



Steel truss

Ultra strength
for ultra-high loads

Category brochure

Flexibility Behind Your Show



Full range of our steel truss solutions



About Us



MILOS was the brainchild of young Czech DJ, Franti Zykan, who started manufacturing truss in 1994 out of a small garage in the Czech Republic. He chose MILOS as the name of his company in honour of his grandfather, with whom he spent a large part of his childhood.

From the very start, Franti adhered to two defining principles in the manufacture of MILOS truss products: simplicity and affordability, without compromising on quality. MILOS customers appreciated and valued this philosophy, which led to the quick growth of MILOS. Within a few years, it established a second office in Germany and then further expanded into the UK, the United States and China.

Fast forward to today, more than a quarter of a century after first opening the doors of its garage, and MILOS has grown into an international brand with a presence in 40 countries on every continent of the globe.

MILOS is currently driven by incredibly enthusiastic professionals and operates two state-of-the-art factories in Europe and China. Both factories follow a unique production process that was developed in-house in the Czech Republic. It focuses on a flexible production process that was successfully transferred from the automotive industry. Designed to solve the problem of constantly changing priorities, its production line operates at high speed, manufactures products with flawless quality and reduces manufacturing costs. Never content to rest on its laurels, MILOS continues to streamline and refine its production process year after year.

Going forward, MILOS will continue its long tradition of offering the highest quality products that feature professional craftsmanship, cutting edge technology and market leading user-friendliness.





Steel truss

Ultra strength

for ultra-high loads



Use QR code
for full range

S-M530 Quatro

- 530×530 mm tower truss made from bespoke, high-strength steels
- Greatly increased load capacity compared to aluminium truss with similar dimensions for an optimised weight to strength ratio
- Orientation-free connectors for ease of use
- Pinned connectors for increased strength
- End frames with 22 mm (0.86") holes for lateral connections on all sides
- Double fork connectors, zinc-coated pins and matt black, impact-resistant industrial paint finish
- Ladder tubes for ease of climbing when used as tower



Fork connector

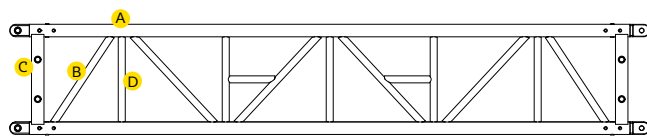
S-M530 Quatro Tower truss section

S-QTPT	mm	in	Main chords A:	Diagonals B:	End braces C:	Intermediate cross braces D:	Pin type:
			60.3×4 (24×0.16)	33.7×2.6 (1.3×0.1)	60×60×4 (24×24×0.16)	33.7×2.6 (1.3×0.1)	PQ

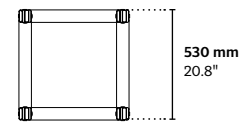
STANDARD LENGTHS AND WEIGHTS AVAILABLE

S-QTPT	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	80.70 (177.91)	118.60 (261.47)	136.70 (301.37)	156.20 (344.36)	204.60 (451.07)	231.30 (509.93)	258.00 (568.79)

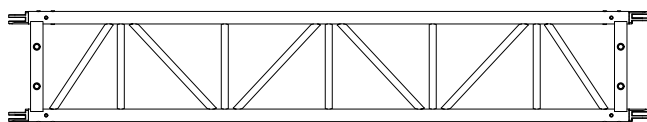
Connection material and packaging are not included in above weights



