

S-M1010 Trio

- 1010 x 580 mm triangular steel truss made from bespoke, high-strength steels
- 2.7 times higher bending strength compared to aluminium truss with similar dimensions
- Can be inserted as cross truss into the larger S-M1450 steel truss
- Orientation-free connectors for ease of use
- Pinned connectors for increased strength
- End brace with 22 mm holes for the connection of e.g. wind bracings
- Optimised truss design for convenient insertion of lateral truss
- Integrated forklift pick up points, double fork couplers, zinc coated pins and matt black, impact-resistant industrial paint finish



Fork couplers

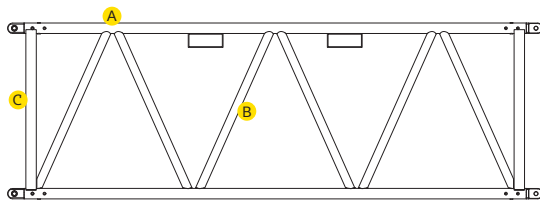
S-M1010 Triangular truss section

S-FTD	mm	in	Vertical			Horizontal		Pin type:	
			Main Chords A:	Diagonals B:	End braces C:	Diagonals D:	End braces E:		Intermediate cross braces F:
			60.3 x 4 (24 x 0.16)	48.3 x 3.2 (1.9 x 0.1)	60 x 60 x 4 (24 x 24 x 0.16)	33.7 x 2.6 (1.3 x 0.1)	60 x 60 x 4 (24 x 24 x 0.16)	48.3x3.2 (1.9x0.1)	PQ-FTD & PQ

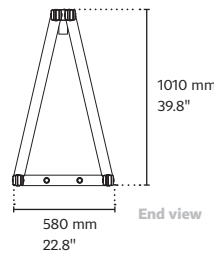
STANDARD LENGTHS AND WEIGHTS AVAILABLE

S-FTD	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	95.00 (209.44)	140.90 (310.63)	159.00 (350.53)	176.70 (389.56)	217.60 (479.73)	258.30 (569.45)	299.00 (659.18)							

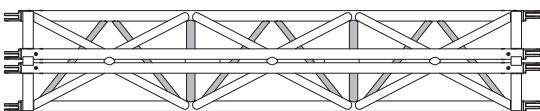
Connection material and packaging are not included in above weights



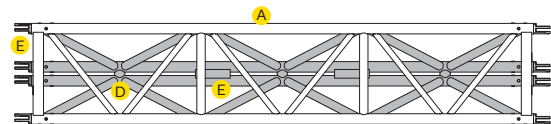
Side view



End view



Top view



Bottom view

S-FTD

LOADING CHART

Steel trusses

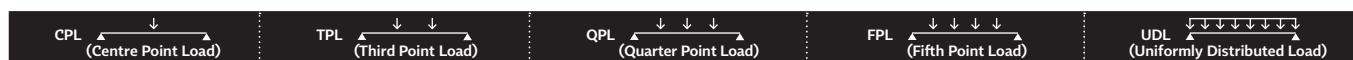
Span	m (ft)	10.00 (32.80)	11.00 (36.10)	12.00 (39.40)	13.00 (42.70)	14.00 (45.90)	15.00 (49.20)	16.00 (52.50)
Centre Point Load (CPL)	kg (lbs)	14407.00 (31762.00)	13037.00 (28742.00)	11890.00 (26213.00)	10915.00 (24063.00)	10075.00 (22212.00)	9342.00 (20596.00)	8697.00 (19174.00)
Deflection	mm (in)	23.00 (0.91)	28.00 (1.10)	33.00 (1.30)	39.00 (1.54)	45.00 (1.77)	52.00 (2.05)	60.00 (2.36)
Third Point Load (TPL)	kg (lbs)	10805.00 (23821.00)	9778.00 (21557.00)	8918.00 (19661.00)	8186.00 (18047.00)	7556.00 (16658.00)	7007.00 (15448.00)	6523.00 (14381.00)
Deflection	mm (in)	29.00 (1.14)	35.00 (1.38)	42.00 (1.65)	49.00 (1.93)	57.00 (2.24)	66.00 (2.60)	75.00 (2.95)
Quarter Point Load (QPL)	kg (lbs)	7204.00 (15882.00)	6519.00 (14372.00)	5945.00 (13106.00)	5458.00 (12033.00)	5037.00 (11105.00)	4671.00 (10298.00)	4349.00 (9588.00)
Deflection	mm (in)	27.00 (1.06)	33.00 (1.30)	39.00 (1.54)	46.00 (1.81)	54.00 (2.13)	62.00 (2.44)	70.00 (2.76)
Fifth Point Load (FPL)	kg (lbs)	5451.00 (12017.00)	5432.00 (11976.00)	4954.00 (10922.00)	4548.00 (10027.00)	4198.00 (9255.00)	3893.00 (8583.00)	3624.00 (7990.00)
Deflection	mm (in)	26.00 (1.02)	35.00 (1.38)	42.00 (1.65)	49.00 (1.93)	57.00 (2.24)	65.00 (2.56)	74.00 (2.91)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	2180.00 (1465.00)	1976.00 (1328.00)	1806.00 (1214.00)	1663.00 (1117.00)	1439.00 (967.00)	1246.00 (837.00)	1087.00 (730.00)
Deflection	mm (in)	22.00 (0.87)	29.00 (1.14)	38.00 (1.50)	48.00 (1.89)	56.00 (2.20)	65.00 (2.56)	74.00 (2.91)

