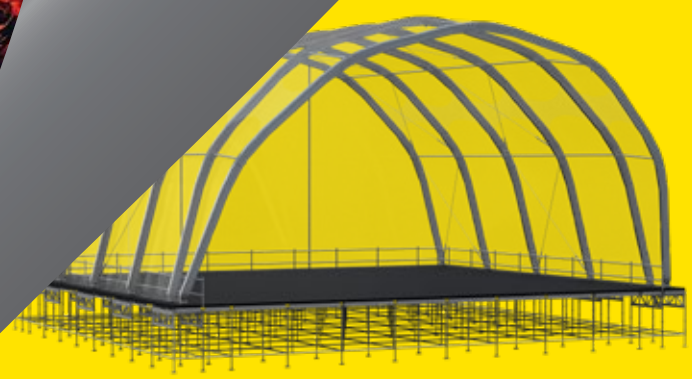
Roofs

We've got you covered

Category brochure

Flexibility Behind Your Show



Full range of our roofs solutions

About Us

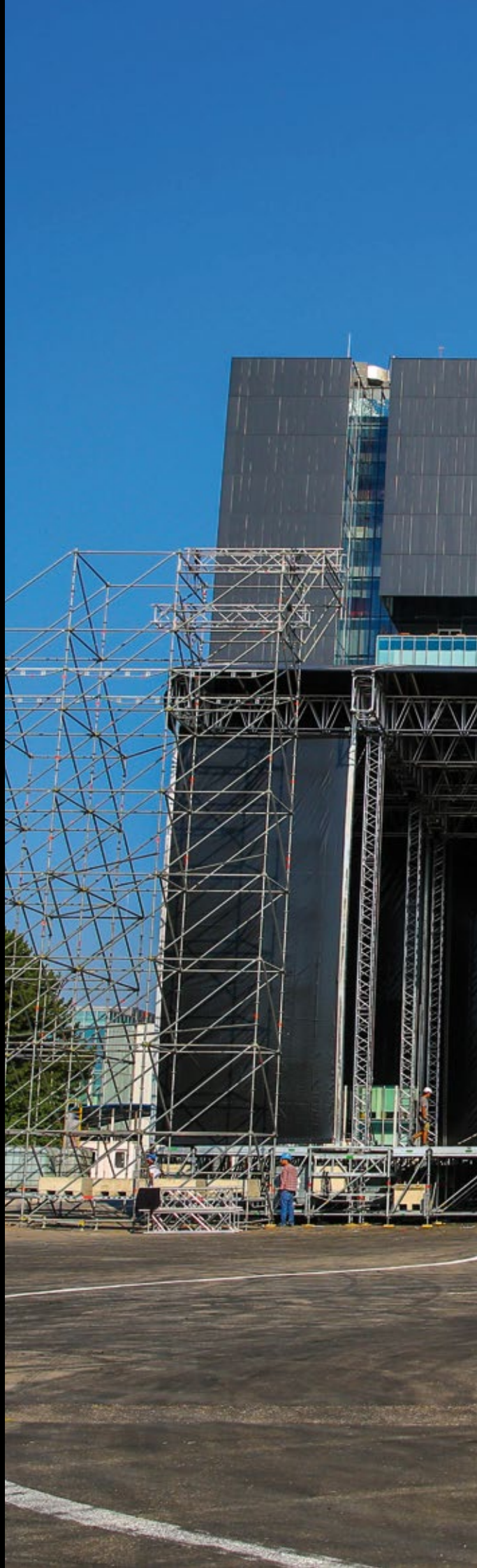
MILOS was the brainchild of young Czech DJ, Franti Zykan, who started manufacturing truss in 1994 out of a small garage in the Czech Republic. He chose MILOS as the name of his company in honour of his grandfather, with whom he spent a large part of his childhood.

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.



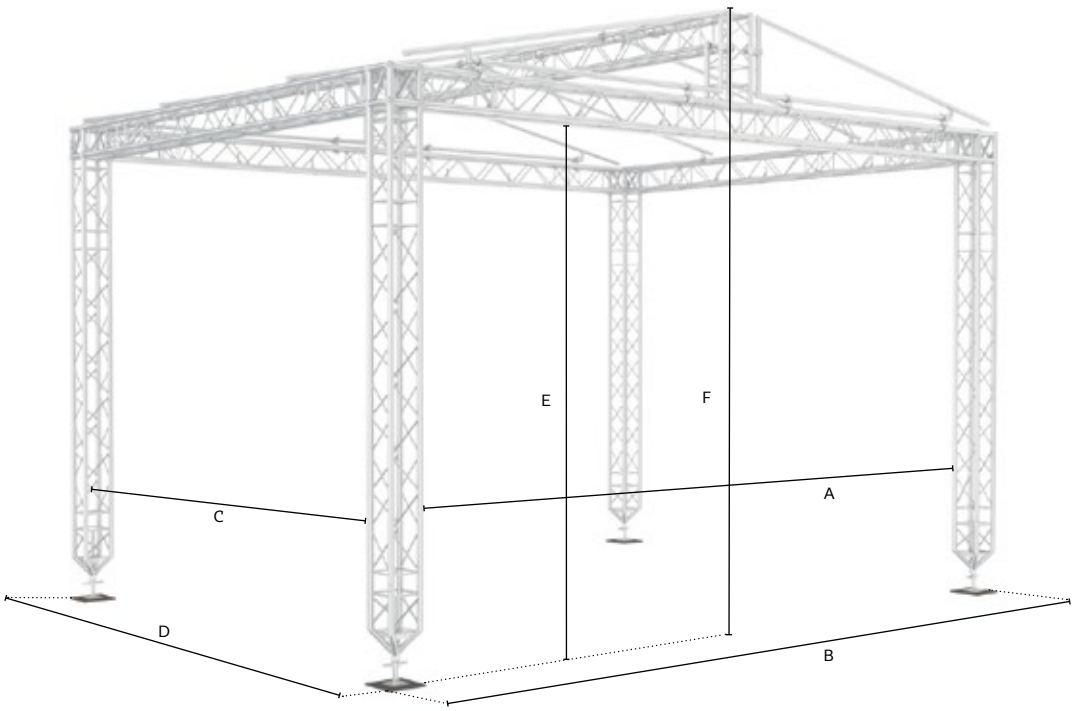
Roofs

We've got you coverd

Use QR code
for full range

MR0 6×5 No Guy Wires

- 6×5 m (19.68×16.40 ft) aluminium roof designed for medium-sized events
- No guy wires required due to implementation of Multicube HD
- Decreased times for roof construction
- Reduced ballast requirements
- Up to 50 kg/m loading on horizontal truss sections
- Loading capacity up to 1500 kg (3307 lbs)
- Loads of up to 200 kg (440.92 lbs) per cantilever
- Up to 30 m/s wind loading in accordance with DIN EN 17879



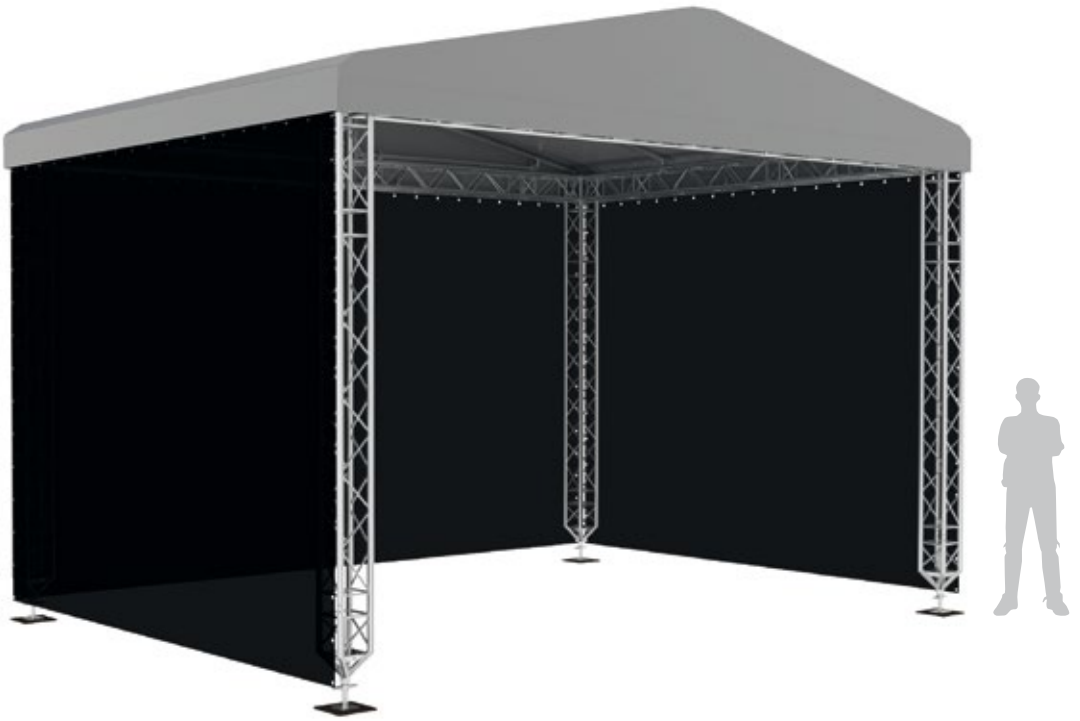
Technical specifications

MR0 - NGW 6×5

		Size ›	6×5 m	(19.68×16.40 ft)
Dimensions	A	Internal width	**6.13 m**	(20.11 ft)
	B	Overall external width	**6.73 m**	(22.08 ft)
	C	Internal depth	**4.42 m**	(14.45 ft)
	D	Overall external depth	**5.00 m**	(16.40 ft)
	E	Clearance	**3.95 m**	(12.96 ft)
	F	Overall height	**4.95 m**	(16.24 ft)

Loading capacity

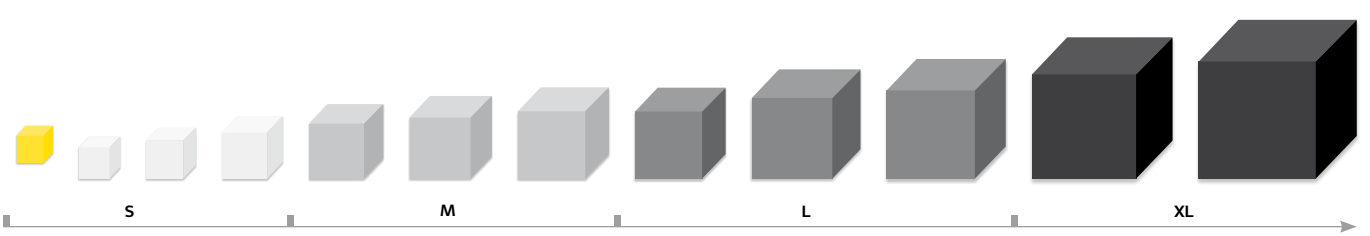
	Size ›		6×5 m	(19.68×16.40 ft)
Loading capacity	Main grid (UDL)	QTB, QTV	**30 kg/m**	(20.15 lbs/ft)
		QTU, QTVU	**50 kg/m**	(33.50 lbs/ft)



Operational specifications

Design standards	EN 17879	Event structures – Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculation based on 100% windproof wall claddings	
	Out of service	Up to 30.0 m/s – 108 km/h – 67 mph (depending on terrain categories)
	* Side claddings and equipment with large areas exposed to wind need to be removed	
Ballast	Depending on configuration	
Canopy & sidewalls	B1 fire-retardant canopy, single-piece format	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocode	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

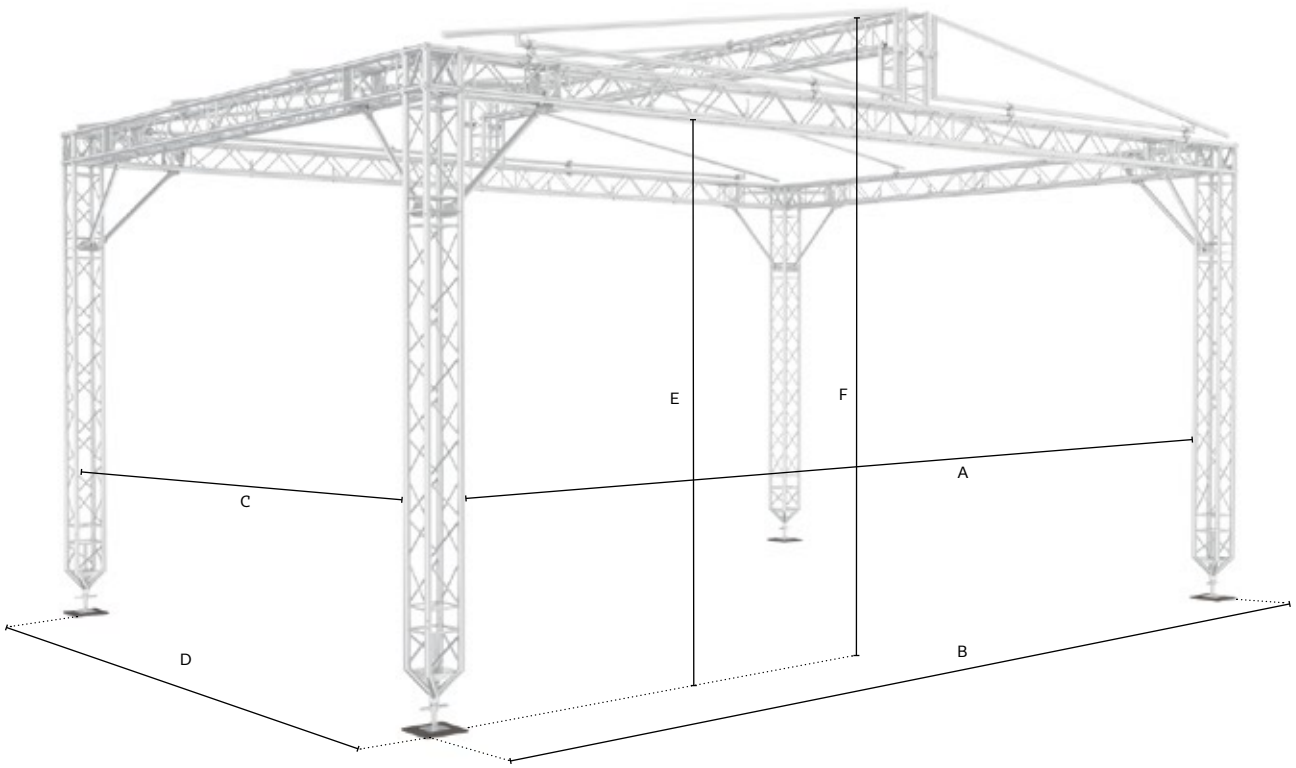
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR0 8×6 m No Guy Wires

- No guy wires required due to implementation of Corner Brace HD
- Decreased times for roof construction
- Reduced ballast requirements
- Loads of up to 200 kg (440.92 lbs) per cantilever
- Up to 30 m/s wind loading in accordance with DIN EN 17879
- Loading capacity up to 2000 kg (4409 lbs)
- Using M290 QTVU enables a loading capacity of up to 60 kg/m plus 300 kg per PA.
- Clear area from all sides
- Adjustment to terrain by 572–950 mm using screw jack legs



