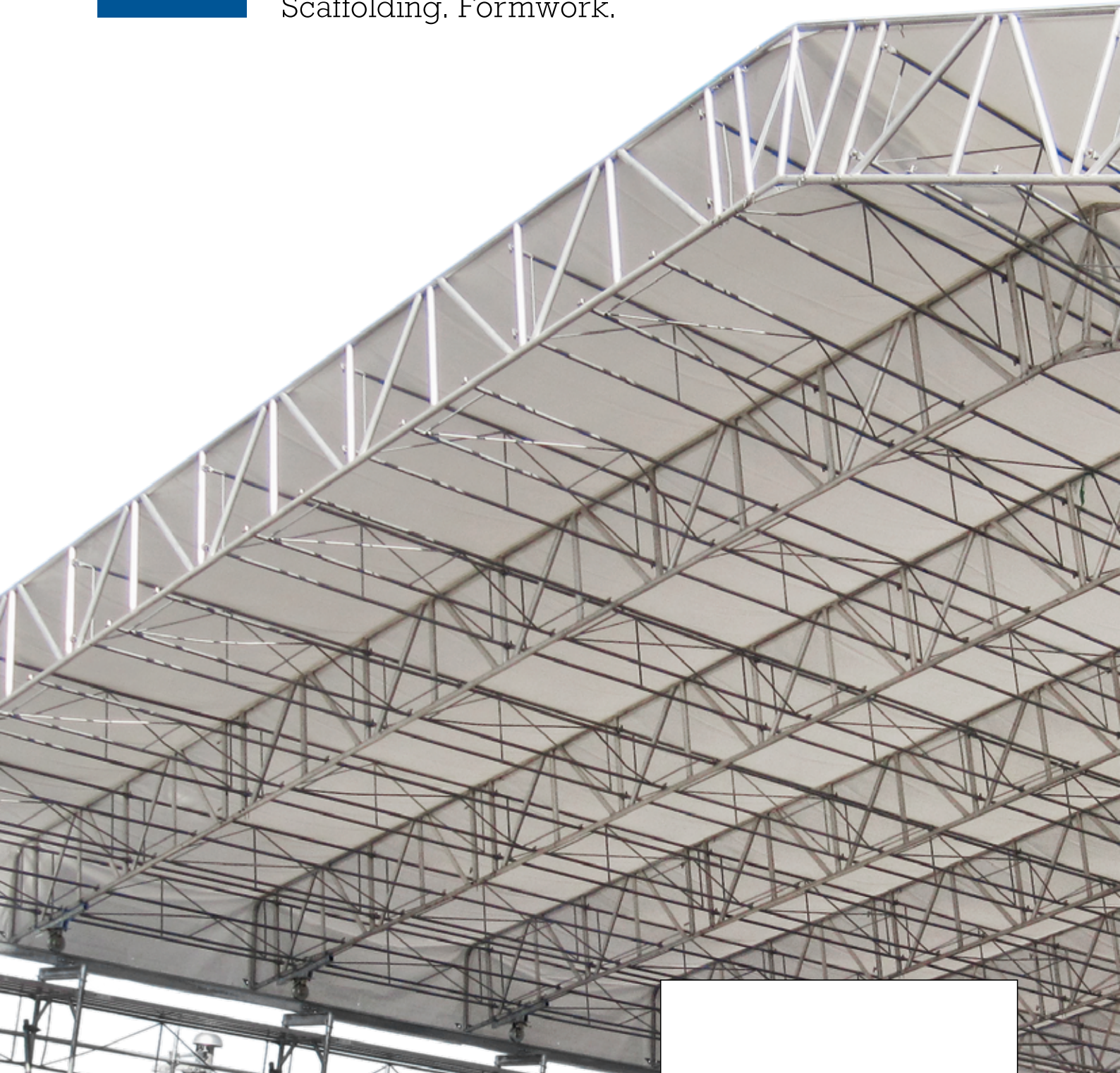




Tobler[®]
Scaffolding. Formwork.



IAU

Instructions for assembly and use

MATON

Temporary roof
systems.



**The safe way to get
higher faster.**

**The safe way to get
in form faster.**



Temporary roof systems – the perfect protection against wind and weather.

One system for all cases.

MATO N temporary roofs are used wherever the influence of wind and weather is undesirable. They protect buildings, civil engineering structures, bridges and motorways during the construction phase, during renovation and after fires. They provide effective protection against the weather for exhibitions, trade fairs or events and are also available as mobile constructions.

The most economical of all solutions.

Whichever way you look at it: there is no cheaper alternative to a MATO N temporary roof with PVC sheeting. The procurement price is about 50% less than the costs of a metal cassette roof.

Not only that, the work required for the assembly and disassembly is between 30% and 60% less thanks to the lightweight construction and simple handling.

Spans up to 38 m.


MATO N can be designed as a single-pitch or double-pitch roof, depending on the application. Spans of up to 38 m are possible depending on the construction and beam thicknesses.

Thanks to the lightweight aluminium structure, MATO N temporary roofs can be assembled extremely simply and quickly – even manually. They can also be built on any scaffolding system.

Table of contents

1	General conditions	5
2	General assembly of the temporary roof beams	7
2.1	Table of beam usage for the required spans	7
2.2	Load specifications for temporary roof beams	8
2.3	Load capacities of the temporary roof beams	9
3	Safety precautions during assembly and disassembly	10
3.1	Safety precautions during assembly	10
3.2	Attachment points for personal protective equipment (PPE)	10
3.3	Mounting the guard rails in the intermediate field	11
4	Assembly instructions – H85 temporary roof system	12
4.1	Assembly of the roof support frame	12
4.2	General assembly of the temporary roof beams	12
4.3	Assembly of a temporary roof element on the ground	15
4.4	Assembly of the inspection gallery on the ground	19
4.5	Placing the temporary roof elements on the support frame / intermediate fields	21
4.6	Temporary roof element with suspension attachment for crane	22
5	Further assembly options	25
5.1	Assembly of the ridge capping	25
5.2	Crane suspension with double field	28
6	Disassembly	29
	MATO N – temporary roof system and accessories	30

1 General conditions

- 
- 1.1 These instructions for assembly and use (IAU) govern the assembly, conversion and disassembly of the major versions of the H85 temporary roof system from Tobler AG of Rheineck, Switzerland. It is not possible for all applications to be described and dealt with in these instructions for assembly and use. The support frame must be assembled in accordance with the corresponding instructions for assembly and use for the type of scaffolding in use. Please contact us if you should have any questions on other applications.
 - 1.2 The stability of the enclosure construction (support frame and temporary roof) is to be verified in all cases and ensured at all times, even in the assembly condition.
 - 1.3 These instructions for assembly and use apply only in conjunction with original MATO N components. The flawless condition of all components must be ensured prior to installation and before each use by means of a visual inspection. Damaged components must not be used.
 - 1.4 The assembly, conversion and disassembly of the temporary roof system may take place only under the supervision of a qualified person (supervisor) and by technically suitable employees following appropriate, object-related instruction based on the results of the risk assessment.
 - 1.5 The technical details given in the instructions for assembly and use are intended to help the assembler or user to comply with the safety precautions to be taken and are not mandatory requirements for them. On the basis of the risk assessment that he has to prepare, the assembler or user has to take the necessary measures according to his best judgement. In doing so, the special features of each individual case must be taken into account.
 - 1.6 The basic prerequisite is that these instructions for assembly and use are followed in every case. Note that all specifications, in particular those concerning the stability of the installation variants, only apply when original Tobler components are used. The installation of third-party products can result in safety deficiencies and insufficient stability.
 - 1.7 Deviations from these instructions are possible if the safety of the assembly procedures (e.g. safety against falling, stability in intermediate states) is proven in the individual case.
 - 1.8 Unfinished scaffolding areas must be marked with the prohibition sign "No entry for unauthorised persons". Access to these danger areas must be limited appropriately.

Note: The products illustrated in these instructions for assembly and use or assembly variants may be subject to country-specific regulations. The user of the products is responsible for complying with these regulations. Depending on the local regulations, we reserve the right not to deliver all of the illustrated products. We will be pleased to advise you on all questions concerning the products, their use or special assembly regulations.

A detailed assortment overview can be found in our product catalogue.
Please refer to our technical documents for information about static data.

1 General conditions

- 1.9** After completion, the respective scaffolder / scaffolding contractor must have the scaffolding inspected to ensure its proper assembly and safe function. The inspection must be carried out by a person who is qualified to do so; this may also be the supervisor.
- 1.10** After completion and inspection, the scaffolding must be labelled. The labelling must contain information about the scaffolder / scaffolding contractor, the type of scaffolding construction and the load and width class, and should also include general safety instructions. It is to be attached to the scaffolding in a clearly visible place.
- 1.11** Once the scaffolder / scaffolding contractor is satisfied that the scaffolding and temporary roof are in an orderly condition, he can hand it over to the user. It is advisable to carry out and record the handover together with the user.
- 1.12** The results of the inspection must be documented in the form of an inspection record and archived for an appropriate period extending beyond the standing period of the scaffolding, as a rule 3 months.
- 1.13** These instructions for assembly and use are published by:

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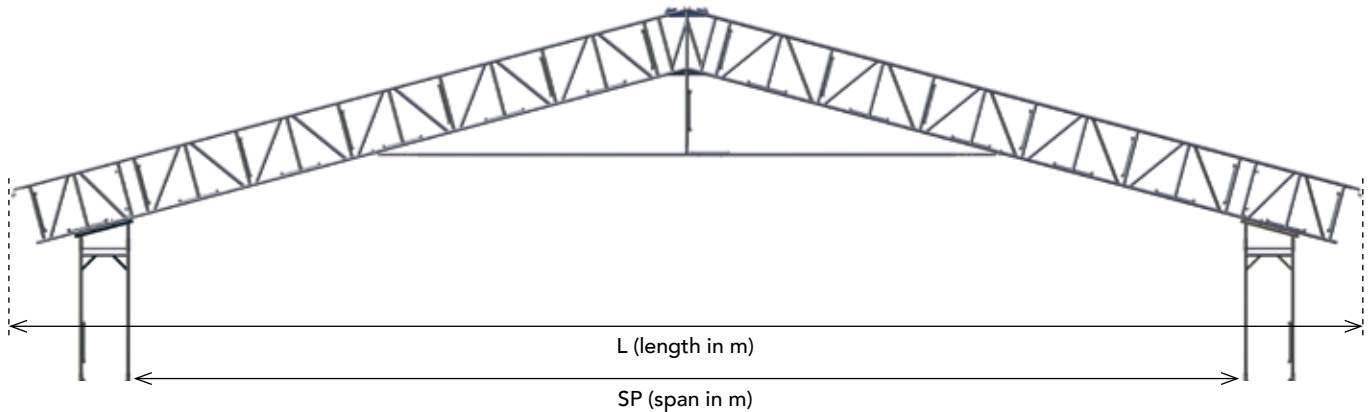
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www.tobler-ag.com

2 General assembly of the temporary roof beams



2.1 Table of beam usage for the required spans



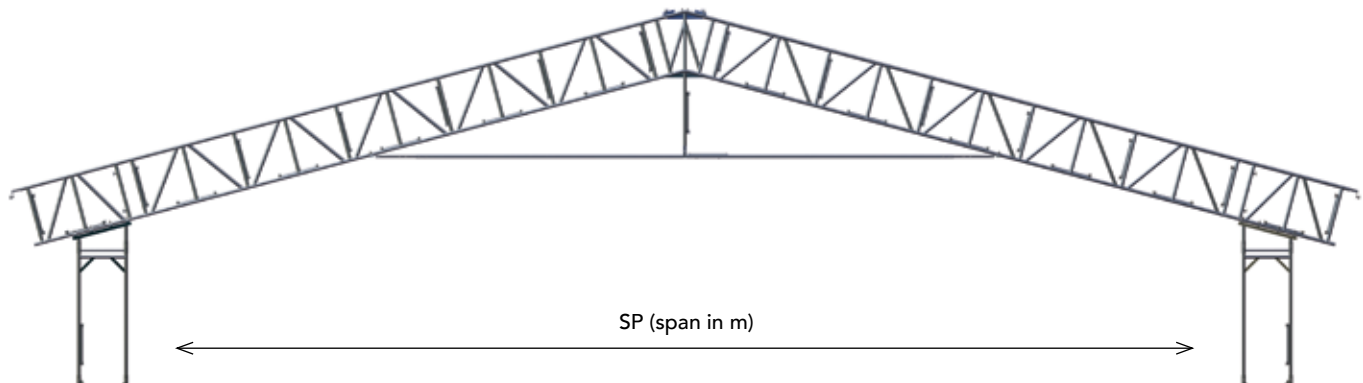
This table serves as a recommendation for the combination of the different beams. Naturally other combinations can also be selected, but this must first be defined together with the manufacturer.

SP	L	RB	TRB	TRB	TRB	TRB	TRB	TRB	TRB
			160	310	410	510	610	710	810
10.40	12.40	1					2		
12.30	14.30	1						2	
14.30	16.30	1							2
15.40	17.40	1	2					2	
16.40	18.40	1		2			2		
18.30	20.30	1			2		2		
20.30	22.30	1			2			2	
22.20	24.20	1				2		2	
24.10	26.10	1				2			2
26.00	28.00	1					2		2
28.00	30.00	1						2	2
29.90	31.90	1							4
32.00	34.00	1			2	2			2
34.00	36.00	1			2		2		2
35.90	37.90	1				2	2		2
37.80	39.80	1					4		2
39.80	41.80	1					2	2	2
41.70	43.70	1						4	2
43.60	45.60	1						4	4

SP = span / L = total length / RB = ridge beam / TRB = temporary roof beam

2 General assembly of the temporary roof beams

2.2 Load specifications for temporary roof beams



Span [m]	Permissible payload		Wind up to 75 km/h
	[kg/m ²]	[kg/m ²]	
8.40	43	0.43	allowed
10.40	35	0.35	allowed
14.30	25	0.25	allowed
16.40	22	0.22	allowed
18.30	19	0.19	allowed
21.00	15	0.15	allowed
22.20	13	0.13	ANC
26.00	10	0.10	ANC
29.90	7	0.07	ANC
34.00	4	0.04	ANC

Permissible snow height [cm]	
fresh	from 1 day
43	21
35	17
25	12
22	10
19	9
15	7
13	6
10	5
7	3
4	2

ANC = anchoring required

ANC: From a span of 21 m, the temporary roof beams themselves need to be braced downwards in addition to the support structure. The ideal place to attach the anchor is in the gable area. The anchoring must not be attached to the support frame. A specialist (engineer) must be consulted for object-related anchoring.

The following load types are permissible for all spans:

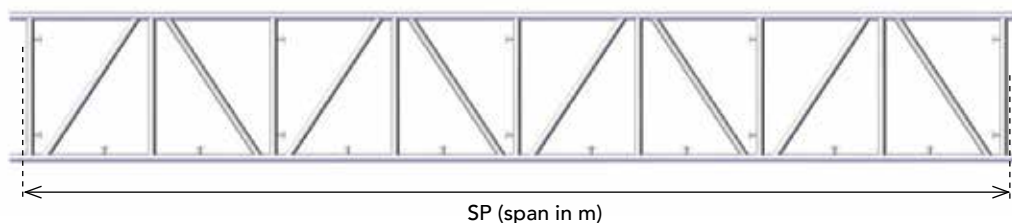
- Dead weight with additional 1.5 kN individual load (central)
- Dead weight with additional 5 mm rainwater per m²

The specified loads apply on condition that all foreseen stiffenings are mounted. In particular the horizontal guard rails for stiffening the temporary roof beams at distances of 1.40 to 1.60 m. The specified loads apply to the roof construction as such. The load-bearing capacity and stability of the support frame used must be checked in the individual case.

In order to cover larger spans, the support frame must be fastened with a tight connection under the temporary roof beams. Tobler AG will be glad to advise you in this respect and offer you an individual solution.



2.3 Load capacities of the temporary roof beams



Span	Evenly distributed load		
	Load capacity		Deformation
	[m]	[kg/m ²]	[mm]
24.10	33	0.33	92
22.50	37	0.37	81
20.90	41	0.41	70
19.30	43	0.43	57
17.80	53	0.53	49
16.00	59	0.59	36
14.40	67	0.67	29
12.80	77	0.77	22
11.20	83	0.83	16
9.70	91	0.91	12
7.90	128	1.28	8
6.30	167	1.67	6
4.70	238	2.38	4
3.10	399	3.99	2

Individual load in the centre		
Load capacity		Deformation
[kg]	[kN]	[mm]
330	3.3	74
330	3.3	63
370	3.7	53
370	3.7	46
470	4.7	42
500	5.0	35
500	5.0	25
500	5.0	20
500	5.0	15
500	5.0	10
500	5.0	7
500	5.0	5
500	5.0	3
500	5.0	2

Prerequisites for the specified load capacities:

- The loads must be distributed evenly to the node points.
- An individual node load may not exceed 5.0 kN.
- The beams must be stiffened. Maximum buckling length of top chord 1.60 m.