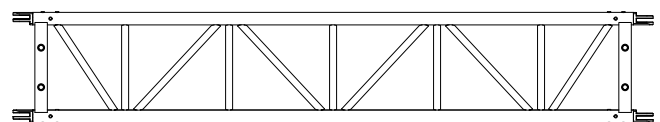
Side view



End view



Top view



Bottom view

S-QTPT

LOADING CHART

Span	m (ft)	5.00 (16.40)	6.00 (19.70)	7.00 (23.00)	8.00 (26.20)	9.00 (29.50)	10.00 (32.80)	11.00 (36.10)
Centre Point Load (CPL)	kg (lbs)	11655.00 (25695.00)	11606.00 (25587.00)	10210.00 (22509.00)	8887.00 (19592.00)	7853.00 (17313.00)	7021.00 (15479.00)	6335.00 (13966.00)
Deflection	mm (in)	9.00 (0.35)	16.00 (0.63)	23.00 (0.91)	30.00 (1.18)	38.00 (1.50)	47.00 (1.85)	57.00 (2.24)
Third Point Load (TPL)	kg (lbs)	5825.00 (12842.00)	5803.00 (12793.00)	5778.00 (12738.00)	5753.00 (12683.00)	5729.00 (12630.00)	5265.00 (11607.00)	4751.00 (10474.00)
Deflection	mm (in)	8.00 (0.31)	14.00 (0.55)	22.00 (0.87)	33.00 (1.30)	46.00 (1.81)	59.00 (2.32)	71.00 (2.80)
Quarter Point Load (QPL)	kg (lbs)	3885.00 (8565.00)	3869.00 (8530.00)	3852.00 (8492.00)	3836.00 (8457.00)	3819.00 (8419.00)	3510.00 (7738.00)	3168.00 (6984.00)
Deflection	mm (in)	7.00 (0.28)	13.00 (0.51)	20.00 (0.79)	30.00 (1.18)	43.00 (1.69)	55.00 (2.17)	67.00 (2.64)
Fifth Point Load (FPL)	kg (lbs)	2914.00 (6424.00)	2901.00 (6396.00)	2889.00 (6369.00)	2877.00 (6343.00)	2864.00 (6314.00)	2852.00 (6288.00)	2640.00 (5820.00)
Deflection	mm (in)	7.00 (0.28)	12.00 (0.47)	19.00 (0.75)	29.00 (1.14)	41.00 (1.61)	57.00 (2.24)	70.00 (2.76)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	2331.00 (1566.00)	1934.00 (1300.00)	1651.00 (1109.00)	1438.00 (966.00)	1273.00 (855.00)	1141.00 (767.00)	1033.00 (694.00)
Deflection	mm (in)	6.00 (0.24)	10.00 (0.39)	16.00 (0.63)	24.00 (0.94)	34.00 (1.34)	47.00 (1.85)	63.00 (2.48)

Span	m (ft)	12.00 (39.40)	13.00 (42.70)	14.00 (45.90)	15.00 (49.20)	16.00 (52.50)	17.00 (55.80)	18.00 (59.10)
Centre Point Load (CPL)	kg (lbs)	5760.00 (12699.00)	5269.00 (11616.00)	4845.00 (10681.00)	4474.00 (9863.00)	4147.00 (9143.00)	3855.00 (8499.00)	3592.00 (7919.00)
Deflection	mm (in)	68.00 (2.68)	79.00 (3.11)	93.00 (3.66)	107.00 (4.21)	122.00 (4.80)	138.00 (5.43)	155.00 (6.10)
Third Point Load (TPL)	kg (lbs)	4320.00 (9524.00)	3952.00 (8713.00)	3634.00 (8012.00)	3356.00 (7399.00)	3110.00 (6856.00)	2891.00 (6374.00)	2694.00 (5939.00)
Deflection	mm (in)	85.00 (3.35)	100.00 (3.94)	116.00 (4.57)	133.00 (5.24)	152.00 (5.98)	171.00 (6.73)	192.00 (7.56)
Quarter Point Load (QPL)	kg (lbs)	2880.00 (6349.00)	2635.00 (5809.00)	2422.00 (5340.00)	2237.00 (4932.00)	2073.00 (4570.00)	1927.00 (4248.00)	1796.00 (3960.00)
Deflection	mm (in)	79.00 (3.11)	93.00 (3.66)	108.00 (4.25)	125.00 (4.92)	142.00 (5.59)	161.00 (6.34)	180.00 (7.09)
Fifth Point Load (FPL)	kg (lbs)	2400.00 (5291.00)	2195.00 (4839.00)	2019.00 (4451.00)	1864.00 (4109.00)	1728.00 (3810.00)	1606.00 (3541.00)	1497.00 (3300.00)
Deflection	mm (in)	84.00 (3.31)	99.00 (3.90)	114.00 (4.49)	131.00 (5.16)	150.00 (5.91)	169.00 (6.65)	190.00 (7.48)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	942.00 (633.00)	811.00 (545.00)	692.00 (465.00)	597.00 (401.00)	518.00 (348.00)	453.00 (304.00)	399.00 (268.00)
Deflection	mm (in)	82.00 (3.23)	98.00 (3.86)	114.00 (4.49)	130.00 (5.12)	149.00 (5.87)	168.00 (6.61)	189.00 (7.44)

