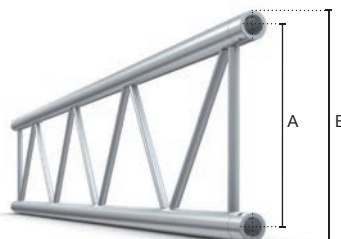


# M390 Heavy-Duty

- Certified 48mm tube heavy-duty M390 series truss range
- Interior & exterior applications
- Fast connection for quick, simple and secure assembly
- Great free-span & loading characteristics (up to 20m / 65.61 ft)
- Custom lengths, junctions & curves available
- Connection kit supplied with every truss length & junction
- Compatible with 200/400/500/600 series cell clamps
- Powder coat colour finish available on request

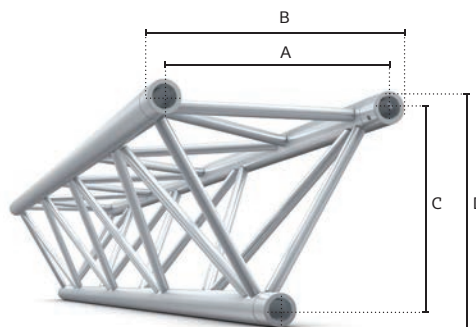
## DUO



### M390L

|      |       | Main Chords      | Diagonals        | Alloy           | A           | B           | Coupler |
|------|-------|------------------|------------------|-----------------|-------------|-------------|---------|
| BTL  | mm in | 48x3 (1.89x0.12) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 340 (13.39) | 388 (15.28) | CCB     |
| BTLF |       | 48x3 (1.89x0.12) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 340 (13.39) | 388 (15.28) | CCF     |

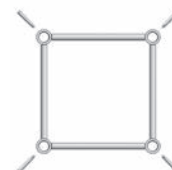
## TRIO



### M390L

|      |       | Main Chords      | Diagonals        | Alloy           | A           | B           | C           | D           | Coupler |
|------|-------|------------------|------------------|-----------------|-------------|-------------|-------------|-------------|---------|
| STL  | mm in | 48x3 (1.89x0.12) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 340 (13.39) | 388 (15.28) | 294 (11.57) | 342 (13.46) | CCB     |
| STLF |       | 48x3 (1.89x0.12) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 340 (13.39) | 388 (15.28) | 294 (11.57) | 342 (13.46) | CCF     |

## QUATRO



### M390L

|      |       | Main Chords      | Diagonals        | Alloy           | A           | B           | Coupler |
|------|-------|------------------|------------------|-----------------|-------------|-------------|---------|
| QTL  | mm in | 48x3 (1.89x0.12) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 340 (13.39) | 388 (15.28) | CCB     |
| QTLF |       | 48x3 (1.89x0.12) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 340 (13.39) | 388 (15.28) | CCF     |

## STANDARD LENGTHS AND WEIGHTS AVAILABLE

|               | m (ft)   | 0.50 (1.64) | 1.00 (3.28)  | 1.50 (4.92)   | 2.00 (6.56)   | 2.50 (8.20)   | 3.00 (9.84)   | 4.00 (13.12)  | 5.00 (16.41)  |
|---------------|----------|-------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>DUO</b>    | kg (lbs) | 2.00 (4.41) | 3.30 (7.28)  | 4.50 (10.01)  | 6.00 (13.23)  | 7.30 (16.09)  | 8.60 (19.05)  | 11.40 (25.13) | 14.10 (31.11) |
| <b>TRIO</b>   | kg (lbs) | 3.10 (6.88) | 5.50 (12.12) | 7.90 (17.46)  | 10.50 (23.15) | 12.70 (27.99) | 15.10 (33.28) | 20.50 (45.20) | 25.00 (55.12) |
| <b>QUATRO</b> | kg (lbs) | 4.50 (9.92) | 7.60 (16.76) | 10.80 (23.81) | 14.00 (30.87) | 17.10 (37.7)  | 20.30 (44.75) | 26.40 (58.2)  | 33.00 (72.75) |

Connection material (pins/clips/couplers) and packaging are not included in above weights