The temporary roof beams and all products used must be checked on arrival at the building site or destination respectively each time before use to ensure their flawless condition and function. Changes to the temporary roof beams and other components are not permissible.

These load values apply only in conjunction with the original parts from Tobler AG.

3 Safety precautions during assembly and disassembly

3.1 Safety precautions during assembly

There may be a risk of falling during the assembly, conversion and disassembly of the temporary roof and the support frame. The assembly and disassembly work must be carried out in such a way that the risk of falling is avoided or that it is at least kept as small as possible.

Assembly situations with an increased risk of falling are marked in these instructions for assembly and use:



The builder of the temporary roof must define suitable measures to avert or minimise the danger on the basis of his risk assessment for the respective activities and for the explicit object.

Measures must be taken into account for the following criteria:

- Assessment of the actually existing risk
- Fitness for purpose
- Practical possibilities
- Qualification of the employees
- Type and duration of the activities in the danger area
- Possible falling heights
- Properties of the surface onto which the fitters could fall
- Properties of the workplace and its access points

Technical and personal measures can be applied for the assembly, conversion and disassembly of the temporary roof:

- Use of fitters who are qualified and have been trained for this work
- Use of the assembly guard rails
- Installation of safety nets in the danger area
- Use of suitable personal protective equipment (PPE against falling)

In all cases the assembly and disassembly procedure must be designed in such a way that the installation of the side protection takes place as quickly as possible so that work can be carried out predominantly in the secured area.

Prior to the start of the assembly work, the contractor must determine whether there are any machines and plants in the foreseen work area that could endanger the assembly personnel.

The assembly, conversion and disassembly of the temporary roof and the support frame may only be carried out with the corresponding protective equipment. Components must not be thrown. The components must be passed on in such a way that they cannot slip or fall down.

3.2 Attachment points for the personal protective equipment against falling (PPE against falling)

If the use of suitable PPE against falling is called for when assembling and disassembling the Tobler temporary roof, then the lower chords of the temporary roof beams are to be used as attachment points (*Fig. 4*).

In every case the suitability of a PPE against falling to protect against falling is to be checked. Particular attention must be paid here to the minimum fall height (clearance height underneath the user) in accordance with the manufacturer's specifications.

3.3 Mounting the guard rails in the intermediate field

The individual preassembled temporary roof fields are assembled on the ground and lifted by crane onto the support frame. Between each of these fields there is an intermediate field into which the remaining stiffening elements (guard rails) are mounted and the reinforced tarpaulins are pulled in.

It is forbidden to step on the sheeting during the assembly and disassembly time as well as during the standing period. Therefore, the assembly work is carried out using auxiliary scaffolding or standing on the temporary roof beams. If no auxiliary scaffolding can be mounted in this area, a PPE against falling attached to the lower chords of the temporary roof beams should be worn for this work (Fig. 2).

In these intermediate fields, all vertical stiffening elements (guard rails) are to be mounted in the vertical connecting bar with guard rail pins.

Every second temporary roof element is to be equipped with all horizontal and vertical stiffening elements (guard rails). Only the intermediate fields are stiffened horizontally.

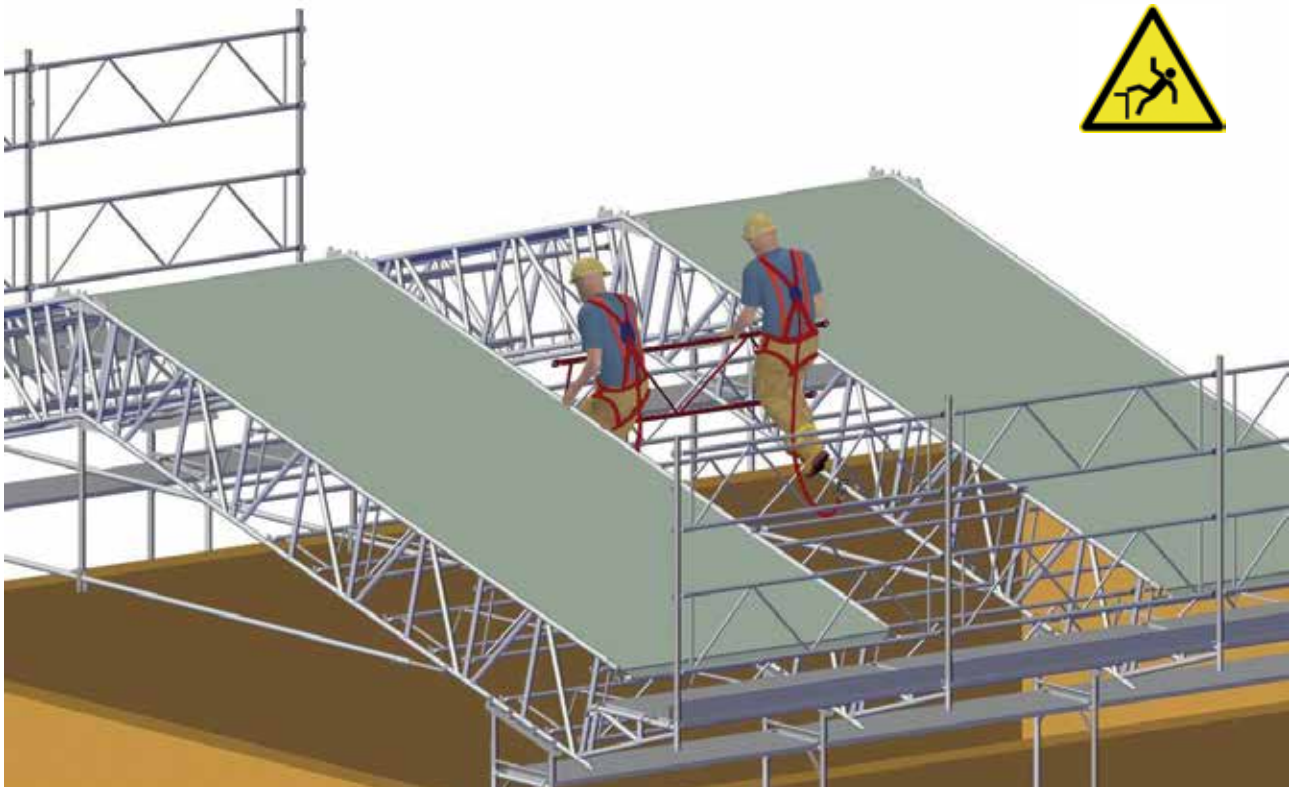


Fig. 2

4 Assembly instructions – H85 temporary roof system

4.1 Assembly of the roof support frame

At the start, the roof support frames are mounted on the support frame in accordance with the overall width of the frame (Fig. 3). It is preferable to attach auxiliary scaffolding to the support frame in order to mount the roof support frames.

The roof support frames are then fastened to the frames by means of locking mandrels (Fig. 4).



Fig. 3

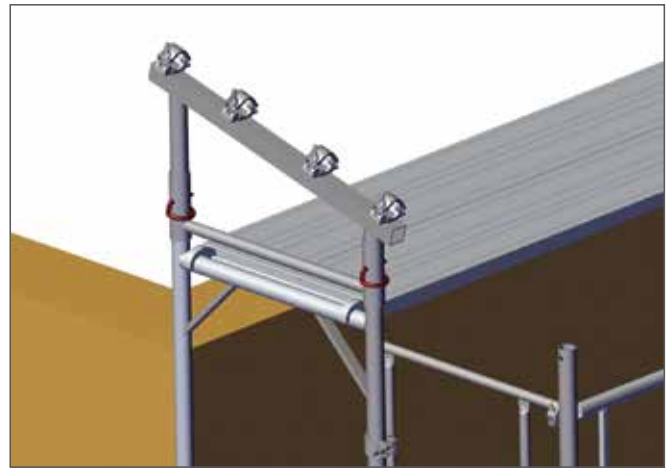
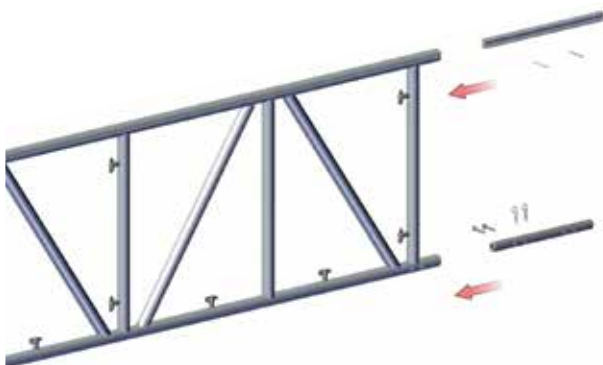
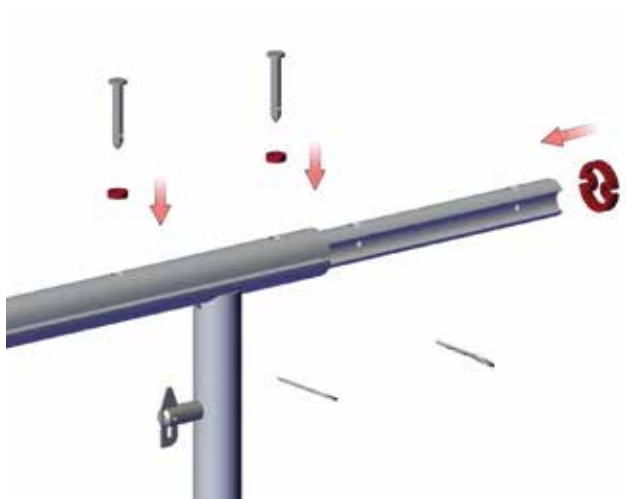


Fig. 4

4.2 General assembly of the temporary roof beams

If two beams or the ridge beams are connected together, the insertion tubes necessary for this must be mounted in one of the beams. The aluminium end profile is inserted in the upper chord, the thick-walled steel tube in the lower chord. The insertion tubes are secured by means of bolts and spring cotters.





In order to guarantee that the temporary roof construction is absolutely watertight, the cellular rubber seals provided are used with the insertion profile (upper chord). On the one hand these are placed between the bolt and the slotted tube and on the other they are attached to the insertion profile.

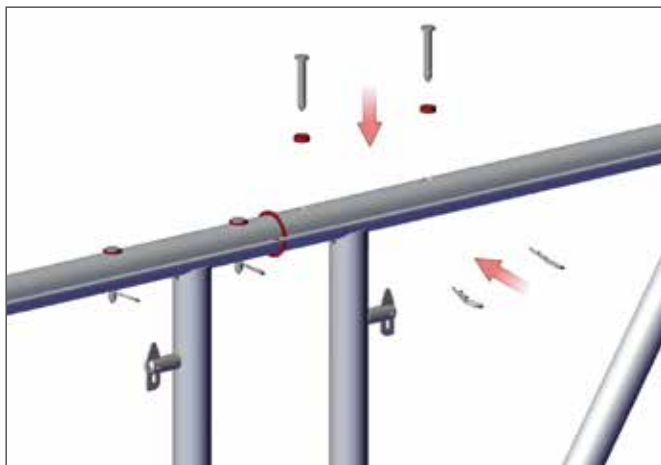


The bolts are then secured with the spring cotters. The insertion tube in the lower chord is likewise secured by bolts and spring cotters.

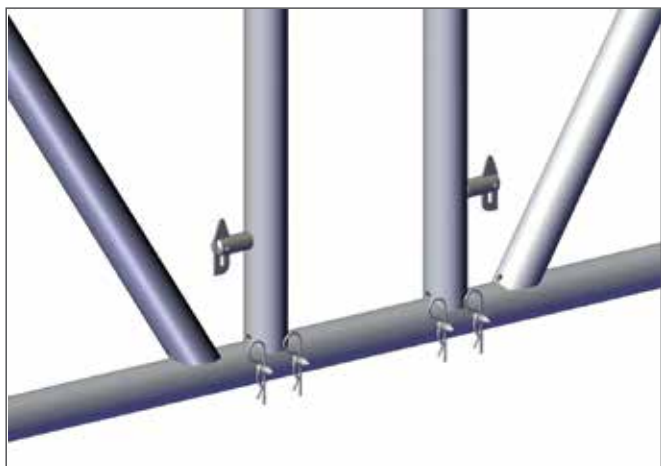


If both insertion tubes have been secured, the second temporary roof beam or ridge beam is inserted.

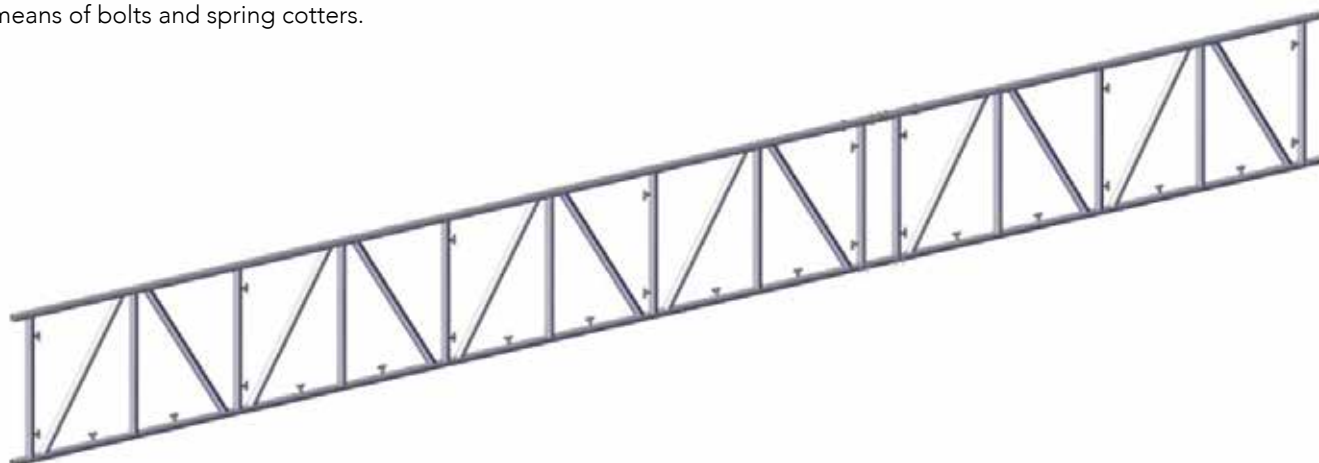
4 Assembly instructions – H85 temporary roof system



The second temporary roof beam or ridge beam is now also connected by means of bolts, spring cotters and cellular rubber seals with the insertion tube and thus secured.

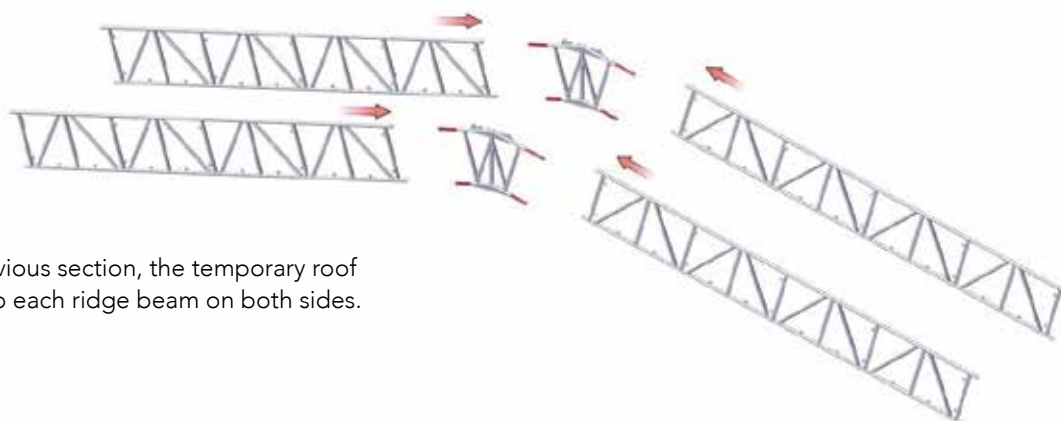


The lower chord is also fastened to the insertion tube by means of bolts and spring cotters.

