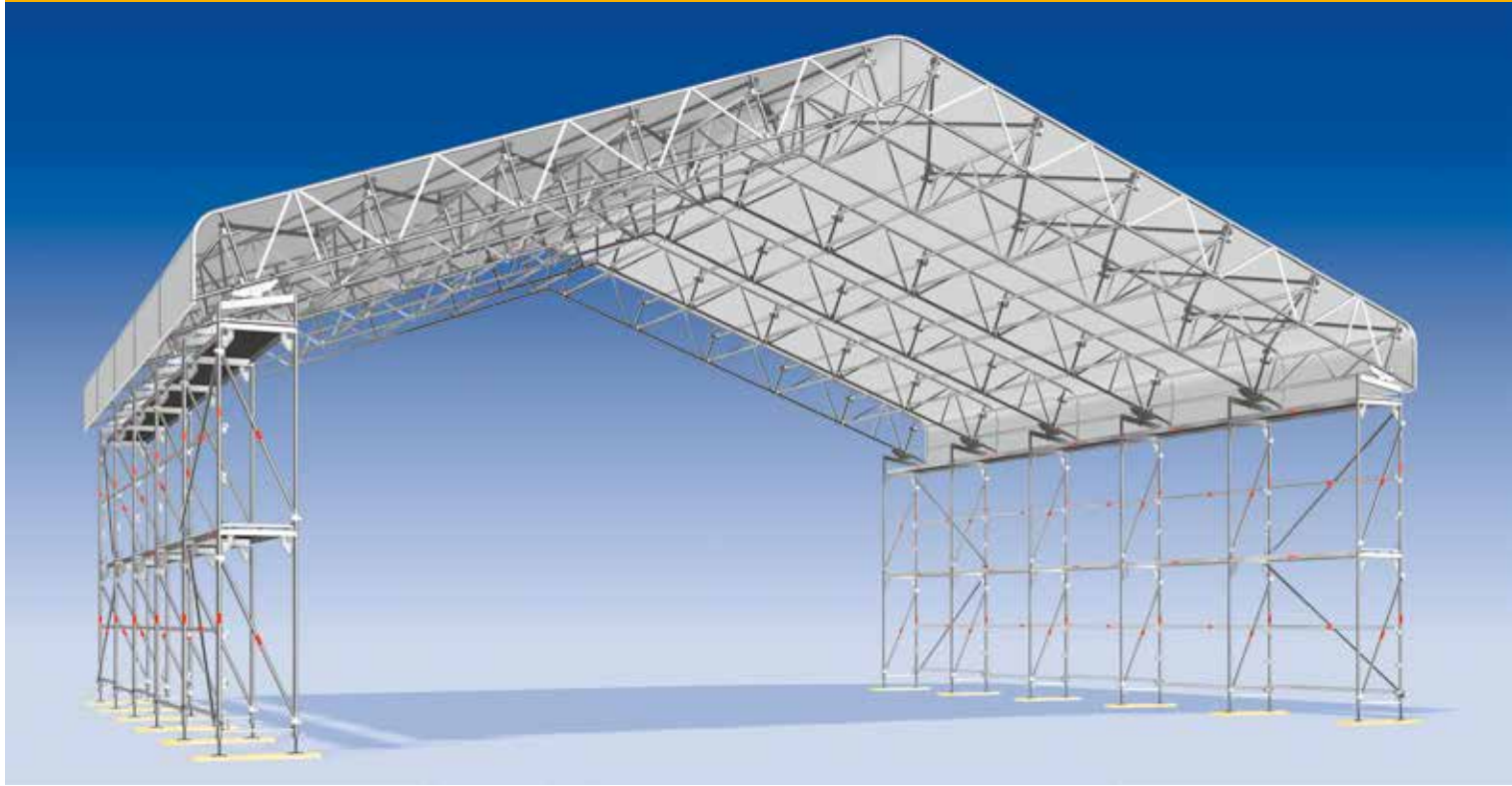


# LAYHER KEDER ROOF



Notice: Potentially necessary stabilizing measurement are not illustrated.

The Layher Keder Roof is a lightweight weather protection roof (manufactured from aluminium) which can be mounted **without a crane** up to approximately 18 m. Used in conjunction with Keder rails for wall cladding, it means that the entire construction can be designed to form a lightweight hall.

It has many areas of application, ranging from the **roofing during the addition of storeys** and the **implementation of timber roofs and coverings, weather protection** for new structures or **refurbishment work on motorways** and over **bridges** through to numerous applications for **events and normal work**.

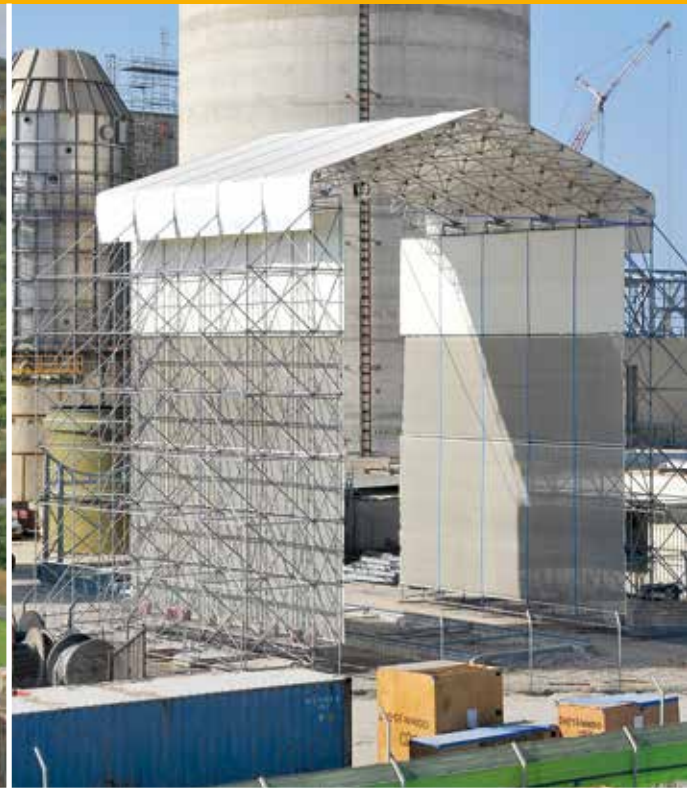
The distance between trusses is 2.57 m or 2.07 m for SpeedyScaf or Allround Scaffolding as the supporting structure. For spans of 18 m and more, further structural measurements are necessary. A special Keder Roof support provides the highest possible level of versatility for all assembly variants and compensates for any tolerances due to the underlying surface. The roof surface consists of high-quality PVC tarpaulins guided using keder rails and forms a watertight covering. It is a non-insulated, rainproof covering under which condensation may form and drip uncontrolled, depending on the weather. Snow loads are possible, but need an individual approval.

The construction is designed in such a way that only every fifth bay has to be fully braced with wind braces. Fewer Keder roof ledgers are thus required in the intermediate bays. Insert connections or snap-on claws at the individual components ensure very short assembly times, while the lightweight aluminium material (approximately 8 kg/m<sup>2</sup> for the aluminium roof structure) means that no heavy physical work is required: everything is designed to permit simple, clear, efficient assembly. The component dimensions, designed with practical applications in mind, mean that no valuable storage space is occupied unnecessarily.

