

Dated:

01.2023

# NOE®top FS

**Assembly and Operating Manual** 

## NOEtop FS



## NOEtop FS



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## 1 Safety advice, GSV guidelines

## 1.1 Notes concerning the intended and safe use of formwork and falsework

The contractor is responsible for drawing up a risk assessment and a set of installation instructions. The latter is not usually identical to the assembly and use instructions (AuV).

- Risk assessment: The contractor is responsible for the compilation, documentation, implementation and revision of a risk assessment for each construction site. His employees are obliged to implement the measures resulting from this in accordance with all legal requirements.
- Installation instructions: The contractor is responsible for compiling a written set of installation instructions. The assembly instructions form part of the basis for the compilation of a set of installation instructions.
- Assembly and use instructions: Formwork is technical work equipment and is intended for commercial use only. It must be used properly and exclusively by trained specialist personnel and appropriately qualified supervising personnel. The assembly and use instructions are an integral component of the formwork construction. They comprise at least safety guidelines, details on the standard configuration and proper use, as well as the system description. The functional instructions (standard configuration) contained in the assembly instructions are to be complied with exactly as stated. Enhancements, deviations or changes represent a potential risk and therefore require separate verification (with the help of a risk assessment) or a set of installation instructions that comply with the relevant laws, standards and safety regulations. The same applies in those cases where formwork and/or falsework components are provided by others on site.
- Availability of the assembly and use instructions: The contractor must ensure that the assembly and use instructions provided by the manufacturer or formwork supplier are available at the place of use, that site personnel are informed of this before assembly and use takes place, and that they are available at all times.
- Representations: The representations (drawings, diagrams etc.) shown in the assembly instructions are, in part, situations of assembly and not always complete in terms of safety considerations. Any safety installations that may not have been shown in these representations must nevertheless be available.
- Storage and transportation: Any special requirements relating to transportation procedures and storage of the formwork constructions must be complied with. An example would be the use of the appropriate lifting gear.
- Material check: Formwork and falsework material deliveries are to be checked on arrival at the construction site/place of destination as well as before each use to ensure that they are in perfect condition and function correctly. Changes to the formwork materials are not permitted.
- Spare parts and repairs: Only original components may be used as spare parts. Repairs are to be carried out by the manufacturer or at authorised repair facilities only.
- Use of other products: Combining formwork components from different manufacturers carries certain risks. They are to be
  individually verified and can result in the compilation of a separate set of assembly instructions required for the installation of the
  equipment.
- Use of other products: Individual safety symbols are to be complied with. Examples:



Safety information: Non-compliance can lead to damage

to materials or risk to the health of site personnel (also life).



Visual check: The intended operation is to be subject to

a visual check.



Note: Supplementary information for safe, correct and

professional execution of work activities.

Miscellaneous: We reserve the right to make amendments in the course of technical development. All current country-specific laws, standards and other safety regulations are to be complied with without exception for the safe application and use of the products. They form a part of the obligations of employers and employees regarding industrial safety. This gives rise to, among other things, the responsibility of the contractor to ensure the stability of the formwork and falsework constructions as well as the structure during all stages of construction, which also includes the basic assembly, dismantling and the transport of the formwork and falsework constructions or their components. The complete construction is to be checked during and after assembly.

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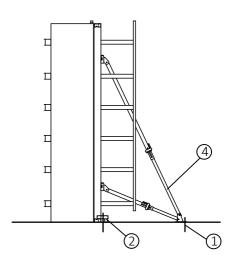


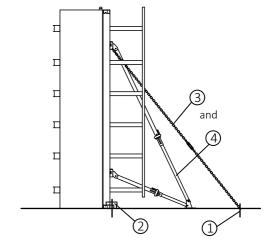
## 2 Safe setting down of column formwork elements

#### Column formwork set complete

#### Half column formwork set L-shaped

The measures shown are to be performed on both formwork elements.





- 1 Anchor bolt
- 2 Uplift safety device
- 3 Tension-resistant guy
- 4 Stabilizer



To avoid accidents always set elements down in such a way that they are structurally stable (guy, brace, anchor), this includes laying them down safely on the ground.

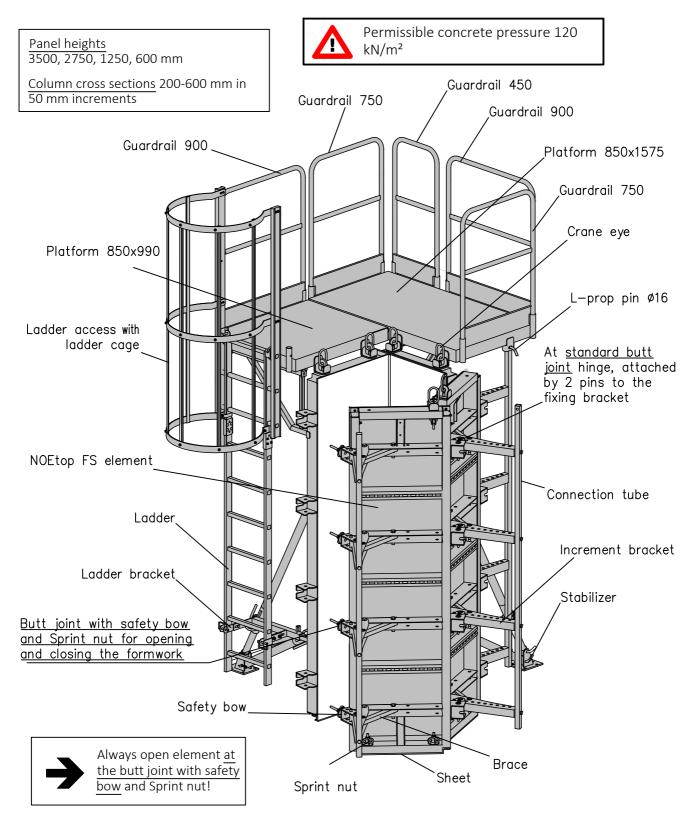
If the stabilizers are anchored with an anchor bolt, they must be able to act in compression and tension. At least one stabilizer in each direction must be bolted down. Attach uplift safety device to ensure structural stability under wind loads.

For attachment of stabilizers see  $\rightarrow$  5.10.



## 3 System overview NOEtop FS rectangular column formwork

NOEtop FS rectangular column formwork consists of 4 column elements, which can be assembled then lifted and moved from one place of use to another by crane. The panels are available with steel or timber facing. The formwork is suitable for casting columns with cross sections of 200-600 mm in 50 mm increments.





## 4 Assembly of NOEtop FS

The individual steps for assembly and erection are shown diagrammatically on the following pages. Panels of the appropriate heights are stacked and assembled one on top of the other to create taller formwork. Ladders, stabilizers etc. of the right height can then be selected. The important differences between the timber and steel facing versions are set out and/or highlighted in the relevant sections.

Before using the formwork, read through the assembly and use manual and observe the safety advice given in each section at all times!



Everyone who works with the product must receive instruction from a suitably qualified member of the site supervisory staff.



