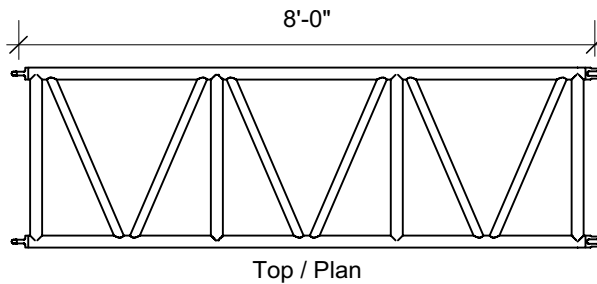
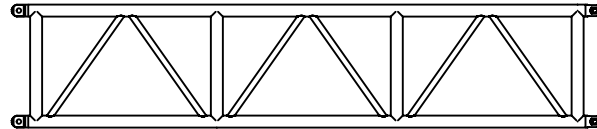
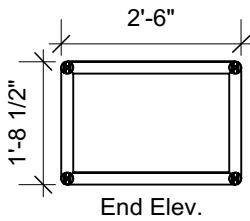
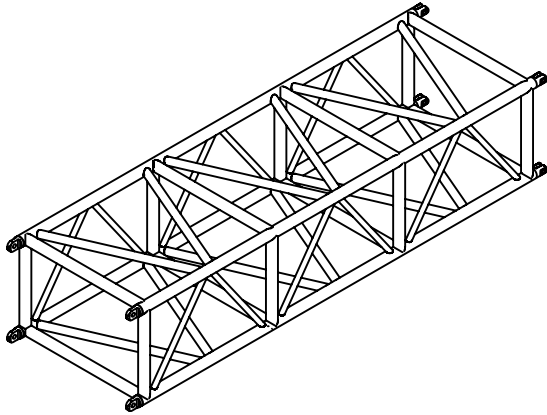




# TRUSS SPECIFICATION SHEET

## 30" x 20.5" HORIZONTAL HEAVY DUTY TRUSS



| TWO WAYS SERIES-HEAVY DUTY<br>TRUSS 30" x 20" with Threaded Spigot   |                             | TWB-3020 ST<br>30" HORIZONTAL   |                                 |
|--|-----------------------------|---|---------------------------------|
| MAIN CHORDS  | 2.00" OD x 0.188"           | ATTACHMENT  | Spigot and Pin                  |
| VERTICAL DIAGONALS   | 1.00" OD x 0.125"           | FABRICATION   | Fabricated by Certified Welders |
| HORIZONTAL DIAGONALS   | 1.50" OD x 0.125"           | COLOUR  | Natural                         |
| MATERIAL   | Aluminum 6061-T6 extrusions |   |                                 |
| <b>LOAD DATA</b> <ul style="list-style-type: none"> <li>• Are to be considered for indoor use only. If dynamic loads or more supporting points are applied contact a structural engineer or Arcofab;</li> <li>• Are only valid for static loads and spans with two supporting points (one at each end);</li> <li>• Are valid when the truss is used with the diagonals oriented vertically (see attached figures in page G-3);</li> <li>• Are valid when the end plates are installed vertically for the bolted trusses (see figure in page G-3 – note 1);</li> <li>• Are valid when the pins are installed horizontally for the spigoted trusses (see figure in page G-3 – note 2);</li> <li>• Take into consideration the self-weight of the trusses and indicate how much additional weight may be safely added;</li> <li>• Deflexions are theoretical (based on the rigidity of the truss when full loaded). Actual deflexion may be slightly higher because of possible movement between truss sections due to attachment tolerance;</li> <li>• When corner blocks are used, loading capacity must be reduce by 50% when corners are loaded on two adjacent faces.</li> </ul> |                             | <b>RIGGING, LOADING, AND UNLOADING</b> <ul style="list-style-type: none"> <li>• Trusses should be assembled by competent personnel who are familiar with the use and assembly of aluminum trusses;</li> <li>• Always use washers on both sides of plates for bolted trusses;</li> <li>• Trusses must be hung using bottom and top chords in order to ensure an optimal stability. Spanset must be as close as possible to the extremities (see figure in page G-3 – notes 3 and 4);</li> <li>• Trusses must be loaded symmetrically on each side; unbalanced loads could twist the trusses (see figure in page G-3 – note 5);</li> <li>• All loads must be applied to, or as close as possible to, node points. A node point is the meeting of diagonal and/or vertical on the main chord (see figure in page G-3 – note 6);</li> <li>• When raising or lowering trusses, hoists should run simultaneously in order to maintain the trusses leveled up;</li> <li>• Always unload trusses before disassembling connections.</li> </ul> |                                 |