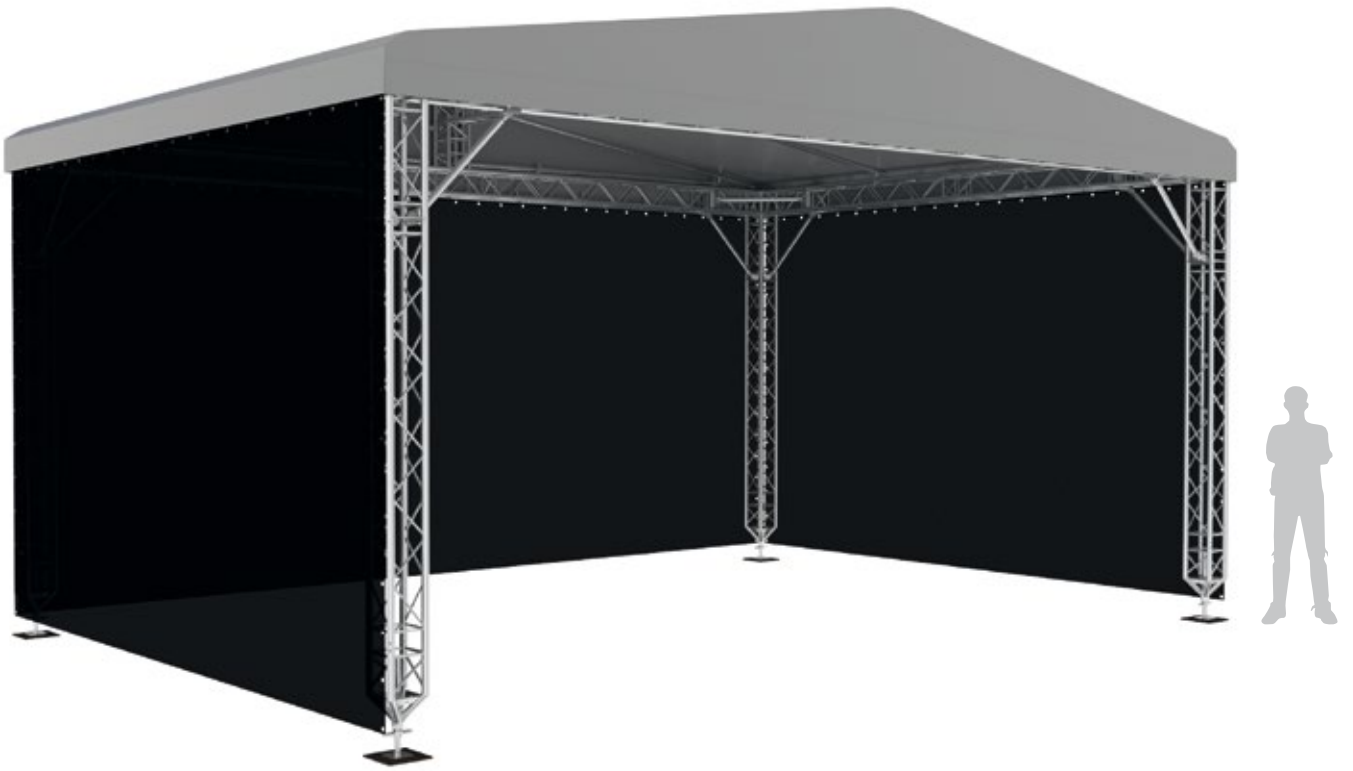
Technical specifications

MR0 - NGW 8×6

		Size ›	8×6 m	(26.25×19.70 ft)
Dimensions	A	Internal width	**8.16 m**	(26.77 ft)
	B	Overall external width	**8.73 m**	(28.64 ft)
	C	Internal depth	**5.44 m**	(17.85 ft)
	D	Overall external depth	**6.03 m**	(19.78 ft)
	E	Clearance	**3.95 m**	(12.96 ft)
	F	Overall height	**4.95 m**	(16.24 ft)

Loading capacity

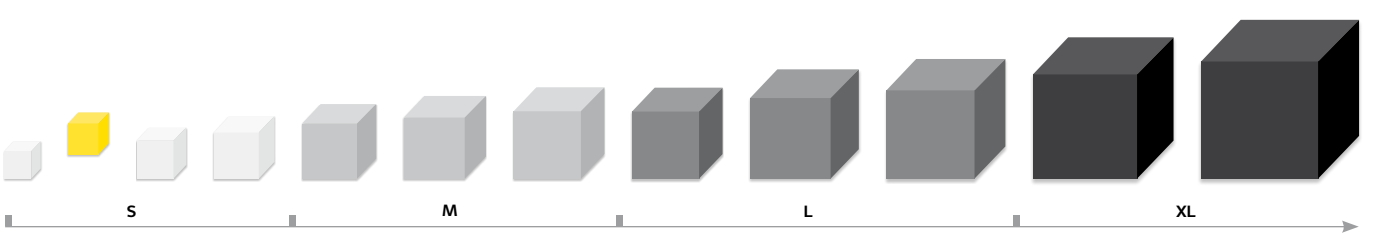
	Size ›		8×6 m	(26.25×19.70 ft)
Loading capacity	Main grid (UDL)	QTB, QTV	Front + rear **30 kg/m** side **25 kg/m**	(20.15 lbs/ft) (16.80 lbs/ft)
		QTVU	**60 kg/m** **+ 300 kg**	(40.30 lbs/ft) (661 lbs) PA



Operational specifications

Design standards	EN 17879	Event structures – Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculation based on 100% windproof wall claddings	
	Out of service	Up to 30.0 m/s – 108 km/h – 67 mph (depending on terrain categories)
	* Side claddings and equipment with large areas exposed to wind need to be removed	
Ballast	Depending on configuration	
Canopy and side walls	B1 fire-retardant canopy, single-piece format	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocode	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

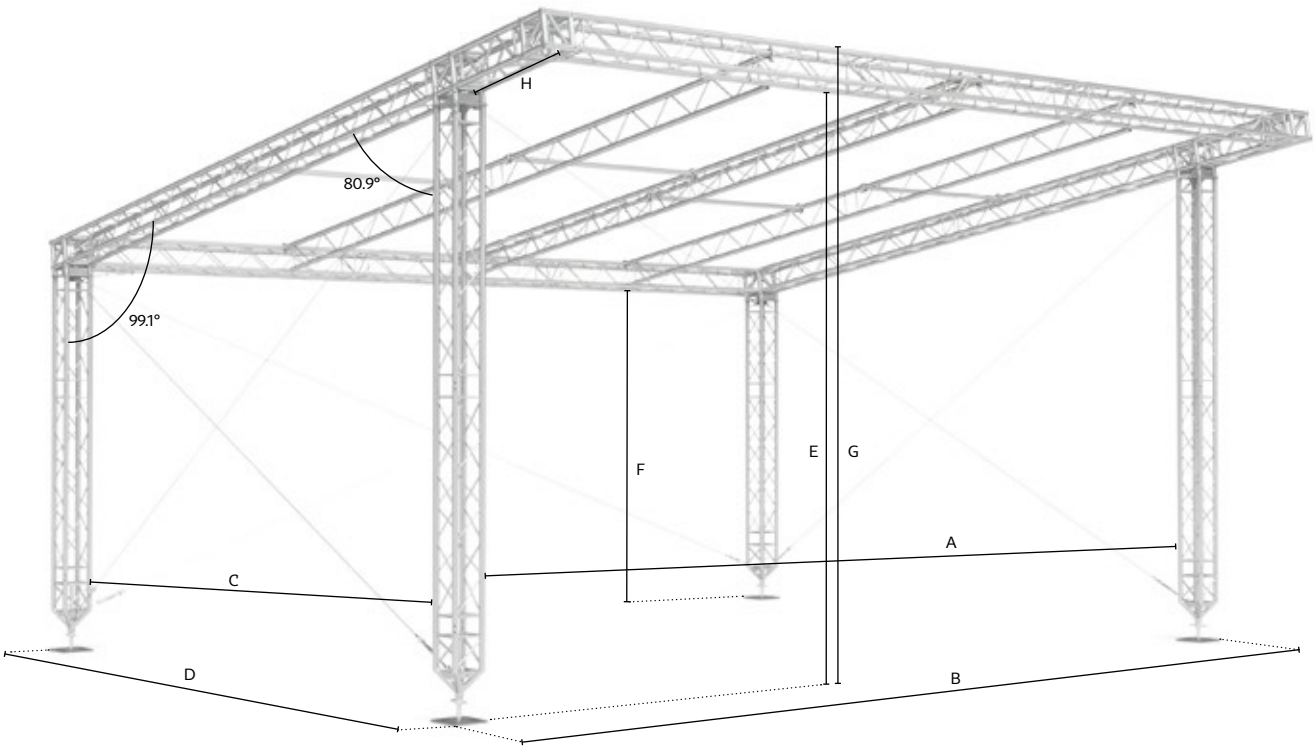
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR0 sloping roofs

- 6×4 m (19.69×13.12 ft) and 8×6 m (26.25×19.69 ft)
- sloping roof set-up for temporary events
- Heavy-duty M290 Quatro structure with Duo canopy support
- Gentle sloping roof design using special wedges and reinforced multicubes
- Supplied complete with internal wind bracing wires and connection accessories
- Full structural calculation report and build manual available
- Loading capacity up to 2000 kg (4409 lbs)
- PVC roof colour options and side walls available



Technical specifications

		Size ›	8×6 m	(26.25×19.70 ft)	6×4m	(19.70×13.10 ft)
Dimensions	A	Internal width	**8.50 m**	(27.89 ft)	**6.50 m**	(21.33 ft)
	B	Overall external width	**9.10 m**	(29.86 ft)	**7.10 m**	(23.29 ft)
	C	Internal depth	**5.92 m**	(19.42 ft)	**3.95 m**	(12.96 ft)
	D	Overall external depth	**6.50 m**	(21.32 ft)	**4.53 m**	(14.86 ft)
	E	Front clearance	**4.76 m**	(15.62 ft)	**4.68 m**	(15.35 ft)
	F	Back clearance	**3.55 m**	(17.98 ft)	**3.87 m**	(12.70 ft)
	G	Overall height	**5.48 m**	(17.98 ft)	**4.97 m**	(16.30 ft)
	H	Cantilever depth	**1.10 m**	(3.60 ft)	**0.59 m**	(1.94 ft)

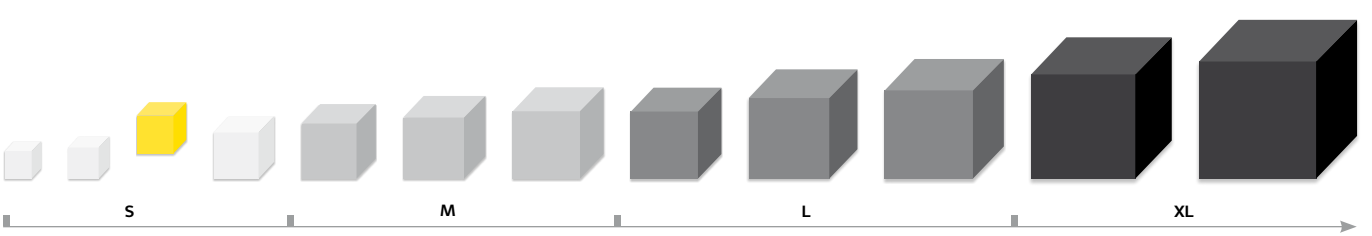
Loading capacity

		Size ›	8×6 m	(26.25×19.70 ft)	6×4 m	(19.70×13.10 ft)
Loading capacity	Back and side truss	Uniformly distributed (UDL)	**30 kg/m**	(20 lbs/ft)	**30 kg/m**	(20 lbs/ft)
	Middle truss	Uniformly distributed (UDL)	**10 kg/m**	(6 lbs/ft)	-	
	Cantilever truss	Uniformly distributed (UDL)	**20 kg/m**	(13 lbs/ft)	**30 kg**	(66.13 lbs)
	PA load	Point load each cantilever corner	**100 kg**	(220 lbs)	**100 kg**	(220 lbs)
	* See structural report for exact load positioning					

Operational specifications

Design standards	EN 17879	Event structures – Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculations based on 100% closed side canopies	
	* Side canopies and loads to be removed above this wind speed if not considered	
	Out of service	28.0 m/s – 100 km/h – 62 mph (max. gust wind speed)
Ballast	Depending on configuration	
Canopy and side walls	B1 fire-retardant canopy on request, single-piece format	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

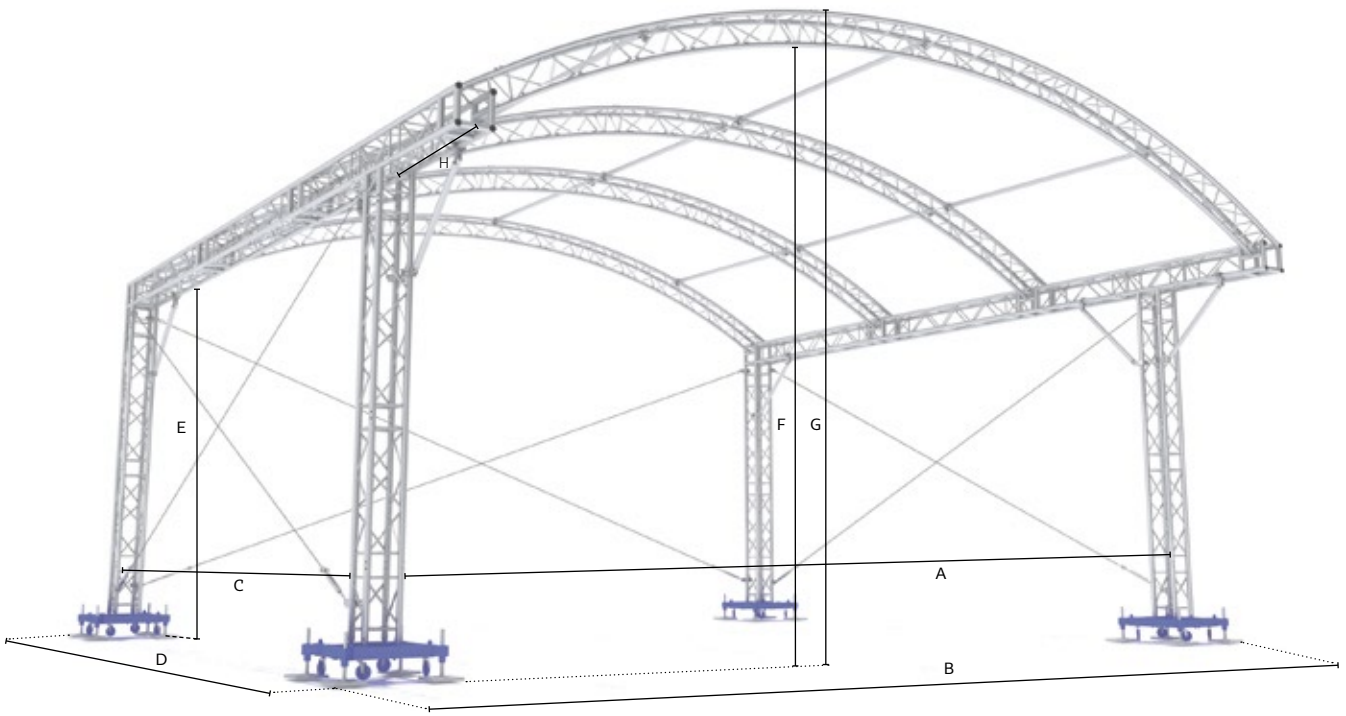
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR1 arched roofs

- 6×4 m (19.69×13.12 ft) and 8×6 m (26.25×19.69 ft) arched roof set-up for temporary events
- Heavy-duty M290 Quatro structure with Trio arches
- Loading capacity up to 2000 kg (4409 lbs)
- Supplied complete with internal wind bracing wires and connection accessories
- Fast connection for quick, simple and secure assembly
- Full structural calculation report and build manual available
- PVC roof colour and side wall options