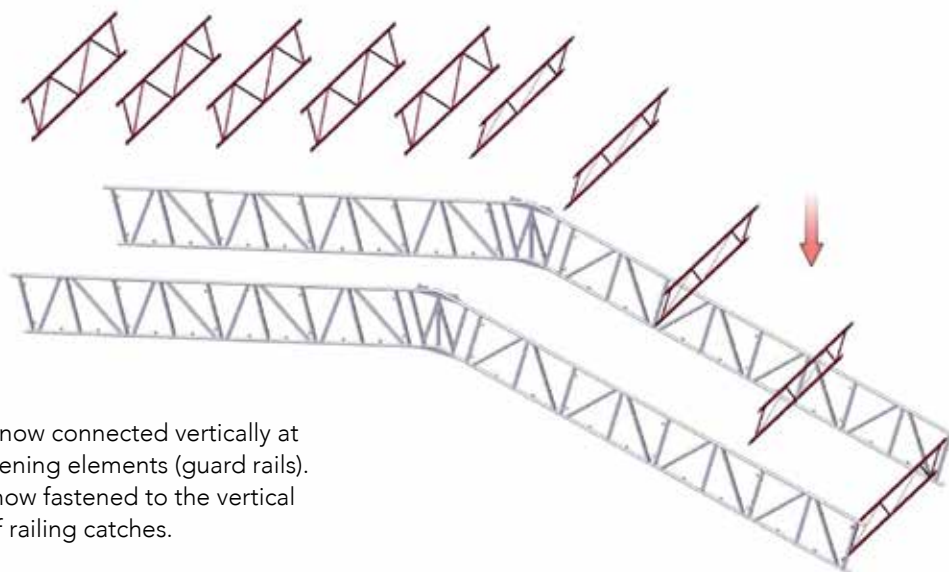




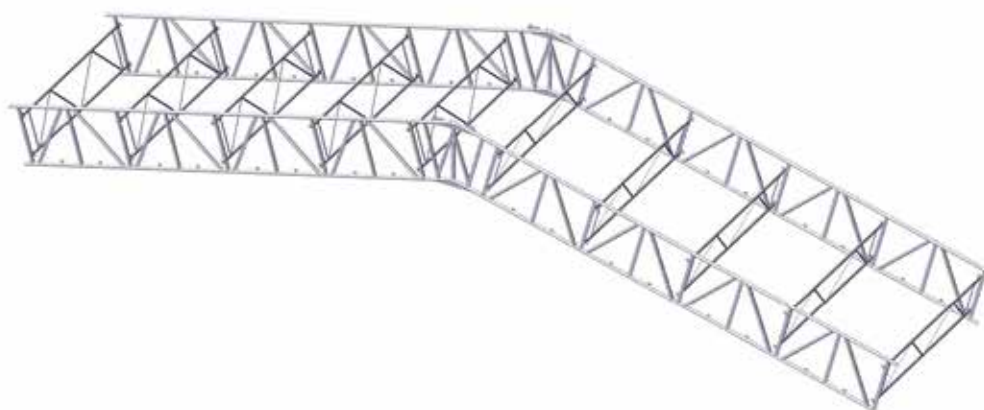
4.3 Assembly of a temporary roof element on the ground



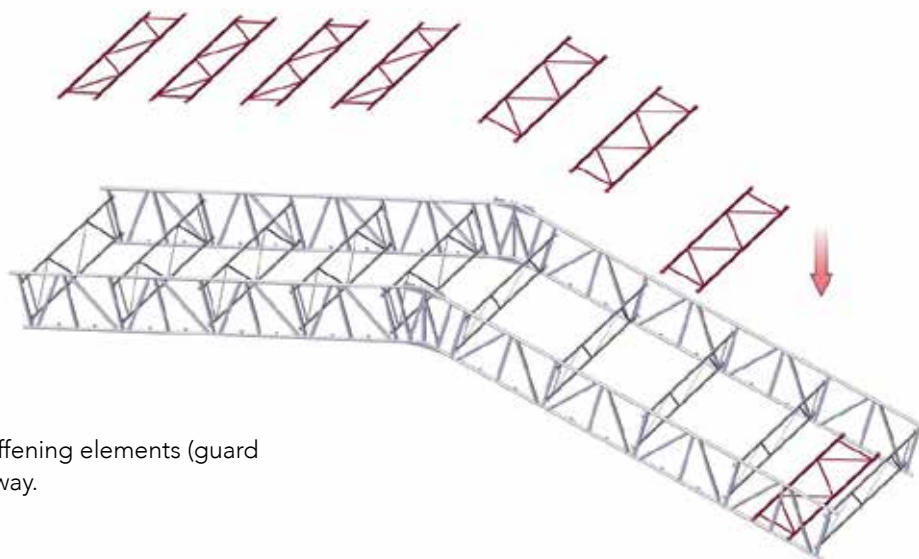
As described in the previous section, the temporary roof beams are connected to each ridge beam on both sides.



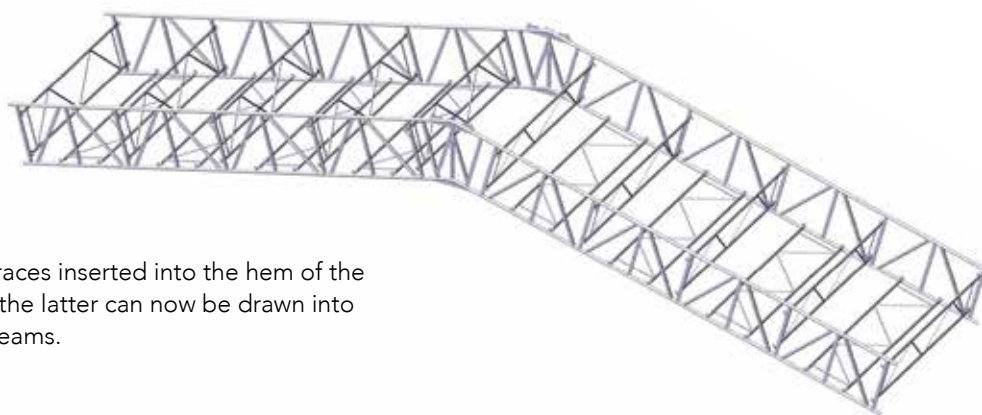
The two beam elements are now connected vertically at the desired distances by stiffening elements (guard rails). The stiffening elements are now fastened to the vertical connecting bars by means of railing catches.



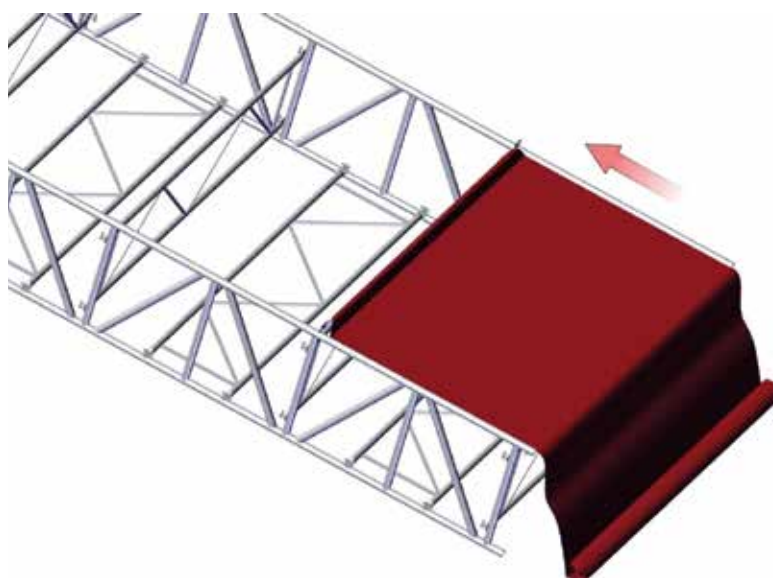
4 Assembly instructions – H85 temporary roof system

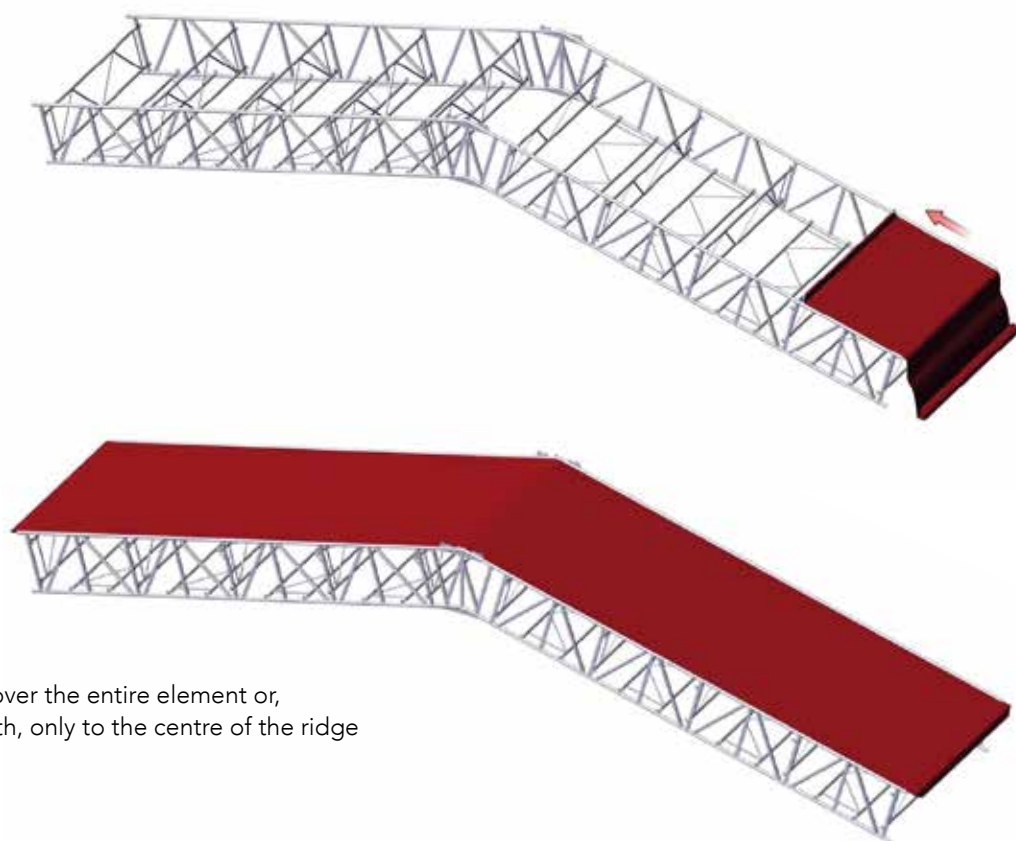


Subsequently, the horizontal stiffening elements (guard rails) are mounted in the same way.

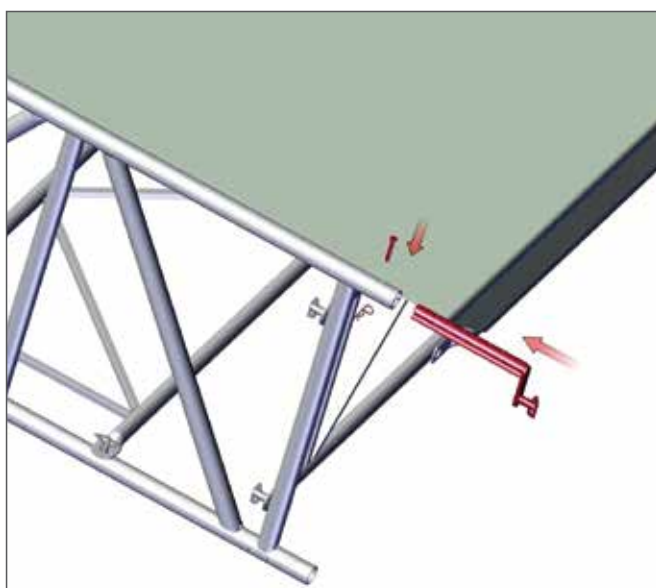


By means of aluminium braces inserted into the hem of the temporary roof tarpaulin, the latter can now be drawn into the slotted tubes of the beams.

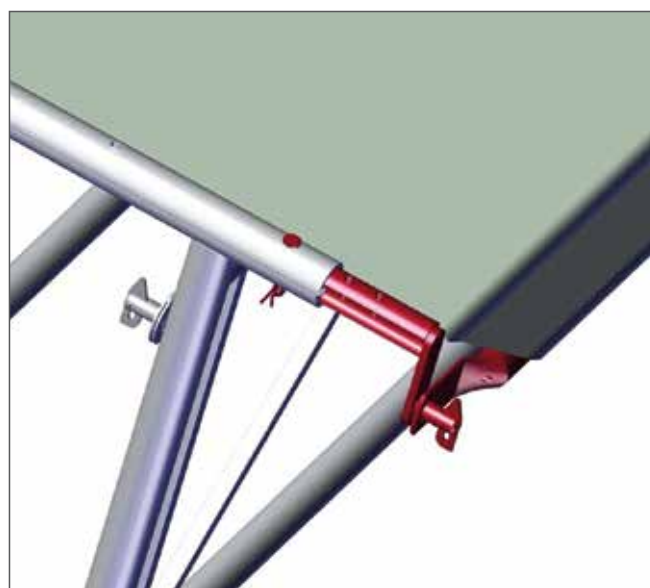




The sheeting is pulled over the entire element or, depending on the length, only to the centre of the ridge beam.



The sheet tensioning elements are mounted in the end of the slotted tube (upper chord). The brace in the hem of the tarpaulin is subsequently inserted on both sides into the guard rail pin of the sheet tensioning element and secured with the catch.

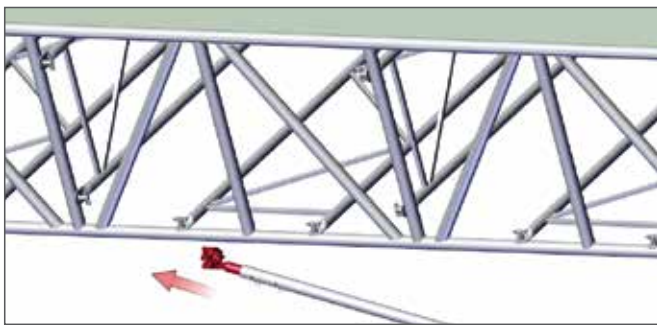
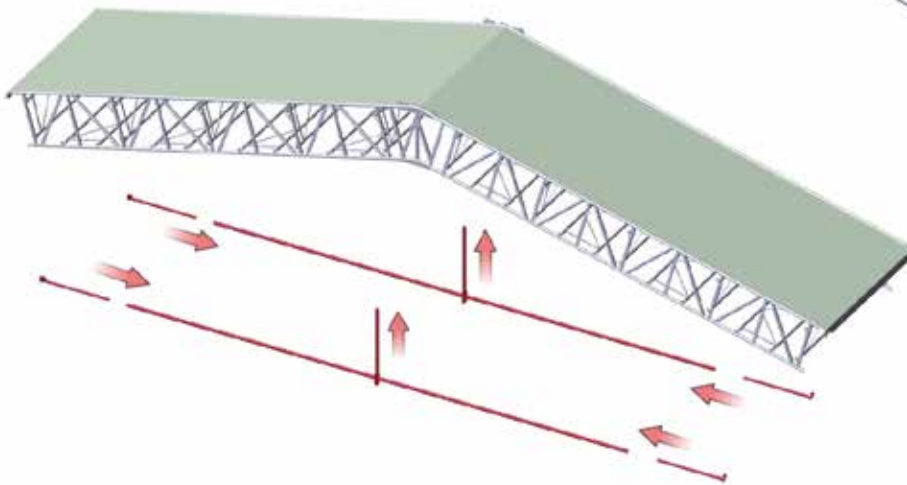
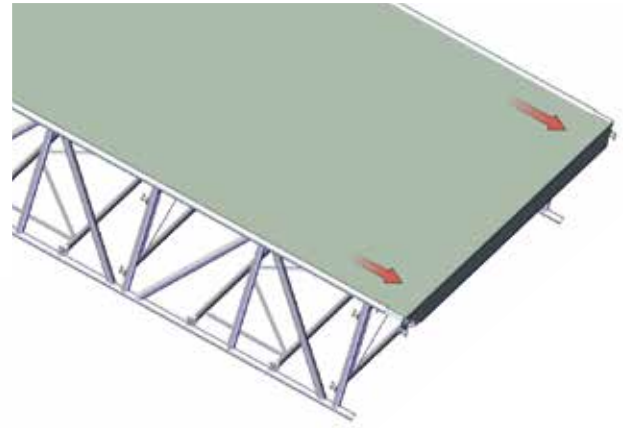


The sheeting is tensioned with the aid of the tensioning element. The sheet tensioning element is fastened to the upper chord in the desired position by means of bolts and spring cotters.