# ALLOWABLE LOAD DATA

## 30" x 20.5" HORIZONTAL HEAVY DUTY TRUSS

| SPAN |         | UNIFORMLY DISTRIBUTED LOAD |        |           |        |      |       | CONCENTRATED LOAD |        |      |       | THIRD POINTS |        | QUARTER POINTS |        |
|------|---------|----------------------------|--------|-----------|--------|------|-------|-------------------|--------|------|-------|--------------|--------|----------------|--------|
|      |         | LOAD                       |        | DEFLEXION |        | LOAD |       | DEFLEXION         |        | LOAD |       | LOAD         |        |                |        |
| ft   | (m)     | lb/ft                      | (kg/m) | lb        | (kg)   | in   | (mm)  | lb                | (kg)   | in   | (mm)  | lb           | (kg)   | in             | (kg)   |
| 8    | (2.44)  | 863                        | (1283) | 6900      | (3129) | 0.08 | (2)   | 6900              | (3129) | 0.08 | (2)   | 3450         | (1565) | 2300           | (1043) |
| 16   | (4.88)  | 419                        | (623)  | 6700      | (3039) | 0.27 | (7)   | 4700              | (2132) | 0.28 | (7)   | 3275         | (1485) | 2175           | (986)  |
| 24   | (7.32)  | 271                        | (403)  | 6500      | (2948) | 0.73 | (19)  | 3250              | (1474) | 0.55 | (14)  | 2440         | (1107) | 1625           | (737)  |
| 32   | (9.76)  | 166                        | (246)  | 5300      | (2404) | 1.33 | (34)  | 2600              | (1179) | 1.04 | (26)  | 1950         | (884)  | 1300           | (590)  |
| 40   | (12.20) | 103                        | (152)  | 4100      | (1859) | 1.92 | (49)  | 2050              | (930)  | 1.58 | (40)  | 1540         | (698)  | (1025)         | (465)  |
| 48   | (14.63) | 69                         | (102)  | 3300      | (1497) | 2.80 | (71)  | 1650              | (748)  | 2.38 | (60)  | 1240         | (562)  | 825            | (374)  |
| 56   | (17.07) | 46                         | (69)   | 2600      | (1179) | 3.79 | (96)  | 1300              | (590)  | 3.26 | (83)  | 975          | (442)  | 650            | (295)  |
| 64   | (19.51) | 31                         | (46)   | 2000      | (907)  | 4.93 | (125) | 1000              | (454)  | 4.31 | (109) | 750          | (340)  | 500            | (227)  |
| 72   | (21.95) | 21                         | (31)   | 1500      | (680)  | 6.14 | (156) | 750               | (340)  | 5.54 | (141) | 560          | (254)  | 375            | (170)  |
| 80   | (24.39) | 14                         | (20)   | 1100      | (499)  | 7.47 | (190) | 550               | (249)  | 6.78 | (172) | 410          | (186)  | 275            | (125)  |

| SECTIONS AVAILABLE        | UNIT WEIGHT |
|---------------------------|-------------|
| 1'                        | 45 lbs      |
| 4'                        | 90 lbs      |
| 8'                        | 126 lbs     |
| Roller Block/Corner Block | 190 lbs     |

Data presented in this chart applies to trusses built after April 2017.

Truss must be loaded symmetrically on each side.

All loads must be applied at or as close to node points (see General Section)

Deflexions are based on the rigidity of the trusses and do not include possible movement between trusses due to attachment tolerance.

Data presented is valid for inside use only.

Data presented is valid for static loads and spans with two supporting points (span must be supported at each end). If dynamic loads or more supportings points are applied, a professional engineer or Riggitt Services.