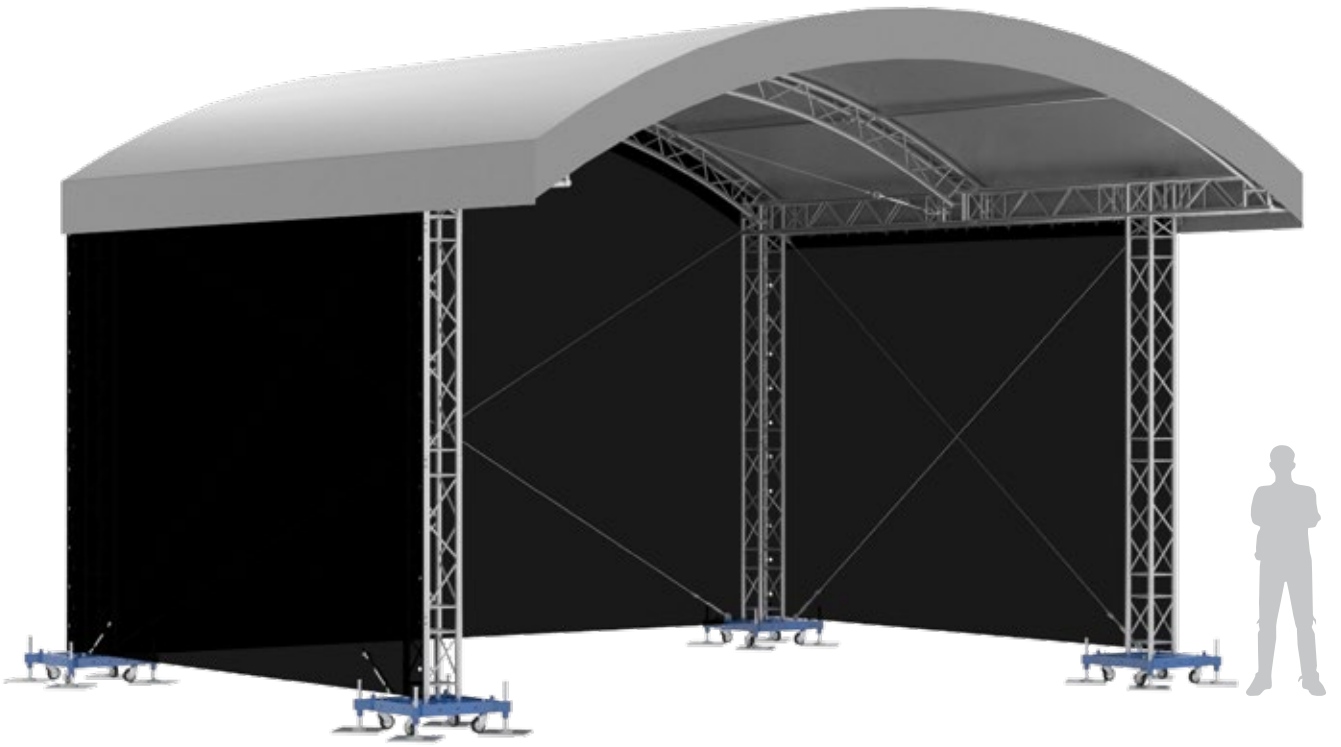


Technical specifications

		Size ›	8×6 m	(26.25×19.70 ft)	6×4 m	(19.70×13.10 ft)
Dimensions	A	Internal width	**8.00 m**	(26.25 ft)	**6.00 m**	(19.69 ft)
	B	Overall external width	**9.06 m**	(29.72 ft)	**7.06 m**	(23.16 ft)
	C	Internal depth	**6.40 m**	(20.99 ft)	**4.40 m**	(14.44 ft)
	D	Overall external depth	**7.48 m**	(24.54 ft)	**5.43 m**	(17.81 ft)
	E	Side clearance	**4.43 m**	(14.53 ft)	**4.43 m**	(14.53 ft)
	F	Middle clearance	**5.69 m**	(18.67 ft)	**5.42 m**	(17.78 ft)
	G	Overall height	**5.96 m**	(19.55 ft)	**5.69 m**	(18.67 ft)
	H	Cantilever depth	**1.21 m**	(3.97 ft)	**1.21 m**	(3.97 ft)

Loading capacity

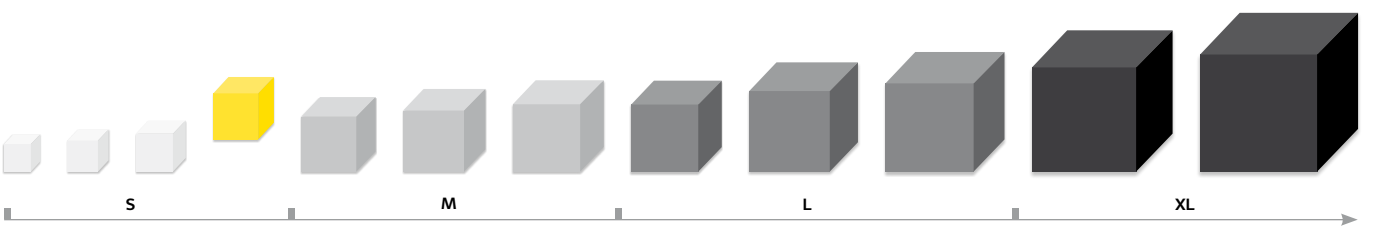
		Size ›	8×6 m	(26.25×19.70 ft)	6×4 m	(19.70×13.10 ft)
Loading capacity	Inner arches	Uniformly distributed (UDL)	**15 kg/m**	(10 lbs/ft)	**15 kg/m**	(10 lbs/ft)
	Side truss	Uniformly distributed (UDL)	**20 kg/m**	(13 lbs/ft)	**20 kg/m**	(13 lbs/ft)
	Outer arches	Uniformly distributed (UDL)	**20 kg/m**	(13 lbs/ft)	**20 kg/m**	(13 lbs/ft)
	PA load	2× point load at cantilever	**250 kg**	(551 lbs)	**250 kg**	(551 lbs)
	* See structural report for exact load positioning					



Operational specifications

Design standards	EN 17879	Event structures – Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculations based on 100% closed side canopies	
	* Side canopies to be removed above this wind speed if not considered	
	Out of service	28.0 m/s – 100 km/h – 62 mph (max. gust wind speed)
Ballast	Depending on configuration	
Canopy and side walls	B1 fire-retardant canopy on request, single-piece format or keder profiles on request	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

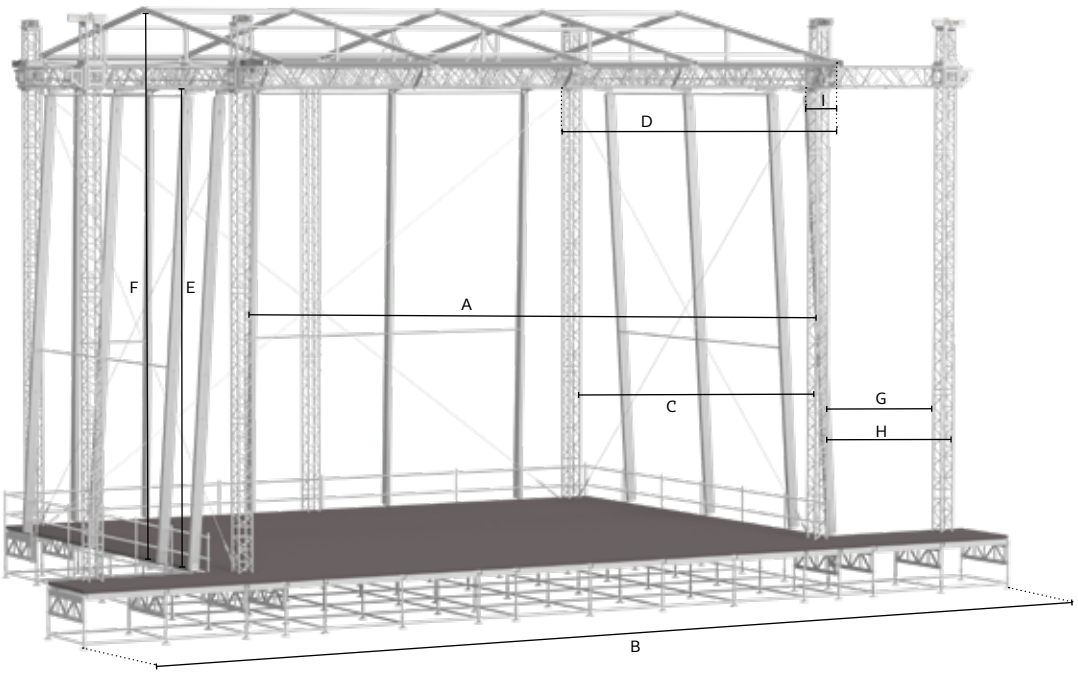
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR2K keder roofs

- Keder roof structure for temporary events
- Roof top framework can be used with existing ground support inventory
- MT1 Towers with horizontal M390 grid for maximum production rigging
- MT2 Tower with horizontal M520 grid for higher loading also available
- Loading capacity up to 14 t (30864 lbs) with
- 15×12 m (49.21×39.37 ft) stage configuration
- Low-profile keder roof construction for ease of
- canopy installation
- Additional rear tower for LED support using back stage beams
- Can be operated with manual or electric chain hoist (bracket required)
- Supplied complete with internal wind bracing wires and connection accessories
- Full structural calculation report and build manual available
- PVC roof colour and side wall (mesh or solid) options
- Integrated tower base / stage components available
- PA wings options available on request

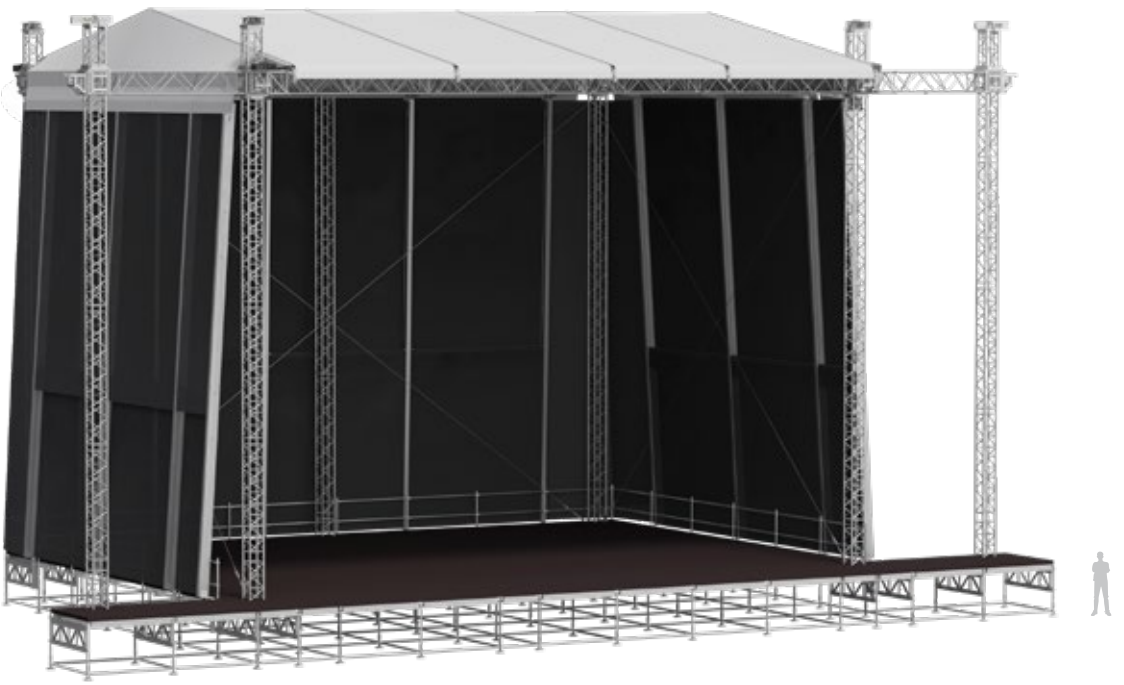


Technical specifications

		Size ›	15×12 m	(49.21×39.37 ft)	12×10 m	(39.37×32.81 ft)
Dimensions	A	Internal width	**15.31 m**	(50.23 ft)	**12.26 m**	(40.22 ft)
	B	Overall external width	**25.15 m**	(82.51 ft)	**21.14 m**	(69.36 ft)
	C	Internal depth	**11.73 m**	(38.48 ft)	**9.23 m**	(30.28 ft)
	D	Overall external depth	**14.41 m**	(47.28 ft)	**12.37 m**	(40.58 ft)
	E	Clearance	**11.18 m**	(36.68 ft)	**6.29 m**	(20.64 ft)
	F	Overall height	**13.13 m**	(43.08 ft)	**7.85 m**	(25.75 ft)
	G	PA wing – internal width	**3.35 m**	(10.99 ft)	**3.15 m**	(10.33 ft)
	H	PA wing – overall external width	**3.74 m**	(12.27 ft)	**3.44 m**	(11.29 ft)
	I	Cantilever depth	**1.00 m**	(3.28 ft)	**1.00 m**	(3.28 ft)

Loading capacity

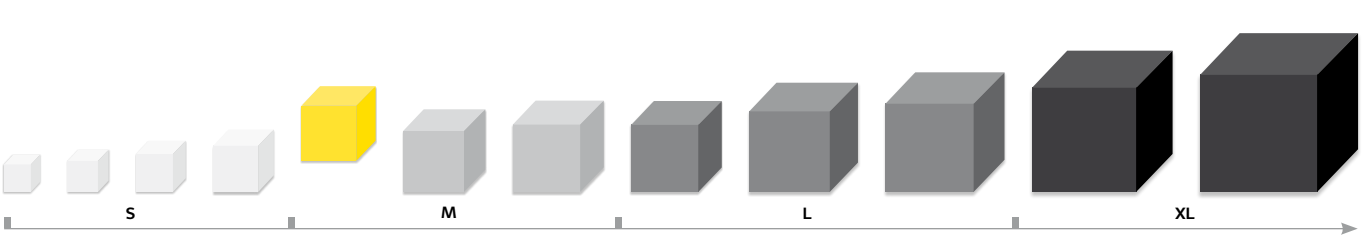
		Size ›	15×12 m	(49.21×39.37 ft)	12×10 m	(39.37×32.81 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**10000 kg**	(24250 lbs)	**7000 kg**	(15432 lbs)
		Side wings and PA in total	**3000 kg**	(6614 lbs)	**3000 kg**	(6614 lbs)
	* See structural report for exact load positioning					



Operational specifications

Design standards	EN 17879	Event structures - Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculations based on 100% closed side canopies	
	* Side canopies to be removed above this wind speed if not considered	
	Out of service	28.8 m/s – 103 km/h – 64 mph (max. gust wind speed)
Ballast	Depending on configuration, side wing, covering, compression beam, guy wires, corner brace, substructure.	
Canopy and side walls	B1 fire-retardant canopy on request, in keders, configurable for various sizes	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

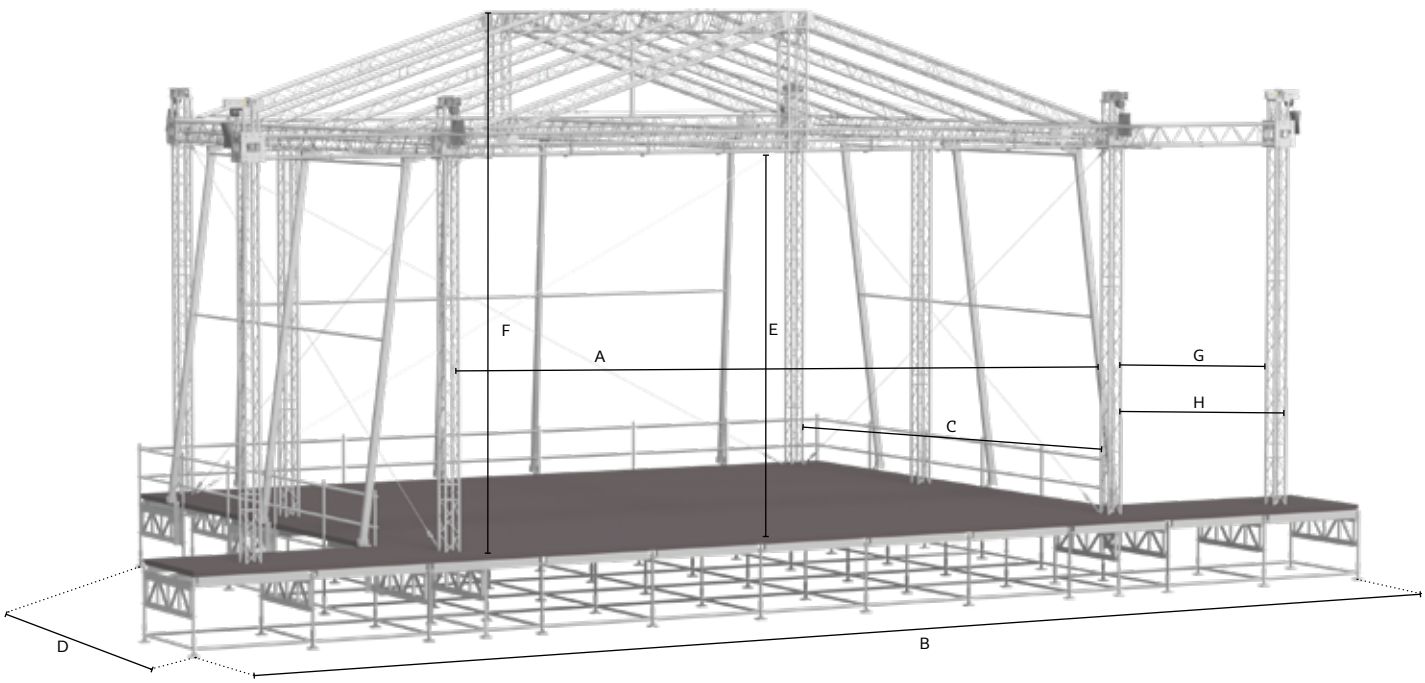
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR2 saddle roofs

- MR2 saddle roof structure for temporary events
- MT1 self-climbing towers, 10×8 m (32.80×26.25 ft), 12×10 m (39.37×32.80 ft) options available
- Fast connection for quick, simple and secure assembly
- Loading capacity up to 10.5 t (23147 lbs) with 12×10 m
- (39.37×32.80 ft) stage configuration
- Can be operated with manual or electric chain hoist (bracket required)
- Supplied complete with internal wind bracing wires and connection accessories
- Full structural calculation report and build manual available
- PVC roof colour and side wall options
- Integrated tower base / stage components available
- PA wings options available on request