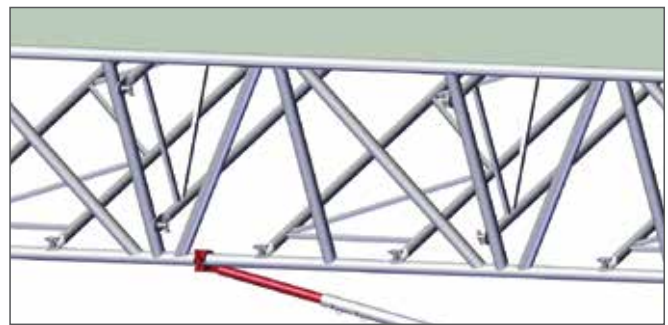
4 Assembly instructions – H85 temporary roof system

When the sheeting has been pulled taut, the ridge tie bars, consisting of a vertical element and two horizontally adjustable connections, are mounted on each beam side.

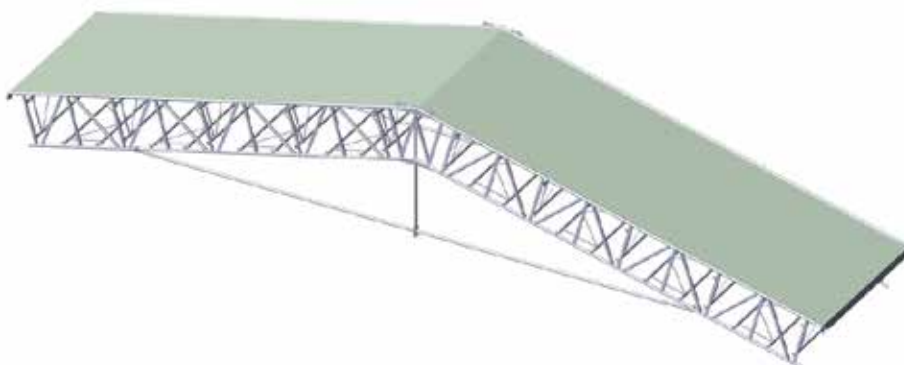
The components are inserted into one another and the vertical element is connected to the ridge beam by means of bolts and spring cotters.



The horizontal components are subsequently fastened to the temporary roof beams by means of couplings.

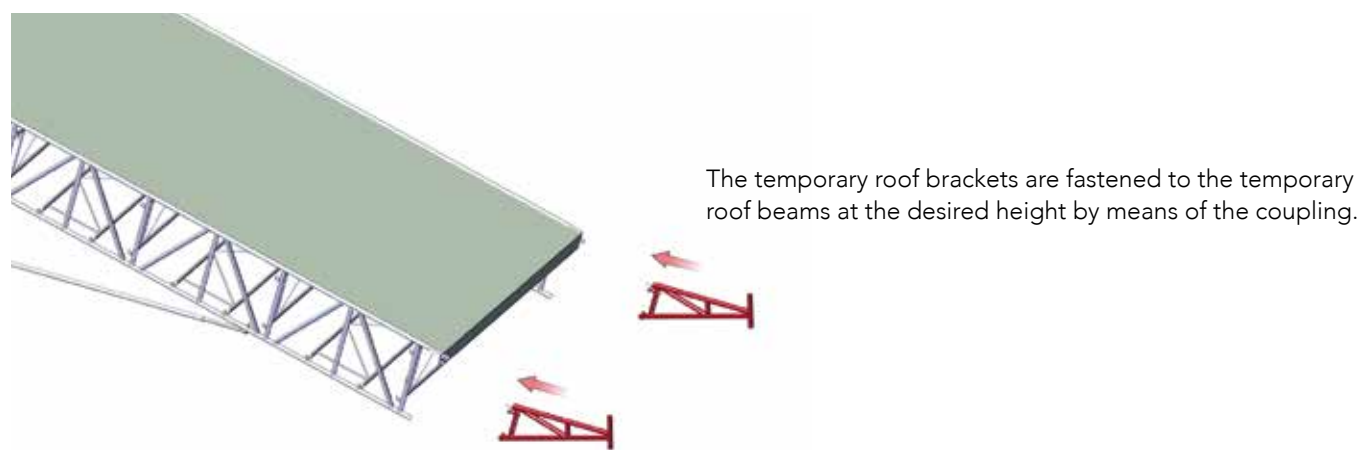


The insertion tubes are connected to the first element by means of bolts and spring cotters.

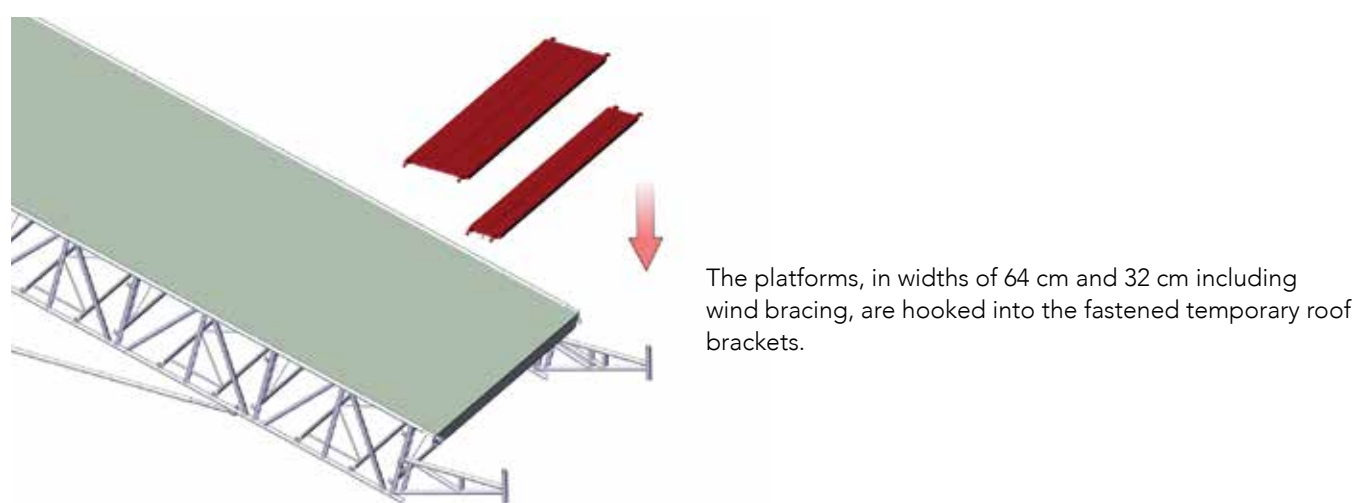




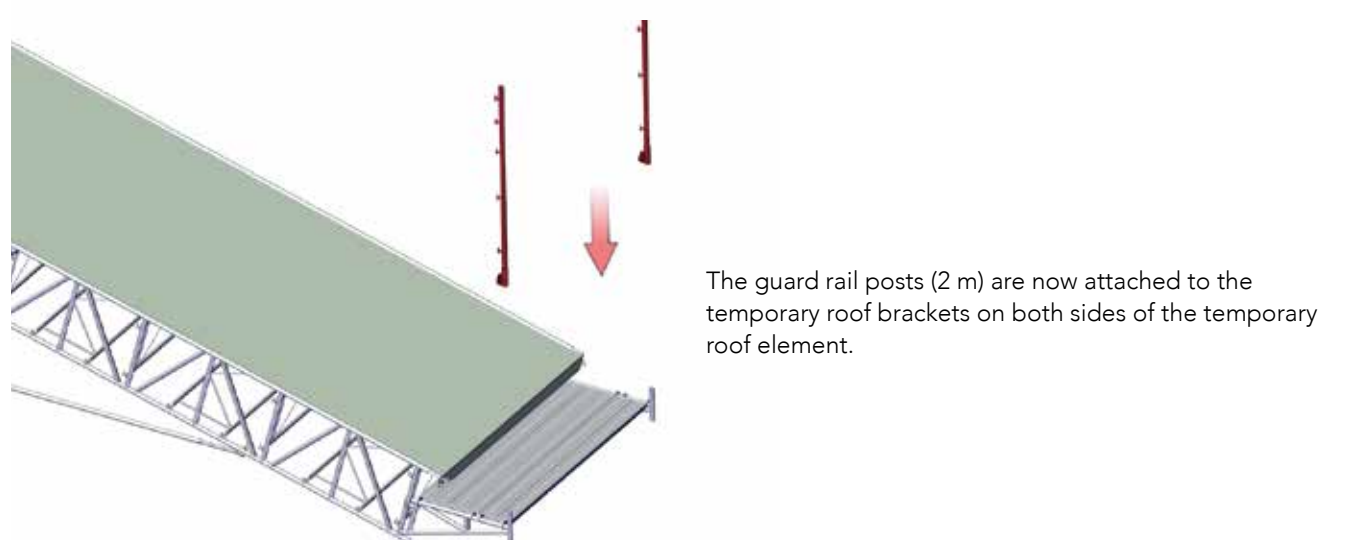
4.4 Assembly of the inspection gallery on the ground



The temporary roof brackets are fastened to the temporary roof beams at the desired height by means of the coupling.

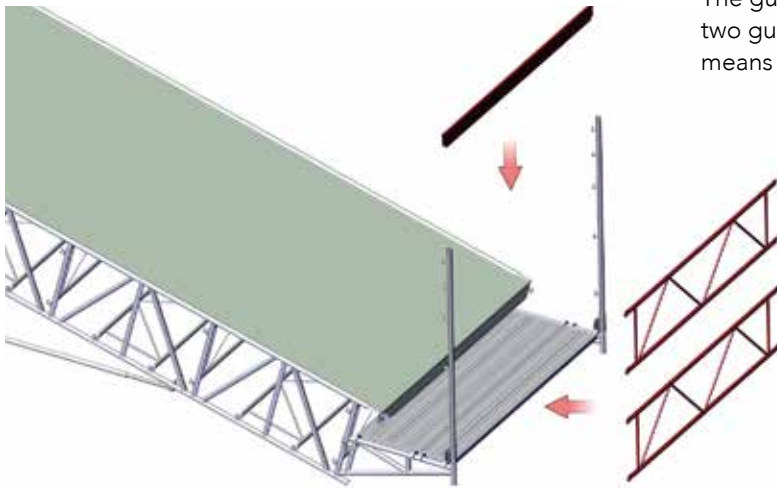


The platforms, in widths of 64 cm and 32 cm including wind bracing, are hooked into the fastened temporary roof brackets.

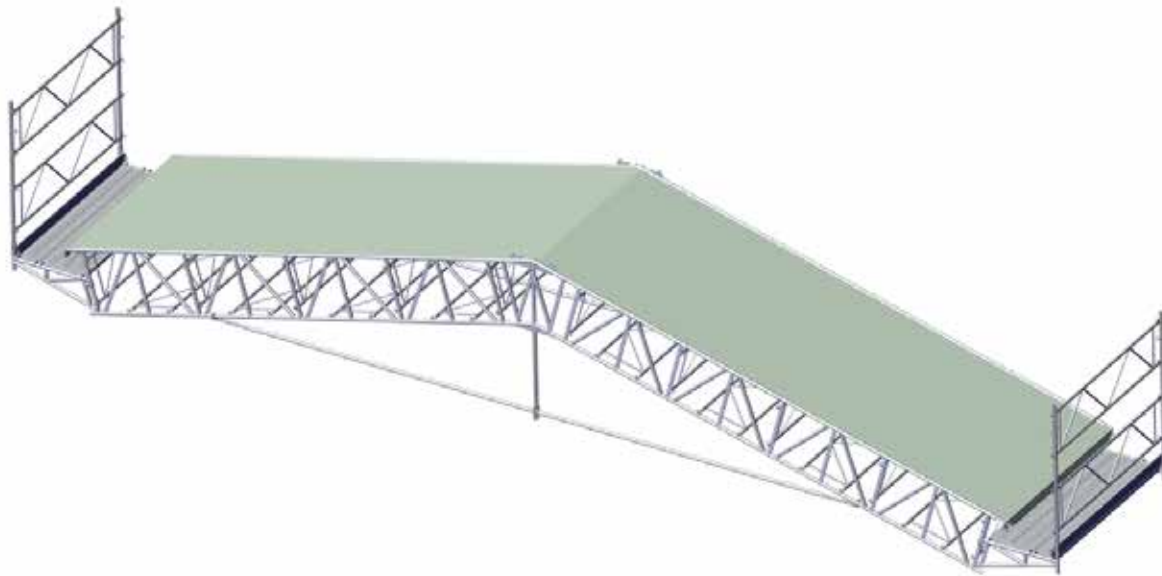


The guard rail posts (2 m) are now attached to the temporary roof brackets on both sides of the temporary roof element.

4 Assembly instructions – H85 temporary roof system

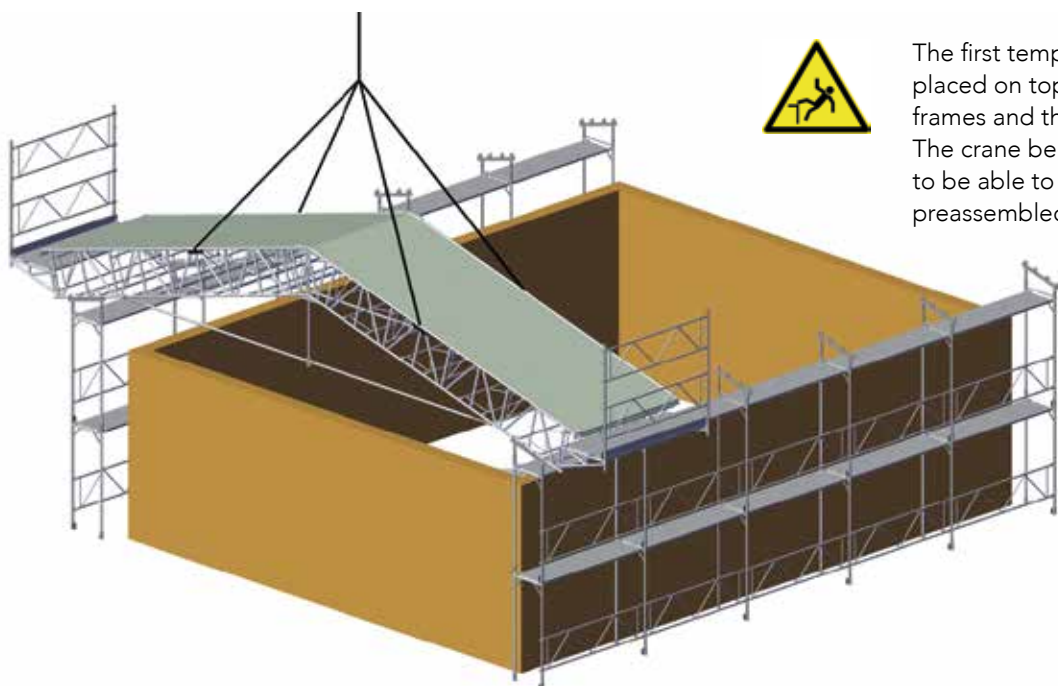


The guard rails and the toe board are now mounted in the two guard rail posts. The guard rails must be secured by means of the railing pin catch.