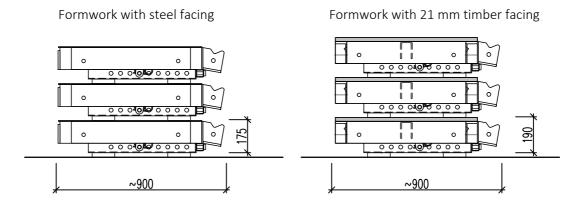
A risk analysis covering all situations on site must be carried out by a responsible person.

Components must be free of defects. Therefore visual inspection and/or testing of each component are essential at all stages of the work!

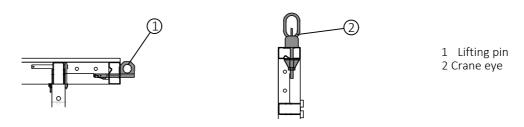
→ Refer to the detailed and exhaustive diagrams of the steps in the relevant sections.

#### 4.1 Assembling the form elements

◆ The elements are folded up with the formwork facing side uppermost and secured against folding out again for transport and delivery.



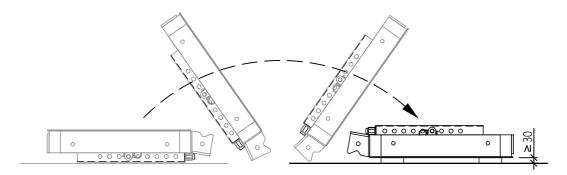
◆ The panels must be turned over to fold out the increment brackets. To transport the panels, use lifting pins or bolt on crane eyes, see → 5.6.



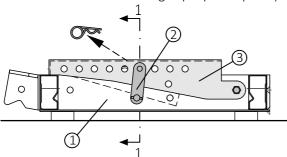
## NOEtop FS



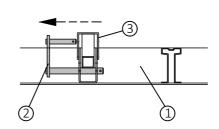
◆ Place the element down on a clean, flat assembly area and turn it over to fold out the increment brackets. Insert min. 30 mm thick timbers below it because the platform guardrail brackets project for the later attached platform (otherwise the platform cannot be attached).



 Remove the spring pin from the formwork element securing U-pin
 (1 formwork element securing U-pin per FS panel).



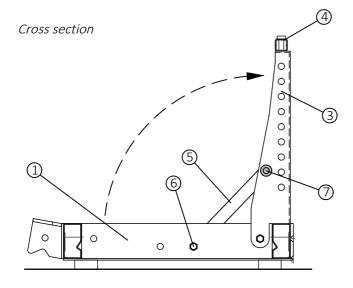
◆ Pull out the formwork element securing U-pin from the increment bracket.



◆ Fold out the increment brackets with connection tube, attach the brace with bolt Ø20x150 and secure it with spring pin.

Reinsert the spring pin into the formwork element securing U-pin.

For folding out the formwork element refer to  $\rightarrow$  5.1.



- 1 NOEtop FS panel
- 2 Formwork element securing U-pin
- 3 Increment bracket
- 4 Connection tube
- 5 Brace

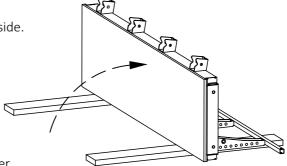
Section 1-1

- 6 Bolt M20x100 with lock nut and plain washer
- 7 Bolt Ø20 150 mm with spring pin Part No. 124632

## **NOEtop FS**



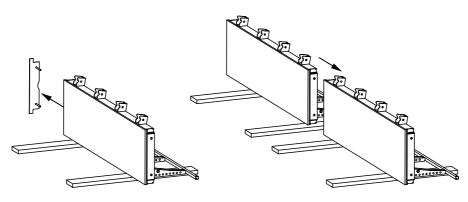
◆ Turn the folded-out element over onto its other side.



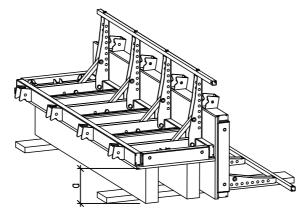
lacktriangle If necessary, add more panels on top of each other, see  $\longrightarrow$  5.5.

Sheets are attached to the panels to prevent them being damaged in use. If the height of the formwork is extended using Toplock, the sheets may be left in place; if the formwork is extended using tie rods and Sprint nuts, the sheets must be removed,

see 
$$\rightarrow$$
 5.4.



 Bring a second element up to the first element. Place the panel on top of temporary supports, which have a height equal to the column dimension.
 In the case of timber-faced panels, attach triangular chamfer strips if required.



a = column dimension

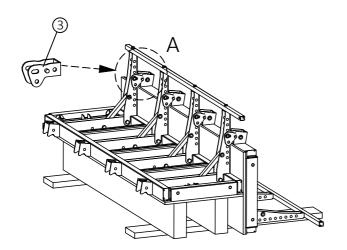
To make the element even easier to move around for assembly, a worthwhile approach is to suspend the element horizontally from a crane using the lifting pins until all the hinges have been installed.

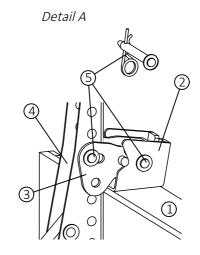
## NOEtop FS



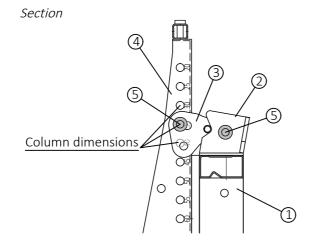
◆ To connect the elements, attach the hinge to the hinge bearing on the NOETop FS panel and to the increment bracket with bolt Ø20 and secure with spring pin.

Select the hole in the increment bracket corresponding to the column dimension and connect the elements see  $\rightarrow$  5.2.





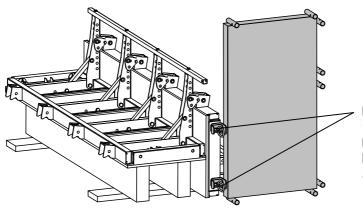
- 1 NOEtop FS panel
- 2 Hinge bearing
- 3 Hinge
- 4 Increment bracket
- 5 Bolt Ø20 150 mm including spring pin Part No. 124632





#### 4.2 Assembly of platform and ladder

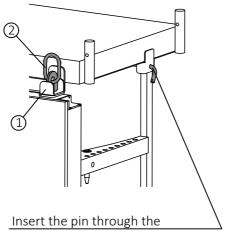
◆ Suspend the NOEtop FS 850x1575 mm platform from the crane, fold out the walkway brackets. Attach both bearing angles on the platform to the transverse holes of the panels with crane eyes and Sprint nuts. Connect the connection tube to the platform. see → 5.7.



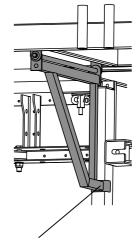
Position and align the platform to suit the transverse holes. Feed the 2 crane eyes through the

bearing angle and the transverse holes and secure with a sprint nut.

- 1 Bearing angle
- 2 Crane eye Part No. 124639



mounting on the platform and through the connection tube and secure.



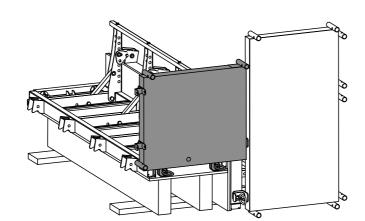
Fold out the bracket and push the U-profile over the panel edge profile.