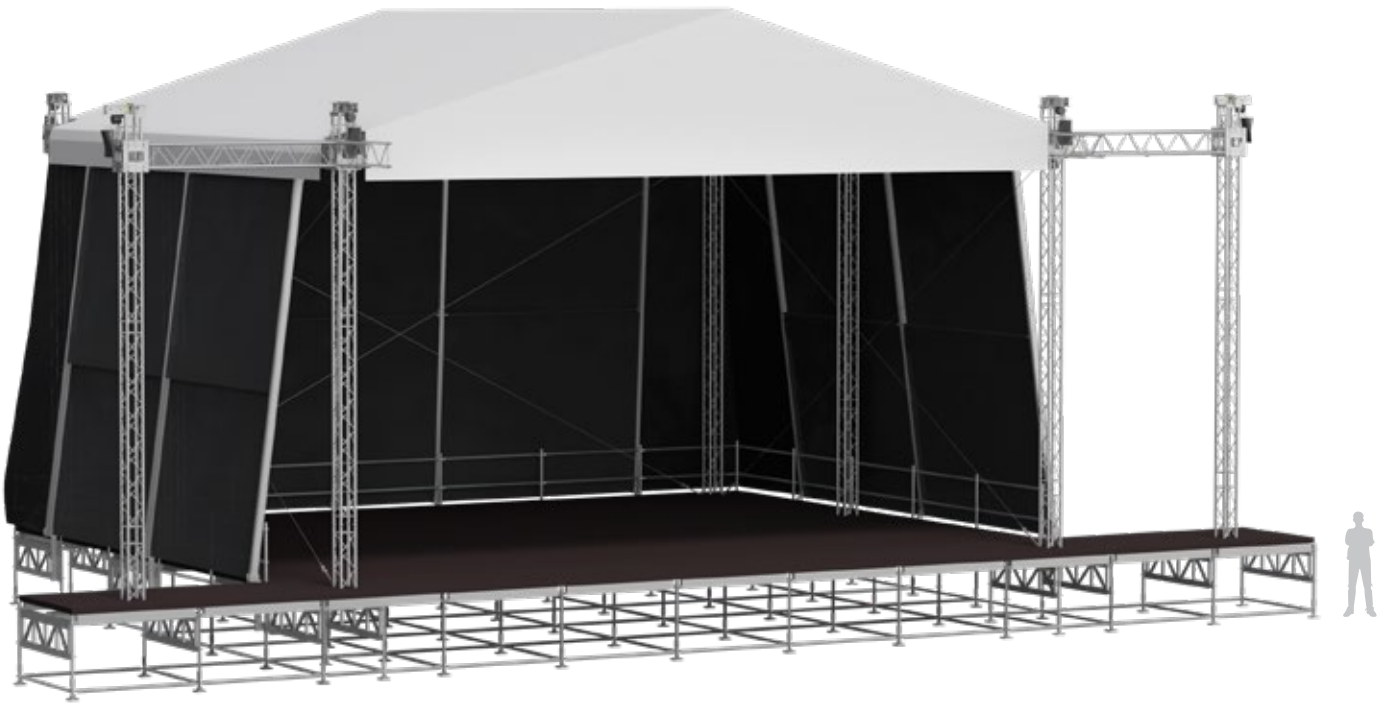


Technical specifications

		Size ›	12×10 m	(39.37×32.80 ft)	10×8 m	(32.80×26.25 ft)
Dimensions	A	Internal width	**12.30 m**	(40.35 ft)	**10.42 m**	(34.19 ft)
	B	Overall external width	**22.15 m**	(72.67 ft)	**19.64 m**	(64.44 ft)
	C	Depth	**10.60 m**	(34.78 ft)	**8.65 m**	(28.38 ft)
	D	Overall external depth	**12.80 m**	(41.99 ft)	**10.97 m**	(35.99 ft)
	E	Clearance	**6.29 m**	(20.64 ft)	**7.12 m**	(23.36 ft)
	F	Overall height	**8.64 m**	(28.35 ft)	**9.14 m**	(29.99 ft)
	G	PA wing – internal width	**3.15 m**	(10.33 ft)	**3.15 m**	(10.33 ft)
	H	PA wing – overall external width	**3.44 m**	(11.29 ft)	**3.44 m**	(11.29 ft)

Loading capacity

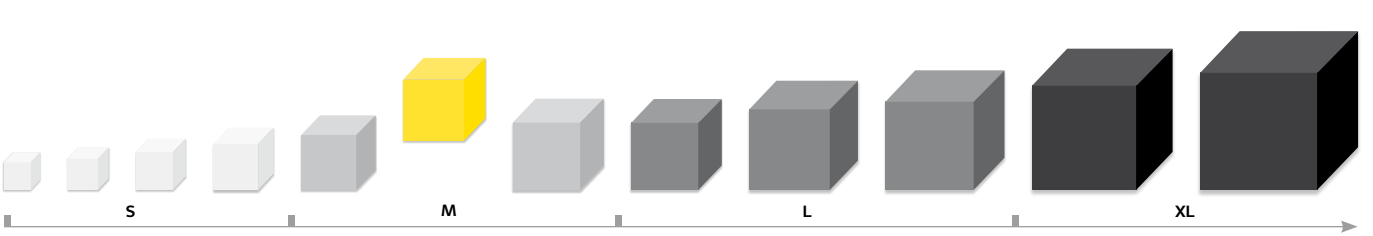
		Size ›	12×10 m	(39.37×32.80 ft)	10×8 m	(32.80×26.25 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**7500 kg**	(16534 lbs)	**5000 kg**	(11023 lbs)
		Side wings and PA in total	**3000 kg**	(6614 lbs)	**3000 kg**	(6614 lbs)
	* See structural report for exact load positioning					



Operational specifications

Design standards	EN 17879	Event structures - Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculations based on 100% closed side canopies	
	* Side canopies to be removed above this wind speed if not considered	
	Out of service	29.6 m/s – 106 km/h – 66 mph (max. gust wind speed)
	Training recommended	
Ballast	Depending on configuration, side wing, covering, compression beam, guy wires, corner brace, substructure	
Canopy and side walls	B1 fire-retardant canopy on request, single-piece format or keder profiles	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

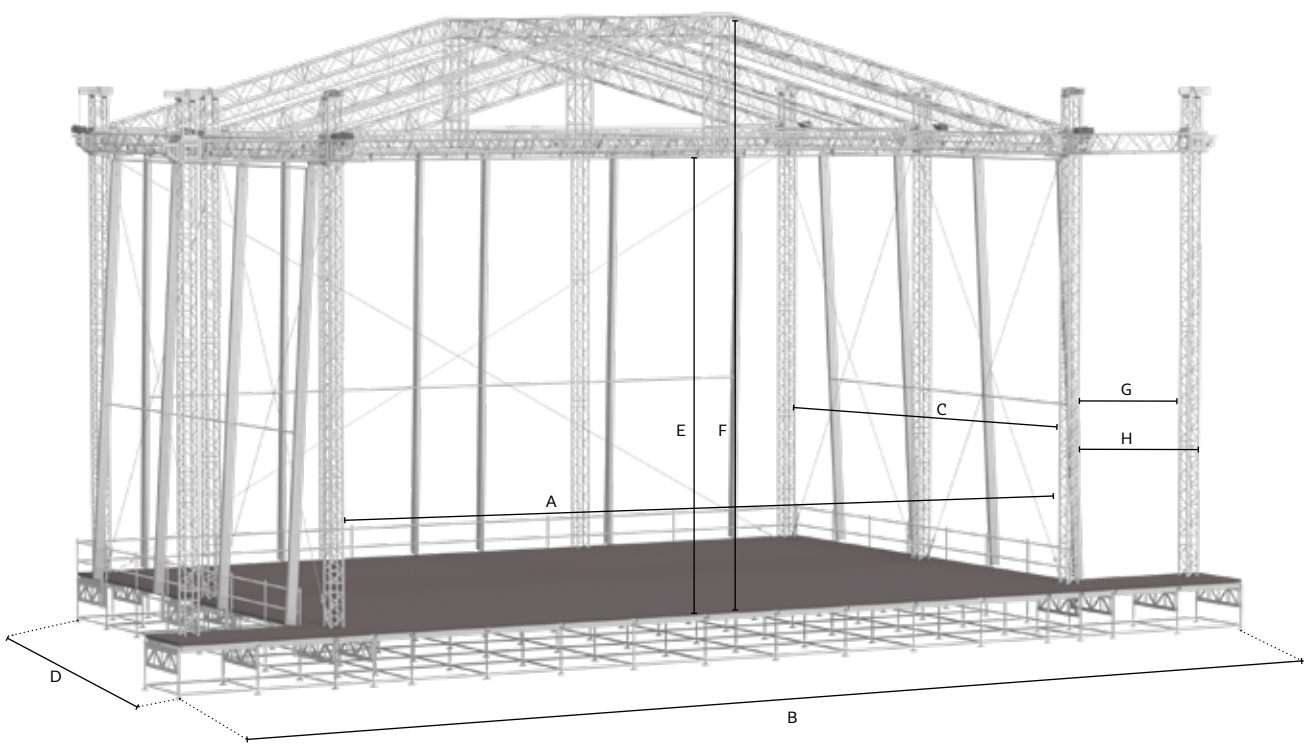
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR3 saddle roofs

- MR3 saddle roof structure for temporary events
- MT2 self-climbing towers up to 12.5 m high (41.01 ft) with M520 main grid
- Various standard sizes and optional front cantilever available
- Loading capacity up to 15 t (33068 lbs) with 16×14 m
- (52.49×45.93 ft) stage configuration
- Fast connection for quick, simple and secure assembly
- Supplied complete with internal wind bracing wires and connection accessories
- Full structural calculation report and build manual available
- PVC roof colour and side wall options
- Integrated tower base / stage components available
- PA wings options available on request



Technical specifications

		Size ›	20×14 m	(65.62×45.93 ft)	16×14 m	(52.49×45.93 ft)
Dimensions	A	Internal width	**20.53 m**	(67.34 ft)	**16.53 m**	(54.23 ft)
	B	Overall external width	**30.00 m**	(98.43 ft)	**26.00m**	(85.30 ft)
	C	Internal depth	**14.03 m**	(46.03 ft)	**14.03 m**	(46.03 ft)
	D	Overall external depth	**16.40 m**	(53.81 ft)	**16.40 m**	(53.81 ft)
	E	Clearance	**11.09 m**	(36.38 ft)	**11.09 m**	(36.38 ft)
	F	Overall height	**16.00 m**	(52.49 ft)	**16.00 m**	(59.49 ft)
	G	PA wing – internal width	**3.35 m**	(10.99 ft)	**3.35 m**	(10.99 ft)
	H	PA wing – overall external width	**3.75 m**	(12.30 ft)	**3.75 m**	(12.30 ft)

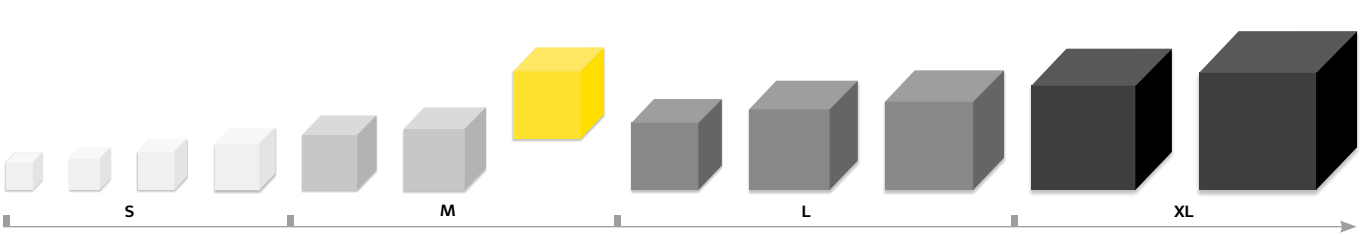
Loading capacity

		Size ›	20×14 m	(65.62×45.93 ft)	16×14 m	(52.49×45.93 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**12100 kg**	(26675 lbs)	**12600 kg**	(27777 lbs)
		Side wings and PA in total	**2400 kg**	(5291 lbs)	**2400 kg**	(5291 lbs)
	* See structural report for exact load positioning					

Operational specifications

Design standards	EN 17879	Event structures – Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculations based on 100% closed side canopies	
	* Side canopies to be removed above this wind speed if not considered	
	Out of service	27.5 m/s – 100 km/h – 62 mph (max. gust wind speed)
	Training recommended	
Ballast	Depending on configuration, side wing, covering, compression beam, guy wires, corner brace, substructure	
Canopy & sidewalls	B1 fire-retardant canopy on request, keder profiles optional	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

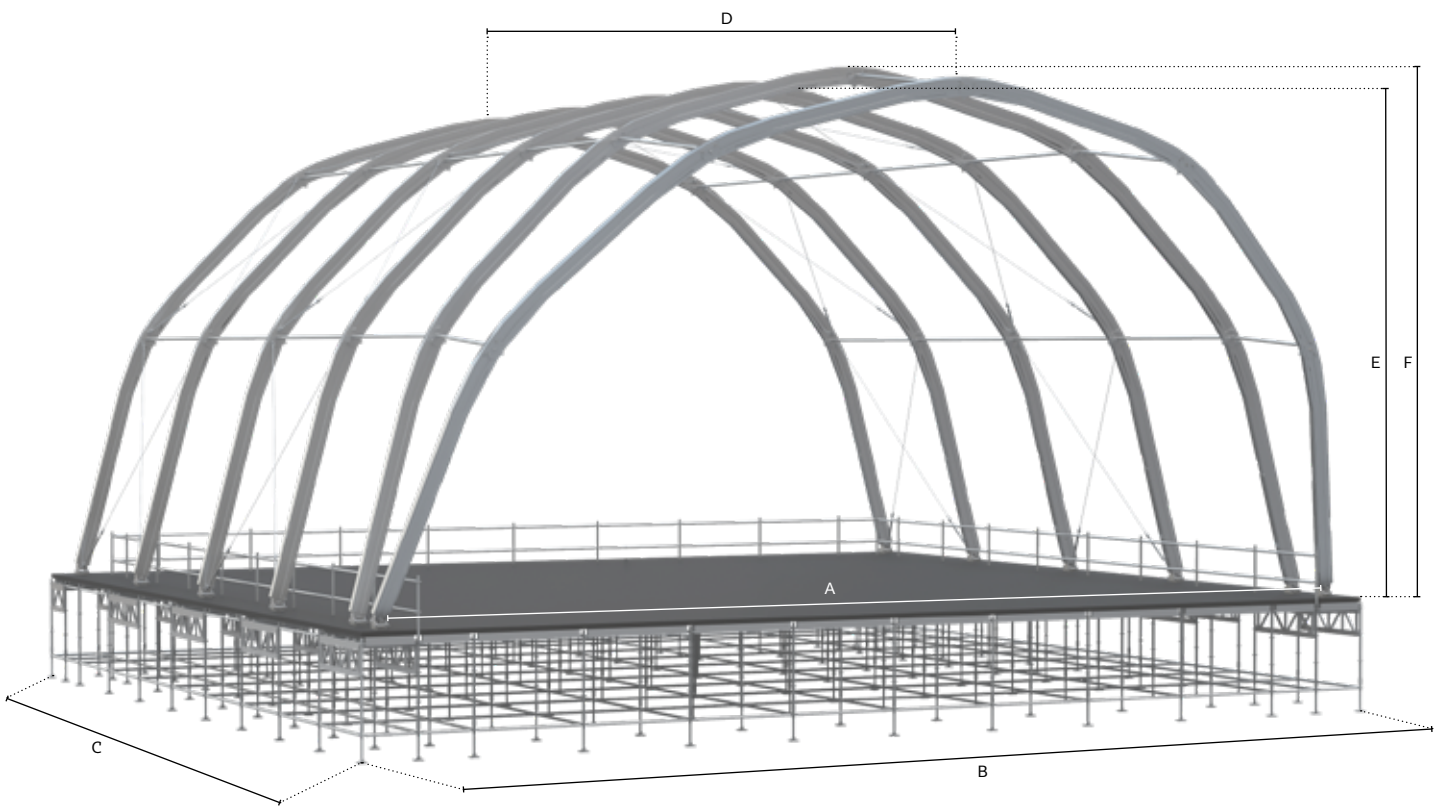
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