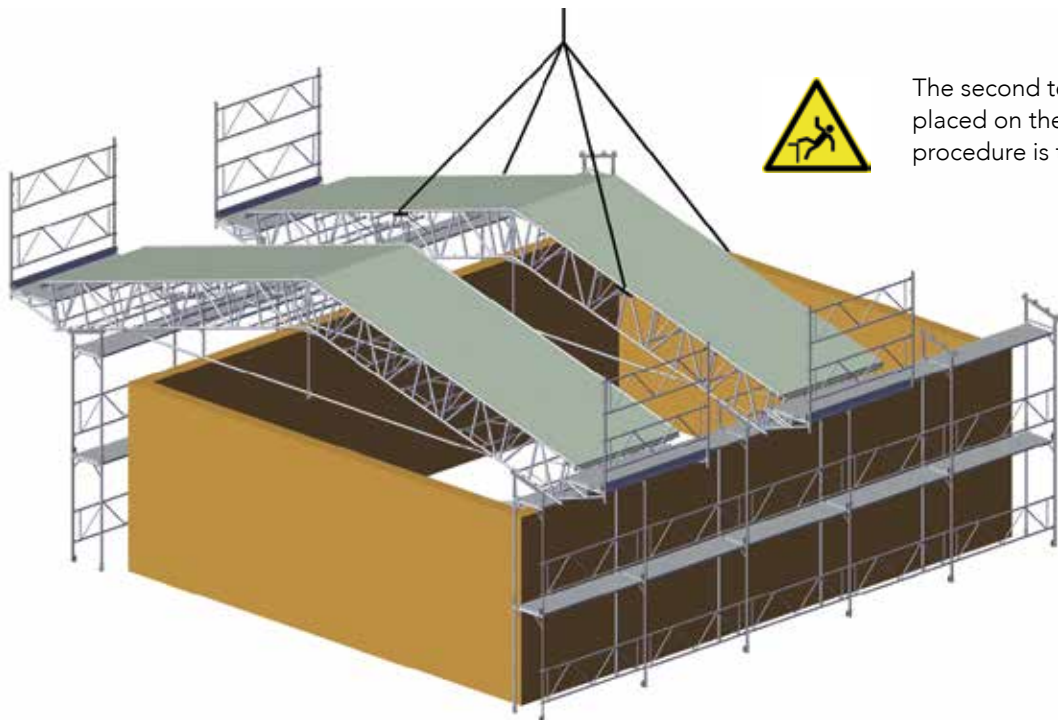


Note: We recommend that you fit the inspection gallery in every case. If this is dispensed with for individual reasons, a safety officer must be consulted to ensure the safety of the workers and the corresponding measures are to be implemented.

4.5 Placing the temporary roof elements on the support frame / intermediate fields



The first temporary roof element is placed on top of the four roof support frames and the couplings are closed. The crane belts are released in order to be able to place the second preassembled element in position.

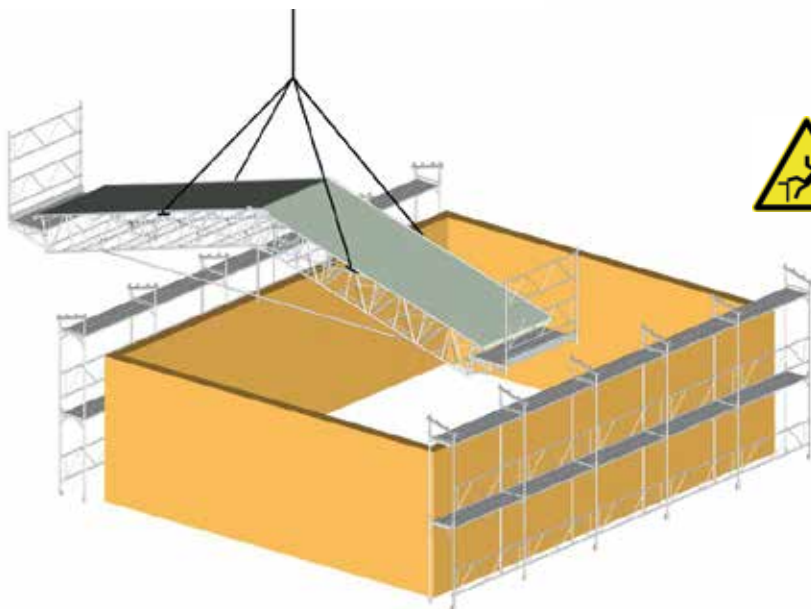
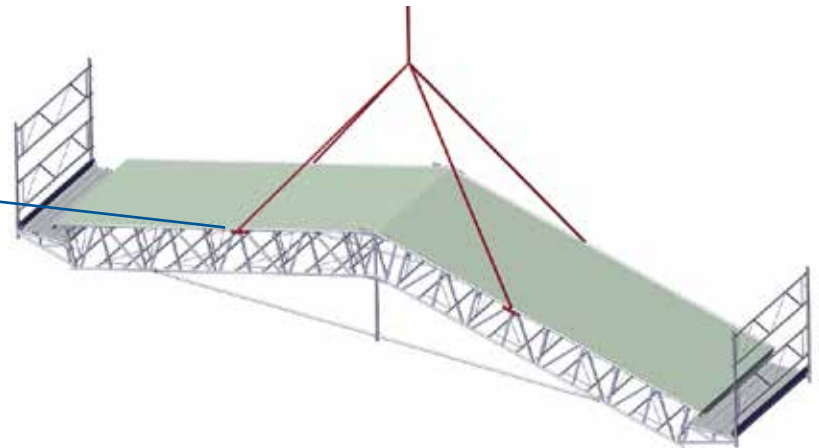
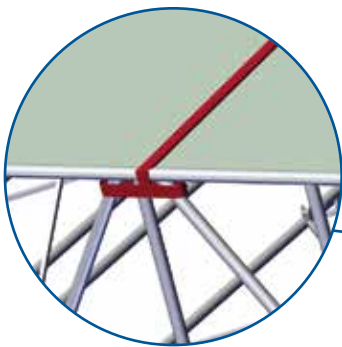
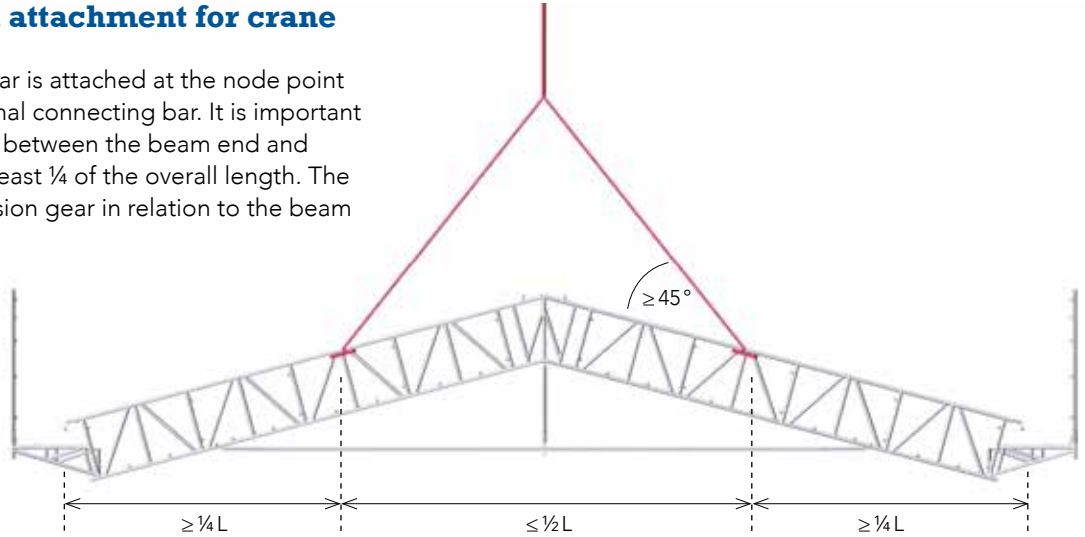


The second temporary roof element is placed on the next but one field. The procedure is the same as before.

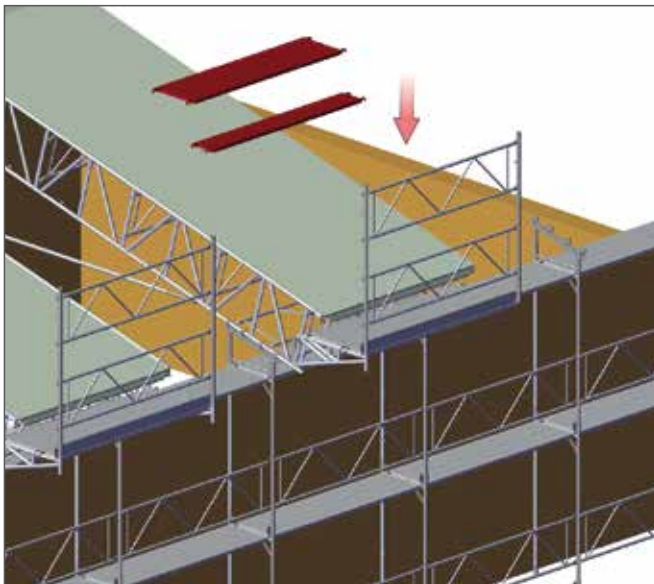
4 Assembly instructions – H85 temporary roof system

4.6 Temporary roof element with suspension attachment for crane

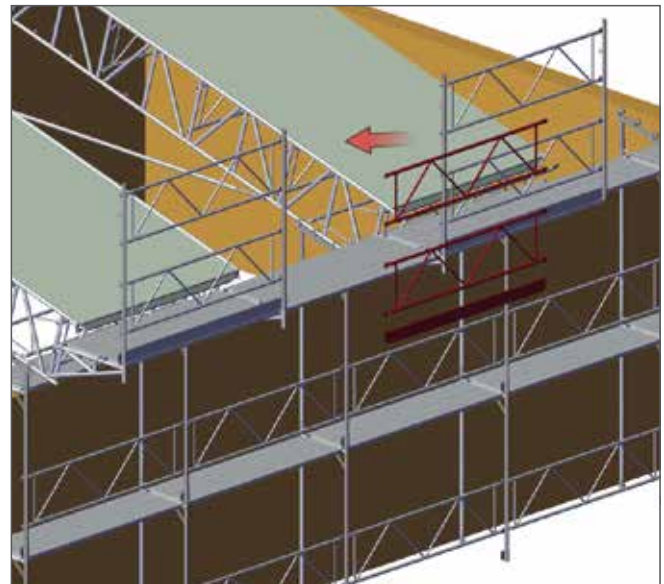
The crane suspension gear is attached at the node point of the vertical and diagonal connecting bar. It is important that the suspension gear between the beam end and the connecting bar is at least $\frac{1}{4}$ of the overall length. The inclination of the suspension gear in relation to the beam must be at least 45° .



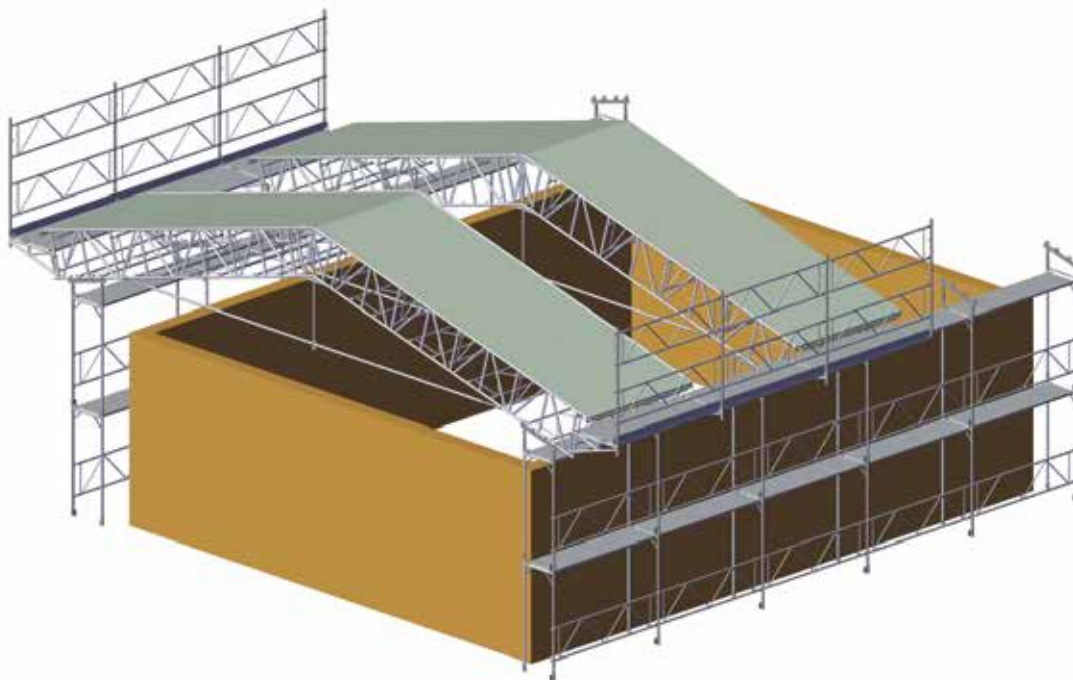
The entire temporary roof element is lifted with the crane and carefully manoeuvred over the support frame. The couplings of the support frames are opened and the beams are set carefully down on the support frames.



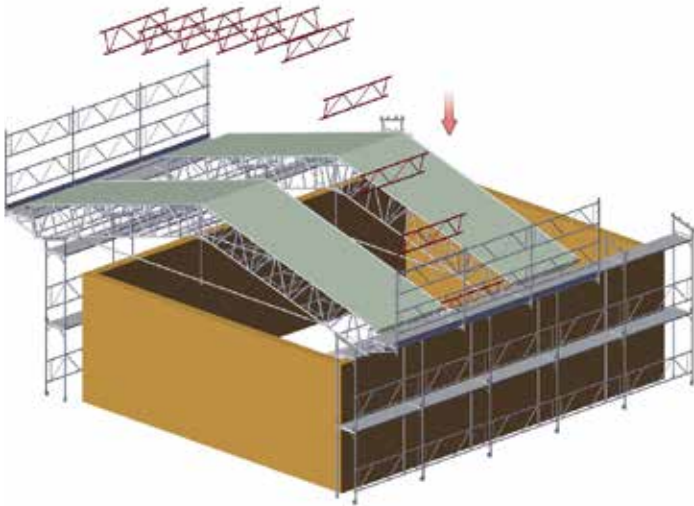
The platforms, guard rails and toe board for the inspection gallery are attached in the intermediate field that has now been created.



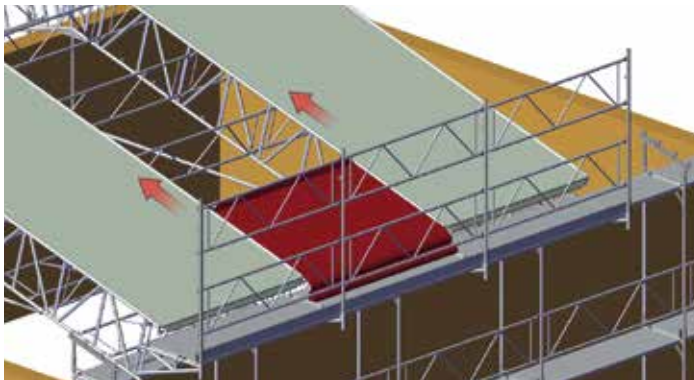
This procedure is also carried out on the opposite side.



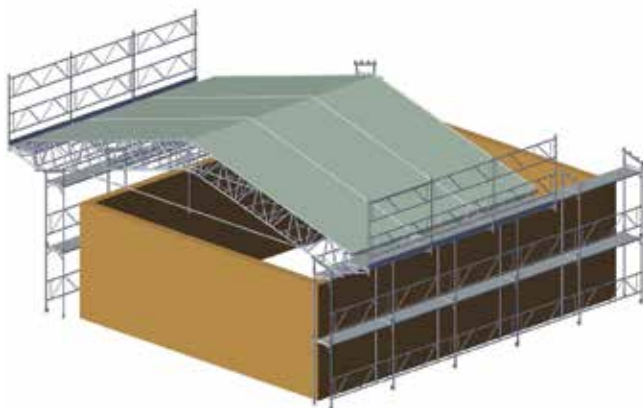
4 Assembly instructions – H85 temporary roof system



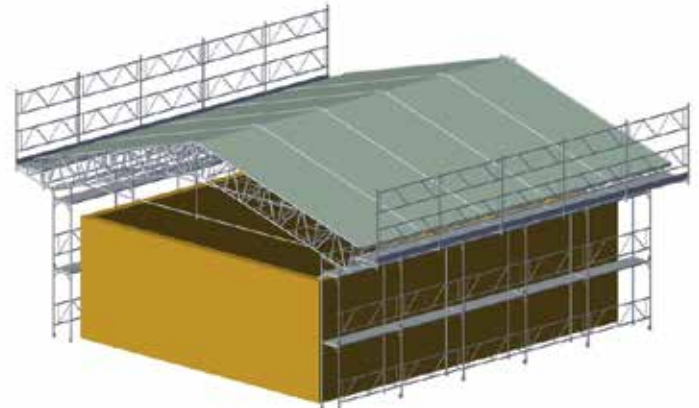
Subsequently, all vertical stiffening elements (guard rails) are mounted in the intermediate field. As the temporary roof tarpaulins may not be stepped on, auxiliary scaffolding or the use of PPE for safety is absolutely necessary here.



