

S-M780 Quatro

- 780 x 780 mm tower truss made from bespoke, high-strength steels
- Greatly increased load capacity compared to aluminium truss with similar dimensions for optimised weight to strength ratio
- Orientation-free connectors for ease of use
- Pinned connectors for increased strength
- End frames with 22mm holes for lateral connections on all sides
- Ladder tubes for ease of climbing when used as tower
- Integrated forklift pick up points, double fork couplers, zinc coated pins and matt black, impact-resistant industrial paint finish



Forklift pick up points

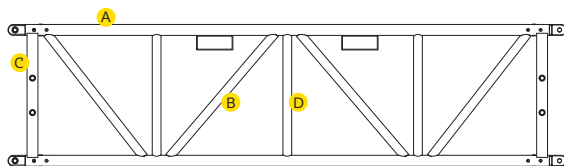
S-M780 Quatro Tower truss section

| S-QTQT | mm | in | Main Chords A: | Diagonals B: | End braces C: | Intermediate cross braces D: | Pin type: |
|--------|----|----|-----------------------|------------------------|--------------------------------|------------------------------|-----------|
| | | | 60.3 x 4 (2.4 x 0.16) | 48.3 x 3.2 (1.9 x 0.1) | 60 x 60 x 4 (2.4 x 2.4 x 0.16) | 48.3 x 3.2 (1.9 x 0.1) | PQ |

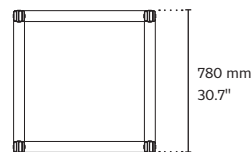
STANDARD LENGTHS AND WEIGHTS AVAILABLE

| S-QTQT | m | ft | 1.00 (3.28) | 2.00 (6.56) | 2.50 (8.20) | 3.00 (9.84) | 4.00 (13.12) | 5.00 (16.41) | 6.00 (19.68) |
|--------|----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| | kg | lbs | 102.20 (225.31) | 164.90 (363.54) | 181.60 (400.36) | 209.60 (462.09) | 259.60 (572.32) | 304.00 (670.21) | 348.4 (768.09) |

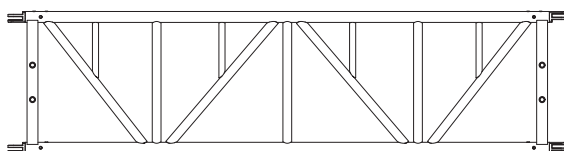
Connection material and packaging are not included in above weights



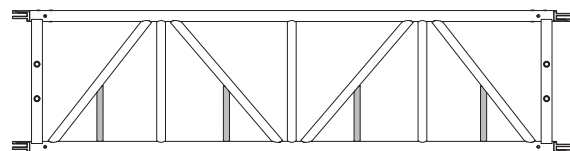
Side view



End view



Top view



Bottom view

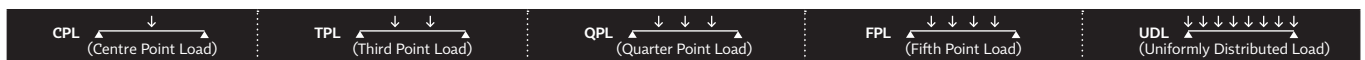
| Span | m (ft) | 7.00 (23.00) | 8.00 (26.20) | 9.00 (29.50) | 10.00 (32.80) | 11.00 (36.10) | 12.00 (39.40) | 13.00 (42.70) |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| CPL | kg (lbs) | 15719 (34654) | 13695 (30192) | 12114 (26707) | 10843 (23905) | 9797 (21599) | 8920 (19665) | 8173 (18018) |
| Deflection | mm (in) | 15 (0.59) | 19 (0.75) | 25 (0.98) | 30 (1.18) | 37 (1.46) | 44 (1.73) | 52 (2.05) |
| TPL | kg (lbs) | 9470 (20878) | 9438 (20807) | 9086 (20031) | 8132 (17928) | 7348 (16200) | 6690 (14749) | 6130 (13514) |
| Deflection | mm (in) | 15 (0.59) | 23 (0.91) | 31 (1.22) | 39 (1.54) | 47 (1.85) | 56 (2.20) | 65 (2.56) |
| QPL | kg (lbs) | 6313 (13918) | 6292 (13871) | 6057 (13353) | 5421 (11951) | 4899 (10800) | 4460 (9833) | 4087 (9010) |
| Deflection | mm (in) | 14 (0.55) | 21 (0.83) | 29 (1.14) | 36 (1.42) | 43 (1.69) | 52 (2.05) | 61 (2.40) |
| FPL | kg (lbs) | 4735 (10439) | 4719 (10404) | 4703 (10368) | 4518 (9960) | 4082 (8999) | 3717 (8195) | 3406 (7509) |
| Deflection | mm (in) | 14 (0.55) | 20 (0.79) | 29 (1.14) | 38 (1.50) | 46 (1.81) | 55 (2.17) | 64 (2.52) |
| UDL | kg/m (lbs/ft) | 2706 (1818) | 2360 (1586) | 2090 (1404) | 1875 (1260) | 1699 (1142) | 1487 (999) | 1257 (845) |
| Deflection | mm (in) | 11 (0.43) | 17 (0.67) | 24 (0.94) | 33 (1.30) | 44 (1.73) | 54 (2.13) | 64 (2.52) |