## NOEtop FS

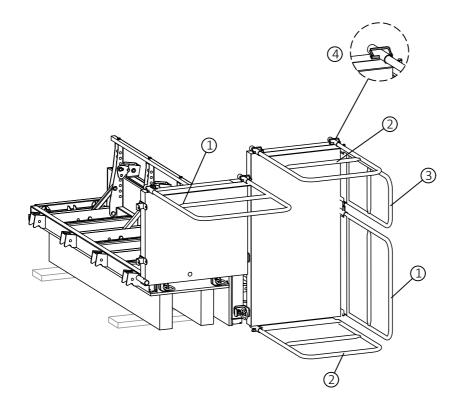


◆ Suspend the NOEtop FS 850x990 mm platform from the crane, fold out the walkway brackets and attach to the formwork.

Attach both bearing angles on the platform to the transverse holes of the panels with crane eyes and Sprint nuts. Connect the connection tube to the platform. see  $\rightarrow$  5.7.



◆ Insert the guardrails and secure with spring pins.

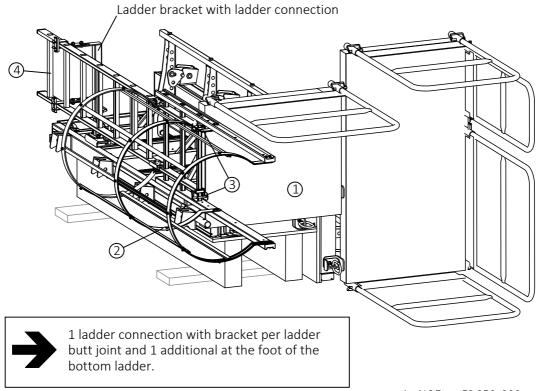


- 1 Guardrail 900
- 2 Guardrail 750
- 3 Guardrail 450
- 4 Spring pin Part No. 555990

## NOEtop FS



◆ Hang the access ladder with ladder cage from the platform and secure with spring pins. Engage ladder connection with hammer-head bolt in the panels hat profile and attach the ladder bracket. Attach ladder to access ladder with ladder cage. See → 5.8.

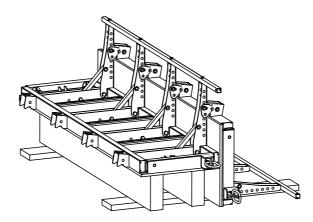


- 1 NOEtop FS 850x990 mm platform
- 2 Access ladder with ladder cage
- 3 Spring pin
- 4 Ladder

◆ Attach stabilizers. see → 5.10.

◆ Assemble 2<sup>nd</sup> L-shaped half of the column

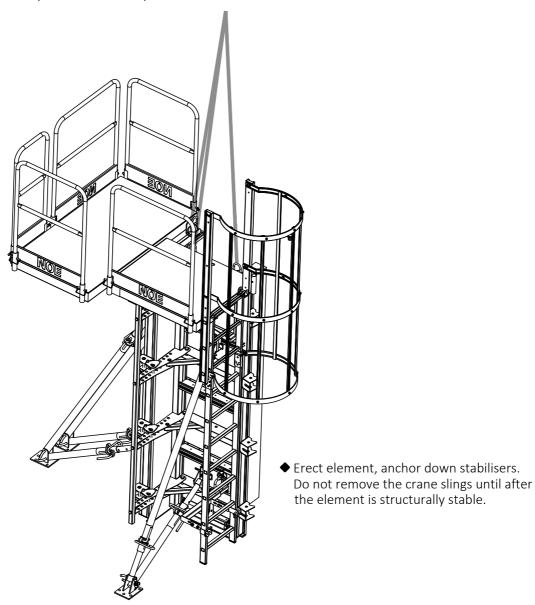
Assembly is done in a similar way to Point 4.1. Only 2 crane suspension points are attached, no platforms, stabilizers or ladders.





#### 4.3 Erection of NOEtop FS column formwork

◆ Attach slings to the crane suspension points of the preassembled elements with platform, lift the formwork slowly and move it into position.





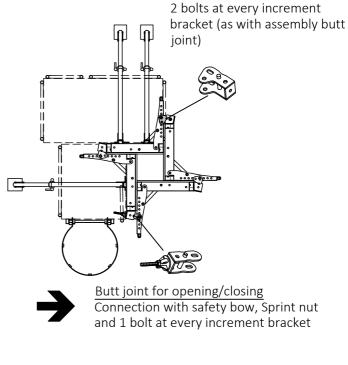
Before lifting the formwork always check in advance that the fastenings are correctly seated and locked.

## NOEtop FS



- ◆ Lift 2<sup>nd</sup> element into place
- ◆ Complete all the connections between the elements before removing the slings. The element can be more easily positioned and closed like this, see  $\rightarrow$  5.2 and 5.3.

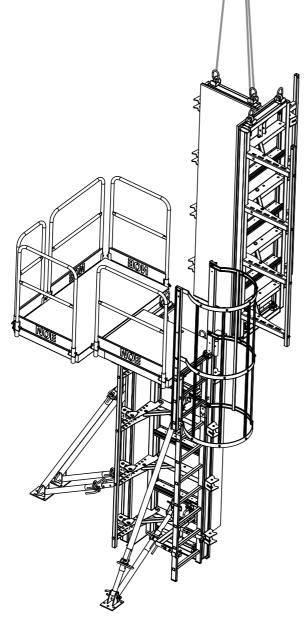
Attach the connections at the element butt joints working from a site scaffold (mobile scaffold); the connections for opening/closing can be operated from the ladder.



Connection with safety bow, Sprint nut and 1 bolt at every increment bracket

Standard butt joint

Connection with hinge and



#### NOEtop FS



#### 4.4 Concreting



Before concreting starts, check the bolts and connections for

- Completeness
  - Correct positioning
  - Effective locking
- ♦ Observe DIN 4235 Part 2 ""Compaction of concrete by internal vibrators"".

#### 4.5 Stripping and moving the formwork



Before stripping first check:

- Observe the minimum stripping times!
- Concrete compressive strength!

Strip at the butt joint with the safety bow!

- Open the column formwork at the butt joint for opening/closing (safety bow with Sprint nut) and not at a standard butt joint (hinge with 2 pins).
- Release the element from the concrete. Use pry bars or similar tools; never pull panels free with a crane. Suspend the complete formwork set from the crane and fold out the formwork.

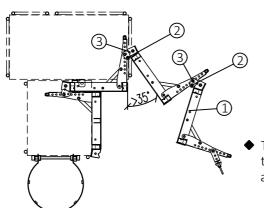


If an element is proving difficult to strip, check again that the formwork has been correctly opened.

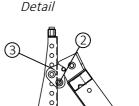
Do not pull the formwork off the concrete using a crane! Use suitable tools!

Stand well clear when lifting the formwork in case it swings out!

- Clean the formwork elements before each further use and apply release agent.
- ◆ To secure the formwork from folding up again after it has been folded out, every element must have an additional 1 bolt inserted in <u>one</u> level on the hinge and secured with a spring pin. This will prevent the formwork folding up again and minimise the crushing hazard. Elements with platforms can be opened only to a limited extent.



- . NOEtop FS panel
- 2 Additional bolt Ø20
- Hinge



 The formwork must be closed before the formwork set is transported to the next place of use. To do this, remove the additional bolts.