## M390L DUO

LOADING CHART

| Span                                    | m (ft)        | 3.00 (9.84)       | 4.00 (13.12)      | 5.00 (16.40)     | 6.00 (19.69)     | 7.00 (22.97)     | 8.00 (26.25)     | 9.00 (29.53)     |
|-----------------------------------------|---------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Centre Point Load (CPL)</b>          | kg (lbs)      | 1249.30 (2754.23) | 1154.60 (2545.45) | 921.10 (2030.68) | 765.00 (1686.53) | 653.00 (1439.62) | 568.80 (1253.99) | 502.90 (1108.70) |
| <b>Deflection</b>                       | mm (in)       | 4.00 (0.16)       | 8.80 (0.35)       | 13.70 (0.54)     | 19.80 (0.78)     | 27.00 (1.06)     | 35.30 (1.39)     | 44.80 (1.76)     |
| <b>Third Point Load (TPL)</b>           | kg (lbs)      | 624.60 (1377.01)  | 623.20 (1373.92)  | 621.80 (1370.83) | 573.70 (1264.79) | 489.80 (1079.82) | 426.60 (940.49)  | 377.20 (831.58)  |
| <b>Deflection</b>                       | mm (in)       | 3.40 (0.13)       | 8.10 (0.32)       | 15.80 (0.62)     | 25.20 (0.99)     | 34.40 (1.35)     | 44.90 (1.77)     | 56.80 (2.24)     |
| <b>Quarter Point Load (QPL)</b>         | kg (lbs)      | 416.40 (918.00)   | 415.50 (916.02)   | 414.50 (913.81)  | 382.50 (843.27)  | 326.50 (719.81)  | 284.40 (626.99)  | 251.40 (554.24)  |
| <b>Deflection</b>                       | mm (in)       | 3.20 (0.13)       | 7.50 (0.30)       | 14.70 (0.58)     | 23.50 (0.93)     | 32.00 (1.26)     | 41.80 (1.65)     | 52.90 (2.08)     |
| <b>Fifth Point Load (FPL)</b>           | kg (lbs)      | 312.30 (688.50)   | 311.60 (686.96)   | 310.90 (685.42)  | 310.20 (683.87)  | 272.10 (599.88)  | 237.00 (522.49)  | 209.50 (461.87)  |
| <b>Deflection</b>                       | mm (in)       | 3.00 (0.12)       | 7.20 (0.28)       | 14.00 (0.55)     | 24.20 (0.95)     | 33.90 (1.33)     | 44.30 (1.74)     | 56.10 (2.21)     |
| <b>Uniformly Distributed Load (UDL)</b> | kg/m (lbs/ft) | 416.40 (279.81)   | 311.60 (209.39)   | 248.70 (167.12)  | 206.80 (138.96)  | 176.80 (118.80)  | 142.20 (95.55)   | 111.70 (75.06)   |
| <b>Deflection</b>                       | mm (in)       | 2.50 (0.10)       | 5.90 (0.23)       | 11.60 (0.46)     | 20.10 (0.79)     | 31.90 (1.26)     | 43.90 (1.73)     | 55.60 (2.19)     |

DUO figures are based on use in vertical mode and stabilized every 1m

## M390L TRIO

LOADING CHART

| Span                                    | m (ft)        | 6.00 (19.69)     | 8.00 (26.25)     | 10.00 (32.81)   | 12.00 (39.37)   | 14.00 (45.93)   | 16.00 (52.49)   | 20.00 (65.61)   |
|-----------------------------------------|---------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Centre Point Load (CPL)</b>          | kg (lbs)      | 654.90 (1443.81) | 482.50 (1063.73) | 377.10 (831.36) | 305.20 (672.85) | 252.40 (556.45) | 211.50 (466.28) | 151.40 (333.77) |
| <b>Deflection</b>                       | mm (in)       | 17.20 (0.68)     | 30.70 (1.21)     | 48.40 (1.91)    | 70.40 (2.77)    | 97.00 (3.82)    | 128.40 (5.06)   | 207.10 (8.15)   |
| <b>Third Point Load (TPL)</b>           | kg (lbs)      | 491.20 (1082.91) | 361.90 (797.85)  | 282.80 (623.47) | 228.90 (504.64) | 189.30 (417.33) | 158.60 (349.65) | 113.50 (250.22) |
| <b>Deflection</b>                       | mm (in)       | 21.80 (0.86)     | 38.80 (1.53)     | 60.70 (2.39)    | 87.60 (3.45)    | 119.60 (4.71)   | 156.70 (6.17)   | 246.70 (9.71)   |
| <b>Quarter Point Load (QPL)</b>         | kg (lbs)      | 327.50 (722.01)  | 241.30 (531.97)  | 188.50 (415.57) | 152.60 (336.43) | 126.20 (278.22) | 105.80 (233.25) | 75.70 (166.88)  |
| <b>Deflection</b>                       | mm (in)       | 20.30 (0.80)     | 36.20 (1.43)     | 56.70 (2.23)    | 82.00 (3.23)    | 112.20 (4.42)   | 147.50 (5.81)   | 233.80 (9.20)   |
| <b>Fifth Point Load (FPL)</b>           | kg (lbs)      | 272.90 (601.64)  | 201.00 (443.13)  | 157.10 (346.35) | 127.10 (280.21) | 105.20 (231.93) | 88.10 (194.23)  | 63.10 (139.11)  |
| <b>Deflection</b>                       | mm (in)       | 21.50 (0.85)     | 38.30 (1.51)     | 59.90 (2.36)    | 86.50 (3.41)    | 118.10 (4.65)   | 154.90 (6.10)   | 244.20 (9.61)   |
| <b>Uniformly Distributed Load (UDL)</b> | kg/m (lbs/ft) | 218.30 (146.69)  | 120.60 (81.04)   | 75.40 (50.67)   | 50.90 (34.20)   | 36.10 (24.26)   | 26.40 (17.74)   | 15.10 (10.14)   |
| <b>Deflection</b>                       | mm (in)       | 21.30 (0.84)     | 38.00 (1.50)     | 59.50 (2.34)    | 85.90 (3.38)    | 117.30 (4.62)   | 153.90 (6.06)   | 242.70 (9.55)   |