The **Layher Keder Roof** is particularly suitable for meeting short-term requirements. Thanks to its versatile system technology and short assembly times, it is also extremely economical and a very attractive overall solution for **lightweight assemblies**.

## THE BENEFITS TO YOU:

- ▶ Lightweight components – Assembly with spans up to 18 m possible without using a crane.
- ▶ Versatile range of use.
- ▶ Fully compatible to Layher SpeedyScaf and Layher Allround Scaffolding.



### Keder Roof

#### Roof trusses

Depending on the span and roof type, the roof trusses are assembled using 1.50 m and 3.00 m lightweight aluminium lattice beams together with an eaves and ridge section. The top chord of the beams is shaped as a keder rail in order to accommodate the tarpaulin covering. Spigots at the beams form a stable connection between the beams and the individual joints are secured without the use of screws by means of bolts and safety clips.

**Lattice beam 1** with fixed, screw-in spigots. The top chord is a keder section designed to accommodate the tarpaulins.

**Mono-pitch roof lattice beam 2** with spigots on both sides. Only required as a spacer on mono-pitch roofs.

The **ridge section 3** (roof pitch 20°) guides the entire keder tarpaulin over the ridge and ensures that water can run off unobstructed.

The **eaves section 4** at the end of the truss guides the keder tarpaulin via the curved top chord towards the wall or closes the construction as required.

The **stiffener 5** ensures the lateral stability of the trusses. Up to external truss dimensions of 15.60 m, it is only necessary to brace every fifth truss bay. Snap-on claws ensure extremely fast assembly at the girders' tube connectors.

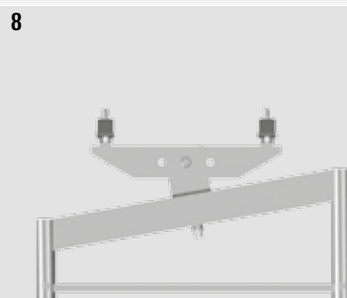
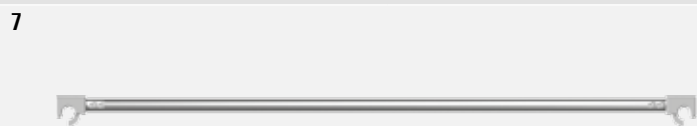
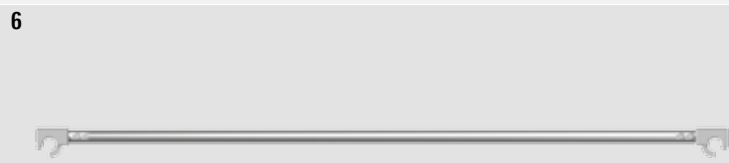
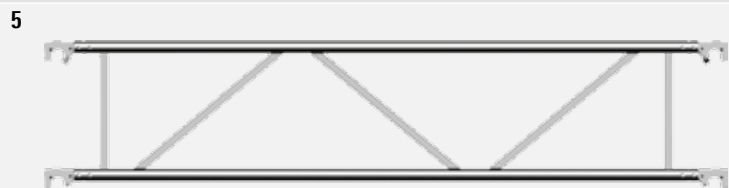
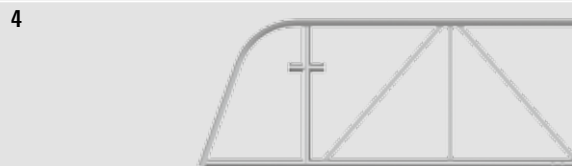
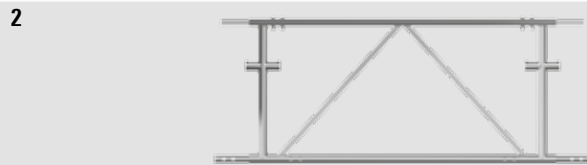
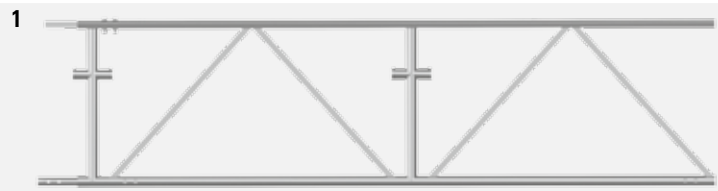
The **diagonal braces 6** help stabilize the construction and take up wind loads at the truss bays.

The **Keder Roof ledger 7** braces the individual trusses in the intermediate bays.















The steel **support 8** with its three rotary axes makes it possible to construct mono-pitch and double-pitch roofs. Asymmetrical truss shapes and eaves projecting on one side can be constructed without any additional effort and tolerances in the substructure compensated for. Two half-couplers secure the trusses to the bottom chord. Possible pitches for the mono-pitch roof variant:  
Support 0.73 m: 0° – 25°  
Support 1.09 m: 0° – 20°.

To prevent water pooling, the roof angle should be not less than 15°.

### Keder Roof elements





Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [St.]	Ref. No.
1	Keder Roof lattice beam	1.50 x 0.78	8.9	50	5971.150 
		3.00 x 0.78	16.4	25	5971.300 
2	Keder Roof mono-pitch lattice beam	1.65 x 0.78	12.1	25	5972.150 
3	Keder Roof ridge section	1.20 x 0.78	9.7	20	5971.110 
4	Keder Roof eaves section	2.00 x 0.78	12.0	20	5971.100 
5	Keder Roof stiffener	2.07 x 0.55	8.3	50	5974.207 
		2.57 x 0.55	9.7	50	5971.257 
6	Keder Roof diagonal brace 2.07 x 1.50 m bay 2.57 x 1.50 m bay	2.56	4.2	50	5971.299 
		2.97	4.7	50	5971.297 
7	Keder Roof ledger	2.07	3.6	50	5971.207 
		2.57	4.2	50	5972.257 
8	Support	0.73	12.7	80	5971.120 
		1.09	15.2	70	5971.130 
9	Support with spigot		8.5	70	5971.180 

## Keder Roof elements

### Keder Hall

The **bending-resistant corner 1** acts as a connector between the keder roof and the wall element and makes it possible to use this system to construct a keder hall.

The **Keder Roof wall element 2** makes it possible to extend constructions by using a bending-resistant corner. Two elements may be used on top of one another.