| Span | m (ft) | 14.00 (45.90) | 15.00 (49.20) | 16.00 (52.50) | 17.00 (55.80) | 18.00 (59.10) | 19.00 (62.30) | 20.00 (65.60) |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| CPL | kg (lbs) | 7529 (16599) | 6966 (15357) | 6470 (14264) | 6028 (13289) | 5632 (12416) | 5274 (11627) | 4949 (10911) |
| Deflection | mm (in) | 60 (2.36) | 69 (2.72) | 79 (3.11) | 90 (3.54) | 101 (3.98) | 113 (4.45) | 126 (4.96) |
| TPL | kg (lbs) | 5647 (12450) | 5225 (11519) | 4852 (10697) | 4521 (9967) | 4224 (9312) | 3956 (8721) | 3712 (8184) |
| Deflection | mm (in) | 76 (2.99) | 87 (3.43) | 99 (3.90) | 112 (4.41) | 126 (4.96) | 140 (5.51) | 155 (6.10) |
| QPL | kg (lbs) | 3764 (8298) | 3483 (7679) | 3235 (7132) | 3014 (6645) | 2816 (6208) | 2637 (5814) | 2474 (5454) |
| Deflection | mm (in) | 71 (2.80) | 81 (3.19) | 93 (3.66) | 105 (4.13) | 118 (4.65) | 131 (5.16) | 146 (5.75) |
| FPL | kg (lbs) | 3137 (6916) | 2903 (6400) | 2696 (5944) | 2512 (5538) | 2347 (5174) | 2198 (4846) | 2062 (4546) |
| Deflection | mm (in) | 75 (2.95) | 86 (3.39) | 98 (3.86) | 110 (4.33) | 124 (4.88) | 138 (5.43) | 153 (6.02) |
| UDL | kg/m (lbs/ft) | 1076 (723) | 929 (624) | 809 (544) | 709 (476) | 626 (421) | 555 (373) | 495 (333) |
| Deflection | mm (in) | 74 (2.91) | 85 (3.35) | 97 (3.82) | 110 (4.33) | 123 (4.84) | 137 (5.39) | 152 (5.98) |

| Span | m (ft) | 21.00 (68.90) | 22.00 (72.20) | 23.00 (75.50) | 24.00 (78.70) | 25.00 (82.00) | 26.00 (85.30) | 27.00 (88.60) |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| CPL | kg (lbs) | 4652 (10256) | 4379 (9654) | 4127 (9098) | 3893 (8583) | 3676 (8104) | 3472 (7654) | 3282 (7236) |
| Deflection | mm (in) | 139 (5.47) | 153 (6.02) | 168 (6.61) | 184 (7.24) | 201 (7.91) | 218 (8.58) | 237 (9.33) |
| TPL | kg (lbs) | 3489 (7692) | 3284 (7240) | 3095 (6823) | 2920 (6437) | 2757 (6078) | 2604 (5741) | 2462 (5428) |
| Deflection | mm (in) | 171 (6.73) | 188 (7.40) | 206 (8.11) | 225 (8.86) | 244 (9.61) | 264 (10.39) | 285 (11.22) |
| QPL | kg (lbs) | 2326 (5128) | 2189 (4826) | 2063 (4548) | 1947 (4292) | 1838 (4052) | 1736 (3827) | 1641 (3618) |
| Deflection | mm (in) | 161 (6.34) | 177 (6.97) | 194 (7.64) | 211 (8.31) | 230 (9.06) | 249 (9.80) | 270 (10.63) |
| FPL | kg (lbs) | 1938 (4273) | 1824 (4021) | 1719 (3790) | 1622 (3576) | 1532 (3377) | 1447 (3190) | 1368 (3016) |
| Deflection | mm (in) | 169 (6.65) | 186 (7.32) | 204 (8.03) | 222 (8.74) | 241 (9.49) | 261 (10.28) | 282 (11.10) |
| UDL | kg/m (lbs/ft) | 443 (298) | 398 (267) | 359 (241) | 324 (218) | 294 (198) | 267 (179) | 243 (163) |
| Deflection | mm (in) | 168 (6.61) | 185 (7.28) | 202 (7.95) | 221 (8.70) | 240 (9.45) | 260 (10.24) | 280 (11.02) |