Span	m (ft)	17.00 (55.80)	18.00 (59.10)	19.00 (62.30)	20.00 (65.60)	21.00 (68.90)	22.00 (72.20)	23.00 (75.50)
Centre Point Load (CPL)	kg (lbs)	8125.00 (17913.00)	7612.00 (16782.00)	7150.00 (15763.00)	6731.00 (14839.00)	6349.00 (13997.00)	5999.00 (13226.00)	5676.00 (12513.00)
Deflection	mm (in)	68.00 (2.68)	76.00 (2.99)	85.00 (3.35)	94.00 (3.70)	104.00 (4.09)	115.00 (4.53)	126.00 (4.96)
Third Point Load (TPL)	kg (lbs)	6093.00 (13433.00)	5709.00 (12586.00)	5362.00 (11821.00)	5048.00 (11129.00)	4762.00 (10498.00)	4499.00 (9919.00)	4257.00 (9385.00)
Deflection	mm (in)	85.00 (3.35)	95.00 (3.74)	106.00 (4.17)	118.00 (4.65)	130.00 (5.12)	142.00 (5.59)	156.00 (6.14)
Quarter Point Load (QPL)	kg (lbs)	4062.00 (8955.00)	3806.00 (8391.00)	3575.00 (7882.00)	3366.00 (7421.00)	3175.00 (7000.00)	2999.00 (6612.00)	2838.00 (6257.00)
Deflection	mm (in)	79.00 (3.11)	89.00 (3.50)	99.00 (3.90)	110.00 (4.33)	121.00 (4.76)	134.00 (5.28)	146.00 (5.75)
Fifth Point Load (FPL)	kg (lbs)	3385.00 (7463.00)	3172.00 (6993.00)	2979.00 (6568.00)	2805.00 (6184.00)	2645.00 (5831.00)	2500.00 (5512.00)	2365.00 (5214.00)
Deflection	mm (in)	84.00 (3.31)	94.00 (3.70)	105.00 (4.13)	116.00 (4.57)	128.00 (5.04)	141.00 (5.55)	154.00 (6.06)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	956.00 (642.00)	846.00 (568.00)	753.00 (506.00)	673.00 (452.00)	605.00 (407.00)	545.00 (366.00)	494.00 (332.00)
Deflection	mm (in)	83.00 (3.27)	93.00 (3.66)	104.00 (4.09)	115.00 (4.53)	127.00 (5.00)	140.00 (5.51)	153.00 (6.02)

Span	m (ft)	24.00 (78.70)	25.00 (82.00)	26.00 (85.30)	27.00 (88.60)	28.00 (91.90)	29.00 (95.10)	30.00 (98.40)
Centre Point Load (CPL)	kg (lbs)	5378.00 (11856.00)	5101.00 (11246.00)	4843.00 (10677.00)	4602.00 (10146.00)	4376.00 (9647.00)	4163.00 (9178.00)	3962.00 (8735.00)
Deflection	mm (in)	138.00 (5.43)	150.00 (5.91)	163.00 (6.42)	177.00 (6.97)	191.00 (7.52)	205.00 (8.07)	221.00 (8.70)
Third Point Load (TPL)	kg (lbs)	4034.00 (8893.00)	3826.00 (8435.00)	3633.00 (8009.00)	3452.00 (7610.00)	3282.00 (7236.00)	3122.00 (6883.00)	2972.00 (6552.00)
Deflection	mm (in)	170.00 (6.69)	184.00 (7.24)	200.00 (7.87)	216.00 (8.50)	232.00 (9.13)	249.00 (9.80)	267.00 (10.51)
Quarter Point Load (QPL)	kg (lbs)	2689.00 (5928.00)	2551.00 (5624.00)	2422.00 (5340.00)	2301.00 (5073.00)	2188.00 (4824.00)	2082.00 (4590.00)	1981.00 (4367.00)
Deflection	mm (in)	159.00 (6.26)	173.00 (6.81)	188.00 (7.40)	203.00 (7.99)	219.00 (8.62)	235.00 (9.25)	252.00 (9.92)
Fifth Point Load (FPL)	kg (lbs)	2241.00 (4941.00)	2126.00 (4687.00)	2018.00 (4449.00)	1918.00 (4228.00)	1823.00 (4019.00)	1735.00 (3825.00)	1651.00 (3640.00)
Deflection	mm (in)	168.00 (6.61)	182.00 (7.17)	197.00 (7.76)	213.00 (8.39)	229.00 (9.02)	246.00 (9.69)	264.00 (10.39)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	448.00 (301.00)	408.00 (274.00)	373.00 (251.00)	341.00 (229.00)	313.00 (210.00)	287.00 (193.00)	264.00 (177.00)
Deflection	mm (in)	167.00 (6.57)	181.00 (7.13)	196.00 (7.72)	212.00 (8.35)	228.00 (8.98)	245.00 (9.65)	262.00 (10.31)