I-MR4 Invisible roof

- 19×18 m (62×59 ft) or 14×10 m (45×50 ft) aluminium keder arched roof
- Endless depth option by adding more keder arches
- 19 m (62 ft) span and clearance height of 9.5 m (31 ft) with 19×18 m
- Loading capacity of up to 5 t (11023 lbs) per arch (19×18 m)
- Standard configuration can support 30 t (66138 lbs)
- Quick and simple assembly with universal parts
- Transparent or solid canopy options available
- Easy logistics with special transport frames



Technical specifications

		Size ›	19×18 m	(62.33×59.05 ft)	14×10 m	(45.93×32.80 ft)
Dimensions	A	Internal width	**18.73 m**	(61.45 ft)	**13.75 m**	(44.11 ft)
	B	Overall external width	**20.20 m**	(66.27 ft)	**15.20 m**	(49.87 ft)
	C	Depth	**17.50 m**	(57.41 ft)	**10.50 m**	(34.45 ft)
	D	Overall external depth	**20.65 m**	(67.75 ft)	**12.65 m**	(41.50 ft)
	E	Clearance	**9.50 m**	(31.16 ft)	**7.05 m**	(23.13 ft)
	F	Overall height	**9.80 m**	(32.15 ft)	**7.30 m**	(23.95 ft)

Loading capacity

	Size ›	19×18 m	(62.33×59.05 ft)	14×10 m	(45.93×32.80 ft)
Loading capacity	Each arch	**5×1000 kg**	(5×2204.63 lbs)	**5×800 kg**	(5×1764.65 lbs)
	Total capacity	**30000 kg**	(66137.00 lbs)	**20000 kg**	(44091.00 lbs)
	* See structural report for exact load positioning				

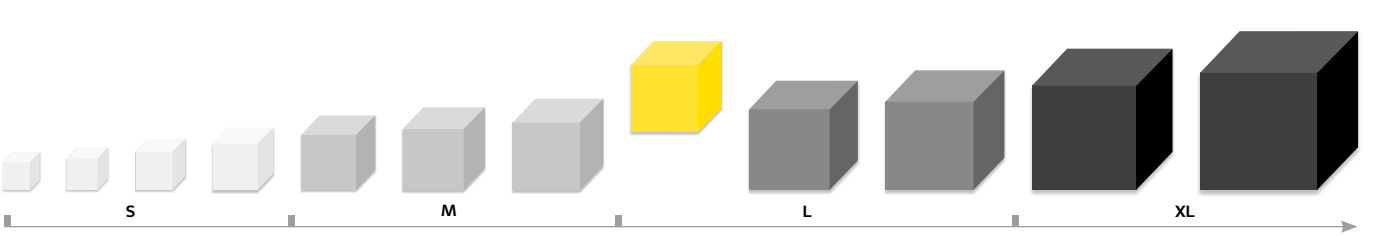
Use QR code for video

Scaffolding substructure is for visualisation only.
Bracing and ballast depend on the requested configuration.

Operational specifications

Design standards	EN 17879	Event structures – Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	The operation must be stopped at 15 m/s, so that removing the wall covers, LED-wall and PA is finished when the windspeed is 17.8 m/s.	
	The out of service windspeed is 27.5 m/s	
	Training recommended	
Ballast	Depending on configuration, side wing, covering, substructure	
Canopy and side walls	B1 fire-retardant canopy, in keders, configurable for different sizes on request	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. alternative dimensions, roof adjustability) on request	

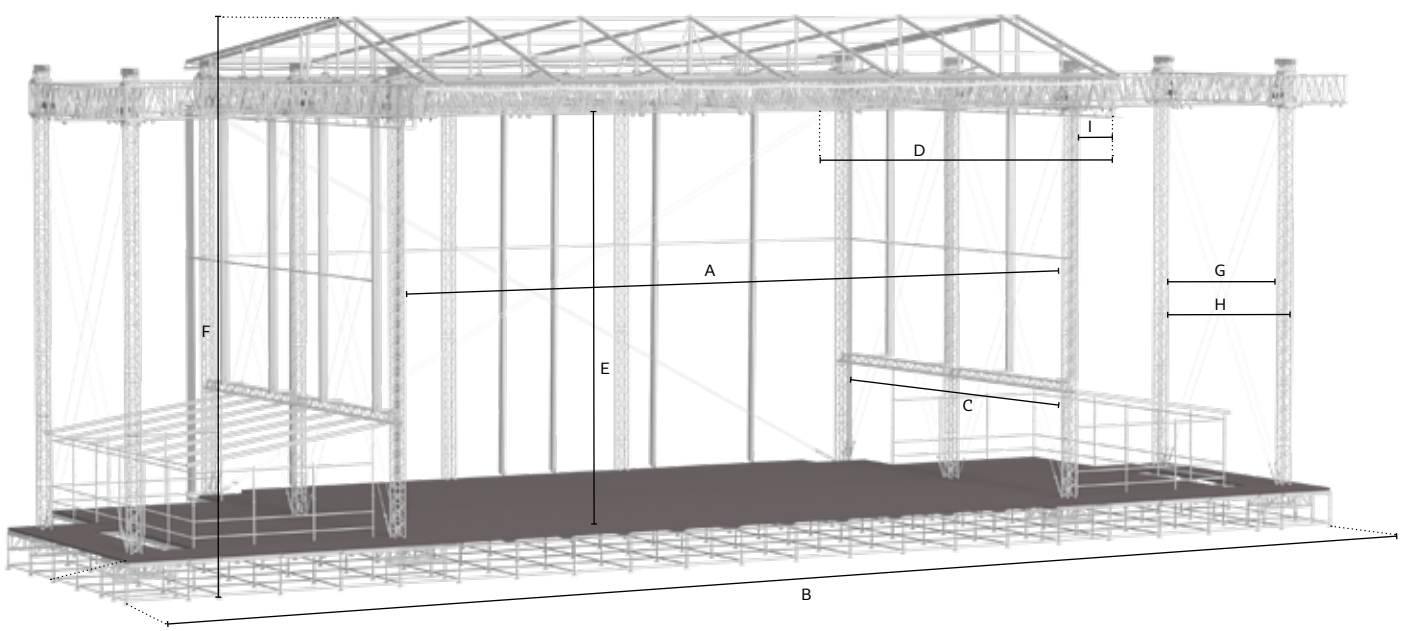
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR5 pitched roofs

- MR5 pitched roof for temporary events
- Standard or Arnold version for max. loading capacity
- MT2 self-climbing towers with M950 main grid
- Convenient backstage area integration with main structure
- Loading capacity up to 34 t (74955 lbs) with 24×14 m 78.74×45.93 ft) Arnold configuration
- Full structural calculation report and build manual on request covered backstage areas on sides as an option
- Wind bracing wires and connection accessories included
- Range of coloured PVC roof options available
- Integrated tower base / stage components available
- PA wings options available on request



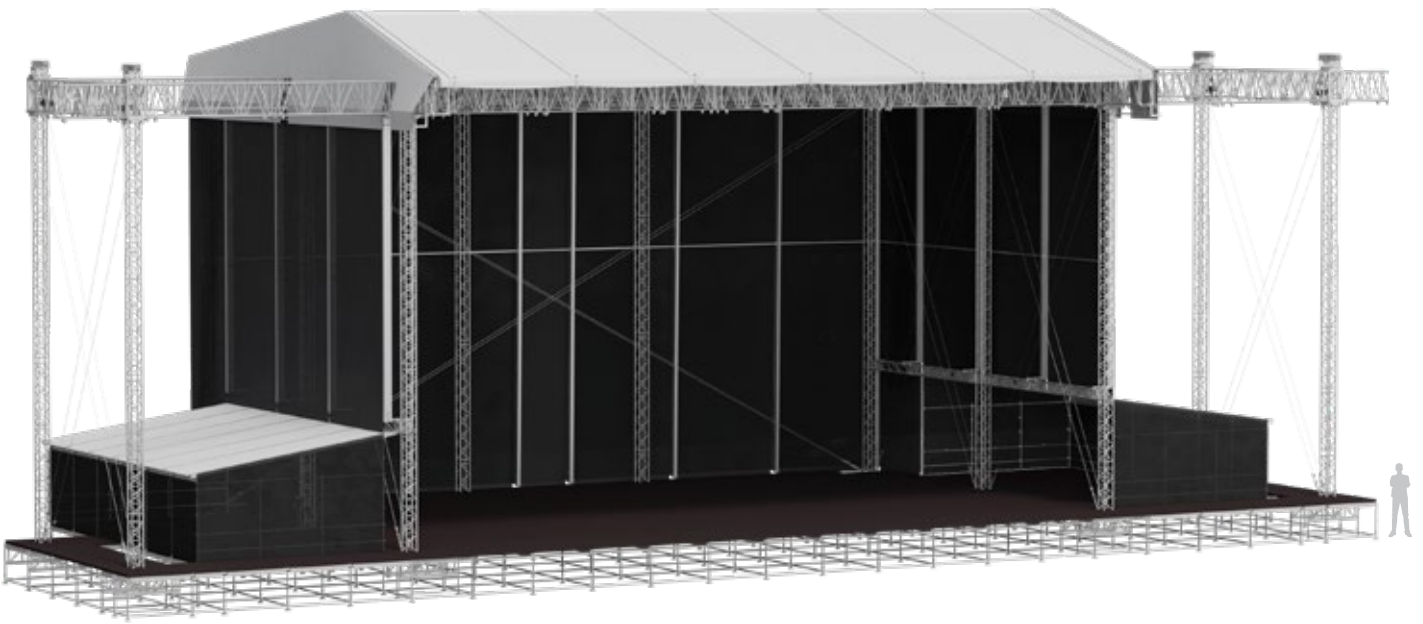
Technical specifications

		Size ›	24×14 m	(78.74×45.93 ft)	20×14 m	(65.62×45.93 ft)
Dimensions	A	Internal width	**24.37 m**	(81.23 ft)	**20.37 m**	(66.83 ft)
	B	Overall external width	**47.03 m**	(91.34 ft)	**43.03 m**	(141.17 ft)
	C	Internal depth	**14.64 m**	(48.36 ft)	**14.64 m**	(48.03 ft)
	D	Overall external depth	**18.78 m**	(58.40 ft)	**18.78 m**	(61.61 ft)
	E	Clearance	**13.14 m**	(37.66 ft)	**13.14 m**	(43.12 ft)
	F	Overall height	**16.20 m**	(47.34 ft)	**16.20 m**	(53.15 ft)
	G	PA wing – internal width	**8.37 m**	(27.46 ft)	**8.37 m**	(27.46 ft)
	H	PA wing – overall external width	**8.76 m**	(28.74 ft)	**8.76 m**	(28.74 ft)
	I	Cantilever depth	**2.32 m**	(7.61 ft)	**2.32 m**	(7.61 ft)

Loading capacity

		Size ›	24×14 m	(78.74×45.93 ft)	20×14 m	(65.62×45.93 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**22000 kg**	(48500 lbs)	**22000 kg**	(48500 lbs)
		Side wings in total	**4000 kg**	(8818 lbs)	**4000 kg**	(8818 lbs)
	* See structural report for exact load positioning					

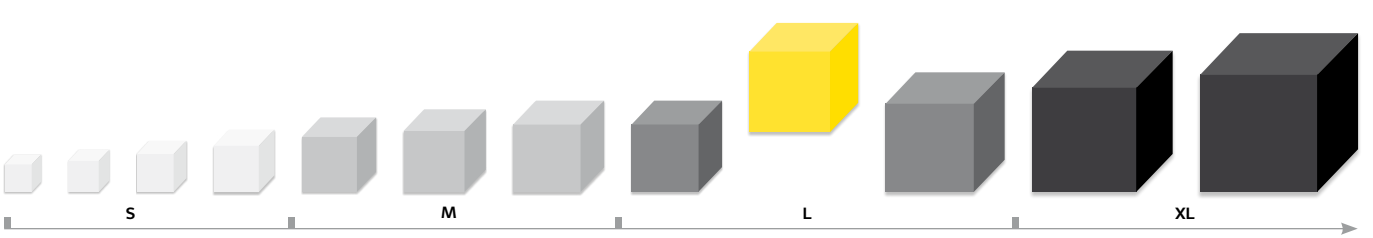
		Size ›	24×14 m	(78.74×45.93 ft)	20×14 m	(65.62×45.93 ft)
Loading capacity ARNOLD	Main grid	(UDL kg/lbs)	**30000 kg**	(66137 lbs)	**26000 kg**	(57318 lbs)
		Side wings in total	**4000 kg**	(8818 lbs)	**4000 kg**	(8818 ft)
	* See structural report for exact load positioning					



Operational specifications

Design standards	EN 17879	Event structures - Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculations based on 100% closed side canopies	
	* Side canopies to be removed above this wind speed if not considered	
	Out of service	28.3 m/s – 100 km/h – 62 mph (max. gust wind speed)
	Training recommended	
Ballast	Depending on configuration, side wing, covering, compression beam, guy wires, corner brace, substructure	
Canopy and side walls	B1 fire-retardant canopy, in keders, configurable for different sizes on request	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

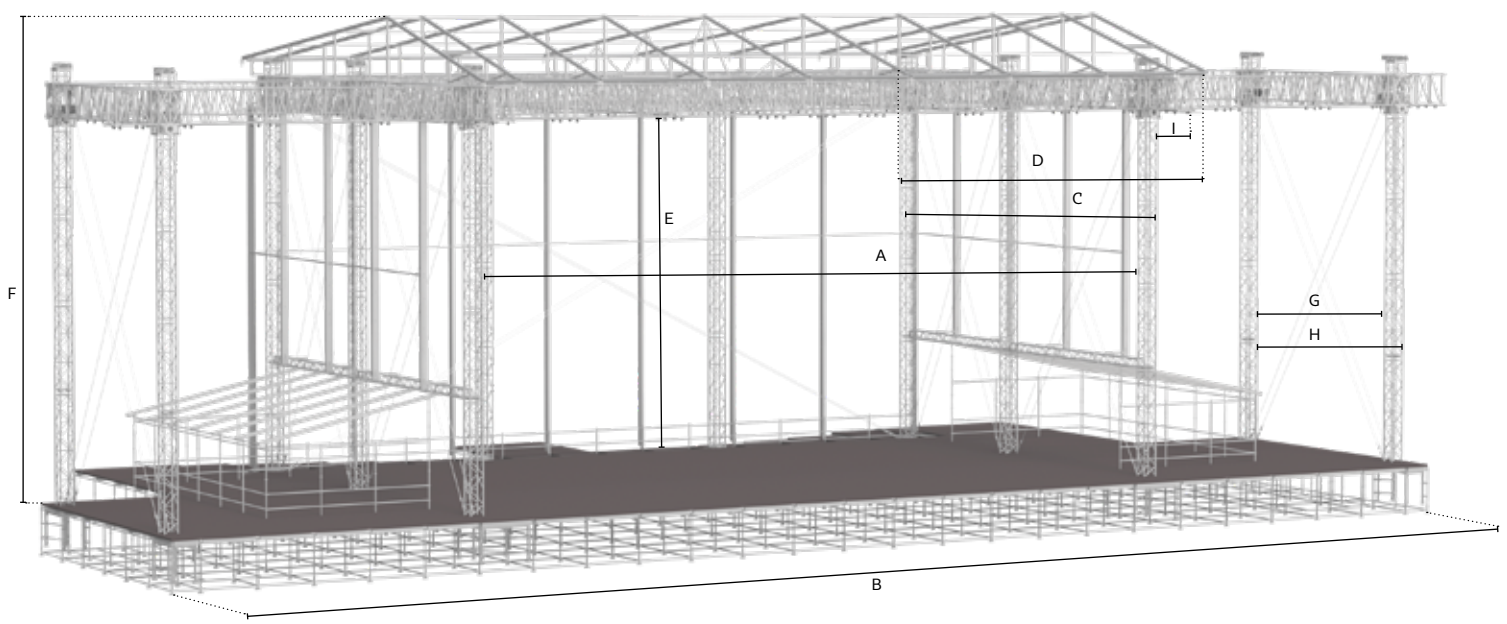
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

MR6 pitched roof

- MR6 large-scale pitched roof structure
- Standard or Arnold version for max. loading capacity
- Dimensions 26×16 m (85×52 ft) or 30×16 m (98×52 ft)
- Loading capacity up to 50 t (110228 lbs) with 26×16 m (85×52 ft) Arnold configuration
- Clearance height 13.3 m (43.63 ft)
- Main grid constructed of 5 spans of M1200 RTR truss
- Rear and side walls from keder profiles for easy canopy installation
- Range of PVC colours and options available covered backstage areas on sides as an option
- PA wings options available on request