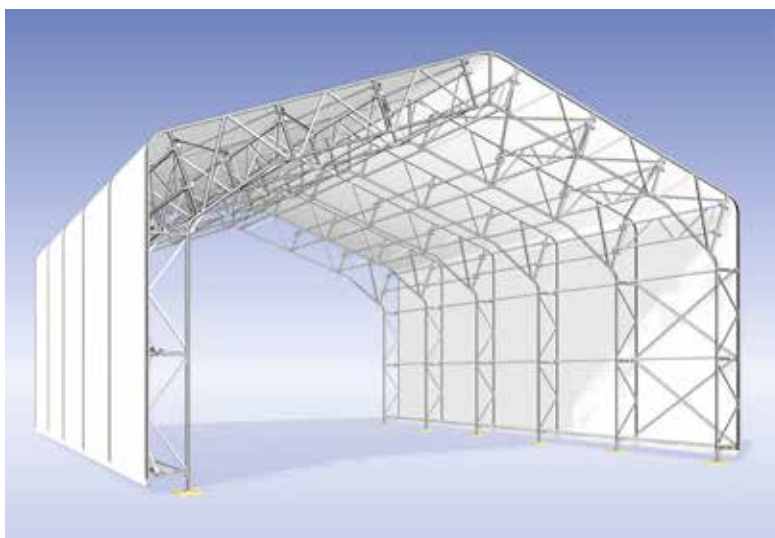
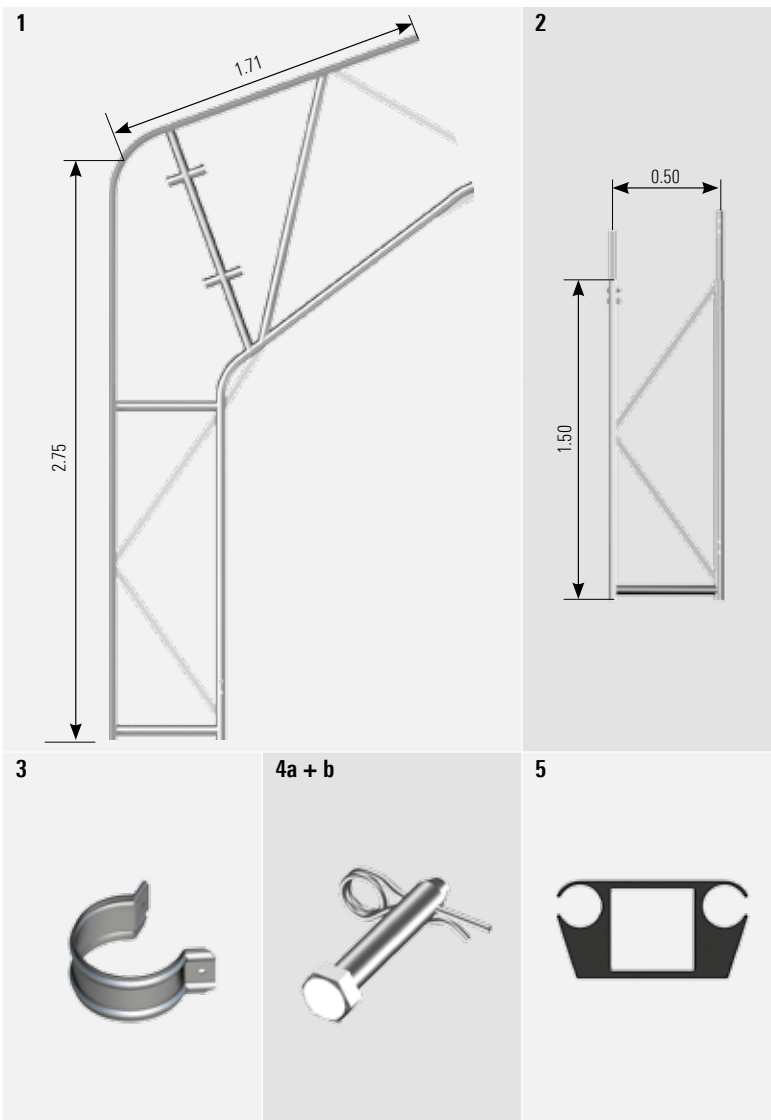
Max. eaves height: approximately 6 m  
Max. hall width: 12.80 m

The spring steel **tarpaulin clip 3** secures the end of a keder roof tarpaulin which is laid over a keder roof ledger.

The **14 x 77 mm bolt 4a** with **safety clip 4b** ensures the connection between the truss elements.










The **Keder rail seal 5** seals the truss joints at the top chord.

### Keder Roof elements



**Layher** 

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Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [St.]	Ref. No.
1	Bending-resistant corner	3.34 x 1.88	20.5	25	5971.160 
2	Keder Roof-wall element	1.50 x 0.50	8.2	25	5971.170 
3	Tarpaulin clip		2.0	50 	5971.141 
4a	Bolt, 14 x 77 mm and	0.08	2.2	20 	5906.078 
4b	Safety clip, 2.80 mm		0.5	50 	4905.001
5	Keder Roof seal		0.2	50 	5971.002 

## Keder Roof elements

### Tarpaulins compliant with DIN 75200, flame-retarding

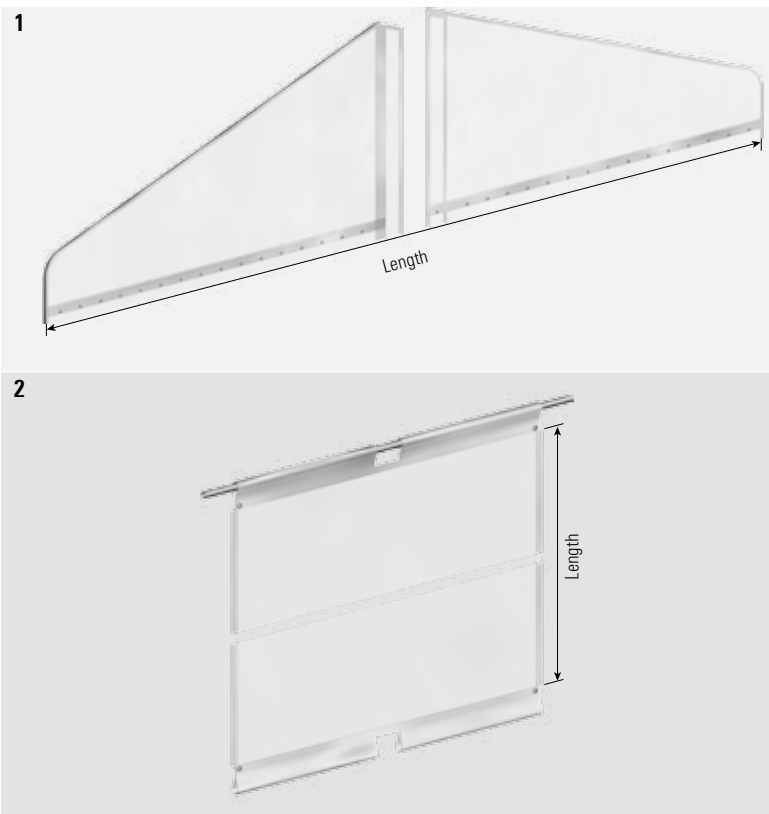
Cream-coloured PVC tarpaulins with a weight of 630 g/m<sup>2</sup>.

Material:  
PVC-coated polyester fabric,  
heat and UV-resistant.