## NOEtop FS

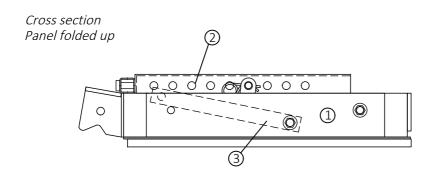


#### 5. Details

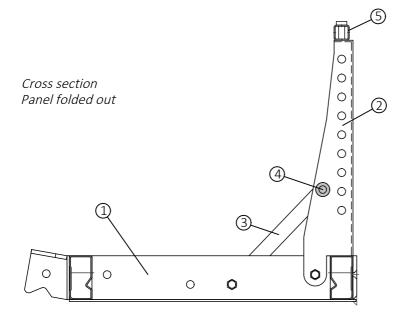
#### 5.1 Folding out the elements

◆ NOEtop FS panels are supplied folded up. The connection tube with the increment brackets must be folded out before use. The brace is pinned in place and secured with a spring pin to fix the unit in its folded-out state.

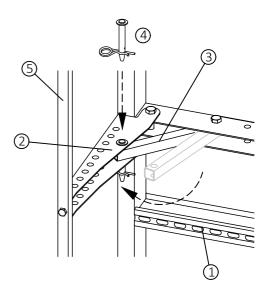
Suitable for cross sections of 200-600 mm in 50 mm increments



- 1 NOEtop FS panel
- 2 Increment bracket
- 3 Brace
- 4 Bolt Ø20 150 mm with spring pin Part No. 124632
- 5 Connection tube



Elevation Panel folded out



## NOEtop FS



#### 5.2 Setting the cross section and connecting the elements

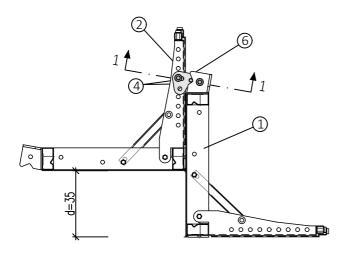
◆ As described earlier, the elements are placed one on top of the other and the hinge attached to the hinge bearing of the NOETop FS panel with bolts Ø20 and secured with spring pins.

Fasten the hinge in the increment bracket by placing a bolt  $\emptyset$ 20 in the correct hole to achieve the required column dimension and secure with a spring pin.

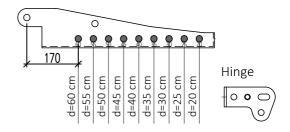
The column dimensions are given at the holes in the increment bracket.

Please note: The parts for formwork faced with steel and timber differ from one another (see below).

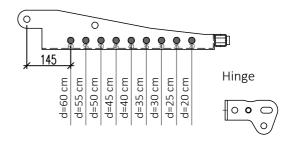
#### e.g. column 35 cm with timber facing

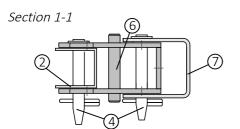


Increment bracket for steel facing



Increment bracket for timber facing





- 1 NOEtop FS panel
- 2 Increment bracket
- 3 Brace
- 4 Bolt Ø20 150 mm with spring pin Part No. 124632
- 5 Connection tube
- 6 Hinge
- 7 Hinge bearing

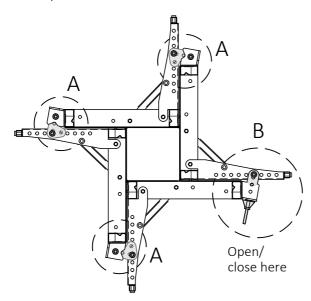
## **NOEtop FS**



#### 5.3 Closing the formwork

◆ NOEtop FS forms are deployed as units and must be opened or closed only at one butt joint. At this joint, a safety bow is used instead of a hinge.

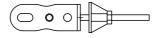
It is fastened in the increment bracket with the bolt and to the fixing bracket of the formwork element with a Sprint nut.

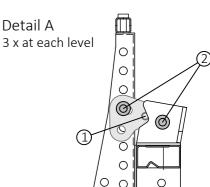


Safety bow for formwork with steel facing

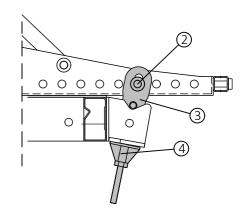


Safety bow for formwork with timber facing





Detail B 1 x at each level



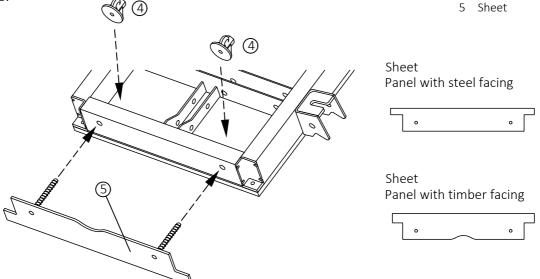
#### 5.4 Sheets

Sheets are fitted to the elements to protect the facing when the formwork units are positioned.

They must be removed from the butt joints if formwork is extended by bolting one unit on top of another.



- 1 Hinge
- 2 Bolt Ø20 150 mm with spring pin Part No. 124632
- 3 Safety bow
- 4 Sprint nut



## NOEtop FS

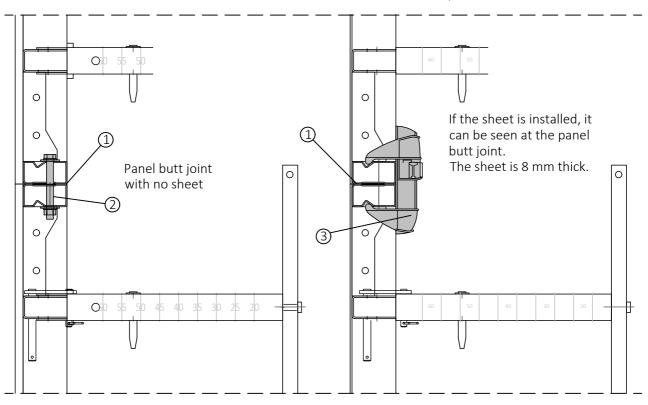


#### 5.5 Extending the formwork

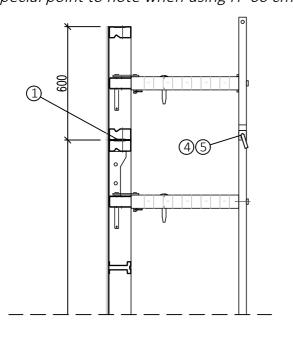
The total height of the NOEtop FS formwork is made up by combining elements with heights of 3500, 2750, 1250 and 600 mm. The smaller elements can be used at the top or bottom to suit site requirements. If the column formwork elements have to be extended or reduced in height, it is best to put these elements at the bottom to allow the platforms to remain attached to the column formwork elements when they are moved.

#### ◆ Bolted elements

#### ◆ Connection with Toplock

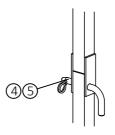


#### Special point to note when using H=60 cm



- 1 Panel butt joint
- 2 Bolt M18x160+hexagon nut Part No. 318900
- 3 Toplock Part No. 137976
- 4 L-prop pin Ø16 Part No. 697010
- 5 Spring pin Ø3.6 Part No. 913304

Insert the connecting tube and secure with pin and spring pin.