Span	m (ft)	19.00 (62.30)	20.00 (65.60)	21.00 (68.90)	22.00 (72.20)	23.00 (75.50)	24.00 (78.70)	25.00 (82.00)
Centre Point Load (CPL)	kg (lbs)	3355.00 (7397.00)	3139.00 (6920.00)	2941.00 (6484.00)	2759.00 (6083.00)	2591.00 (5712.00)	2434.00 (5366.00)	2288.00 (5044.00)
Deflection	mm (in)	174.00 (6.85)	194.00 (7.64)	215.00 (8.46)	237.00 (9.33)	260.00 (10.24)	285.00 (11.22)	311.00 (12.24)
Third Point Load (TPL)	kg (lbs)	2516.00 (5547.00)	2354.00 (5190.00)	2206.00 (4863.00)	2069.00 (4561.00)	1943.00 (4284.00)	1826.00 (4026.00)	1716.00 (3783.00)
Deflection	mm (in)	214.00 (8.43)	238.00 (9.37)	263.00 (10.35)	289.00 (11.38)	316.00 (12.44)	344.00 (13.54)	374.00 (14.72)
Quarter Point Load (QPL)	kg (lbs)	1678.00 (3699.00)	1570.00 (3461.00)	1471.00 (3243.00)	1380.00 (3042.00)	1295.00 (2855.00)	1217.00 (2683.00)	1144.00 (2522.00)
Deflection	mm (in)	201.00 (7.91)	224.00 (8.82)	247.00 (9.72)	272.00 (10.71)	298.00 (11.73)	325.00 (12.80)	354.00 (13.94)
Fifth Point Load (FPL)	kg (lbs)	1398.00 (3082.00)	1308.00 (2884.00)	1226.00 (2703.00)	1150.00 (2535.00)	1079.00 (2379.00)	1014.00 (2235.00)	954.00 (2103.00)
Deflection	mm (in)	212.00 (8.35)	235.00 (9.25)	260.00 (10.24)	285.00 (11.22)	312.00 (12.28)	341.00 (13.43)	370.00 (14.57)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	353.00 (237.00)	314.00 (211.00)	280.00 (188.00)	251.00 (169.00)	225.00 (151.00)	203.00 (136.00)	183.00 (123.00)
Deflection	mm (in)	210.00 (8.27)	233.00 (9.17)	258.00 (10.16)	283.00 (11.14)	310.00 (12.20)	338.00 (13.31)	368.00 (14.49)

Span	m (ft)	26.00 (85.30)	27.00 (88.60)	28.00 (91.90)	29.00 (95.10)	31.00 (101.70)	33.00 (108.30)	35.00 (114.80)
Centre Point Load (CPL)	kg (lbs)	2152.00 (4744.00)	2024.00 (4462.00)	1903.00 (4195.00)	1788.00 (3942.00)	1577.00 (3477.00)	1386.00 (3056.00)	1210.00 (2668.00)
Deflection	mm (in)	339.00 (13.35)	368.00 (14.49)	398.00 (15.67)	430.00 (16.93)	498.00 (19.61)	573.00 (22.56)	655.00 (25.79)
Third Point Load (TPL)	kg (lbs)	1614.00 (3558.00)	1518.00 (3347.00)	1427.00 (3146.00)	1341.00 (2956.00)	1183.00 (2608.00)	1039.00 (2291.00)	908.00 (2002.00)
Deflection	mm (in)	405.00 (15.94)	438.00 (17.24)	472.00 (18.58)	507.00 (19.96)	581.00 (22.87)	661.00 (26.02)	746.00 (29.37)
Quarter Point Load (QPL)	kg (lbs)	1076.00 (2372.00)	1012.00 (2231.00)	951.00 (2097.00)	894.00 (1971.00)	789.00 (1739.00)	693.00 (1528.00)	605.00 (1334.00)
Deflection	mm (in)	384.00 (15.12)	415.00 (16.34)	448.00 (17.64)	482.00 (18.98)	554.00 (21.81)	632.00 (24.88)	716.00 (28.19)
Fifth Point Load (FPL)	kg (lbs)	897.00 (1978.00)	843.00 (1858.00)	793.00 (1748.00)	745.00 (1642.00)	657.00 (1448.00)	577.00 (1272.00)	504.00 (1111.00)
Deflection	mm (in)	401.00 (15.79)	433.00 (17.05)	467.00 (18.39)	502.00 (19.76)	576.00 (22.68)	655.00 (25.79)	740.00 (29.13)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	166.00 (112.00)	150.00 (101.00)	136.00 (91.00)	123.00 (83.00)	102.00 (69.00)	84.00 (56.00)	69.00 (46.00)
Deflection	mm (in)	399.00 (15.71)	431.00 (16.97)	464.00 (18.27)	499.00 (19.65)	573.00 (22.56)	652.00 (25.67)	737.00 (29.02)