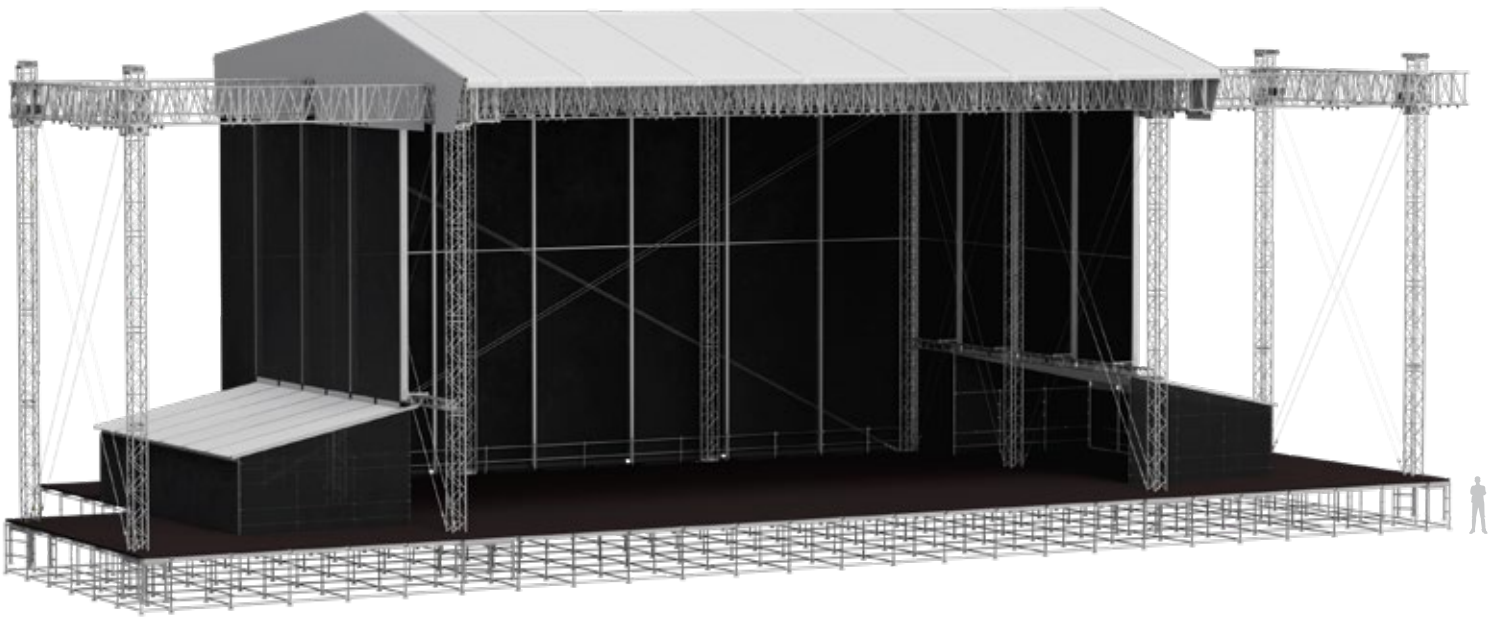
Technical specifications

		Size ›	26×16 m	(85.30×52.49)	30×16 m	(98.43×52.49 ft)
Dimensions	A	Internal width	**26.47 m**	(86.84 ft)	**30.47 m**	(99.97 ft)
	B	Overall external width	**53.00 m**	(173.88 ft)	**57.00 m**	(187.01 ft)
	C	Depth	**17.70 m**	(58.07 ft)	**17.70 m**	(58.07 ft)
	D	Overall external depth	**20.70 m**	(67.91 ft)	**20.70 m**	(67.91 ft)
	E	Clearance	**13.30 m**	(43.63 ft)	**13.30 m**	(43.64 ft)
	F	Overall height	**16.70 m**	(54.79 ft)	**16.70 m**	(54.79 ft)
	G	PA wing – internal width	**10.47 m**	(34.35 ft)	**10.47 m**	(34.35 ft)
	H	PA wing – overall external width	**11.00 m**	(36.09 ft)	**11.00 m**	(326.09 ft)
	I	Cantilever depth	**2.40 m**	(7.87 ft)	**2.40 m**	(7.87 ft)

Loading capacity

		Size ›	26×16 m	(85.30×52.49 ft)	30×16 m	(98.43×52.49 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**34000 kg**	(74516 lbs)	**20000 kg**	(44091 lbs)
		Side wings in total	**6000 kg**	(13227 lbs)	**6000 kg**	(13227 ft)
	* See structural report for exact load positioning					

		Size ›	26×16 m	(85.30×52.49 ft)	30×16 m	(98.43×52.49 ft)
Loading capacity ARNOLD	Main grid	(UDL kg/lbs)	**44000 kg**	(97001 lbs)	**28000 kg**	(61728 lbs)
		Side wings in total	**6000 kg**	(13227 lbs)	**6000 kg**	(13227 ft)
	* See structural report for exact load positioning					

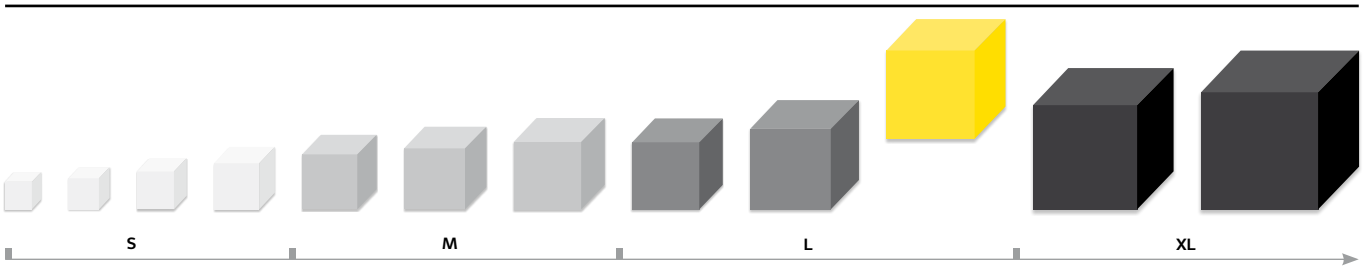


Scaffolding substructure is for visualisation only.
Bracing and ballast depend on the requested configuration.

Operational specifications

Design standards	EN 17879	Fairground and amusement park machinery and structures
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculations based on 100% closed side canopies	
	* Side canopies to be removed above this wind speed if not considered	
	Out of service	28.3 m/s – 100 km/h – 62 mph (max. gust wind speed)
	Training recommended	
Ballast	Depending on configuration, side wing, covering, compression beam, guy wires, corner brace, substructure.	
Canopy and side walls	B1 fire-retardant canopy, in keders, configurable for different sizes on request	
	Silver-grey; other colours or black inner side on request	
	B1 fire-retardant side nets in compliance with latest Eurocodes	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

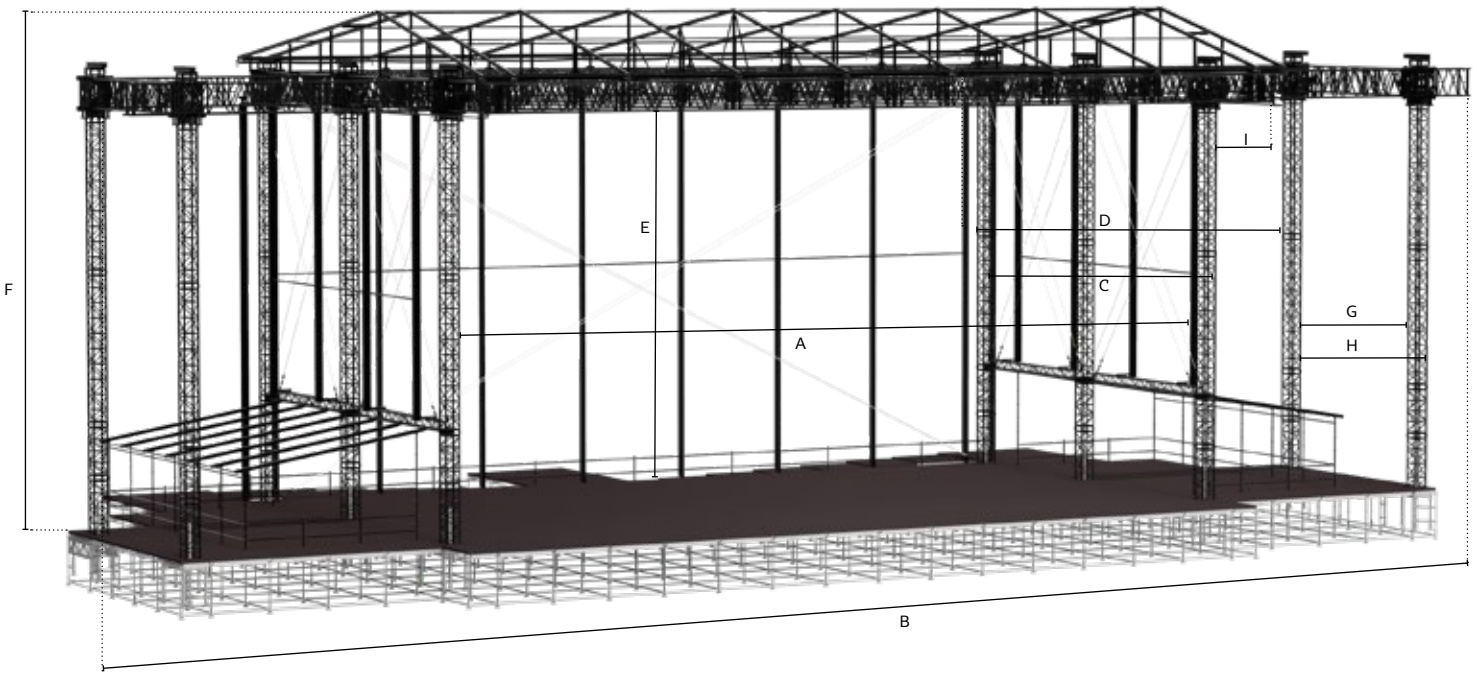
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

S-MR10 steel roof

- Constructed from ultra-high-strength steel
- Unique locking system with capacity of 45 t per tower
- Steel head section with aluminium wheels and heavy-duty bearings
- Dimensions 28×19 m (92×62 ft) or 32×19 m (105×62 ft)
- Loading capacity up to 68 t (149910 lbs) for 28×19 m version
- Durable industrial black paint finish as standard on all trusses
- Towers with integrated ladder for easy climbing
- Canopy tensioning system for roof top canopies
- Keder profiles for secure attachment of canopies
- Covered backstage areas on sides as an option
- PA wings options available on request

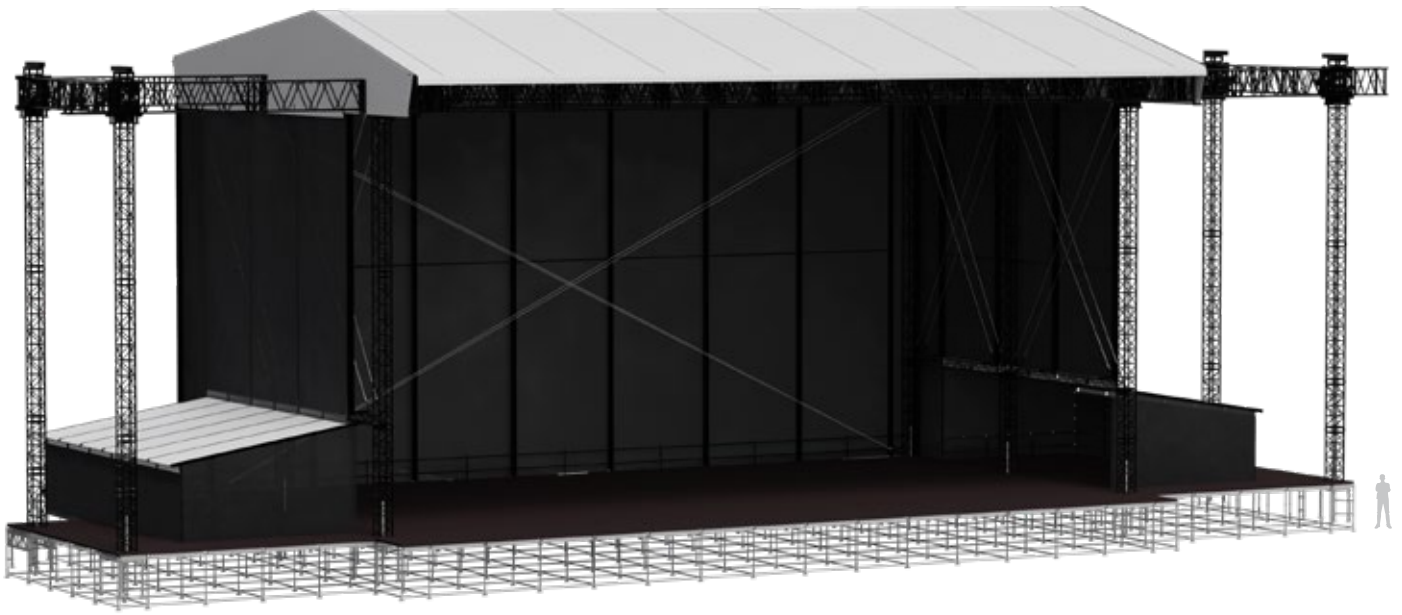


Technical specifications

		Size ›	28×19 m	(91.86×62.33 ft)	32×19 m	(104.99×62.33 ft)
Dimensions	A	Internal width	**28.50 m**	(93.50 ft)	**32.50 m**	(106.63 ft)
	B	Overall external width	**51.10 m**	(167.65 ft)	**55.10 m**	(180.77 ft)
	C	Depth	**15.80 m**	(51.83 ft)	**15.80 m**	(51.84 ft)
	D	Overall external depth	**20.30 m**	(66.60 ft)	**20.30 m**	(66.60 ft)
	E	Clearance	**13.90 m**	(45.60 ft)	**13.90 m**	(45.60 ft)
	F	Overall height	**17.30 m**	(56.76 ft)	**17.30 m**	(56.76 ft)
	G	PA wing – internal width	**8.47 m**	(27.79 ft)	**8.47 m**	(27.79 ft)
	H	PA wing – overall external width	**9.00 m**	(29.53 ft)	**9.00 m**	(29.53 ft)
	I	Cantilever depth	**3.50 m**	(11.48 ft)	**3.50 m**	(11.48 ft)

Loading capacity

		Size ›	28×19 m	(91.86×62.33 ft)	32×19 m	(104.99×62.33 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**50000 kg**	(110228 lbs)	**40000 kg**	(88182 lbs)
		Side wings in total	**18000 kg**	(39682 lbs)	**18000 kg**	(39682 ft)
	* See structural report for exact load positioning					

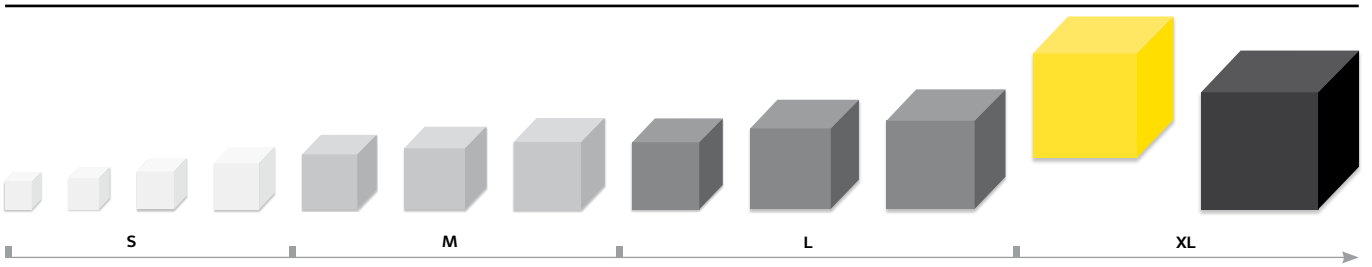


Scaffolding substructure is for visualisation only.
Bracing and ballast depend on the requested configuration.