Once all vertical stiffening elements have been mounted, the temporary roof tarpaulins can be pulled in. The procedure is the same as described in the previous section.



These procedures are now continued in succession until the entire support frame is covered.



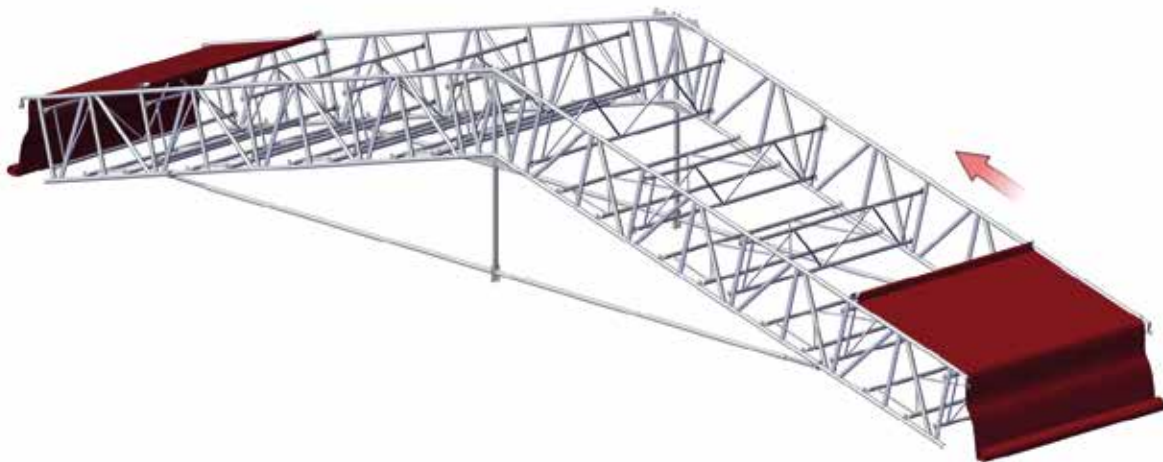
It is important to use a fully stiffened temporary roof field at both ends of the support frame (vertical and horizontal stiffening elements).

5 Further assembly options

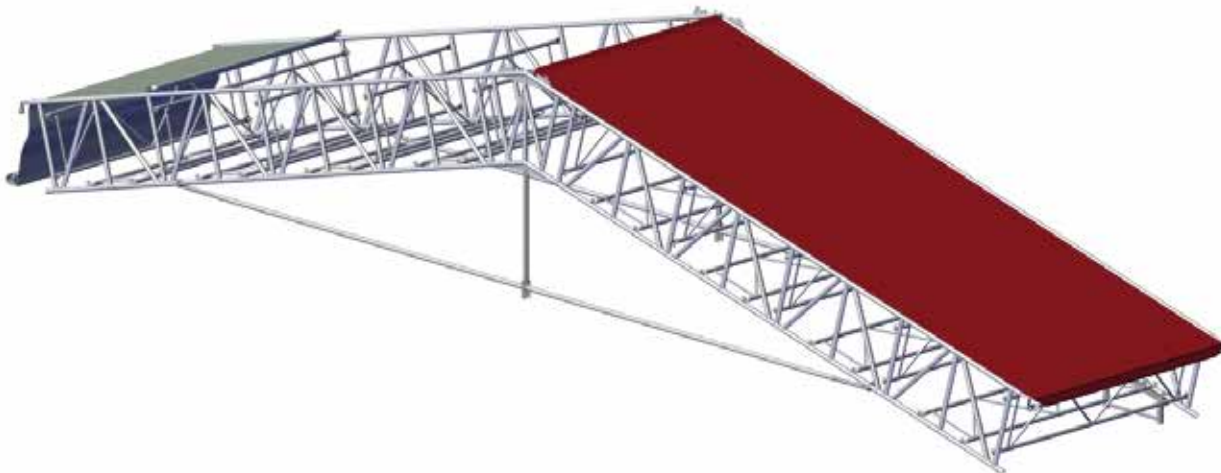


5.1 Assembly of the ridge capping

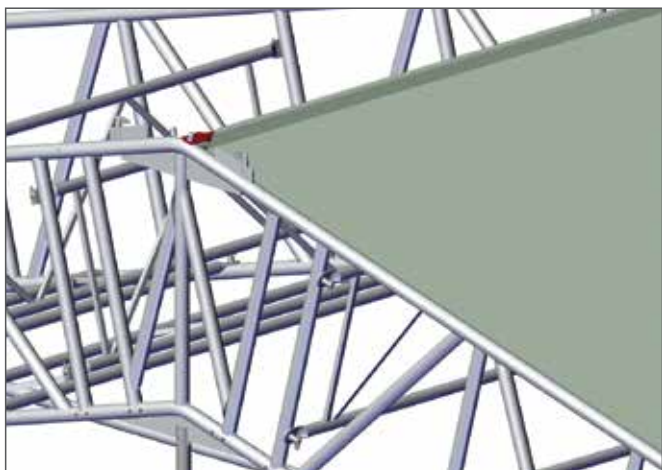
With a large span (from 20 m), one sheet is no longer sufficient for both sides of the temporary roof element. In this case one sheet is drawn up to the ridge on each side. To ensure in this case that no water can enter, a ridge capping is additionally mounted.



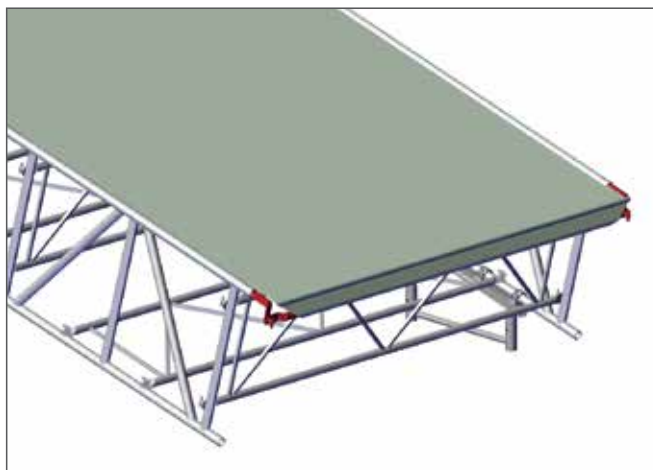
As described in the previous assembly, the sheet is pulled along the temporary roof beam with the help of the brace.



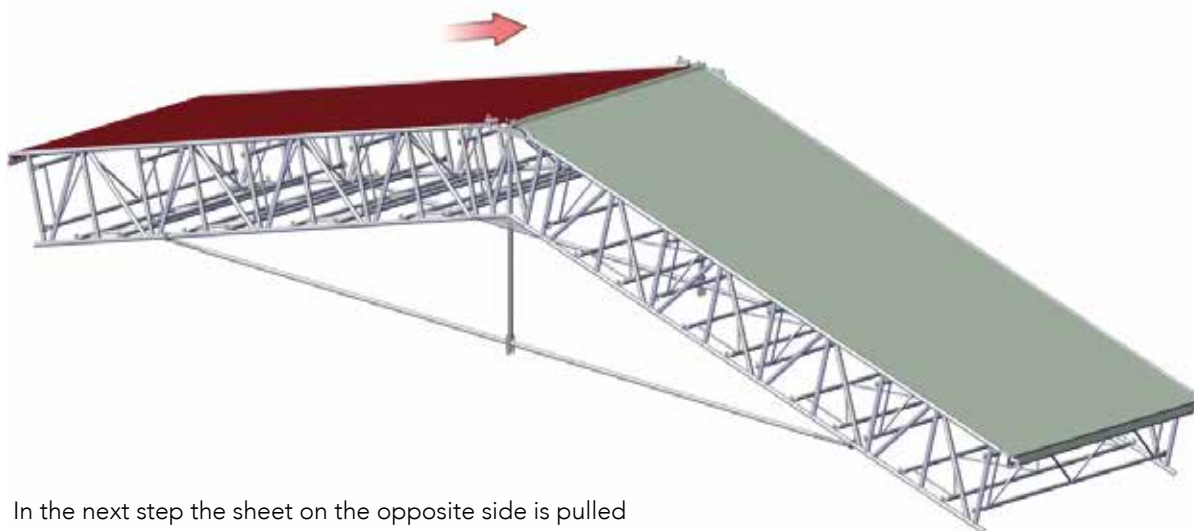
5 Further assembly options



The brace is subsequently hooked into the pin provided on the ridge beam. The brace is to be secured by means of spring cotters.



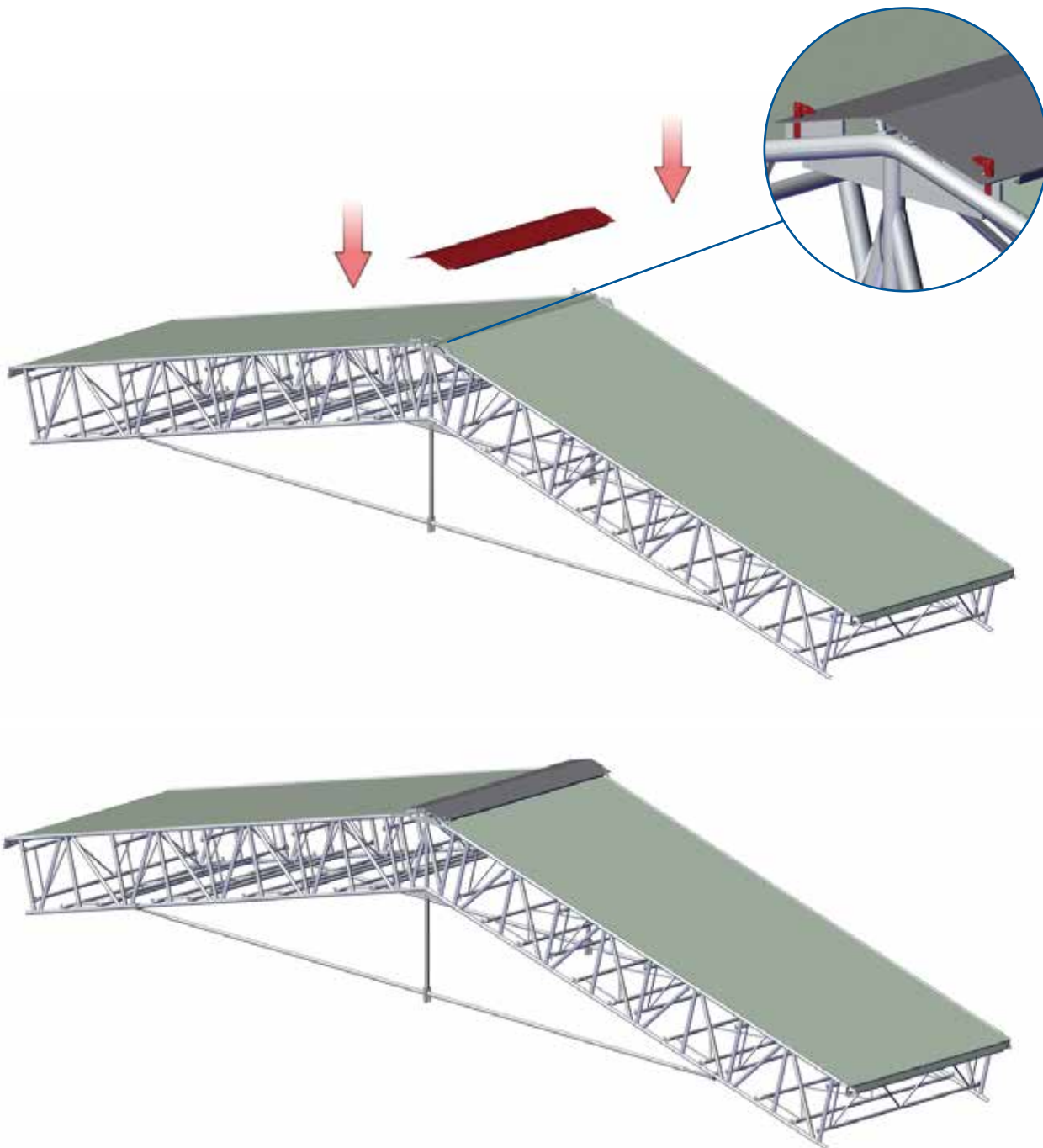
As with a single tarpaulin, the tension is generated by the sheet tensioning element in the lower area.



In the next step the sheet on the opposite side is pulled up, tensioned and secured in the same way.



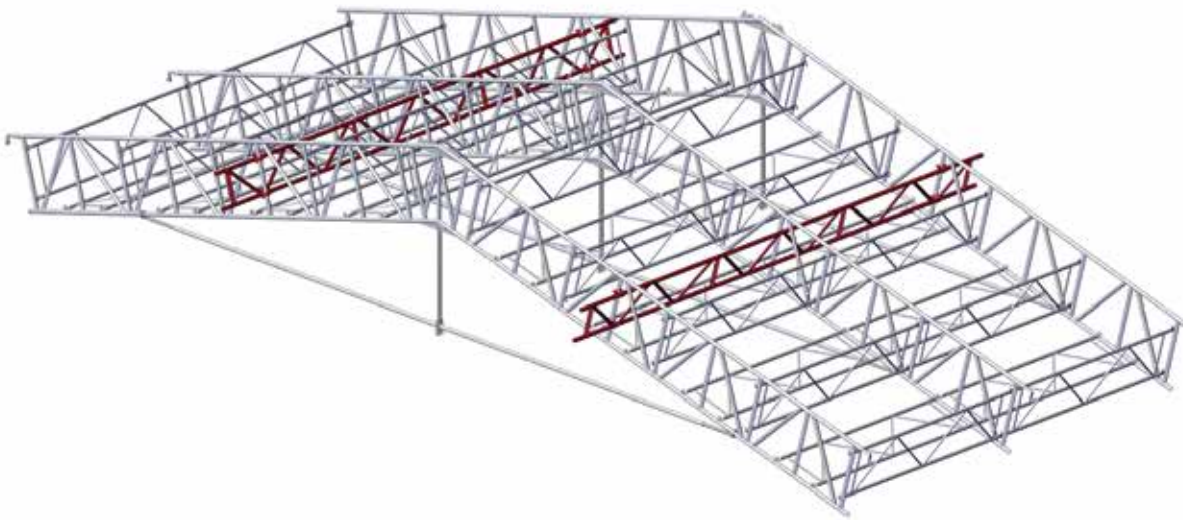
The ridge capping is subsequently mounted on the ridge beam. The cut-outs provided in the ridge capping are moved over the pins and secured by means of the railing catches.