All truss loading calculations are based on:

Truss supported or suspended at both ends • Static loading only • Loads applied at the node points • Self-weight of the truss is included • Spans consisting 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

S-M780 Quatro

- 780×780 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 22 mm (0.86") holes for lateral connections on all sides
- Ladder tubes for ease of climbing when used as tower
- Integrated forklift pick-up points, double fork connectors, zinc-coated pins and matt black, impact-resistant industrial paint finish



Forklift pick-up points

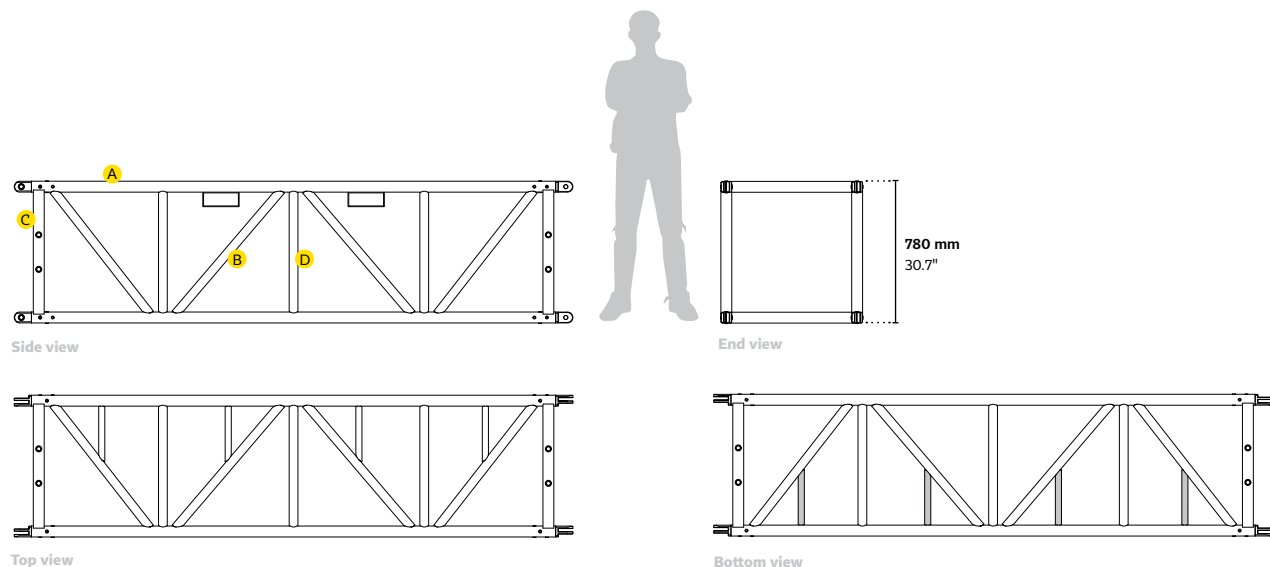
S-M780 Quatro Tower truss section

S-QTQT	mm	in	Main chords A:	Diagonals B:	End braces C:	Intermediate cross braces D:	Pin type:
			60.3×4 (24×0.16)	48.3×3.2 (1.9×0.1)	60×60×4 (24×24×0.16)	48.3×3.2 (1.9×0.1)	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)	207.80 (458.12)	259.60 (572.32)	304.00 (670.21)	352.00 (776.03)