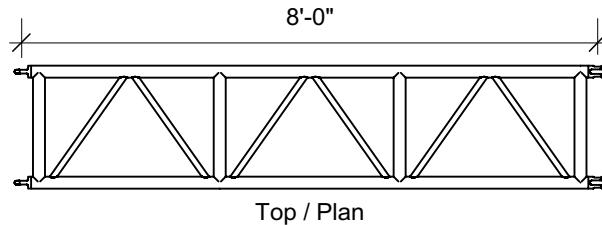
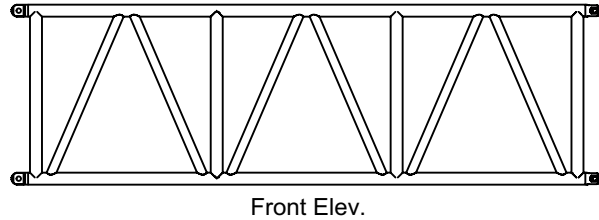
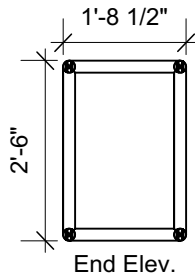
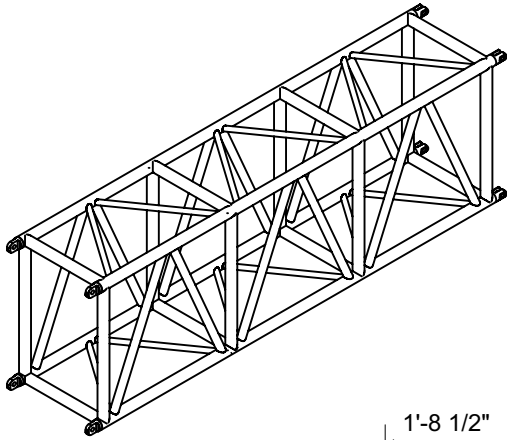
When corners are loaded on two adjacent faces, reduce the capacity of the trusses to 50%.

Trusses must be suspended by lower chords.



# TRUSS SPECIFICATION SHEET

## 30" x 20.5" VERTICAL HEAVY DUTY TRUSS



| TWO WAYS SERIES-HEAVY DUTY<br>TRUSS 30" x 20.5" with Threaded Spigot   |                             | TWB-3020 ST<br>30" VERTICAL   |                                 |
|--|-----------------------------|---|---------------------------------|
| MAIN CHORDS  | 2.00" OD x 0.188"           | ATTACHMENT  | Spigot and Pin                  |
| VERTICAL DIAGONALS   | 1.50" OD x 0.125"           | FABRICATION   | Fabricated by Certified Welders |
| HORIZONTAL DIAGONALS   | 1.00" OD x 0.125"           | COLOUR  | Natural                         |
| MATERIAL   | Aluminum 6061-T6 extrusions |   |                                 |
| <b>LOAD DATA</b> <ul style="list-style-type: none"> <li>• Are to be considered for indoor use only. If dynamic loads or more supporting points are applied contact a structural engineer or Arcofab;</li> <li>• Are only valid for static loads and spans with two supporting points (one at each end);</li> <li>• Are valid when the truss is used with the diagonals oriented vertically (see attached figures in page G-3);</li> <li>• Are valid when the end plates are installed vertically for the bolted trusses (see figure in page G-3 – note 1);</li> <li>• Are valid when the pins are installed horizontally for the spigoted trusses (see figure in page G-3 – note 2);</li> <li>• Take into consideration the self-weight of the trusses and indicate how much additional weight may be safely added;</li> <li>• Deflexions are theoretical (based on the rigidity of the truss when full loaded). Actual deflexion may be slightly higher because of possible movement between truss sections due to attachment tolerance;</li> <li>• When corner blocks are used, loading capacity must be reduce by 50% when corners are loaded on two adjacent faces.</li> </ul> |                             | <b>RIGGING, LOADING, AND UNLOADING</b> <ul style="list-style-type: none"> <li>• Trusses should be assembled by competent personnel who are familiar with the use and assembly of aluminum trusses;</li> <li>• Always use washers on both sides of plates for bolted trusses;</li> <li>• Trusses must be hung using bottom and top chords in order to ensure an optimal stability. Spanset must be as close as possible to the extremities (see figure in page G-3 – notes 3 and 4);</li> <li>• Trusses must be loaded symmetrically on each side; unbalanced loads could twist the trusses (see figure in page G-3 – note 5);</li> <li>• All loads must be applied to, or as close as possible to, node points. A node point is the meeting of diagonal and/or vertical on the main chord (see figure in page G-3 – note 6);</li> <li>• When raising or lowering trusses, hoists should run simultaneously in order to maintain the trusses leveled up;</li> <li>• Always unload trusses before disassembling connections.</li> </ul> |                                 |