## NOEtop FS

## NOE

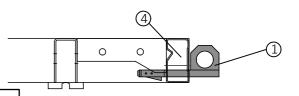
#### 5.6 Crane suspension points

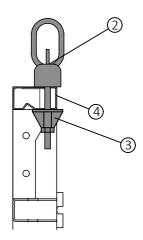
◆ Individual elements can be moved horizontally using the lifting pins.



Observe the operating instructions for the lifting pins!

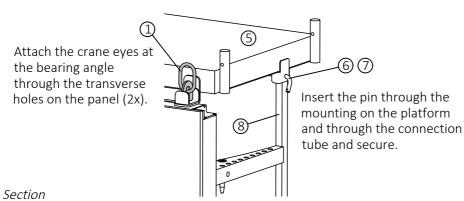
- ◆ The crane eye is fitted into the edge profile of the column formwork panel and secured with a Sprint nut. This allows e.g. individual elements to be moved. It also acts as a fastening and a crane suspension point when adding the platforms.
  - 1 Lifting pin Part No. 136808
  - 2 Crane eye Part No. 124639
  - 3 Sprint nut Part No. 680580
  - 4 Element edge profile

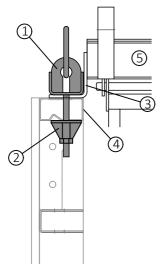




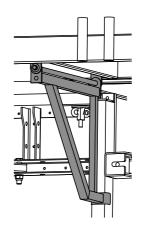
#### 5.7 Attaching the platform

The platform is attached to the bearing angles and to the connecting tube at 3 points.





- 1 Crane eye Part No. 124639
- 2 Sprint nut Part No. 680580
- 3 Platform bearing angle
- 4 Element edge profile
- 5 Platform
- 6 L-prop pin Ø16 Part No. 697010
- 7 Spring pin Ø3.2 Part No. 913304
- 8 Connection tube



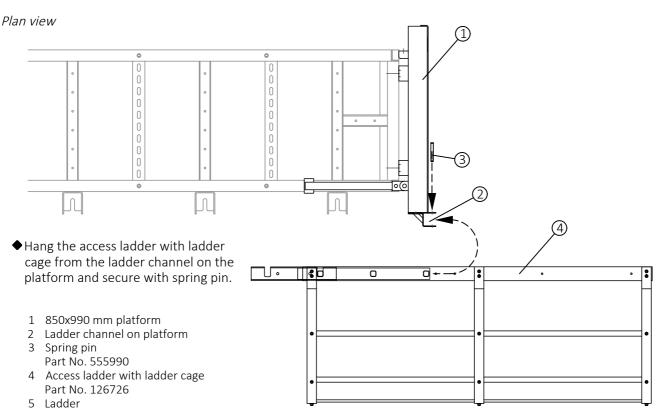
Fold out the walkway bracket and push the U-profile over the panel edge profile.

## NOEtop FS



#### 5.8 Attaching ladders and ladder cages

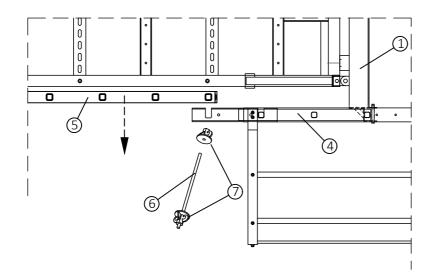
Hanging the access ladder with ladder cage from the platform



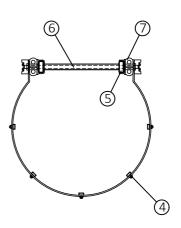
Attaching a ladder to the access ladder with ladder cage

#### Plan view

6 600 mm tie rod Part No. 6706007 Sprint nut Part No. 680580



◆ Attach the ladder to the access ladder using a tie rod and Sprint nut through the top rung of the ladder.



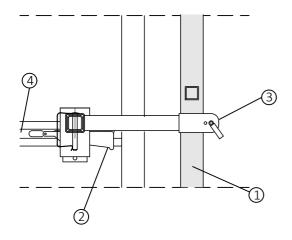
## NOEtop FS

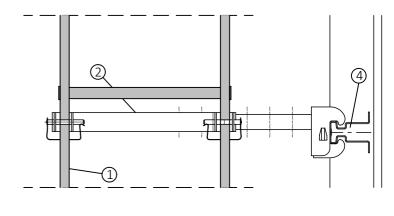


Attaching the ladder connection and ladder bracket

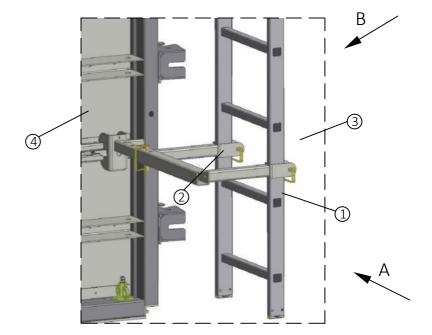
View A on formwork

View B on ladder





- 1 Ladder
- 2 Ladder bracket
- 3 Spring pin
- 4 Element hat profile



## NOEtop FS



#### Selection of the ladders and ladder cages

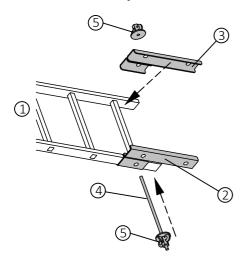
The way ladders and ladder cage are configured varies according to the formwork height.

The individual parts should be selected to suit the height and the accident prevention regulations or scaffolding standards.

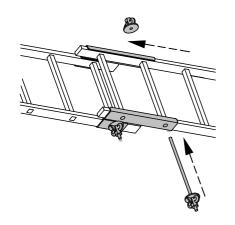
#### Connecting ladders

Ladders can be connected by ordinary or offset butt joints. A butt joint can be positioned anywhere in the overall length of the ladder but not within the length of the ladder cage.

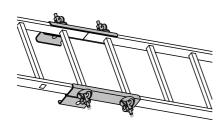
#### Ladders offset butt jointed



- Place the right and left ladder extender pieces with short side plates against the ladder stiles.
   Insert the tie rod with Sprint nut through the ladder extender pieces and a rung and secure with the 2<sup>nd</sup> Sprint nut.
  - 1 Ladder
  - 2 Ladder extender piece left Part No. 126707
  - 3 Ladder extender piece right Part No. 126708
  - 4 Tie rod 60 cm Part No. 670600
  - 5 Sprint nut Part No. 680580



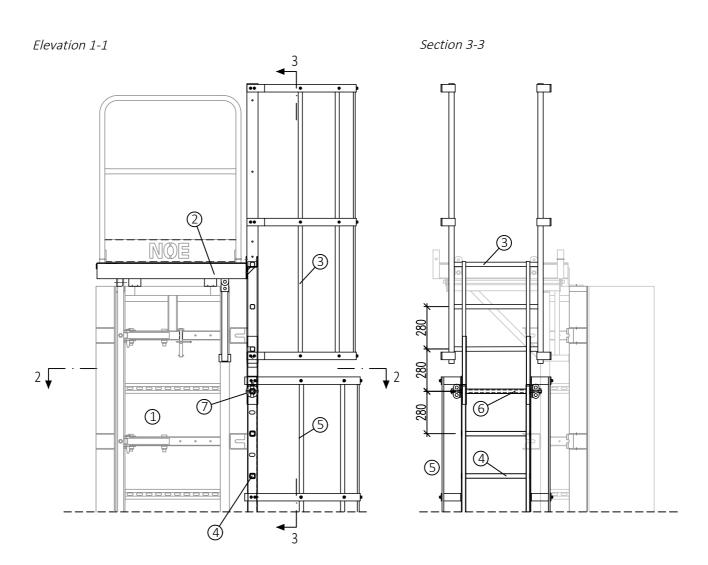
Ladders can also be extended with a simple butted connection. In this case, the ladders are connected only at the long stile ends through two holes.



