 12.



**KCFS**

Kit for vert. connection incl.
bolts, spigots and accessories



**QXFC**

Quick connection set



**QXSM10**

Bolt connection set
for 30 – 40 series

# Complements

A range of complementary elements is available as standard to help you interface your TX30SA in the best possible way.



**FP30**

FX30/TX30/QX30/TH30/QH30 universal
floor plate



**FP30M**

FX30/TX30/QX30/TH30/QH30 universal
floor plate (large 50×50 cm)



**QU3040H050**

30-40 Special Truss L=050
with hoist support



**C030**

Bar Hook for 30 series



**C030WB**

29 cm wall bracket W/half couplers



**C029-40**

Ceiling support for 30-40 cm series



**CBT3040**

Bar hook for 29 cm truss



# Corners



A wide range of corner elements is available for the TX30SA System. Standard corners come in various opening angles. Here we present the most commonly used angles. Other solutions are available on request.



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL2060** | 100 × 100 × 26 | 7.0 |

ST 29 cm triangular - 2 way 60° corner



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL2090** | 50 × 50 × 26 | 4.4 |

ST 29 cm triangular - 2 way 90° corner



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL2090E** | 50 × 50 × 29 | 4.5 |

ST 29 cm triangular - 2 way 90° corner (ext.)



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL2090I** | 50 × 50 × 29 | 4.5 |

ST 29 cm triangular - 2 way 90° corner (int.)



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL2135E** | 50 × 50 × 29 | 4.9 |

ST 29 cm triangular - 2 way 135° corner ext. vertex



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL3R** | 50 × 50 × 50 | 6.4 |

ST 29 cm triangular - 3 way corner right



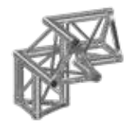
| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL3L** | 50 × 50 × 50 | 6.5 |

ST 29 cm triangular - 3 way corner left



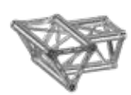
| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL3LU** | 50 × 50 × 50 | 6.3 |

ST 29 cm triangular - 3 way corner left up



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAL3RU** | 50 × 50 × 50 | 6.3 |

ST 29 cm triangular - 3 way corner right up



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAT3** | 50 × 50 × 26 | 5.5 |

ST 29 cm triangular - 3 way tee



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAT3F** | 50 × 50 × 29 | 5.8 |

ST 29 cm triangular - 3 way tee F



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAT4** | 50 × 50 × 50 | 7.5 |

ST 29 cm triangular - 4 way corner



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAX4** | 50 × 50 × 26 | 4.1 |

ST 29 cm triangular - 4 way corner



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAX5** | 50 × 50 × 50 | 8.4 |

ST 29 cm triangular - 5 way corner



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TX30SAX6** | 50 × 50 × 50 | 9.3 |

ST 29 cm triangular - 6 way cross



| Code | W × D × H (cm) | Kg |
|---|---|---|
| **TU30BHH** | 100 × 37 × 32 | 16.8 |

Truss hinge 29 cm triangular truss

The use of a triangular truss within a composite structure depends on the position of the triangle's apex. Multiple corner combinations are possible, and custom solutions not shown in this page can be provided on request.