Span	m (ft)	31.00 (101.70)	32.00 (105.00)	33.00 (108.30)	34.00 (111.50)	35.00 (114.80)	36.00 (118.10)	37.00 (121.40)
Centre Point Load (CPL)	kg (lbs)	3773.00 (8318.00)	3593.00 (7921.00)	3422.00 (7544.00)	3259.00 (7185.00)	3104.00 (6843.00)	2955.00 (6515.00)	2813.00 (6202.00)
Deflection	mm (in)	237.00 (9.33)	254.00 (10.00)	271.00 (10.67)	289.00 (11.38)	308.00 (12.13)	328.00 (12.91)	348.00 (13.70)
Third Point Load (TPL)	kg (lbs)	2829.00 (6237.00)	2695.00 (5941.00)	2566.00 (5657.00)	2444.00 (5388.00)	2328.00 (5132.00)	2217.00 (4888.00)	2110.00 (4652.00)
Deflection	mm (in)	285.00 (11.22)	304.00 (11.97)	324.00 (12.76)	345.00 (13.58)	366.00 (14.41)	387.00 (15.24)	410.00 (16.14)
Quarter Point Load (QPL)	kg (lbs)	1886.00 (4158.00)	1796.00 (3960.00)	1711.00 (3772.00)	1630.00 (3594.00)	1552.00 (3422.00)	1478.00 (3258.00)	1407.00 (3102.00)
Deflection	mm (in)	270.00 (10.63)	288.00 (11.34)	307.00 (12.09)	327.00 (12.87)	347.00 (13.66)	368.00 (14.49)	390.00 (15.35)
Fifth Point Load (FPL)	kg (lbs)	1572.00 (3466.00)	1497.00 (3300.00)	1426.00 (3144.00)	1358.00 (2994.00)	1293.00 (2851.00)	1231.00 (2714.00)	1172.00 (2584.00)
Deflection	mm (in)	282.00 (11.10)	301.00 (11.85)	321.00 (12.64)	341.00 (13.43)	362.00 (14.25)	383.00 (15.08)	406.00 (15.98)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	243.00 (163.00)	225.00 (151.00)	207.00 (139.00)	192.00 (129.00)	177.00 (119.00)	164.00 (110.00)	152.00 (102.00)
Deflection	mm (in)	281.00 (11.06)	299.00 (11.77)	319.00 (12.56)	339.00 (13.35)	360.00 (14.17)	381.00 (15.00)	403.00 (15.87)

Span	m (ft)	38.00 (125.00)	39.00 (128.00)	40.00 (131.00)	41.00 (135.00)	42.00 (138.00)	43.00 (141.00)	45.00 (148.00)
Centre Point Load (CPL)	kg (lbs)	2677.00 (5901.78)	2546.00 (5612.97)	2421.00 (5337.39)	2299.00 (5068.43)	2182.00 (4810.49)	2069.00 (4561.36)	1854.00 (4087.37)
Deflection	mm (in)	369.00 (15.00)	391.00 (15.00)	414.00 (16.00)	438.00 (17.00)	462.00 (18.00)	487.00 (19.00)	540.00 (21.00)
Third Point Load (TPL)	kg (lbs)	2008.00 (4426.88)	1910.00 (4210.83)	1815.00 (4001.39)	1724.00 (3800.77)	1637.00 (3608.97)	1552.00 (3421.57)	1391.00 (3066.63)
Deflection	mm (in)	433.00 (17.00)	456.00 (18.00)	481.00 (19.00)	506.00 (20.00)	532.00 (21.00)	558.00 (22.00)	613.00 (24.00)
Quarter Point Load (QPL)	kg (lbs)	1339.00 (2951.99)	1273.00 (2806.49)	1210.00 (2667.59)	1150.00 (2535.32)	1091.00 (2405.24)	1035.00 (2281.78)	927.00 (2043.69)
Deflection	mm (in)	412.00 (16.00)	435.00 (17.00)	459.00 (18.00)	484.00 (19.00)	509.00 (20.00)	535.00 (21.00)	589.00 (23.00)
Fifth Point Load (FPL)	kg (lbs)	1116.00 (2460.36)	1061.00 (2339.11)	1009.00 (2224.46)	958.00 (2112.03)	909.00 (2004.00)	862.00 (1900.39)	773.00 (1704.17)
Deflection	mm (in)	429.00 (17.00)	452.00 (18.00)	476.00 (19.00)	501.00 (20.00)	527.00 (21.00)	553.00 (22.00)	608.00 (24.00)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	141.00 (94.75)	131.00 (88.03)	121.00 (81.31)	112.00 (75.26)	104.00 (69.88)	96.00 (64.51)	82.00 (55.10)
Deflection	mm (in)	426.00 (16.77)	450.00 (17.71)	474.00 (18.66)	499.00 (19.64)	525.00 (20.66)	551.00 (21.69)	606.00 (23.85)



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