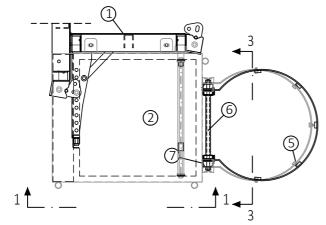


#### Ladders and ladder cages

Additional ladder cages should be provided for greater formwork heights in accordance with the accident prevention regulations and/or scaffolding regulations. It is fastened in place with tie rods, which are inserted through the holes in the channel and ladder rungs, and Sprint nuts. The ladder cage can be positioned at 140 mm increments within the height of the ladder.



Section 2-2



- 1 NOEtop FS panel
- 2 NOEtop FS platform
- 3 Access ladder with ladder cage
- 4 Ladder
- 5 Ladder cage
- 6 Tie rod 60 cm Part No. 670600
- 7 Sprint nut Part No. 680580

## NOEtop FS

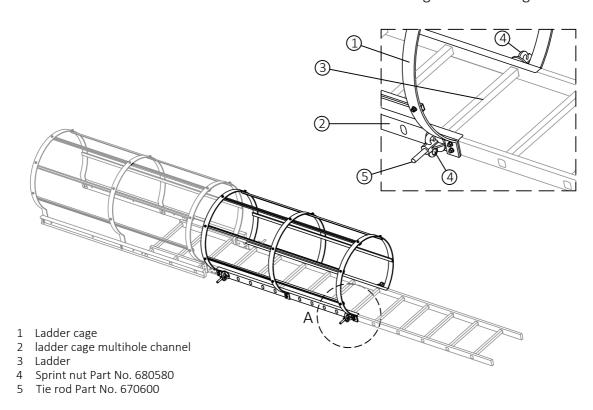


The ladder cage is attached in combination with the ladders. The ladders are butted within the length of the multihole channels of the ladder cages and fastened together through the rungs.

The ladders to be used must have a rung spacing of 280 mm and a width of 450 mm to allow them to be attached to the ladder cages.

See  $\longrightarrow$  5.9.

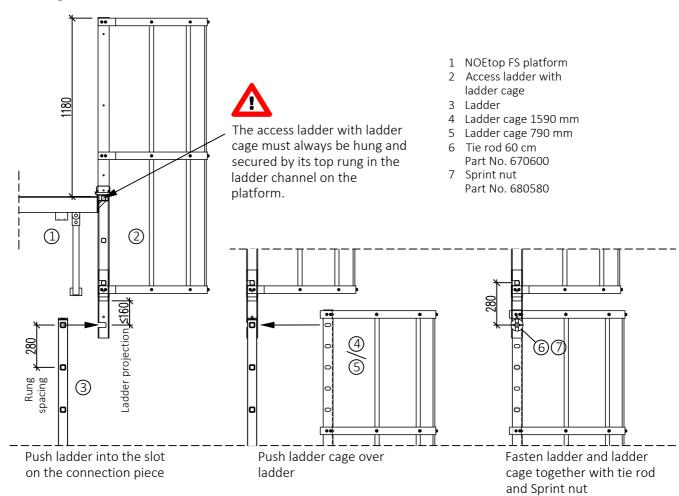
#### Detail A Attaching the ladder cage



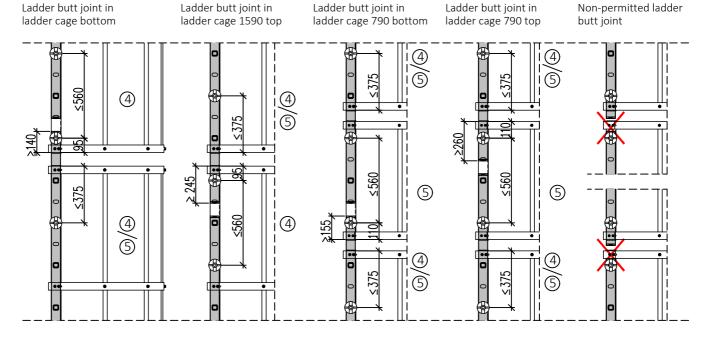


#### 5.9 Rules for attaching ladders and ladder cages

Attaching the first ladder



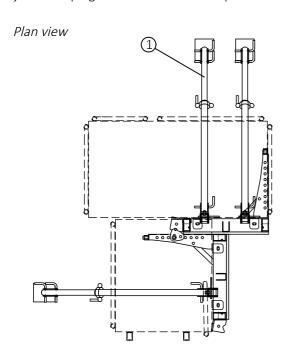
#### Butt joints in ladders and ladder cages



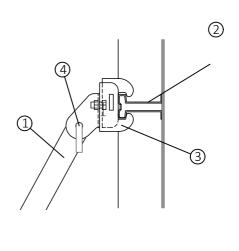


## 5.10 Attaching the stabilizers

3 stabilizers are attached to each column formwork set. They are attached to the panel by the NOEtop stabilizer joint clamping onto the element hat profile.

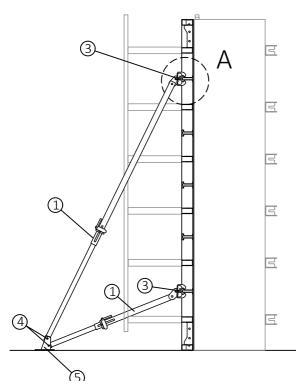


Detail A



- 1 Raking prop
- 2 Hat profile in element
- 3 Stabilizer connection
- 4 L-prop pin Ø16 with spring pin
- 5 Bottom bearing





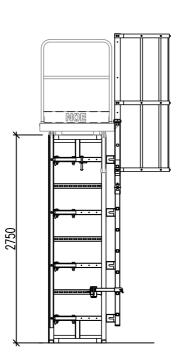
Formwork height	Propping components used
Up to 1.25 m	Raking prop 1510*
1.85 - 4.00 m	Raking prop 1510 + 3650
4.00 - 7.00 m	Raking prop 3650 + 5000
7.00 - 10.50 m	Raking prop 10300* + 1510 + 3650

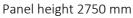
<sup>\*</sup> Single prop

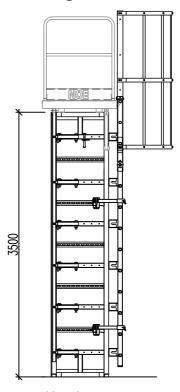
For Parts Nos. see  $\longrightarrow$  6.