Connection material and packaging are not included in above weights



S-M1010 Rect

- 1010×580 mm rectangular span section made from bespoke, high-strength steels
- 2.7 times higher bending strength compared to aluminium truss with similar dimensions
- Orientation-free connectors for ease of use
- Pinned connectors for increased strength
- End braces with 22 mm (0.86") holes for lateral connections
- Optimised truss design for convenient insertion of lateral truss
- Integrated forklift pick-up points, double fork connectors, zinc-coated pins and matt black, impact-resistant industrial paint finish



Forklift pick-up points

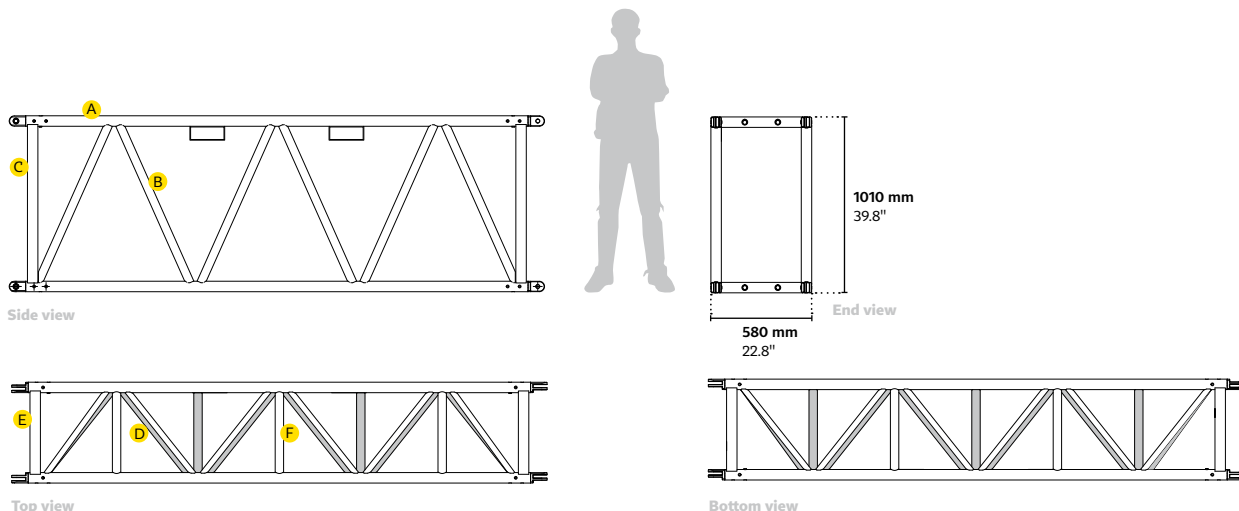
S-M1010 Rectangular truss section

S-RTD	mm	in	Vertical			Horizontal		Pin type: PQ
			Main chords A:	Diagonals B:	End braces C:	Diagonals D:	End braces E:	
			60.3×4 (24×0.16)	48.3×3.2 (1.9×0.1)	60×60×4 (24×24×0.16)	33.7×2.6 (1.3×0.1)	60×60×4 (24×24×0.16)	48.3×3.2 (1.9×0.1)

STANDARD LENGTHS AND WEIGHTS AVAILABLE

S-RTD	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	106.40 (234.57)	150.70 (332.24)	172.90 (381.18)	195.00 (429.90)	239.30 (527.57)	284.00 (626.11)	328.70 (724.66)							

Connection material and packaging are not included in above weights



S-M1010 Trio

- 1010×580 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 (0.86") holes for connecting e.g. wind bracings
- Optimised truss design for convenient insertion of lateral truss
- Integrated forklift pick-up points, double fork connectors, zinc-coated pins and matt black, impact-resistant industrial paint finish