| Span | m (ft) | 28.00 (91.90) | 29.00 (95.10) | 30.00 (98.40) | 31.00 (101.70) | 32.00 (105.00) | 33.00 (108.30) | 34.00 (111.50) |
|------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|
| CPL | kg (lbs) | 3103 (6841) | 2934 (6468) | 2774 (6116) | 2623 (5783) | 2479 (5465) | 2342 (5163) | 2211 (4874) |
| Deflection | mm (in) | 256 (10.08) | 276 (10.87) | 298 (11.73) | 320 (12.60) | 343 (13.50) | 367 (14.45) | 392 (15.43) |
| TPL | kg (lbs) | 2327 (5130) | 2201 (4852) | 2081 (4588) | 1967 (4336) | 1859 (4098) | 1756 (3871) | 1658 (3655) |
| Deflection | mm (in) | 307 (12.09) | 330 (12.99) | 354 (13.94) | 378 (14.88) | 404 (15.91) | 430 (16.93) | 457 (17.99) |
| QPL | kg (lbs) | 1551 (3419) | 1467 (3234) | 1387 (3058) | 1311 (2890) | 1239 (2732) | 1171 (2582) | 1105 (2436) |
| Deflection | mm (in) | 291 (11.46) | 313 (12.32) | 335 (13.19) | 359 (14.13) | 384 (15.12) | 409 (16.10) | 436 (17.17) |
| FPL | kg (lbs) | 1293 (2851) | 1223 (2696) | 1156 (2549) | 1093 (2410) | 1033 (2277) | 976 (2152) | 921 (2030) |
| Deflection | mm (in) | 304 (11.97) | 327 (12.87) | 350 (13.78) | 374 (14.72) | 400 (15.75) | 426 (16.77) | 453 (17.83) |
| UDL | kg/m (lbs/ft) | 222 (149) | 202 (136) | 185 (124) | 169 (114) | 155 (104) | 142 (95) | 130 (87) |
| Deflection | mm (in) | 302 (11.89) | 325 (12.80) | 348 (13.70) | 372 (14.65) | 398 (15.67) | 424 (16.69) | 451 (17.76) |

| Span | m (ft) | 35.00 (114.80) | 36.00 (118.10) | 37.00 (121.40) | 38.00 (124.70) | 39.00 (128.00) | 40.00 (131.20) |
|------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| CPL | kg (lbs) | 2085 (4597) | 1965 (4332) | 1850 (4079) | 1739 (3834) | 1632 (3598) | 1529 (3371) |
| Deflection | mm (in) | 418 (16.46) | 445 (17.52) | 474 (18.66) | 503 (19.80) | 534 (21.02) | 566 (22.28) |
| TPL | kg (lbs) | 1564 (3448) | 1474 (3250) | 1388 (3060) | 1304 (2875) | 1224 (2698) | 1147 (2529) |
| Deflection | mm (in) | 485 (19.09) | 514 (20.24) | 544 (21.42) | 575 (22.64) | 607 (23.90) | 639 (25.16) |
| QPL | kg (lbs) | 1043 (2299) | 983 (2167) | 925 (2039) | 870 (1918) | 816 (1799) | 765 (1687) |
| Deflection | mm (in) | 463 (18.23) | 492 (19.37) | 521 (20.51) | 552 (21.73) | 583 (22.95) | 615 (24.21) |
| FPL | kg (lbs) | 869 (1916) | 819 (1806) | 771 (1700) | 725 (1598) | 680 (1499) | 637 (1404) |
| Deflection | mm (in) | 481 (18.94) | 510 (20.08) | 540 (21.26) | 570 (22.44) | 602 (23.70) | 635 (25.00) |
| UDL | kg/m (lbs/ft) | 119 (80) | 109 (73) | 100 (67) | 92 (62) | 84 (56) | 76 (51) |
| Deflection | mm (in) | 478 (18.82) | 507 (19.96) | 537 (21.14) | 568 (22.36) | 599 (23.58) | 632 (24.88) |



All truss loading calculations are based on:

Truss supported or suspended at both ends • Static loadings only • Loads applied in the node points • Self-weight of the truss is included • Spans made of different truss lengths • Interaction of bending moment and shear force at connector • Structural analysis based on EN 1993-1-1, EN 1993-1-8 and EN 1993-1-12 • To comply with BS 7905-2 / ANSI E1.2-2006 / EN 17115 all loading data should be multiplied by 0.85 • For any other application, or in case of an assembled structure, contact Milos or a structural engineer • Safety factors used - self-weight 1.35 / loading 1.5