## NOE

## 6 Ladders and ladder cages for standard heights





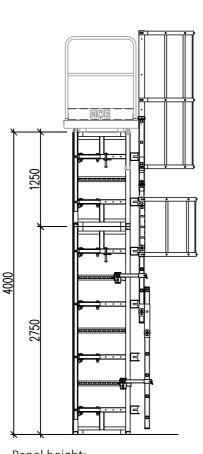


Panel height 3500 mm

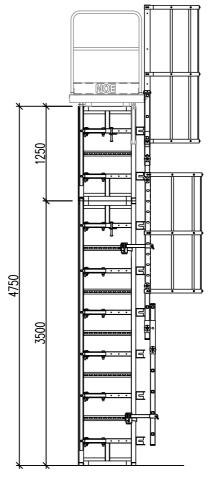
## Table of individual parts

2750	3500	2750	3500	2750	3500	2750	3500	mm	Panel height bottom
0	0			ı		3500		mm	Panel height extension
2750	3500	4000	4750	5500	6250	6250	7000	mm	Panel height total
								Ladders	and ladder cages
								Part No.	Description
								l art No.	Description
1	1	1	1	1	1	1	1	126726	PLATFORM ACC. LADDER W. LADDER CAGE
2	2	2	2	2	2	2	2	555990	SPRING PIN 12.0 X 80
				1	1	1	2	126760	LSS LADDER 2975-11
	1			1	1	1	2		
	1							126761	LSS LADDER 2695-10
			1		1	1		126762	LSS LADDER 2415-9
1		2	1	1				126763	LSS LADDER 1855-7
0	0	1	1	1	0	0	0	126708	LSS LADDER EXTENDER PIECE RIGHT
0	0	1	1	1	0	0	0	126707	LSS LADDER EXTENDER PIECE LEFT
				0	4	4		406757	LCC LADDED CACE 700
0	0	1	0	0	1	1	0	126757	LSS LADDER CAGE 790
0	0	0	1	1	1	1	2	126725	PLATFORM LADDER CAGE 1590
1	1	5	5	5	6	6	6	670600	TIE ROD 15.1 GALV. 600 MM
2	2	10	10	10	12	12	12	680580	SPRINT NUT 80
1	_	_	2	2	2	4	4	126705	NOTTOR LARRED BRACKET
1	2	2	2	3	3	4	4	126705	NOETOP LADDER BRACKET
-	atively								
1	2	2	2	3	3	4	4	126706	LSS LADDER BRACKET
1	2	2	2	3	3	4	4	126729	LSS LADDER CONNECTION
1	2	2	2	3	3	4	4	319338	HHB WITH HANDLE,CLAMP LGTH. 125 MM



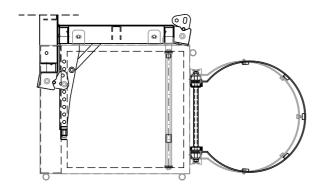


Panel height:
bottom 2750 mm
Extension 1250 mm
Total 4000 mm

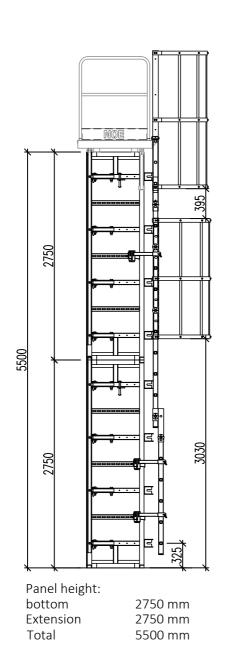


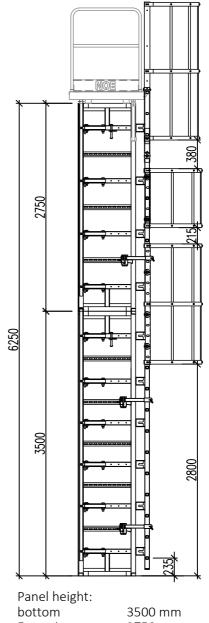
Panel height:
bottom 3500 mm
Extension 1250 mm
Total 4750 mm

#### Plan view

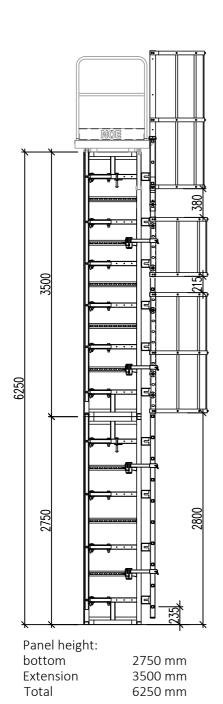


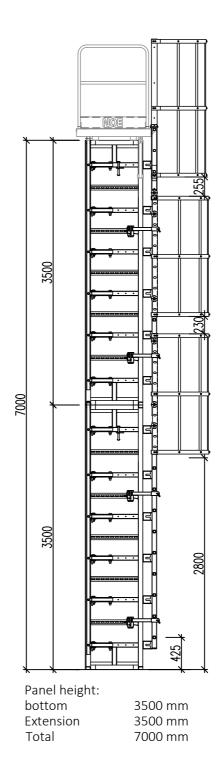






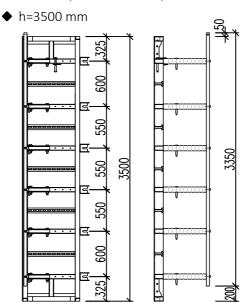






## 7. Individual parts

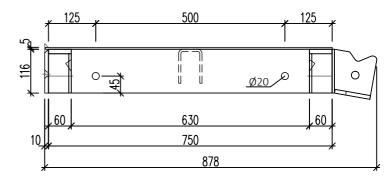
## 7.1 NOEtop FS column panels with steel facing

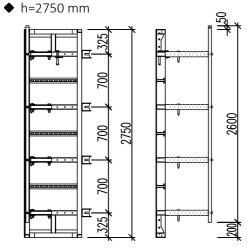


NOEtop FS element	Part No.	Weight kg	m <sup>2</sup>
Steel 750 x 3500	124566	330	2,63
Steel 750 x 2750	124564	248	2,06
Steel 750 x 1250	124562	123	0,94
Steel 750 x 600	124560	63	0,45

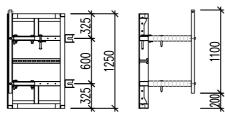
Plus triangular chamfer strips.