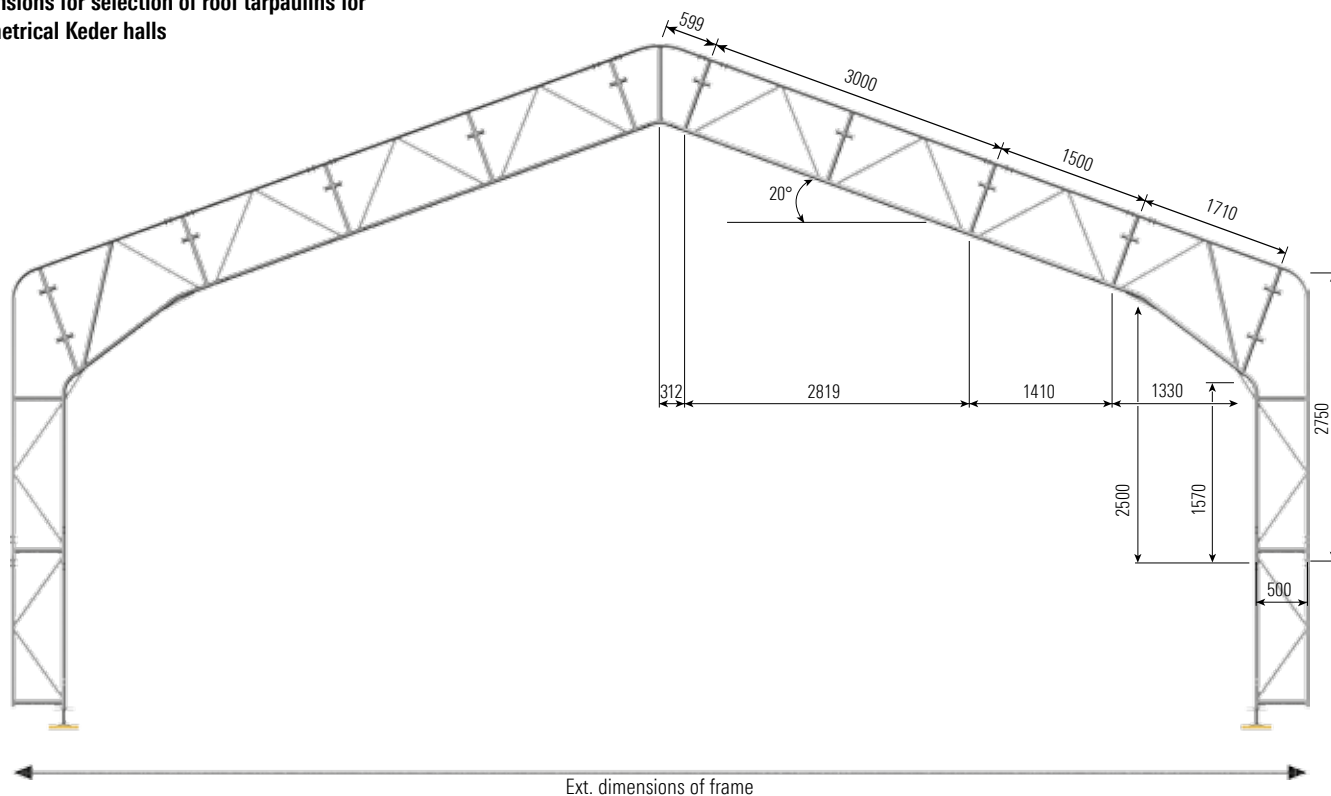
### Tarpaulin compliant with DIN 4102 B1, low-inflammability

PVC tarpaulins with a weight of 650 g/m<sup>2</sup>. In the case of public events, the building inspection authorities usually demand low-inflammability tarpaulins.

## Keder Roof elements



### Dimensions for selection of roof tarpaulins for symmetrical Keder halls



Layher® 

More Possibilities. The Scaffolding System.

Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [St.]	Ref. No.
1	<b>Keder Roof gable tarpaulin, flame-retarding</b>	7.15	9.8		<b>5972.301</b> ☺
		9.98	16.7		<b>5972.302</b> ☺
		12.80	23.3		<b>5972.303</b> ☺
		15.62	31.1		<b>5972.304</b> ☺
	<b>Keder Roof gable tarpaulin, low-inflammability</b>	7.15	10.0		<b>5973.301</b> ☺
		9.98	17.1		<b>5973.302</b> ☺
		12.80	23.8		<b>5973.303</b> ☺
		15.62	31.8		<b>5973.304</b> ☺
2	<b>Keder Roof, roof tarpaulin, flame-retarding</b>	11.00 x 2.57	23.5		<b>5972.306</b> 🏠
		14.00 x 2.57	28.2		<b>5972.307</b> ☺
		17.00 x 2.57	35.5		<b>5972.308</b> ☺
		20.00 x 2.57	40.7		<b>5972.309</b> 🏠
		22.50 x 2.57	46.3		<b>5972.370</b> ☺
		24.50 x 2.57	50.4		<b>5972.371</b> 🏠
		26.50 x 2.57	54.5		<b>5972.372</b> ☺
		28.50 x 2.57	58.5		<b>5972.373</b> ☺
		30.50 x 2.57	62.7		<b>5972.374</b> ☺
		32.50 x 2.57	66.8		<b>5972.375</b> ☺
		34.50 x 2.57	70.9		<b>5972.376</b> ☺
		36.50 x 2.57	75.0		<b>5972.377</b> ☺
		38.50 x 2.57	79.2		<b>5972.378</b> ☺
		11.00 x 2.07	18.4		<b>5972.360</b> ☺
		14.00 x 2.07	23.5		<b>5972.361</b> ☺
		17.00 x 2.07	28.5		<b>5972.362</b> ☺
		20.00 x 2.07	33.5		<b>5972.363</b> ☺
	<b>Keder Roof, roof tarpaulin, low-inflammability</b>	11.00 x 2.57	24.0		<b>5973.306</b> ☺
		14.00 x 2.57	28.8		<b>5973.307</b> ☺
		17.00 x 2.57	36.3		<b>5973.308</b> ☺
		20.00 x 2.57	41.6		<b>5973.309</b> ☺
		22.50 x 2.57	46.8		<b>5973.370</b> ☺
		24.50 x 2.57	51.0		<b>5973.371</b> ☺
		26.50 x 2.57	55.2		<b>5973.372</b> ☺
		28.50 x 2.57	59.3		<b>5973.373</b> ☺
		30.50 x 2.57	63.5		<b>5973.374</b> ☺
		32.50 x 2.57	67.7		<b>5973.375</b> ☺
		34.50 x 2.57	73.9		<b>5973.376</b> ☺
		36.50 x 2.57	76.0		<b>5973.377</b> ☺
		38.50 x 2.57	80.1		<b>5973.378</b> ☺
		11.00 x 2.07	18.8		<b>5973.360</b> ☺
		14.00 x 2.07	24.0		<b>5973.361</b> ☺
		17.00 x 2.07	29.2		<b>5973.362</b> ☺
		20.00 x 2.07	34.4		<b>5973.363</b> ☺

## TARPAULIN DIMENSIONS FOR KEDER HALLS

Ext. dimensions of frame	Bending-resistant corner	Ridge section	Lattice beam 1.50 m	Lattice beam 3.00 m	Roof tarpaulin	Gable tarpaulin
4.30 m	2	1	0	0	11.00 m	Special tarpaulin
7.15 m	2	1	2	0	14.00 m	7.15 m
10.00 m	2	1	0	2	17.00 m	10.00 m
12.80 m	2	1	2	2	20.00 m	12.80 m

Connectors see page 32

WS = wrench size    PU = packaging unit    🏠 = available ex works    ☺ = delivery time on request    🏠☺ = only available in this packaging unit