Operational specifications

Design standards	EN 17879	Fairground and amusement park machinery and structures
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculation based on 100% windproof cladding on rear wall, side walls and side wing fronts	
	Out of service	28 m/s – 100 km/h – 62 mph (max. gust wind speed)
	*Cladding on side walls and rear wall must be dismantled; the upper half of the side wing fronts can remain covered (e.g. by LED screens)	
Ballast	Depending on configuration, side wing, covering, compression beam, guy wires, corner brace, substructure	
Canopy and side walls	B1 fire-retardant canvas in keders, configurable for different sizes on request	
	Silver-grey; other colours or black inner side on request	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

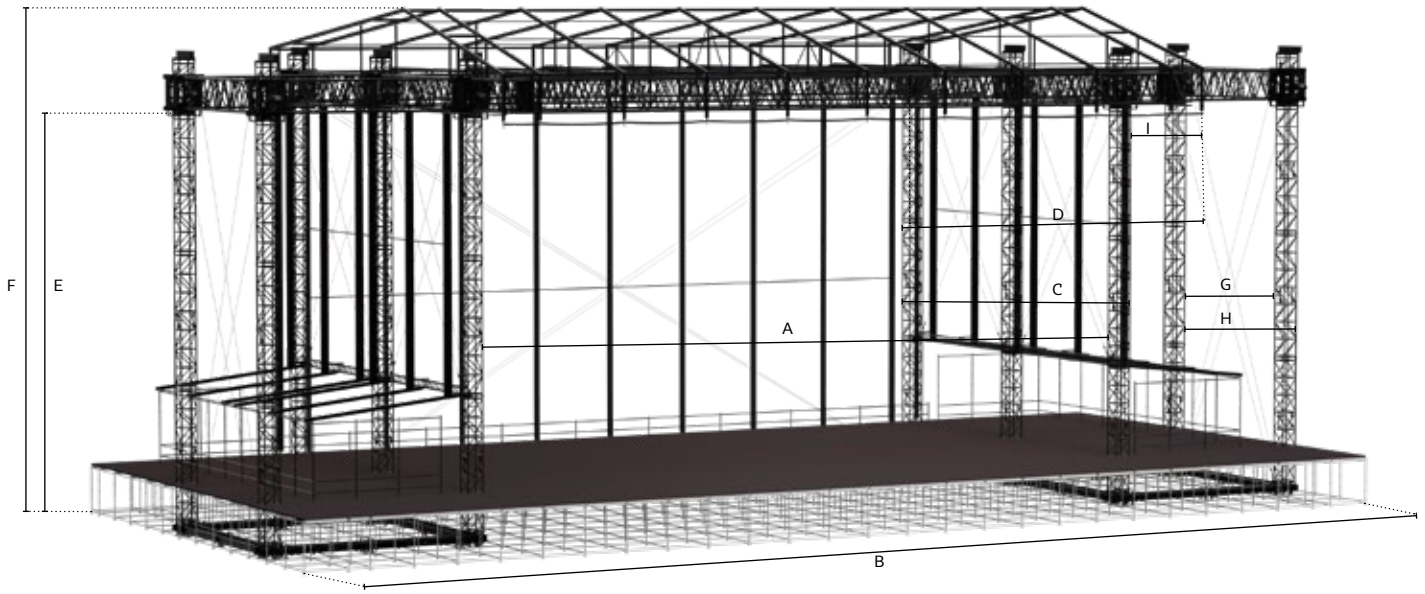
MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

S-MR20 steel roof

- Constructed from ultra-high-strength steel
- Dimensions 32×25 m (105×82 ft) or 24×25 m (78×82 ft)
- Incredible 128 t (282183 lbs) capacity achievable with 24×25 m stage configuration
- Unique locking system with capacity of 45 t per tower
- Integrated steel base with interconnecting towers
- Towers with integrated ladder for easy climbing
- Base with multiple attachment points for steel wires
- Canopy tensioning system for roof top canopies
- Keder profiles for secure attachment of canopies
- Covered backstage areas on sides as an option
- PA wings options available on request

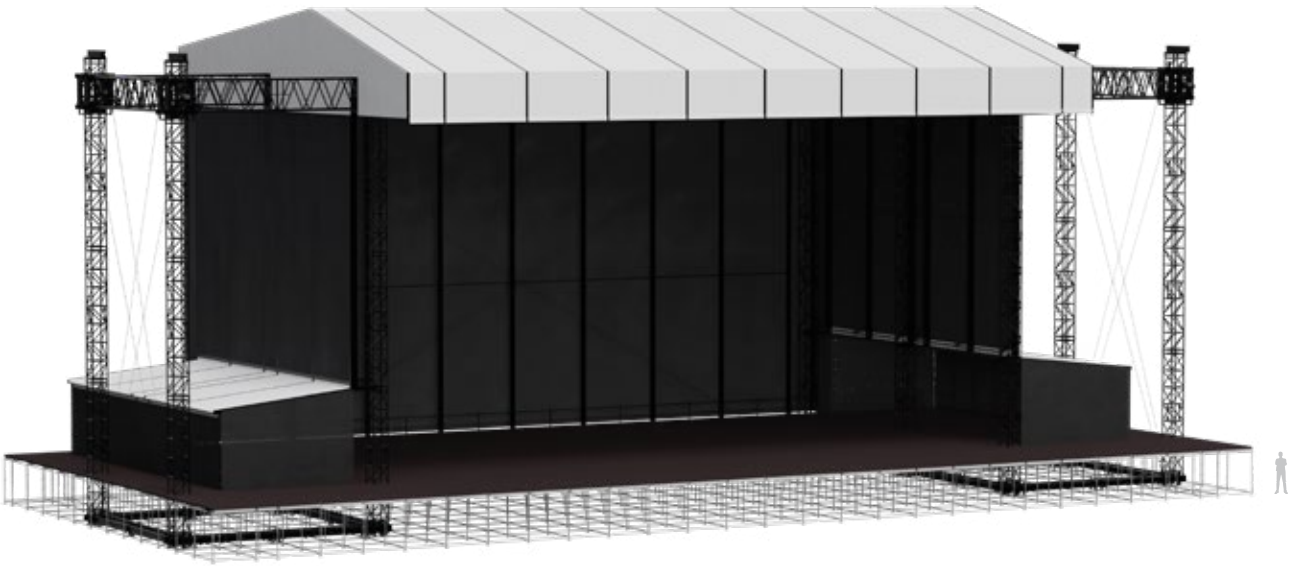


Technical specifications

		Size ›	32×25 m	(104.98×82.02 ft)	24×25 m	(78.74×82.02 ft)
Dimensions	A	Internal width	**32.70 m**	(107.28 ft)	**24.70 m**	(81.03 ft)
	B	Overall external width	**54.10 m**	(177.49 ft)	**46.10 m**	(151.25 ft)
	C	Depth	**20.00 m**	(65.61 ft)	**20.00 m**	(65.61 ft)
	D	Overall external depth	**25.55 m**	(83.83 ft)	**25.55 m**	(83.83 ft)
	E	Clearance	**18.40 m**	(60.36 ft)	**18.40 m**	(60.36 ft)
	F	Overall height	**23.30 m**	(76.44 ft)	**23.30 m**	(76.44 ft)
	G	PA wing – internal width	**8.72 m**	(28.61 ft)	**8.72 m**	(28.61 ft)
	H	PA wing – overall external width	**9.50 m**	(31.17 ft)	**9.50 m**	(31.17 ft)
	I	Cantilever depth	**4.50 m**	(14.76 ft)	**4.50 m**	(14.76 ft)

Loading capacity

		Size ›	32×25 m	(104.98×82.02 ft)	24×25 m	(78.74×82.02 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**60000 kg**	(132273 lbs)	**100000 kg**	(220456 lbs)
		Side wings and PA in total	**28000 kg**	(61728 lbs)	**28000 kg**	(61728 lbs)
	* See structural report for exact load positioning					

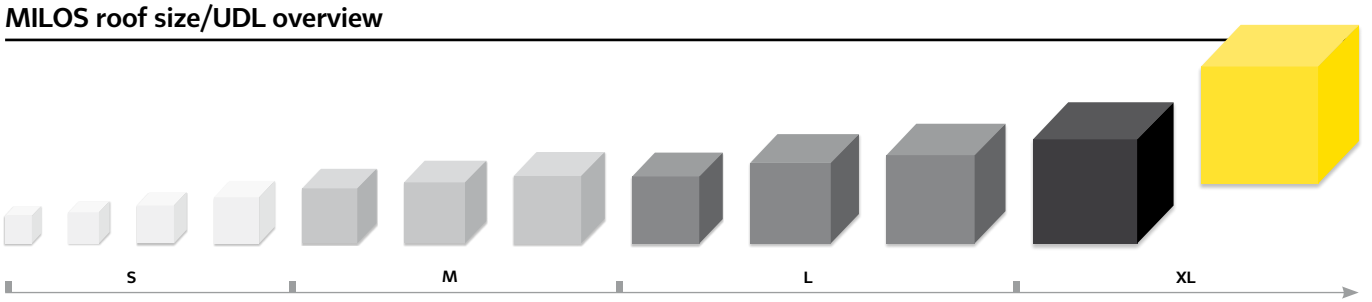


Scaffolding substructure is for visualisation only.
Bracing and ballast depend on the requested configuration.

Operational specifications

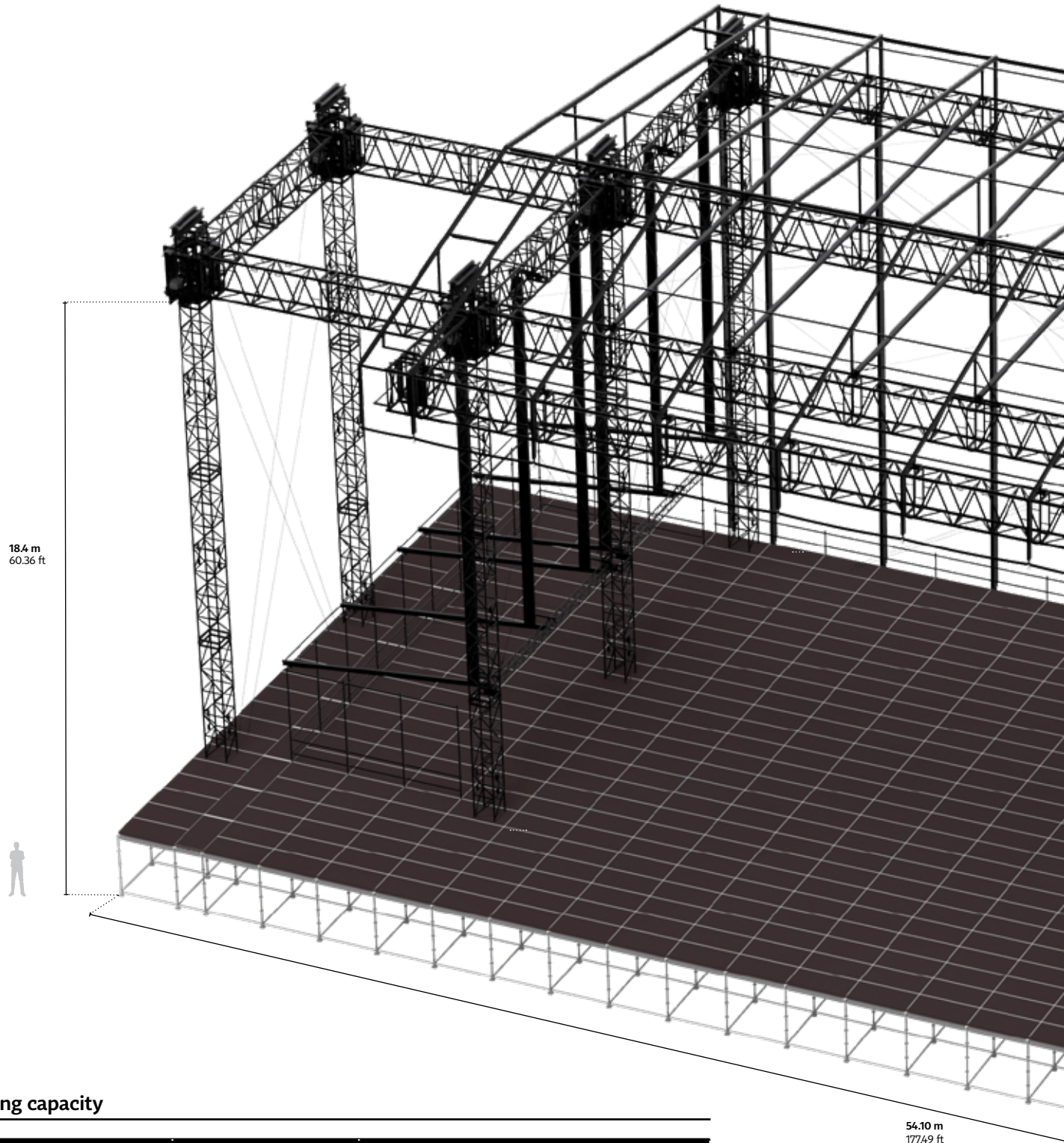
Design standards	EN 17879	Event structures – Safety requirements
	EN 1991-1-4	Loads on structures: Wind loads
	EN 1993	Design of steel structures
	EN 1999	Design of aluminium structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	* Calculation based on 100% windproof cladding on rear wall, side walls and side wing fronts	
	Out of service	28 m/s – 100 km/h – 62 mph (max. gust wind speed)
	* Cladding on side walls and rear wall must be dismantled at heights above 7 m; side wing fronts can remain covered (e.g. by LED screens)	
Ballast	Depending on configuration, side wing, covering, compression beam, guy wires, corner brace, substructure	
Canopy and Side Walls	B1 fire-retardant canvas in keders, configurable for different sizes on request	
	Silver-grey; other colours or black inner side on request	
Customised	Customisation (i.e. truss configuration, alternative dimensions, roof adjustability) on request	

MILOS roof size/UDL overview



To simplify understanding our standard roof options, we've categorized them into four sizes: S, M, L, and XL.

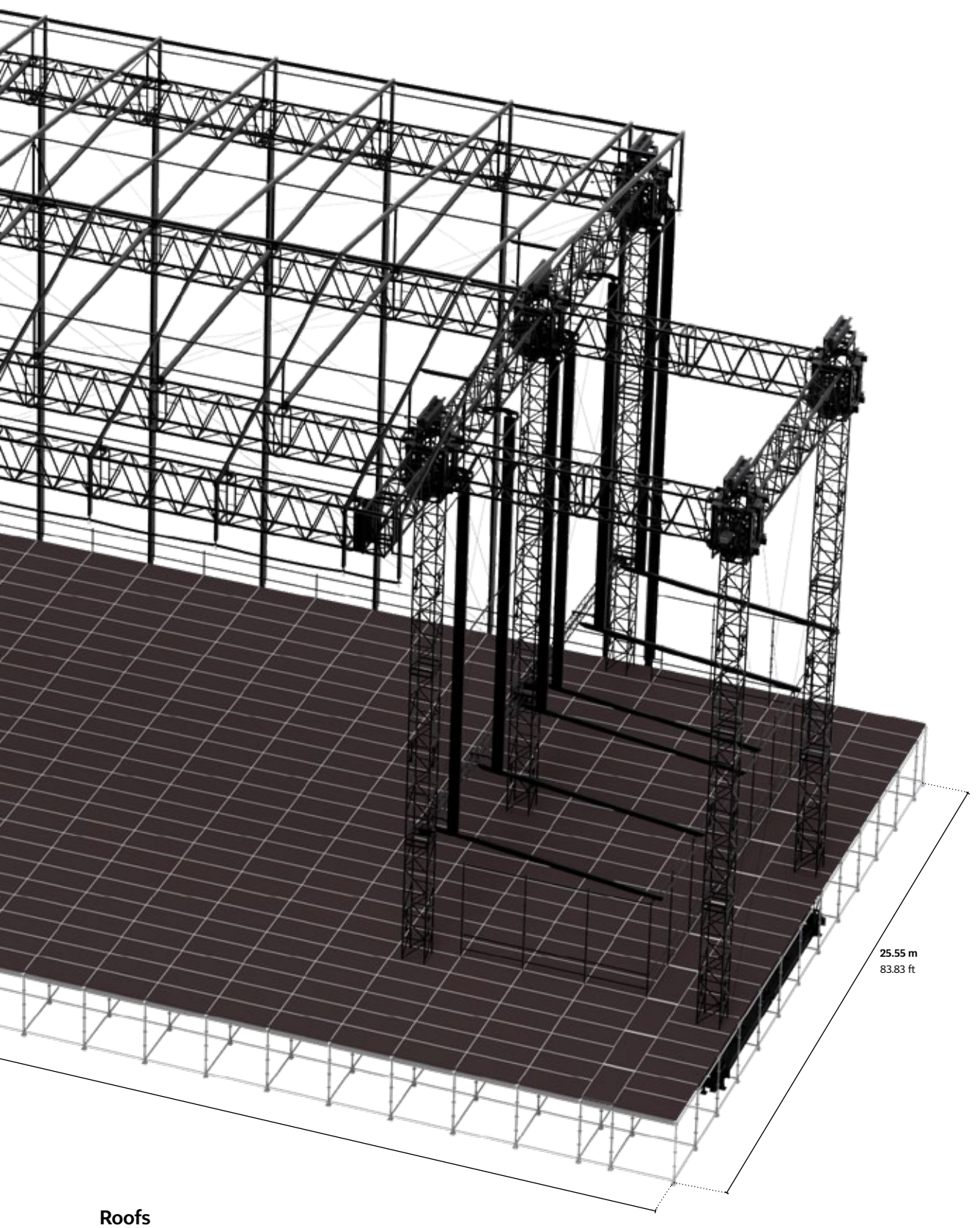
S-MR20 steel roof



Loading capacity

		Size ›	32×25 m	(104.98×82.02 ft)	24×25 m	(78.74×82.02 ft)
Loading capacity	Main grid	(UDL kg/lbs)	**60000 kg**	(132277 lbs)	**100000 kg**	(220462 lbs)
		Side wings and PA in total	**12000 kg**	(26455 lbs)	**12000 kg**	(26455 lbs)
	* See structural report for exact load positioning					

Scaffolding substructure is for visualisation only.
Bracing and ballast depend on the requested configuration.