Fork connectors

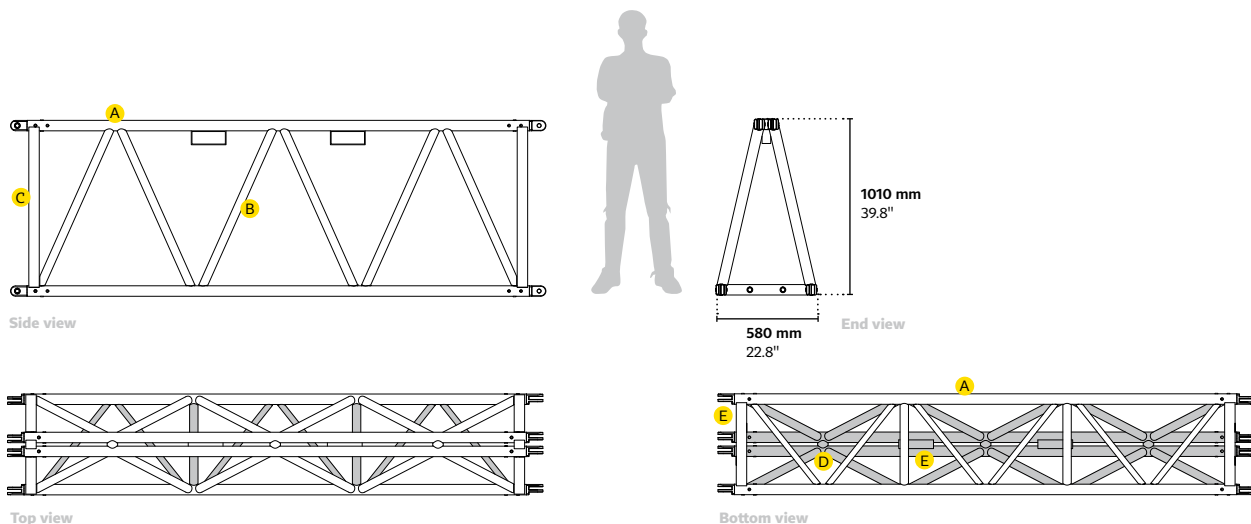
S-M1010 Triangular truss section

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:
			60.3×4 (2.4×0.16)	48.3×3.2 (1.9×0.1)	60×60×4 (2.4×2.4×0.16)	33.7×2.6 (1.3×0.1)	60×60×4 (2.4×2.4×0.16)	48.3×3.2 (1.9×0.1)	PQ-FTD & PQ

STANDARD LENGTHS AND WEIGHTS AVAILABLE

S-FTD	m		ft		kg		lbs	
	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)	
	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



S-M1450 Rect

- 1451×771 mm rectangular truss made from special, ultra-high-strength steel alloys
- 2.2 times more loading capacity than aluminium truss with similar dimensions
- Webbing pattern allows the insertion of cross trusses
- Compression tubes are located at important rigging points
- Orientation-free double fork connector arrangement for ease of use
- End braces with 22 mm (0.86") holes for lateral connections
- Pinned connectors for increased strength
- Integrated forklift pick-up points and ladder tubes
- Zinc-coated pins and matt black, impact-resistant industrial paint finish



Forklift pick-up points

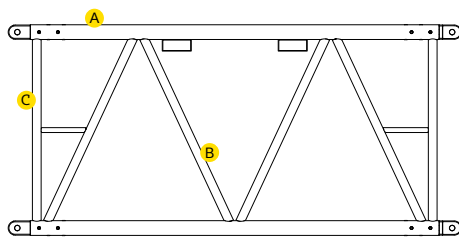
S-M1450 Rectangular truss section

S-RTW	mm	in	Vertical			Horizontal		Pin type:	
			Main chords A:	Diagonals B:	End braces C:	Diagonals D:	End braces E:		Intermediate cross braces F:
			101.6×4 (4×0.16)	60.3×4 (2.4×0.16)	60.3×4 (2.4×0.16)	48.3×3.2 (1.9×0.1)	80×60×4 (3.2×2.4×0.16)	48.3×3.2 (1.9×0.1)	PW