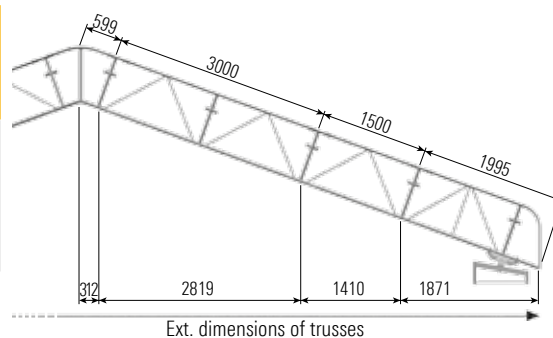


## Keder Roof as double-pitch roof

### TARPAULIN DIMENSIONS FOR DOUBLE-PITCH ROOFED KEDER ROOFS




Ext. dimensions of trusses	Eaves section	Ridge section	Lattice beam 1.50 m	Lattice beam 3.00 m	Roof tarpaulin	Gable tarpaulin/ truss cover
7.15 m	2	1	2	0	11.00 m	7.15 m
10.00 m	2	1	0	2	14.00 m	10.00 m
12.80 m	2	1	2	2	17.00 m	12.80 m
15.62 m	2	1	0	4	20.00 m	15.60 m

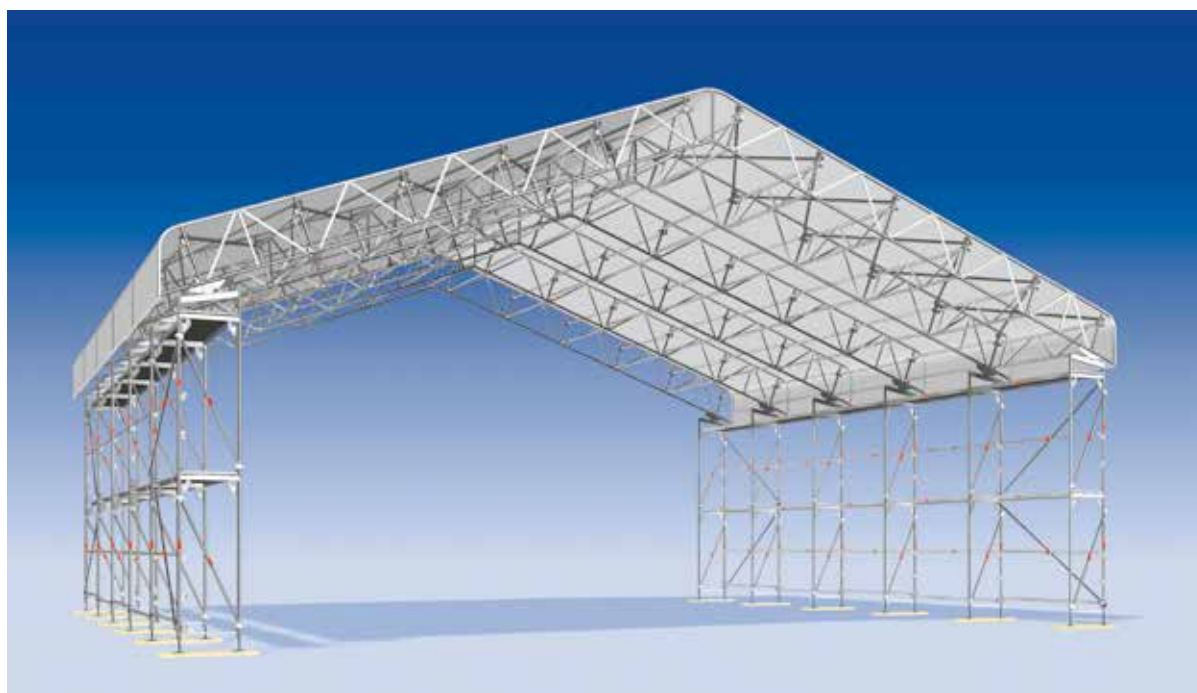
Connectors see page 32



## Material example

**ROOFED BASE AREA:** 15.60 m x 12.85 m (5 bays à 2.57 m)

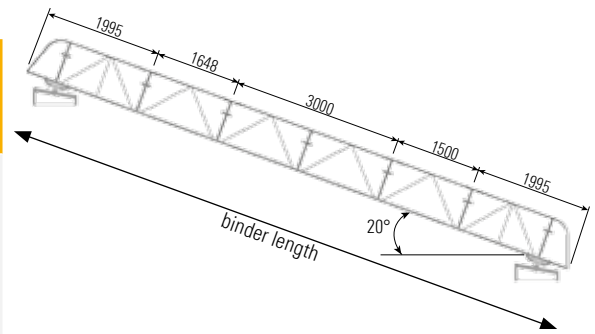
Following material is needed	Quantity	PU [St.]	Ref. No.
Keder Roof eaves section	12		<b>5971.100</b>
Keder Roof ridge section	6		<b>5971.110</b>
Keder Roof lattice beam 3.00 m	24		<b>5971.300</b>
Keder Roof stiffener 2.57 m	12		<b>5971.257</b>
Keder Roof diagonal brace 2.57 x 1.50 m	20		<b>5971.297</b>
Keder Roof ledger 2.57 m	96		<b>5972.257</b>
Keder Roof support 0.73 m	12		<b>5971.120</b>
Keder Roof tarpaulin 2.57 m x 20.00 m	5		<b>5972.309</b>
Keder Roof tarpaulin clip (100 pcs. needed)	2	50 	<b>5971.141</b>
Locking pin	24		<b>4000.001</b>
Bolt (83 pcs. needed)	5	20 	<b>5906.078</b>
Safety clip (83 pcs. needed)	2	50 	<b>4905.001</b>
Keder rail seal (36 pcs. needed)	1	50 	<b>5971.002</b>



Notice: Potentially necessary stabilizing measurement are not illustrated.

**TARPAULIN DIMENSIONS FOR MONO-PITCH KEDER ROOFS**

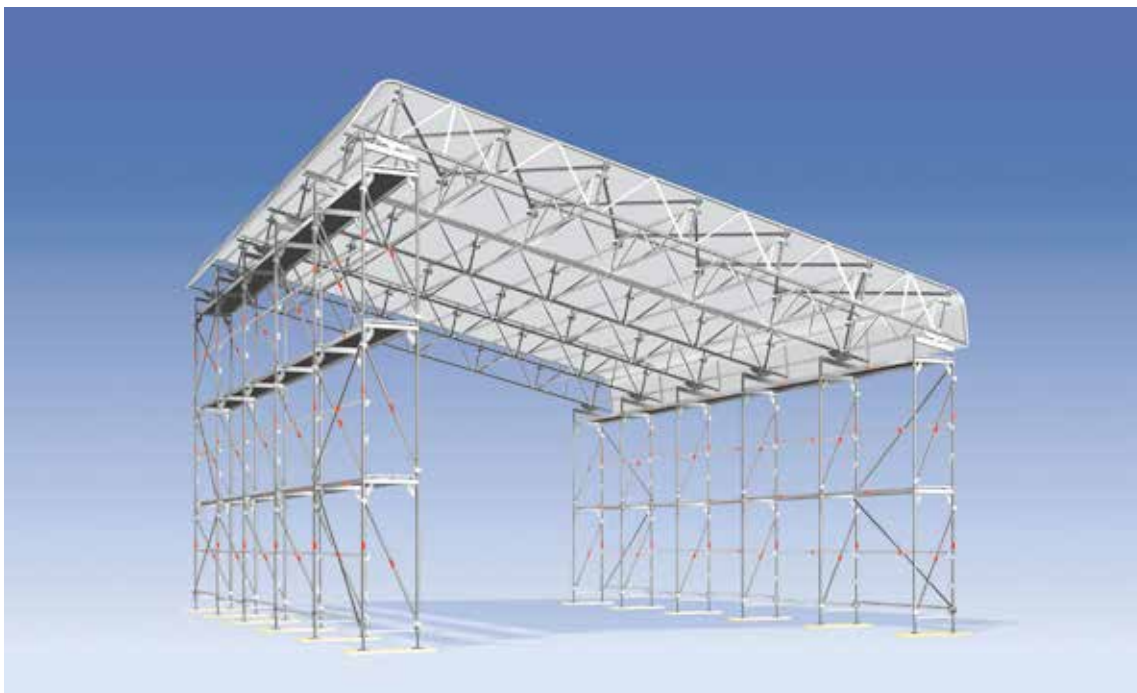
Ext. dimensions Length	Eaves section	Mono-pitch roof lattice beam	Lattice beam 1.50 m	Lattice beam 3.00 m	Roof tarpaulin
5.64 m	2	1	0	0	11.00 m
7.14 m	2	1	1	0	11.00 m
8.64 m	2	1	0	1	11.00 m
10.14 m	2	1	1	1	14.00 m
11.64 m	2	1	0	2	14.00 m
13.14 m	2	1	1	2	17.00 m
14.64 m	2	1	0	3	17.00 m
16.14 m	2	1	1	3	20.00 m