Keder profiles

- Custom profile with optimised strength-to-weight ratio
- Incl. channel 31×10 mm channel for M12 hammerhead bolts
- Max. point load in channel 600 kg
- Internal connectors available for all rectangular profiles
- Standard length 4 m
- Profile includes drilling line marked in side flanges for ease of fabrication
- Anodisation also available
- Other lengths and custom machining on request

Profile 80×61 mm

	Values
80×61 mm	g = 3.38 kg/m
	I_y = 99.23 cm⁴
	$M_{y,Rd}$ = 537.00 kNcm

E.g. for roof covers with short spans

Profile 120×80 mm

	Values
120×80 mm	g = 4.93 kg/m
	I_y = 409.82 cm⁴
	$M_{y,Rd}$ = 1552.30 kNcm

E.g. for roof covers with medium spans and walls up to 8 m height

Profile 170×88 mm

	Values
170×88 mm	g = 7.51 kg/m
	I_y = 1326.02 cm⁴
	$M_{y,Rd}$ = 3545.50 kNcm

E.g. for wall covers up to 10 m height

Connector for profile 80×61 mm

	Values
80×61 mm	g = 2.74 kg/m
	I_y = 25.16 cm⁴
	$M_{y,Rd}$ = 163.36 kNcm

Connector for profile 120×80 mm

	Values
120×80 mm	g = 11.03 kg/m
	I_y = 350.42 cm⁴
	$M_{y,Rd}$ = 1531.50 kNcm

Connector for profile 170×88 mm

	Values
170×88 mm	g = 12.90 kg/m
	I_y = 1180.01 cm⁴
	$M_{y,Rd}$ = 3619.21 kNcm

Profile 250×120 mm

	Values
250×120 mm	g = 8.12 kg/m
	I_y = 2944.18 cm⁴
	$M_{y,Rd}$ = 5323.20 kNcm

E.g. for wall covers up to 12 m height

Profile 300×122 mm

	Values
300×122 mm	g = 11.64 kg/m
	I_y = 6063.40 cm⁴
	$M_{y,Rd}$ = 9110.30 kNcm

E.g. for wall covers up to 16 m height

Profile 360×122 mm

	Values
360×122 mm	g = 15.45 kg/m
	I_y = 10364.40 cm⁴
	$M_{y,Rd}$ = 12981.80 kNcm

E.g. for wall covers up to 19 m height

Connector for profile 250×120 mm

	Values
250×120 mm	g = 10.21 kg/m
	I_y = 2852.12 cm⁴
	$M_{y,Rd}$ = 5395.00 kNcm

Connector for profile 300×122 mm

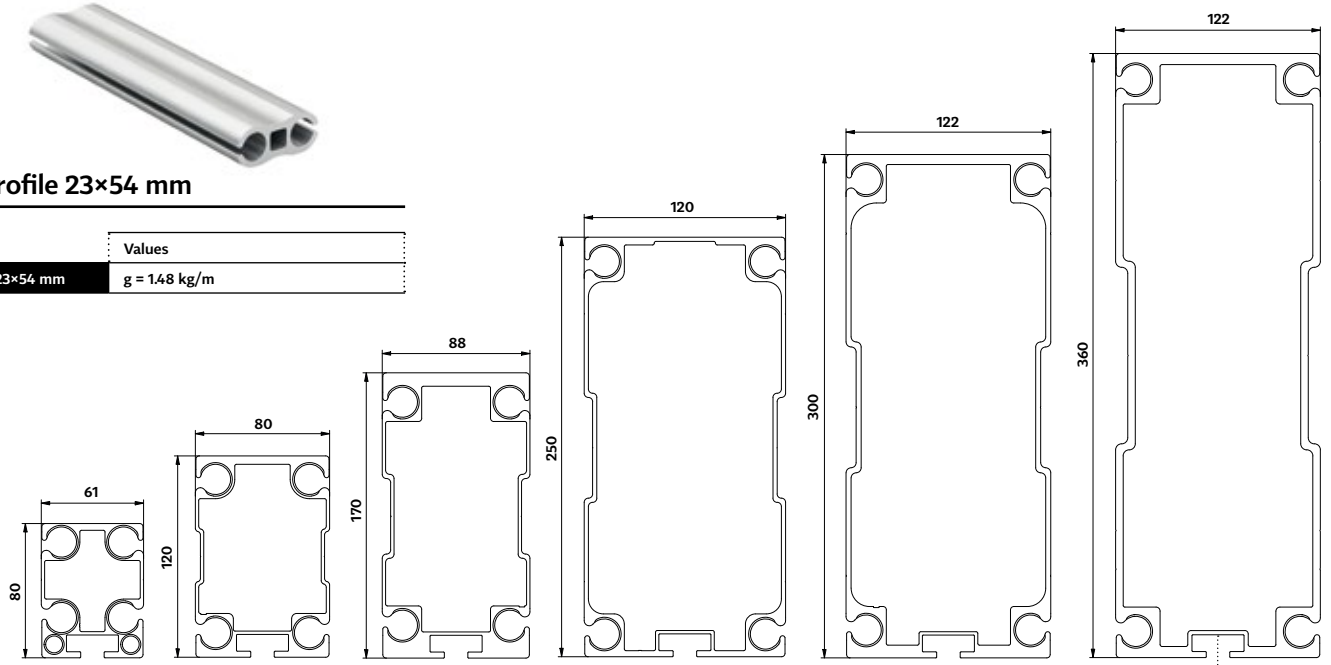
	Values
300×122 mm	g = 14.94 kg/m
	I_y = 5920.40 cm⁴
	$M_{y,Rd}$ = 9391.50 kNcm

Connector for profile 360×122 mm

	Values
360×122 mm	g = 20.60 kg/m
	I_y = 10045.67 cm⁴
	$M_{y,Rd}$ = 13312.20 kNcm

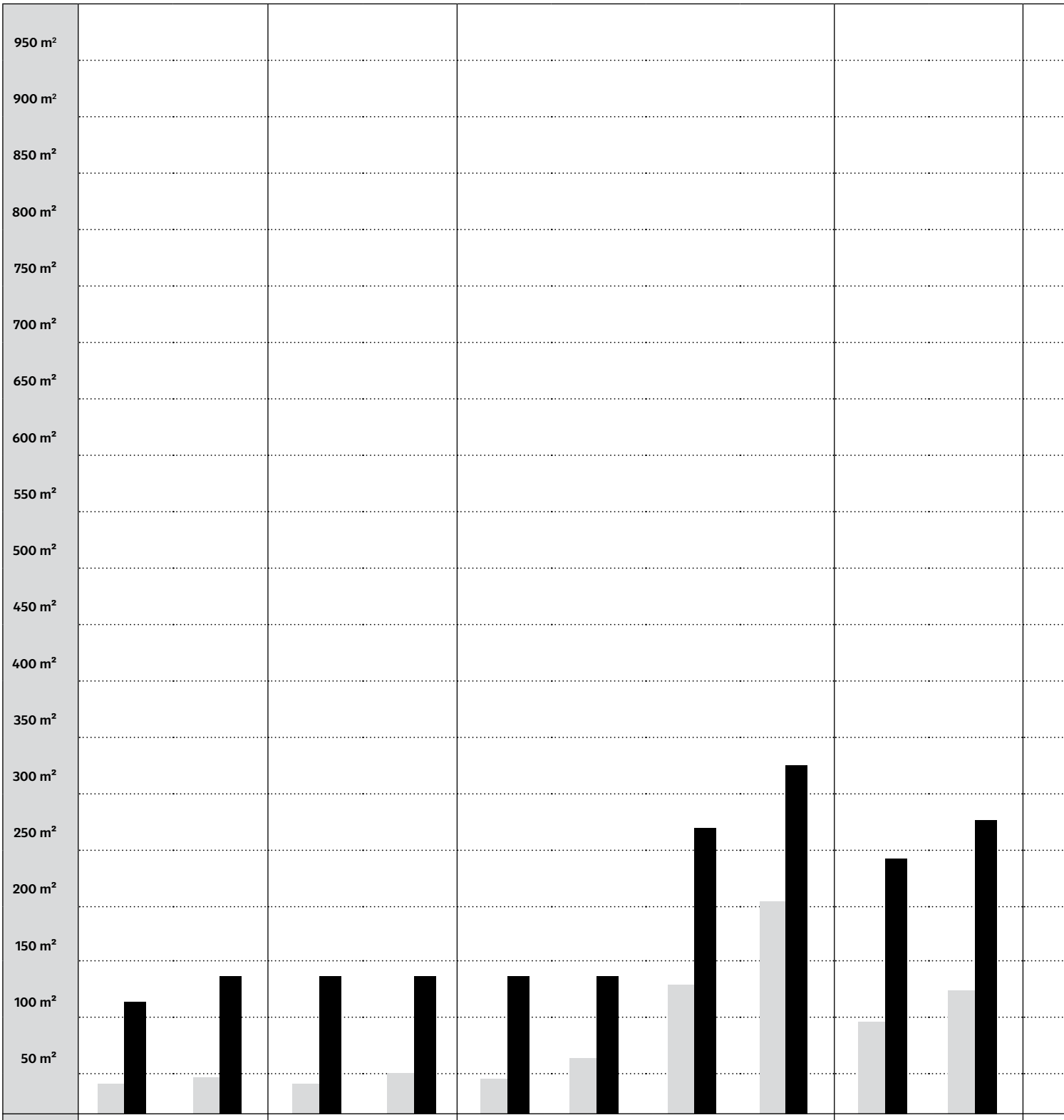
Profile 23×54 mm

	Values
23×54 mm	g = 1.48 kg/m



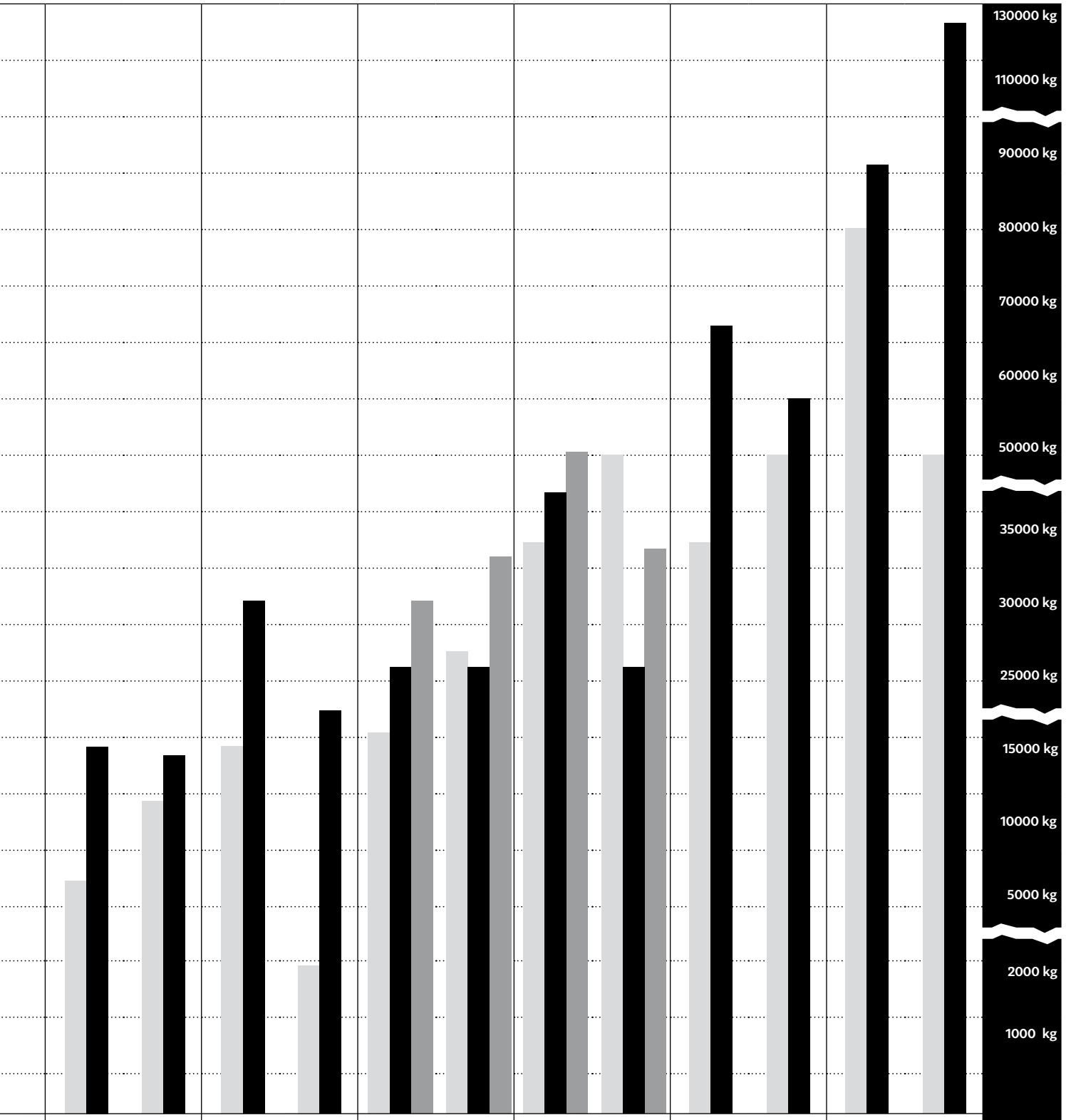
MILOS roofs: overview

Stage size



Stage size	30 m²	48 m²	30 m²	56 m²	36 m²	64 m²	132m²	210 m²	90 m²	132 m²	
Load Capacity	1500 kg	2000 kg	2000k g	2000 kg	2000 kg	2000 kg	10000 kg	14000 kg	8000 kg	10500 kg	
Load Capacity Arnold	–	–	–	–	–	–	–	–	–	–	
Clearance	**3.90 m**		**4.70 m**	**4.70 m**	**5.40 m**	**5.70 m**	**7.10 m**	**10.50 m**	**7.10 m**		
Roof type	**MR0 NGW**		**MR0 Sloping**		**MR1 Arched**		**MR2K Keder**		**MR2 Saddle**		
	6×5 m	8×6 m	6×4 m	8×6 m	6×4 m	8×6 m	12×10 m	15×12 m	10×8 m	12×10 m	

Load Capacity



	224 m²	280 m²	342 m²	140 m²	360 m²	432 m²	520 m²	600 m²	532 m²	608 m²	800 m²	600 m²
	15000 kg	14500 kg	30000 kg	20000 kg	26000 kg	26000 kg	40000 kg	26000 kg	68000 kg	58000 kg	88000 kg	128000 kg
	–	–	–	–	30000 kg	34000 kg	50000 kg	34000 kg	–	–	–	–
	11.50 m		**9.50 m**		**11.40 m**		**13.30 m**		**13.70 m**	**13.90 m**	**18.40 m**	**18.40 m**
	MR3 Saddle		**I-MR4 Arched**		**MR5 Pitched**		**MR6**		**S-MR10**		**S-MR20**	
	16×14 m	20×14 m	19×18 m	14×10 m	20×14 m	24×14 m	26×16 m	30×16 m	28×19 m	32×19 m	32×25 m	24×25 m


Sommer
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