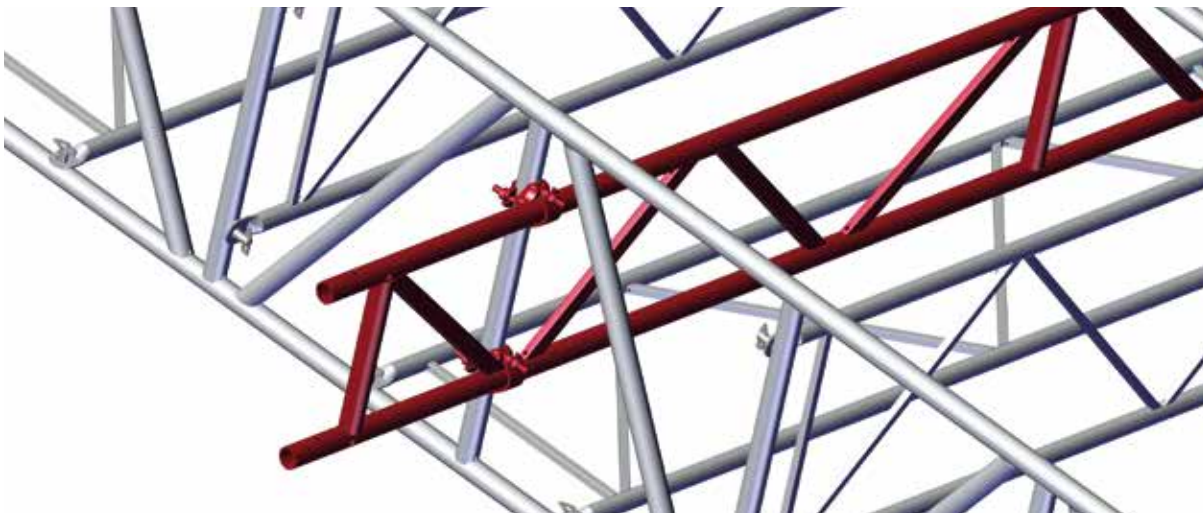
5 Further assembly options

5.2 Crane suspension with double field

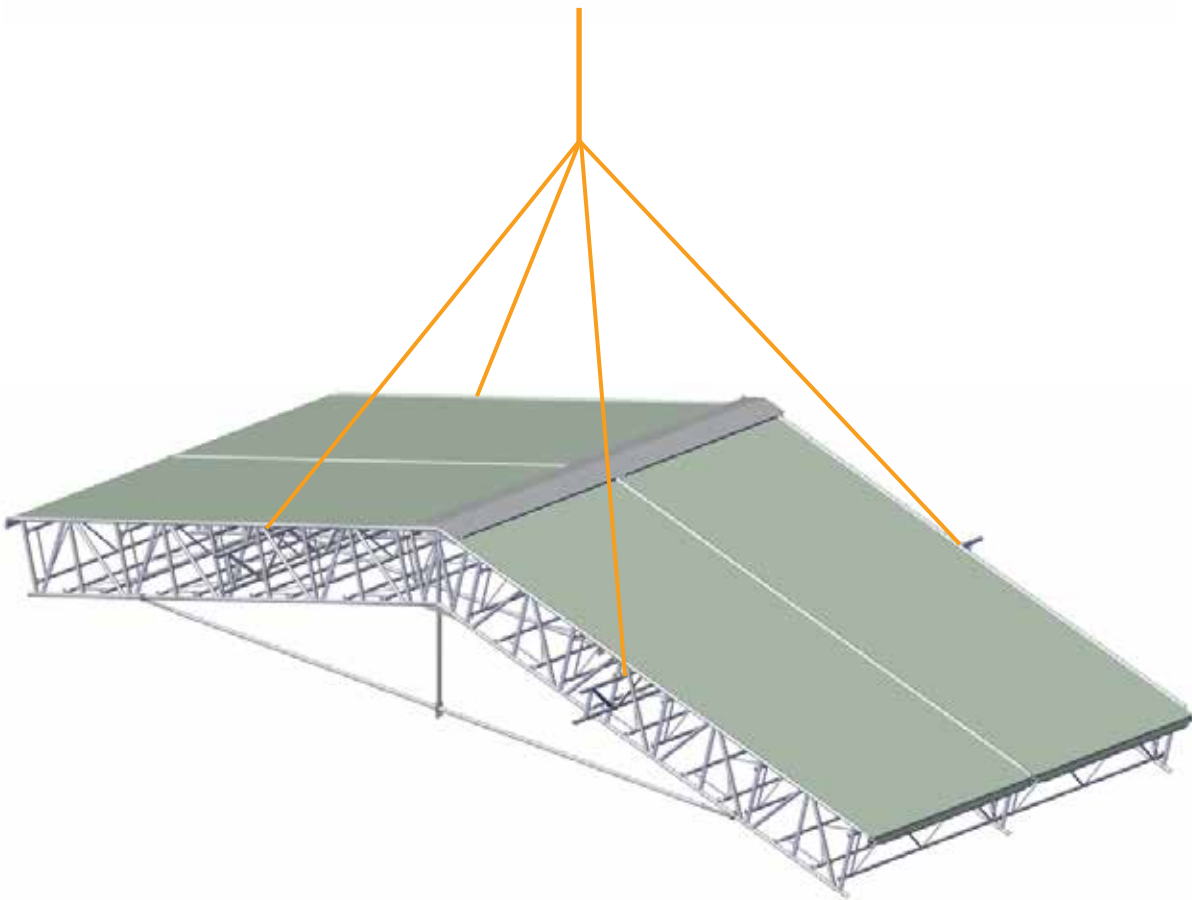
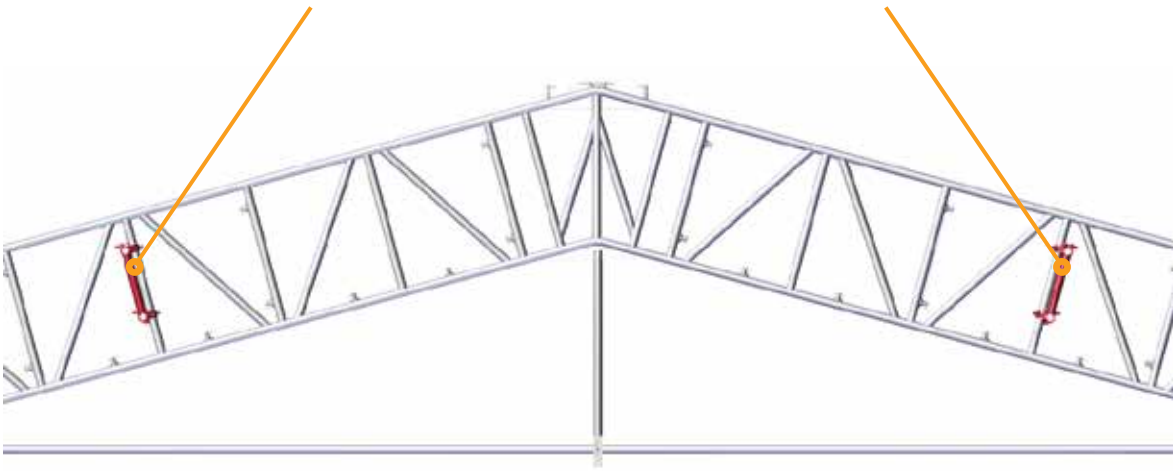
The two outer fields of each temporary roof must be equipped with vertical and horizontal stiffening fields. It may therefore be necessary to assemble a fully stiffened double field on the ground and to lift it onto the support frame with the help of a crane. In this case a beam must be pulled in over the entire double field in each crane suspension area.



The beam is mounted by means of couplings on each vertical tube, where the previous crane suspension points were also located (see *chapter 4.6*). The horizontal bridging beams are attached to each vertical tube of the temporary roof beam.



6 Disassembly



6 Disassembly

The temporary roof is disassembled in the reverse order to the assembly described here.

MATO N – temporary roof system and accessories

Temporary roof beams

- Beams made of aluminium with 45 cm construction height
- Tube Ø 48.3 mm
- 8 per bundle

Wall thickness in mm	Length in cm	Height in cm	Weight in kg	Order no.
4	160	45	8.3	N-560160
4	310	45	15.5	N-560310
4	410	45	19.9	*N-560410
4	510	45	24.9	N-560510
4	610	45	29.4	N-560610
4	710	45	34.2	*N-560710
4	810	45	38.9	N-560810

* not held in stock



- Aluminium beam with 85 cm construction height for spans up to 38 m

Wall thickness in mm	Length in cm	Height in cm	Weight in kg	Order no.
4	160	85	13.4	N-561160
4	310	85	25.0	N-561310
4	410	85	34.3	*N-561410
4	510	85	39.0	N-561510
4	610	85	48.3	N-561610
4	710	85	57.6	*N-561710
4	810	85	62.3	N-561810

* not held in stock



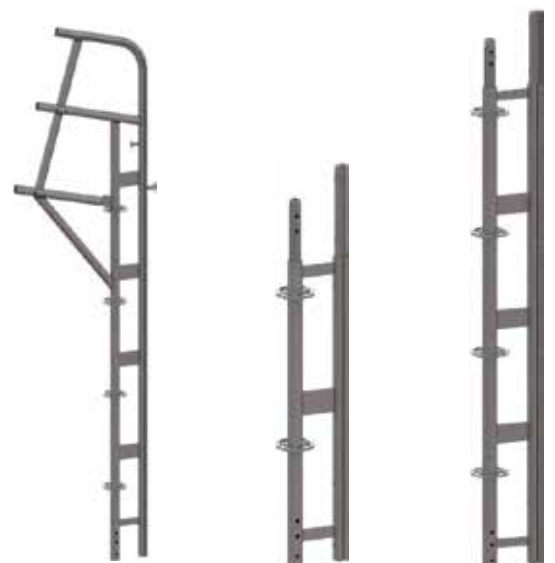
Wall beams

- made of aluminium
- for MATO 8 walers
- ideal for mobile temporary roofs and event roofs

Wall thickness in mm	Length in cm	Width in cm	Weight in kg	Order no.
4	310	20	16.1	N-8-563300

- Wall beam extension

Wall thickness in mm	Length in cm	Width in cm	Weight in kg	Order no.
4	100	20	6.0	N-8-563100
4	200	20	10.6	N-8-563200



N-8-563300

N-8-563100

N-8-563200



Wall retainer

- for temporary roof

Length in cm	Width in cm	Weight in kg	Order no.
70	8	4.4	N-588045



Ridge beam end piece

- made of aluminium
- for 45 cm temporary roof beams

Length in cm	Weight in kg	Order no.
165	7.0	N-588010
115	3.8	N-588020



N-588010



N-588020

- for 85 cm temporary roof beams

Length in cm	Weight in kg	Order no.
165	7.9	N-588021



N-588021

Connecting tube

- made of steel
- for round tube

Length in cm	Weight in kg	Order no.
50	2.9	N-560050



- made of aluminium
- for slotted tube

Length in cm	Weight in kg	Order no.
60	1.2	N-560060



Sheet tensioning element

- Aluminium set: Aluminium sheet tensioning element, including bolt $\varnothing 12 \times 60$ mm and spring cotter

Length in cm	Weight in kg	Order no.
30	1.5	N-588040



MATO N – temporary roof system and accessories

Foam rubber gasket

- for slotted tube

Ø Diameter in mm	Order no.
50	N-850002



- for bolt

Ø Diameter in mm	Order no.
20	N-850003



Ridge beam

- made of aluminium

Length in cm	Height in cm	Weight in kg	Order no.
100	45	6.0	N-560100
110	85	10.9	N-561110



N-560100



N-561110

Ridge capping

- made of aluminium, textured
- can be walked on only with fall arresters fitted all round

Length in cm	Width in cm	Weight in kg	Order no.
250	80	17.1	N-566250
300	80	20.5	N-566300



Tie bars

- Ridge tie bar incl. connectors

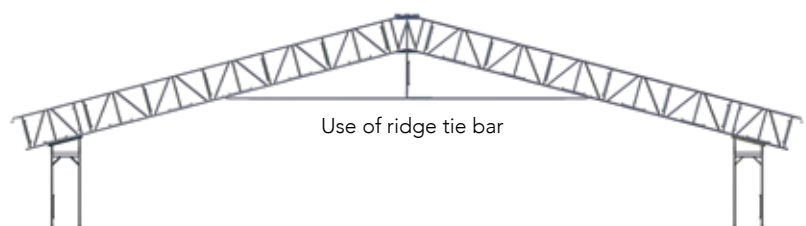
Length in cm	Weight in kg	Order no.
800	24.1	N-564800



- Soffit tie bar

Length in cm	Weight in kg	Order no.
300 × 800	48.0	*N-565010
300 × 700	54.0	*N-565014
400 × 800	60.0	*N-565018
500 × 760	66.0	*N-565022

* not held in stock





Roof support frame

- galvanised steel

Length in cm	Weight in kg	Order no.
65/95	12.8	N-2-570095
70/100	15.7	N-1-570100

- compatible with MATO 8
- adjustable from 0 to 15°

Length in cm	Weight in kg	Order no.
75/110	35.5	N-8-571110



N-2-570095



N-1-570100



N-8-571110

Gutter

- made of steel
- End piece with water drain

Length in cm	Width in cm	Weight in kg	Order no.
270	15	21.2	*N-588260
270	15	21.0	*N-588270

* not held in stock



N-588260



N-588270

- Gutter bracket

Weight in kg	Order no.
2.4	*N-589020

* not held in stock



N-589020

Catwalk bracket for temporary roof beams

- mountable on an 85 cm temporary roof beam
- The bracket can be walked on horizontally due to the inclination of 15°
- permissible load 120 kg/m

Width in cm	Weight in kg	Order no.
110	6.1	N-254110



N-254110

Guard rail post

- made of steel

Height in cm	Weight in kg	Order no.
200	7.7	1-222200



1-222200

MATO N – temporary roof system and accessories

Steel brace

- horizontal with screw mount
- made of galvanised steel tube
- Tube Ø 48.3 mm

Length in cm	Weight in kg	Order no.
150	6.9	N-574150
200	7.1	N-574200
250	11.0	N-574250
300	12.3	N-574300



- diagonal with screw mount

Length in cm	Width in cm	Weight in kg	Order no.
250	250	10.9	N-575250
300	250	12.1	N-575300
200	250	10.1	N-576200
200	70	7.5	N-577070
200	100	7.9	N-577100



Aluminium guard rail

- for temporary roof beam height 85 cm
- with diagonal stiffening
- 20 per bundle

Length in cm	Width in cm	Weight in kg	Order no.
70	60	1.5	1-130070
100	60	2.2	1-130100
150	60	3.1	1-130150
200	60	4.2	1-130200
250	60	5.1	1-130250
300	60	6.2	1-130300
350	60	7.1	1-130350





Aluminium brace

- horizontal with pressing at the ends
- for mounting under the ridge capping

Length in cm	Weight in kg	Order no.
65	0.6	N-131065
70	0.6	N-131070
100	0.8	N-131100
150	1.2	N-131150
200	1.6	N-131200
250	2.0	N-131250
300	2.4	N-131300



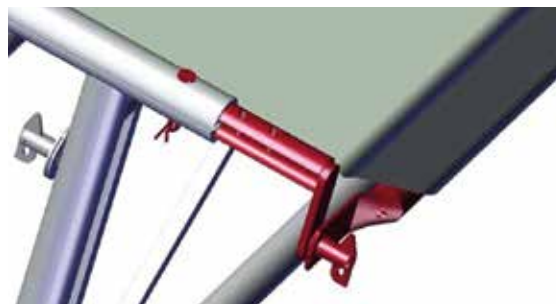
MATO N – temporary roof system and accessories

Temporary roof sheet

- with cord 650 g/m²
- Colour coding

Length in cm	Width in cm	Weight in kg	Order no.
• 580	249	10	*N-580010
• 680	249	11	*N-580014
• 880	249	15	N-580018
• 1190	249	20	N-580022
• 1360	249	22	N-580026
• 1760	249	29	N-580030
• 1960	249	32	N-580034
• 2180	249	35	*N-580038

* not held in stock



- Custom dimensions

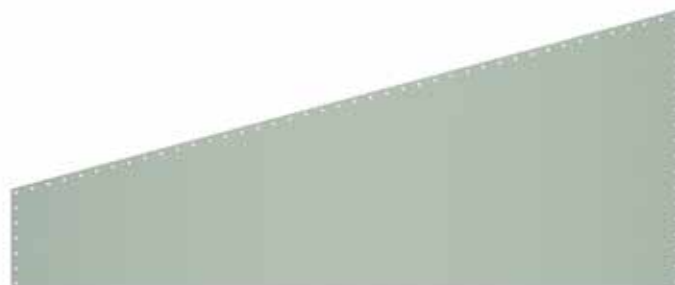
Order no.
*N-580001

* not held in stock

- Gable sheets
- with cord 650 g/m² and eyelets

Length in cm	Width in cm	Weight in kg	Order no.
360	100	4	*N-584010
460	100	5	*N-584014
560	100	7	*N-584018
660	100	8	*N-584022
860	100	12	*N-584026
1170	100	20	*N-584030

* not held in stock



- Custom dimensions

Order no.
*N-584001

* not held in stock

Bolt

- including spring cotter Ø 3 mm

Ø Diameter in mm	Length in cm	Weight in kg	Order no.
12	60	0.10	Z-570012





Temporary roof anchor, steel

- Base plate for temporary roof anchoring
- also suitable as scaffolding anchor in special structures
- galvanised steel