# ALLOWABLE LOAD DATA

## 30" x 20.5" VERTICAL HEAVY DUTY TRUSS

| SPAN |         | UNIFORMLY DISTRIBUTED LOAD |        |            |        |      |       | CONCENTRATED LOAD |        |      |       | THIRD POINTS |        | QUARTER POINTS |        |
|------|---------|----------------------------|--------|------------|--------|------|-------|-------------------|--------|------|-------|--------------|--------|----------------|--------|
|      |         | LOAD                       |        | DEFLECTION |        | LOAD |       | DEFLECTION        |        | LOAD |       | LOAD         |        |                |        |
| ft   | (m)     | lb/ft                      | (kg/m) | lb         | (kg)   | in   | (mm)  | lb                | (kg)   | in   | (mm)  | lb           | (kg)   | in             | (kg)   |
| 8    | (2.44)  | 1250                       | (1859) | 10000      | (4535) | 0.07 | (2)   | 10000             | (4535) | 0.07 | (2)   | 5000         | (2268) | 3300           | (1497) |
| 16   | (4.88)  | 625                        | (930)  | 10000      | (4535) | 0.21 | (5)   | 7000              | (3175) | 0.22 | (6)   | 4800         | (2177) | 3300           | (1497) |
| 24   | (7.32)  | 375                        | (558)  | 9000       | (4082) | 0.48 | (12)  | 4500              | (2041) | 0.38 | (10)  | 3375         | (1531) | 2250           | (1020) |
| 32   | (9.76)  | 253                        | (377)  | 8100       | (3673) | 0.92 | (23)  | 4000              | (1814) | 0.72 | (18)  | 3000         | (1361) | 2000           | (907)  |
| 40   | (12.20) | 163                        | (242)  | 6500       | (2948) | 1.32 | (32)  | 3100              | (1406) | 1.04 | (26)  | 2325         | (1054) | (1550)         | (703)  |
| 48   | (14.63) | 108                        | (161)  | 5200       | (2358) | 1.94 | (49)  | 2500              | (1134) | 1.57 | (40)  | 1875         | (850)  | 1250           | (567)  |
| 56   | (17.07) | 77                         | (114)  | 4300       | (1950) | 2.54 | (65)  | 2100              | (952)  | 2.12 | (54)  | 1575         | (714)  | 1050           | (476)  |
| 64   | (19.51) | 55                         | (81)   | 3500       | (1587) | 3.25 | (83)  | 1700              | (771)  | 2.72 | (69)  | 1275         | (578)  | 850            | (385)  |
| 72   | (21.95) | 39                         | (58)   | 2800       | (1270) | 4.00 | (102) | 1400              | (635)  | 3.50 | (89)  | 1050         | (476)  | 700            | (317)  |
| 80   | (24.39) | 29                         | (43)   | 2300       | (1043) | 5.00 | (127) | 1150              | (522)  | 4.39 | (112) | 860          | (390)  | 575            | (261)  |

| SECTIONS AVAILABLE        | UNIT WEIGHT |
|---------------------------|-------------|
| 1'                        | 45 lbs      |
| 4'                        | 90 lbs      |
| 8'                        | 126 lbs     |
| Roller Block/Corner Block | 190 lbs     |

Data presented in this chart applies to trusses built after April 2017.

Truss must be loaded symmetrically on each side.

All loads must be applied at or as close to node points (see General Section)

Deflexions are based on the rigidity of the trusses and do not include possible movement between trusses due to attachment tolerance.

Data presented is valid for inside use only.

Data presented is valid for static loads and spans with two supporting points (span must be supported at each end). If dynamic loads or more supportings points are applied, a professional engineer or RiggIt Services.

When corners are loaded on two adjacent faces, reduce the capacity of the trusses to 50%.

Trusses must be suspended by lower chords.