Connectors see page 32

**ROOFED BASE AREA:** 9.50 m x 12.85 m (5 bays à 2.57 m)

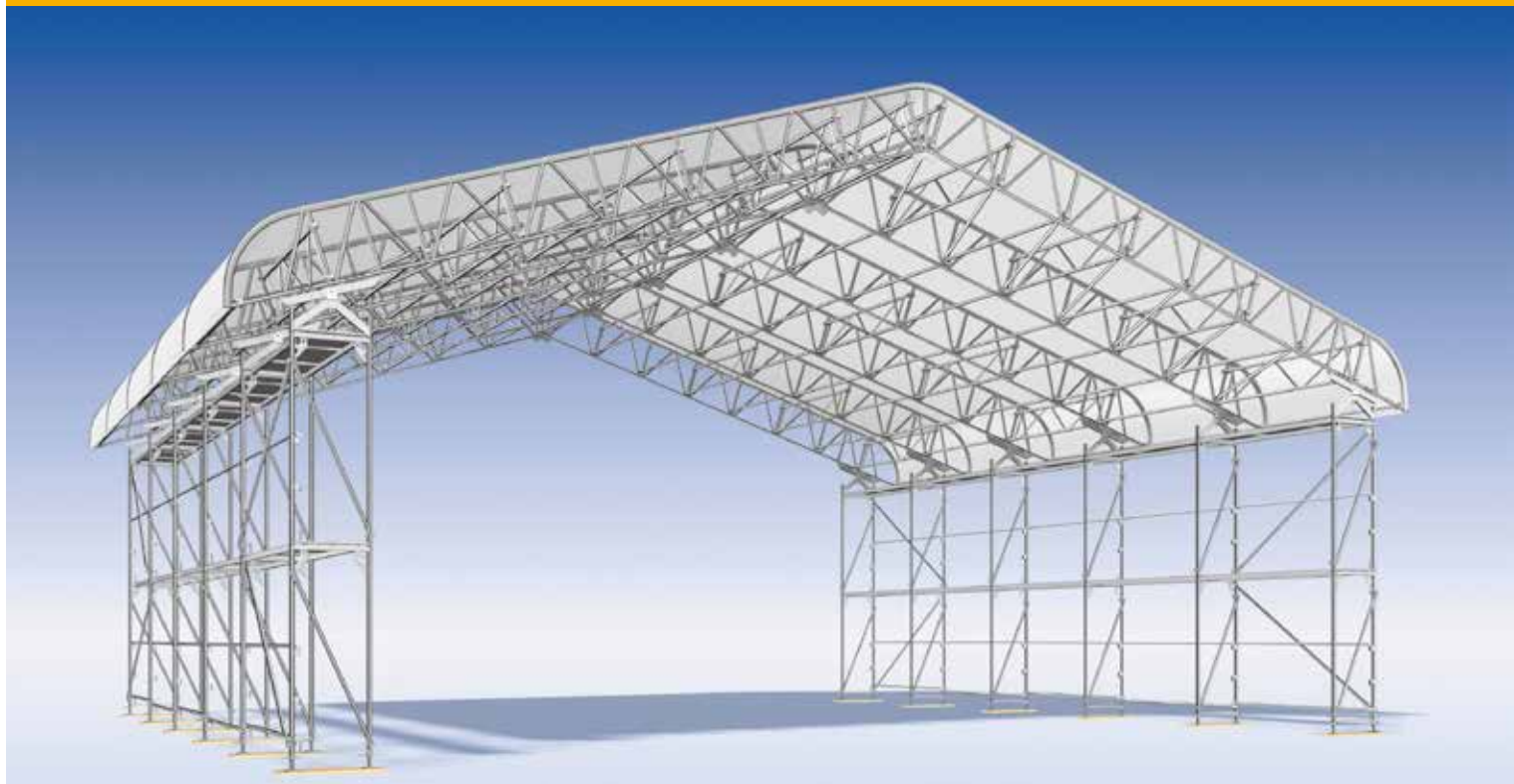
Following material is needed	Quantity	PU [St.]	Ref. No.
Keder Roof eaves section	12		<b>5971.100</b>
Mono-pitch roof lattice beam	6		<b>5972.150</b>
Keder Roof lattice beam 1.5 m	6		<b>5971.150</b>
Keder Roof lattice beam 3.0 m	6		<b>5971.300</b>
Keder Roof stiffener 2.57 m	7		<b>5971.257</b>
Keder Roof diagonal brace 2.57 x 1.50 m	12		<b>5971.297</b>
Keder Roof ledger 2.57 m	56		<b>5972.257</b>
Keder Roof support 0.73 m	12		<b>5971.120</b>
Keder Roof tarpaulin 2.57 m x 14.00 m	5		<b>5972.307</b>
Keder Roof tarpaulin clip (100 pcs. needed)	2	50	<b>5971.141</b>
Locking pin	24		<b>4000.001</b>
Bolt (96 pcs. needed)	5	20	<b>5906.078</b>
Safety clip (96 pcs. needed)	2	50	<b>4905.001</b>
Keder rail seal (24 pcs. needed)	1	50	<b>5971.002</b>



Notice: Potentially necessary stabilizing measurement are not illustrated.

**WS** = wrench size   **PU** = packaging unit   = available ex works   = delivery time on request   = only available in this packaging unit

# LAYHER KEDER ROOF XL



Notice: Potentially necessary stabilizing measurement are not illustrated.

Layher's Keder Roof has long proven itself a great success. But with the Keder Roof XL, Layher is setting new standards for temporary roofing over construction sites or stages. Where roofs are often limited to a 20 metre span for structural strength reasons, the Keder Roof XL comes into its own. Taking into account requirements to cope with local weather conditions, it can be built with a **span of up to 40 metres!**

The Layher Keder Roof XL is based on Aluminium Lattice Beams 750 with integrated Keder section in the top chord.