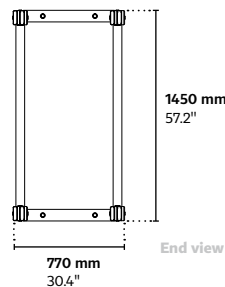
STANDARD LENGTHS AND WEIGHTS AVAILABLE

S-RTW	m		ft		kg	lbs	
	1.00	2.00	2.50	3.00			4.00
	3.28	6.56	8.20	9.84	1012.58	1308.88	
	222.40	288.60	310.50	375.30	459.30	526.50	593.70

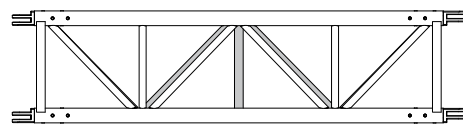
Connection material and packaging are not included in above weights



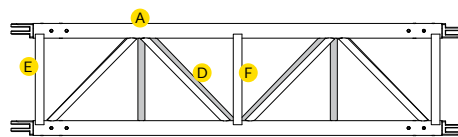
Side view



End view



Top view



Bottom view

S-M2000 Fold

- 2002×772 mm foldable truss made from bespoke, high-strength steels for optimised transport and storage
- Unique product for the event industry with increased loading on extremely wide spans
- Orientation-free connectors for ease of use
- Optimised weight to strength ratio
- Pinned connectors for increased strength
- Optimised webbing pattern for ease of use when assembling cross trusses
- Integrated forklift pick-up points, double fork connectors, zinc-coated pins and matt black, impact-resistant industrial paint finish



Detail of hinge

S-M2000 Foldable truss section

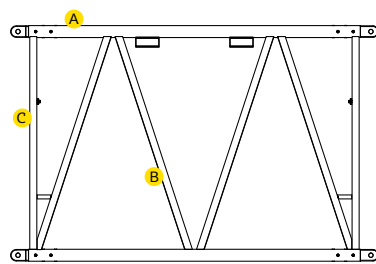
S-FTZ	mm	in	Vertical		Horizontal	Pin type:	
			Main chords A:	Diagonals B:	End braces C:		Diagonals D:
			101.6×4 (4×0.16)	60×60×4 (2.4×2.4×0.16)	60×60×4 (2.4×2.4×0.16)	48.3×3.2 (1.9×0.1)	PW-FTZ & PW

STANDARD LENGTHS AND WEIGHTS AVAILABLE

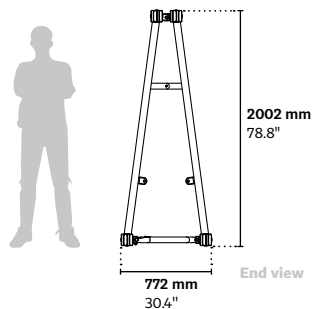
S-FTZ	m		ft		kg		lbs	
	1.00 (3.28)	2.00 (6.56)	2.50 (8.20)	3.00 (9.84)	4.00 (13.12)	5.00 (16.41)	6.00 (19.68)	
	243.20 (536.16)	350.00 (771.62)	387.20 (853.62)	424.30 (935.42)	525.40 (1158.31)	627.10 (1382.52)	728.70 (1606.51)	

Connection material and packaging are not included in above weights

In-service

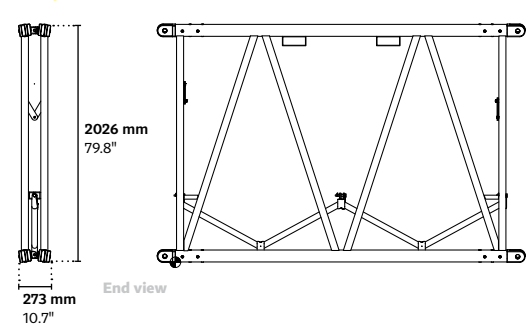


Side view

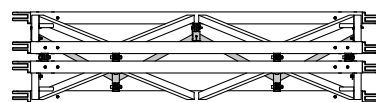


End view

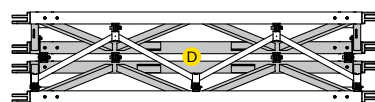
Transport mode



End view



Top view



Bottom view

MILOS

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