TRIO figures are based on use in apex up/down orientation

## M390L QUATRO

LOADING CHART

| Span                                    | m (ft)        | 6.00 (19.69)      | 8.00 (26.25)      | 10.00 (32.81)    | 12.00 (39.37)    | 14.00 (45.93)    | 16.00 (52.49)    | 20.00 (65.61)   |
|-----------------------------------------|---------------|-------------------|-------------------|------------------|------------------|------------------|------------------|-----------------|
| <b>Centre Point Load (CPL)</b>          | kg (lbs)      | 1526.90 (3366.23) | 1133.50 (2498.94) | 894.70 (1972.47) | 733.30 (1616.65) | 616.10 (1358.27) | 526.60 (1160.95) | 397.10 (875.45) |
| <b>Deflection</b>                       | mm (in)       | 19.80 (0.78)      | 35.40 (1.39)      | 55.60 (2.19)     | 80.50 (3.17)     | 110.30 (4.34)    | 145.30 (5.72)    | 231.50 (9.11)   |
| <b>Third Point Load (TPL)</b>           | kg (lbs)      | 1054.00 (2323.67) | 850.10 (1874.15)  | 671.00 (1479.30) | 550.00 (1212.54) | 462.10 (1018.75) | 394.90 (870.60)  | 297.80 (656.53) |
| <b>Deflection</b>                       | mm (in)       | 23.20 (0.91)      | 44.90 (1.77)      | 70.20 (2.76)     | 101.30 (3.99)    | 138.10 (5.44)    | 180.70 (7.11)    | 283.60 (11.16)  |
| <b>Quarter Point Load (QPL)</b>         | kg (lbs)      | 763.50 (1683.23)  | 566.70 (1249.36)  | 447.40 (986.35)  | 366.70 (808.43)  | 308.10 (679.24)  | 263.30 (580.48)  | 198.60 (437.83) |
| <b>Deflection</b>                       | mm (in)       | 23.50 (0.93)      | 41.80 (1.65)      | 65.50 (2.58)     | 94.50 (3.72)     | 129.10 (5.08)    | 169.20 (6.66)    | 266.60 (10.49)  |
| <b>Fifth Point Load (FPL)</b>           | kg (lbs)      | 618.90 (1364.44)  | 472.30 (1041.24)  | 372.80 (821.88)  | 305.60 (673.73)  | 256.70 (565.93)  | 219.40 (483.69)  | 165.50 (364.86) |
| <b>Deflection</b>                       | mm (in)       | 24.20 (0.95)      | 44.30 (1.74)      | 69.30 (2.73)     | 99.90 (3.93)     | 136.30 (5.37)    | 178.40 (7.02)    | 280.20 (11.03)  |
| <b>Uniformly Distributed Load (UDL)</b> | kg/m (lbs/ft) | 412.60 (277.25)   | 283.40 (190.44)   | 178.90 (120.22)  | 122.20 (82.11)   | 88.00 (59.13)    | 65.80 (44.22)    | 39.70 (26.68)   |
| <b>Deflection</b>                       | mm (in)       | 20.10 (0.79)      | 43.90 (1.73)      | 68.80 (2.71)     | 99.20 (3.91)     | 135.30 (5.33)    | 177.10 (6.97)    | 278.40 (10.96)  |

|                            |                           |                             |                           |                                     |
|----------------------------|---------------------------|-----------------------------|---------------------------|-------------------------------------|
|                            |                           |                             |                           |                                     |
| CPL<br>(Centre Point Load) | TPL<br>(Third Point Load) | QPL<br>(Quarter Point Load) | FPL<br>(Fifth Point Load) | UDL<br>(Uniformly Distributed Load) |

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 in all listed load capacities • Spans made of different truss lengths • Interaction of bending moment and shear force at connector is considered • Structural analysis based on EN 1999 • All loading data should be multiplied by 0.85 to comply with BS 7905-2 and ANSI E1.2-2006 • For any other application, or in case of an assembled structure, contact Milos or a structural engineer • Safety factors used: self-weight 1.35 / variable loads 1.5