The Layher Keder Roof has many areas of application, ranging from the **roofing during the addition of storeys** and the **repair of timber roofs and coverings**, **weather protection** for new structures, **refurbishment work on motorways** and over bridges, and numerous applications for **events and normal work**.

## THE BENEFITS TO YOU:

- ▶ Roof widths up to 40 m.
- ▶ High snow loads (up to about 1.0 kN/m<sup>2</sup>) with medium spans.
- ▶ Faster and easier fitting of Keder tarpaulins.
- ▶ Compatible with all Layher scaffolding systems.
- ▶ Material and load bearing-capacity tables are available to ease the planning.
- ▶ Double-pitch, mono-pitch and polygonal barrel roofs are possible.





## Keder Roof XL elements

The Keder Roof XL is a lightweight, but very sturdy weather protection roof for great spans up to 40 m.

It has a standard roof angle of 18°.



### Assembly variants

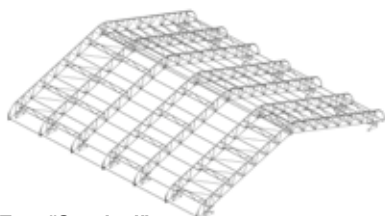
The new Keder Roof XL permits, thanks to differing configurations of the stiffening components, three different variants for use depending on the span, snow load or wind load requirements.

The lattice beam parts are identical in all of these! Material and load-bearing capacity tables are available for these variants. That saves you real money when planning temporary weather protection roofs.



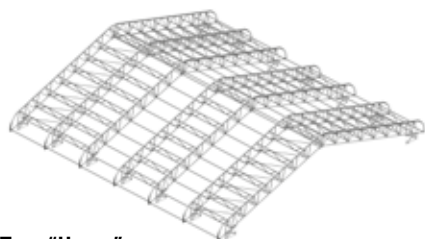
#### Type "Light"

Vertical stiffener: 2.00 m  
Bottom chord stiffener: 2.00 m  
Perm. snow load\*: 0.34 kN/m<sup>2</sup>  
Perm. wind suction\*: 0.08 kN/m<sup>2</sup>



#### Type "Standard"

Vertical stiffener: 2.00 m  
Bottom chord stiffener: 1.00 m  
Perm. snow load\*: 0.33 kN/m<sup>2</sup>  
Perm. wind suction\*: 0.18 kN/m<sup>2</sup>



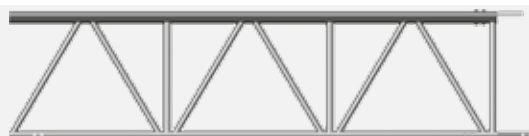
#### Type "Heavy"

Vertical stiffener: 1.00 m  
Bottom chord stiffener: 1.00 m  
Perm. snow load\*: 0.61 kN/m<sup>2</sup>  
Perm. wind suction\*: 0.19 kN/m<sup>2</sup>

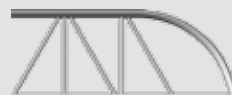
\* with a span of 32 m and constructed with tie

## Keder Roof XL elements

1



2



3



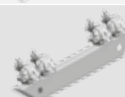
4



5



6



7



8



9



10



11



12



13a + b



14



Layher® 

More Possibilities. The Scaffolding System.



Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [St.]	Ref. No.
1	<b>Keder Roof XL lattice beam</b> Aluminium	2.00 x 0.78	17.3	25	<b>5975.200</b> 🏠
		3.00 x 0.78	24.4	25	<b>5975.300</b> 🏠
2	<b>Keder Roof XL eaves section</b>	2.00 x 0.78	14.3	20	<b>5975.100</b> 🏠
3	<b>Keder Roof XL ridge section</b> 18°-Version 20°-Version	2.10 x 0.78			
			24.5	20	<b>5975.110</b> 🏠
			24.5	20	<b>5975.120</b> 🕒
4	<b>Mono-pitch lattice beam</b>	1.06 x 0.78	14.5	25	<b>5975.106</b> 🏠
5	<b>Keder Roof XL support</b>	0.73	19.1	20	<b>5975.073</b> 🏠
		1.09	22.4	20	<b>5975.109</b> 🏠
6	<b>Tie attachment</b>		6.1		<b>5975.000</b> 🏠
7	<b>Tie connection threaded rod</b>		2.2		<b>5975.020</b> 🏠
8	<b>Tie connecting piece</b>		0.8		<b>5975.030</b> 🏠
9	<b>Tie connecting sleeve WS 30 x 90</b>		0.4		<b>5976.000</b> 🏠
10	<b>Tie connection lashing strap</b>		2.0		<b>5975.010</b> 🏠
11	<b>Keder rail seal</b>		0.5	50 🏠	<b>5971.003</b> 🏠
12	<b>Special bolt</b> , M12 x 60 with nut <b>Special bolt</b> , M12 x 90 with nut		4.0	50 🏠	<b>4905.061</b>
			2.8	25 🏠	<b>5975.091</b> 🏠
13a	Alternative for Pos. 12 <b>Bolt</b> , 12 x 95 mm and		2.5	25 🏠	<b>5976.091</b> 🏠
13b	<b>Safety clip</b> , 2.80 mm		0.5	50 🏠	<b>4905.001</b>
14	<b>Threaded Tie</b>	2.00	2.9	100	<b>5976.200</b> 🏠
		3.00	4.4	100	<b>5976.300</b> 🏠
		4.00	5.8	100	<b>5976.400</b> 🏠
		5.00	7.3	100	<b>5976.500</b> 🏠

WS = wrench size PU = packaging unit 🏠 = available ex works 🕒 = delivery time on request 🏠 = only available in this packaging unit

## Keder Roof XL elements

### Tarpaulins compliant with DIN 75200, flame-retarding

Cream-coloured PVC tarpaulins with a weight of 630 g/m<sup>2</sup>.

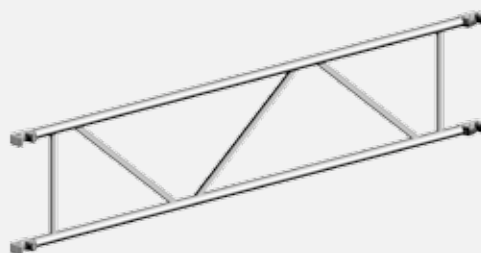
Material:  
PVC-coated polyester fabric,  
heat and UV-resistant.

### Tarpaulin compliant with DIN 4102 B1, low-inflammability

PVC tarpaulins with a weight of 650 g/m<sup>2</sup>. In the case of public events, the building inspection authorities usually demand low-inflammability tarpaulins.