Length in cm	Width in cm	Weight in kg	Order no.
60	30	23.4	N-585100



- Earth spike for temporary roof anchoring
- galvanised steel

Length in cm	Weight in kg	Order no.
100	6.0	N-585101



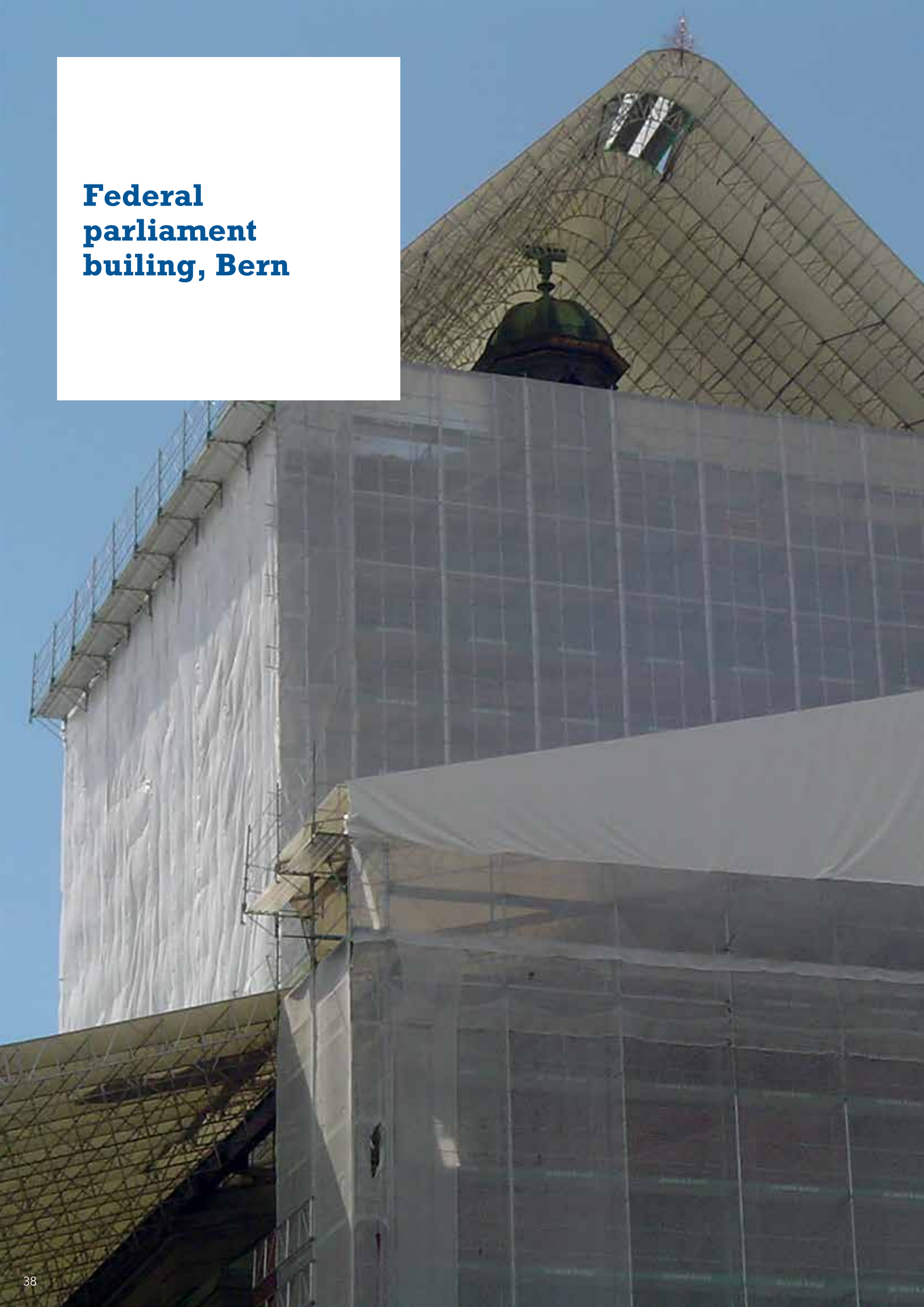
Feed roller for temporary roof sheets

- for feeding in the temporary roof sheets

Weight in kg	Order no.
2.0	N-850004



**Federal
parliament
building, Bern**



General Terms and Conditions of Business (T&Cs) as at 1 January 2013

These T&Cs govern legal relationships between Tobler AG (hereinafter referred to as TOBLER) and its contracting partners (hereinafter referred to as Client) arising from the sale, rental and assembly of scaffolding, formwork and the corresponding accessories. They constitute a framework contract applicable to the conclusion of all contracts and are binding until revoked.

1. Tender and conclusion of the contract

- 1.1. Tenders, goods and services will be provided by TOBLER solely on the basis of these T&Cs, which will be deemed to have been accepted when the goods or services are ordered. The T&Cs will also expressly apply to all future orders by the Client.
- 1.2. A contract will be concluded when TOBLER accepts a written, telephone or personal order unconditionally.
- 1.3. Verbal assurances by TOBLER will only be valid if confirmed in writing and signed.
- 1.4. TOBLER will only be bound by the Client's general terms and conditions of business if they correspond to its own or if it has agreed to them in writing. Divergent conditions of the Client which TOBLER has not expressly recognised in writing will not be binding upon it.

2. Technical documents

- 2.1. Prospectuses, catalogues, etc. will not be binding in the absence of any agreement to the contrary. Details in technical documents will only be binding if they are expressly guaranteed in writing.
- 2.2. The right to make technical modifications is reserved. Differences from the prospectus or from details in other sales documents or from earlier deliveries in terms of configuration, weights and measurements of the goods will only be relevant if the intended purpose of the goods is restricted to a significant extent.
- 2.3. The final potential configuration is expressly reserved, particularly in the case of new designs or special configurations.
- 2.4. TOBLER will be entitled to supply equivalent unbranded parts from subcontractors.

3. Terms of payment

- 3.1. In the absence of any agreement to the contrary, payment must be made to TOBLER within thirty days, strictly net. The Client will be entitled to deduct a prompt payment discount of 2% for payment within ten days of the date of the invoice. Further deductions will only be admissible if expressly agreed in writing. Unjustified deductions will be charged retrospectively.
- 3.2. In the case of arrears, the Client will be liable for 7% p.a. interest on arrears with effect from the due date of payment, without a reminder from TOBLER.
- 3.3. The absence of minor parts from the order or the assertion of claims under guarantee against TOBLER will not entitle the Client to delay payments due.
- 3.4. Payment of the entire purchase price or the balance thereof will be due immediately if acceptance is delayed by the Client. The Client must bear the cost of any demurrage by the transport contractor.
- 3.5. Should the deposit not be paid or the requisite security not be provided in accordance with the contract, TOBLER will be entitled to uphold or cancel the contract and demand compensation in either case.

4. Delivery terms

- 4.1. In the absence of any agreement to the contrary, the place of fulfilment will be TOBLER's registered office in Rheineck.
- 4.2. Despatch and carriage are for the account and at the risk of the Client. The Client will be responsible for insurance against loss of any type whatsoever. The Client must bear any customs duty payable.
- 4.3. Pallets and crates are only made available on loan. The Client must return them at its own expense, otherwise TOBLER will invoice their cost.
- 4.4. Delivery will be made at the time desired by the Client, as far as possible. Notified or agreed delivery periods and times will be observed as far as possible, but are not binding. Should delivery be delayed for reasons for which TOBLER is not responsible (force majeure, import or transport problems, delay by third-party suppliers, changes subsequently demanded by the Client, etc.), the delivery date will be postponed accordingly.
- 4.5. A failure to observe the delivery deadline will not entitle the Client to cancel the contract, delay acceptance or demand compensation for delay.
- 4.6. Should it be impossible to provide goods and services in the foreseeable future due to events over which TOBLER has no control, TOBLER will be entitled to cancel the contract by notifying the Client, without incurring liability for compensation.
- 4.7. If the Client has been informed that the goods ordered are ready for despatch or collection, it will be obliged to collect or arrange delivery of the goods within five working days of notification. The Client will be in arrears of acceptance after this deadline has expired. In the event of arrears of acceptance, the Client will be obliged to compensate TOBLER for losses thus incurred. In this case, TOBLER will be entitled to retain the delivery at the expense and risk of the Client, store it on its premises, charging an appropriate fee, or cancel the contract, with payment of compensation for the loss incurred by TOBLER. Delayed acceptance will be deemed to apply if the Client unjustifiably refuses to accept the consignment due to delays in delivery. Even if TOBLER retains the goods or stores it on its premises, it will be entitled to cancel the contract at any time, without notice and without setting a period of grace, and to demand repayment of the loss which it has incurred.

5. Transfer of risk

- 5.1. The risk applicable to the deliverable will be transferred to the Client when the consignment leaves TOBLER.
6. Complaints
- 6.1. The Client must inspect the goods and assembly work immediately after receipt and execution.
- 6.2. It must notify TOBLER of any shortcomings in writing within three days, otherwise the goods and services will be deemed to have been approved.

7. Guarantee under the purchase agreement

- 7.1. In the case of new products (with the exception of timber, spare parts, tarpaulins, nets, any plastic components, small parts such as screws, nuts, etc., and mountings such as cables and tarpaulin ties), TOBLER will issue a guarantee to the Client for six months with effect from despatch of the consignment from TOBLER, provided that examination and notification take place punctually in accordance with paragraph 6. Liability for particular product characteristics will only be accepted if guaranteed in writing by TOBLER. Differences attributable to production or material will not give rise to entitlement to a guarantee. Moreover, the guarantee will lapse if the Client or an authorised agent of the Client makes modifications or repairs to the goods without the written agreement of TOBLER.
- 7.2. Any guarantee whatsoever for used items is precluded. No guarantee will apply to installed parts from third-party suppliers or if installed parts from third-party suppliers cause a fault or damage, or inhibit operation.
- 7.3. The guarantee may be restricted to repair or replacement of the defective parts, at TOBLER'S discretion. Further claims under guarantee by the Client, particularly for rehibition, reduction or damages, are precluded.
- 7.4. Replaced parts are the property of TOBLER and must be returned to it.
- 7.5. Repair work or the supply of replacements will not extend or renew the period under paragraph 7.1. The guarantee period applicable to the original delivery will apply to the repaired or replaced parts.
- 7.6. TOBLER will be entitled to refuse to rectify defects for as long as the Client fails to fulfil its obligations to TOBLER, without restriction.

- 7.7. TOBLER rejects any guarantee for damage attributable to normal wear and tear, inappropriate or violent handling, excess stress, inappropriate use and maintenance of the items, the use of unsuitable materials, accidents or force majeure.
- 7.8. Only TOBLER may carry out repairs to scaffolding components. Otherwise any claim under guarantee will lapse.

8. Reservation of title under the purchase agreement

- 8.1. TOBLER will remain the proprietor of the item purchased until the purchase price, including interest and any other costs, has been paid in full. The Client is obliged to inform any tenant of premises on which it accommodates the item purchased of the reservation of title in writing, before storing it.
- 8.2. The Client authorises TOBLER to register retention of title with the responsible authority.
- 8.3. The Client may not sell, pledge, loan or rent the purchased item until full payment of the purchase price, including all interest and costs, has been made. The Client also undertakes not to remove the purchase item from Swiss territory without the express written agreement of TOBLER. The Client must disclose the reservation of title immediately in the case of pledging, retention or seizure, and inform TOBLER in writing whenever possible, before the corresponding measure is taken.
- 8.4. The Client is obliged to cooperate with measures necessary to protect TOBLER'S property, at its own expense.
- 8.5. The Client is obliged to insure the purchased item against all likely risks at its own expense to the benefit of TOBLER, throughout the term of retention of title. The Client must submit a corresponding certificate of insurance on demand. Should the Client fail to comply with this requirement, TOBLER will be entitled to subscribe to insurance for its own benefit, at the expense of the Client.

9. Provisions specific to rental

- 9.1. Rent will always be net of carriage to and from the place of use. The costs of carriage will be charged separately, if it is arranged by TOBLER.
- 9.2. The Client is obliged to notify any tenant on whose premises it accommodates the rented goods of TOBLER'S rights of ownership in writing, before placing it there.
- 9.3. The benefit and risk associated with the rented goods will be transferred to the Client no later than at the time at which it can dispose of said goods, i.e. either when the rented goods are transferred to the Client or a third party appointed by the latter at TOBLER'S warehouse or when the rented goods are unloaded on site, if the Client has commissioned TOBLER with carriage. If delivery to an unoccupied building site is ordered, TOBLER will not assume any guarantee for the integrity and completeness of the delivery.
- 9.4. The Client must treat the rented goods with care and maintain them properly. The Client will be invoiced and must pay for damage and excessive wear attributable to inappropriate use of the rented goods. Formwork must be used as economically and carefully as possible and not cut. In particular, all formwork must be treated with release agent before concreting. Formwork beams must not be truncated under any circumstances. The greatest possible care must be taken when compressing concrete poured into the formwork, in order not to damage it.
- 9.5. All rented goods must be returned in a clean condition when the rental period ends. Otherwise the costs of subsequent cleaning will be invoiced to the Client. The Client is responsible for return carriage, which must take place at its own expense. The rented goods must be prepared for unloading so that they can be lifted easily by crane. A separate charge will be imposed for any work necessary for unloading, such as rearrangement, etc.
- 9.6. The rental charge for formwork does not include consumables (spacing tubes, plugs, tapers, release agent, etc.). When handling the elements, care must be taken that their wooden parts are not scratched (e.g. by sharp edges and corners of other elements). Particular care must be taken not to damage elements when cleaning them. Following use, the formwork must be placed on the pallets and in the crates provided. Small parts must be boxed. A separate charge will be made for any cleaning, sorting and repair work which may be necessary. Lost small parts must be replaced.
- 9.7. The rented goods will be made available for the agreed term. Should the Client be in arrears of payment of the rent or should it handle the rented goods carelessly or contrary to instructions, TOBLER will be entitled to cancel the rental agreement immediately and repossess the rented goods. In this case, the costs of return carriage will be invoiced to the Client separately. The Client will also be obliged to pay compensation for premature termination of the rental agreement. In particular, TOBLER must be placed in the position which it would have enjoyed had the rental agreement remained in force for the entire anticipated rental term. In this case, TOBLER will not be obliged to ensure the re-rental of the goods throughout the remainder of the anticipated rental term.
- 9.8. Should no firm rental agreement term be anticipated or should the Client continue to use the rented goods beyond the contractual term originally intended, both parties will be entitled to terminate the rental agreement at any time, subject to observance of a fourteen-day period of notice.

10. Static calculations

- 10.1. The prices do not include static calculations. They will be invoiced additionally at the request of and in accordance with the requirements of the Client.

11. Prohibition of assignment and offsetting

- 11.1. The Client is not entitled to offset claims by TOBLER against its own claims unless TOBLER has expressly agreed to offsetting in writing.
- 11.2. The Client is prohibited from assigning claims arising out of the contractual relationship with TOBLER to third parties.

12. Preclusion of further liability

- 12.1. Any claims by the Client, with the exception of those expressly identified in these terms and conditions, on any legal basis whatsoever, particularly any claims for compensation, reduction or cancellation of the contract which are not expressly stipulated, are precluded. Under no circumstances will the Client be entitled to claim compensation for damage which does not affect the delivered item itself, such as loss of production, loss of use, orders, profit or other direct or indirect losses.

13. Amendments and liability









- 13.1. TOBLER reserves the right to amend these T&Cs at any time. The Client will be notified of amendments by circular letter or in another suitable way. They will be deemed to have been accepted unless a written objection is received within one month.

14. Copyright


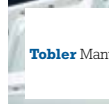





- 14.1. TOBLER retains unrestricted title to drafts, drawings, etc. which it has prepared. They may not be copied or rendered accessible to third parties without TOBLER'S permission.
- 14.2. The imitation of goods, even if for exclusive personal use, will be subject to prosecution under criminal law.
15. Applicable law and court of jurisdiction
- 15.1. All legal relationships between the Client and TOBLER are governed by Swiss law, to the exclusion of the UN Convention on Contracts for the International Sale of Goods.
- 15.2. The sole place of jurisdiction for any proceedings and the place of recovery, but only for Clients with a foreign domicile (Article 50(2) of the Swiss Debt Recovery and Bankruptcy Act), is the domicile of TOBLER in Rheineck. However, TOBLER is entitled to pursue the Client before the responsible court at the latter's domicile or place of residence, or before any other responsible court.

ASSORTIMENT

MATO scaffolding systems and accessories

 MATO 1	Façade scaffoldings
 MATO 2	Façade scaffoldings
 MATO 8	Module scaffoldings
 MATO Z	Scaffolding accessories
 MATO R	Rolling scaffolding
 MATO N	Temporary roof systems
 MATO S	Safety
 MATO B	Building accessories

Tobler formwork systems and accessories

 Tobler Top	Wall formwork
 Tobler Manu	Hand-set formwork
 Tobler Deck	Slab formwork
 Tobler Flex	Props & beams
 Tobler Bau	Building accessories
 Tobler Rent	Rental park
 Tobler Care	Refurbishment

As a full-range supplier of scaffolding and formwork systems, we are your competent partner for all questions concerning the professional construction of scaffolding and formwork. Innovation as well as top quality standards and unique functionality characterise our wide range of products. Apart from our standard assortment, we also develop customer-specific solutions – from the planning and engineering through to the production.



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