## Keder Roof XL elements

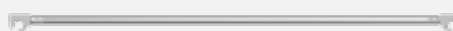
1



2



3



4



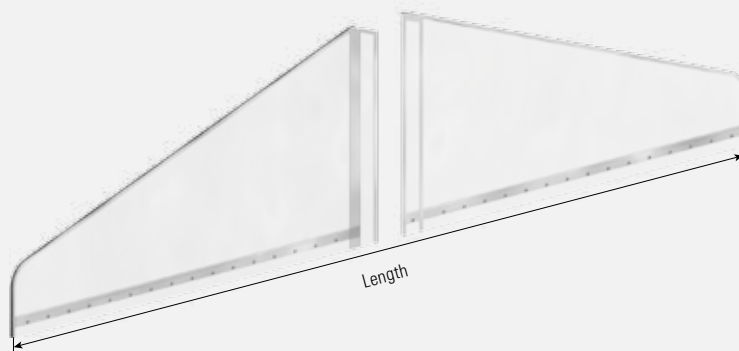
5



6



7



8






































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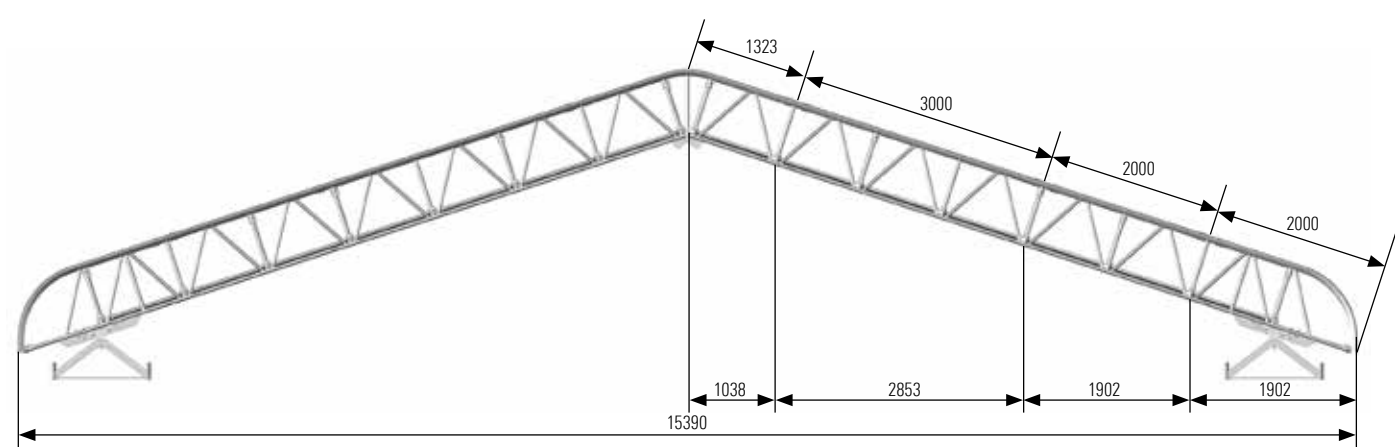


Layher® 

More Possibilities. The Scaffolding System.

Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [St.]	Ref. No.
1	Stiffener	2.57 x 0.55	10.0	50	5940.257 
2	Keder Roof ledger	2.57	4.2	50	5972.257 
3	Horizontal diagonal brace	2.57 x 1.00	4.2	50	5939.100 
		2.57 x 2.00	5.0	50	5939.200 
4	Set for tarpaulin pulling consisting of 2 castors, 1 aluminium tube 3.00 m and 4 securing pins	3.00	5.8		5971.400 
	Castor for tarpaulin pulling, for 48.30 mm tube		0.4	2	5971.401 
5	Polyester lashing strap, 6.00 m with clamp lock	6.00	0.2		5976.610 
6	Lashing strap 5 t, 5.00 m with ratchet	5.00	2.8		5976.600 
7	Keder Roof gable tarpaulin, flame-retarding 2-piece	9.60	13.8		5972.381 
		11.50	17.9		5972.382 
		13.40	22.1		5972.383 
		15.30	27.4		5972.384 
		17.20	33.1		5972.385 
		19.10	39.4		5972.386 
		21.00	44.7		5972.387 
		22.90	51.7		5972.388 
		24.80	59.5		5972.389 
		26.80	68.2		5972.390 
		28.70	76.7		5972.391 
		30.60	85.8		5972.392 
		32.50	95.5		5972.393 
	Keder Roof gable tarpaulin, low-inflammability 2-piece	9.60	13.8		5973.381 
		11.50	17.9		5973.382 
		13.40	22.1		5973.383 
		15.30	27.4		5973.384 
		17.20	33.1		5973.385 
		19.10	39.4		5973.386 
		21.00	44.7		5973.387 
		22.90	51.7		5973.388 
		24.80	59.5		5973.389 
		26.80	68.2		5973.390 
		28.70	76.7		5973.391 
		30.60	85.8		5973.392 
		32.50	95.5		5973.393 
	More tarpaulins upon request				
8	Keder Roof, roof tarpaulin see page 27				
9	Tarpaulin clip		2.0	50 	5971.141 

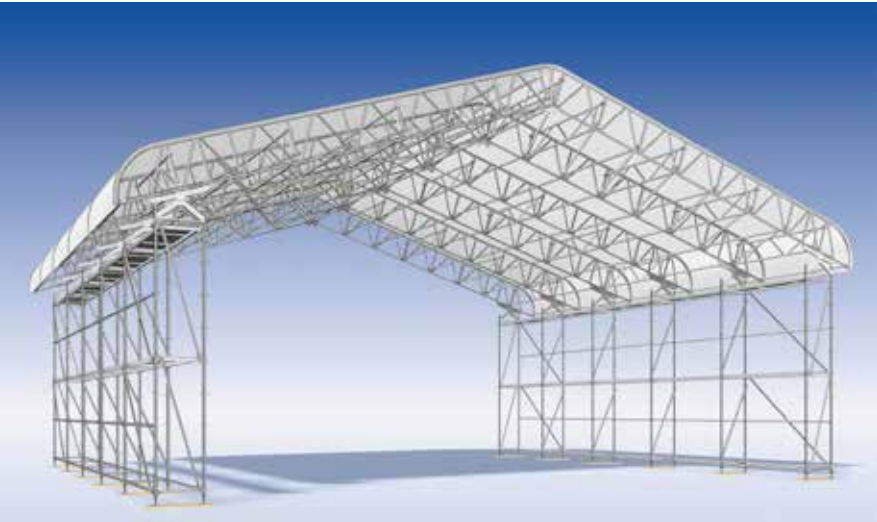
Keder Roof XL as double-pitch roof – Type Standard



Material example

**ROOFED BASE AREA:** 15.40 x 12.86 m (5 bays each 2.57 m) without support scaffolding, Weight: 1.654 kg (8.35 kg/m²)

Following material is needed	Quantity	PU [St.]	Ref. No.
Locking pin, red	24		4000.001
Special bolt M12 x 60 with nut (72 pcs. needed)	2	50	4905.061
Horizontal diagonal brace 1.00 x 2.57 m	14		5939.100
Stiffener 2.57 m	30		5940.257
Keder rail seal (36 pcs. needed)	1	50	5971.003
Tarpaulin clip (100 pcs. needed)	2	50	5971.141
Ledger 2.57 m	60		5972.257
Roof tarpaulin 2.57 x 20.00 m	5		5972.309
Support 0.73 m	12		5975.073
Hexagonal screw M12 x 90 with nut (72 pcs. needed)	3	25	5975.091
Eaves section	12		5975.100
Ridge section 18°	6		5975.110
Lattice beam 2.00 m	12		5975.200
Lattice beam 3.00 m	12		5975.300



Notice: Potentially neccessary stabilizing measurement are not illustrated.