#### Plan view

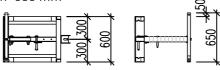


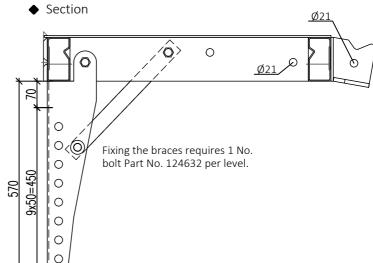












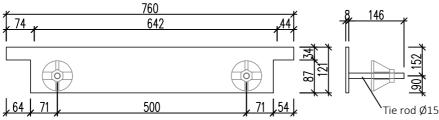


#### NOEtop FS S sheet

For bolting onto the underside of the panels (are supplied already installed)

Part No. 124608 Weight 5.5 kg

NOEtop FS S triangular chamfer strip For clamping onto the facing Part No. 841201 Packaging unit 25 lm Weight 2.9 kg

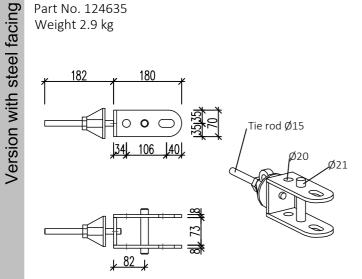


Plus 2 Sprint nuts Part No. 680580

#### NOEtop FS S safety bow

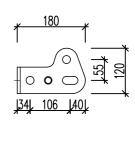
For connecting at the stripping butt joint

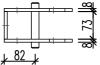
Part No. 124635 Weight 2.9 kg



#### NOEtop FS S hinge

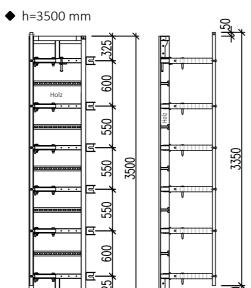
For connecting at standard butt joints Part No. 124637 Weight 1.9 kg





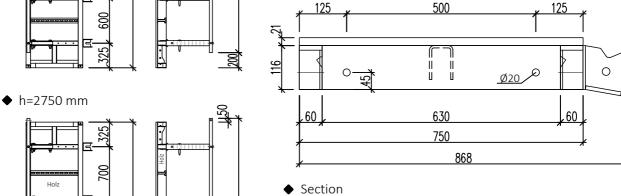
## NOE

#### 7.2 NOEtop FS column panels for timber facing 21 mm

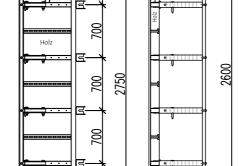


NOEtop FS element	Part No.	Weight kg	m <sup>2</sup>
Timber 750 x 3500	124576	226	2,63
Timber 750 x 2750	124574	167	2,06
Timber 750 x 1250	124572	86	0,94
Timber 750 x 600	124570	45	0,45

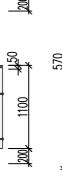
Plus triangular chamfer strips if required.

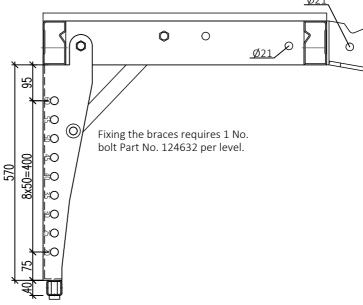


Plan view



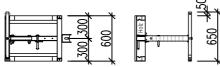








♦ h=1250 mm

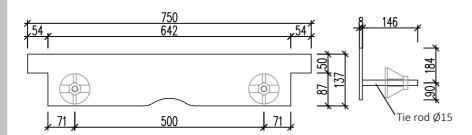


## NOE

#### NOEtop FS H sheet

For bolting onto the underside of the panels (are supplied already installed)

Part No. 124609 Weight 6.2 kg

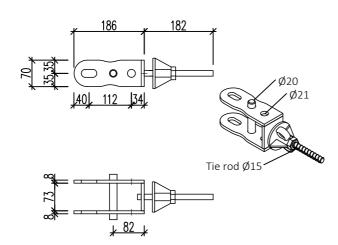


Plus 2 Sprint nuts Part No. 680580

#### NOEtop FS H safety bow

For connecting at the stripping butt joint

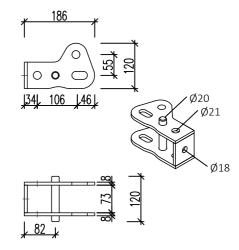
Part No. 124636 Weight 2.9 kg



#### NOEtop FS H hinge

For connecting at standard butt joints Part No. 124638

Weight 1.9 kg



### NOEtop FS



#### 7.3 Miscellaneous accessories

NOEtop FS crane suspension

For bolting at the panel profile

Part No. 124639 Weight 1.3 kg

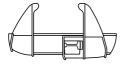


Plus Sprint nut Part No. 680580

**NOEtoplock** 

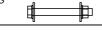
For extending formwork panels

Part No. 137976 Weight 3.7 kg



NOE M18x160

For extending formwork panels



	Part No.	Description	Packaging unit
	360346	Bolt M18x160 DIN 931	25
M18	370026	Hexagonal nut M18 DIN 934	100
	380028	Plain washer A19 DIN 125	250

NOEtop lifting pin with catch

Part No. 136808 Weight 0.66 kg



NOEtop FS bolt Ø20 150 mm

Including spring pin
Part No. 124632

Weight 1.3 kg



NOE L-prop pin Ø16

Part No. 697010 Weight 0.34 kg



NOE spring pin Ø3.6 For L-prop pin Ø16

Part No. 913304 Weight 0.02 kg

#### NOE stabilizers

The combination of stabilizer components depends on the formwork height. The stabilizers consist of base plate, prop and stabilizer connection, which is used to clamp onto the panel profile. As an alternative to the stabilizer connection, the end hinge (Part No. 697012) can be attached with a hammer-head bolt (Part No. 319338) to the panel profile.



3 stabilisers are required for each column formwork set.

#### Requirement list for individual stabilizers



	Part No.	Inclined prop* 1510 mm	Stabilizer** 3650 mm	Stabilizer** 5000 mm
Bottom bearing	697014	1	1	1
Stabilizer connection	697032	1	2	2
Prop 1.00-1.51 m	697026	1	1	
Prop 2.10-3.65 m	697027		1	1
Prop 2.77-5.00 m	697028			1
NOE L-prop pin Ø16	697010	2	4	4
NOE spring pin Ø3.6	913304	2	4	4
Weight per prop		15.5 kg	36.2 kg	52.5 kg

<sup>\*</sup> Lower prop only

Assembly as required per formwork set see  $\rightarrow$  7.

<sup>\*\*</sup> Consisting of an upper and lower prop



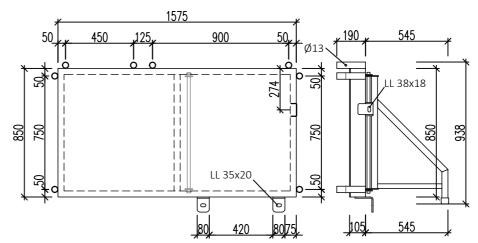
#### 7.4 Individual platform and ladder parts NOEtop FS platform

850x1575

Including guardrails, brackets, connection angles, as shown.

Part No. 124641 Weight 97 kg

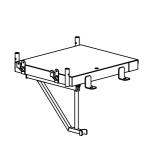


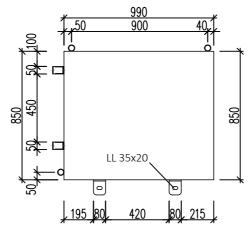


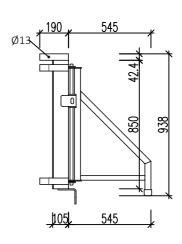
## *NOEtop FS platform 850x990*

Including guardrails, brackets, connection angles, as shown.

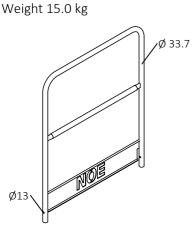
Part No. 124640 Weight 67 kg



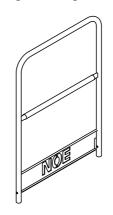




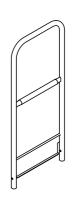
NOEtop FS guardrail 900 Part No. 124645



NOEtop FS guardrail 750 Part No. 126721 Weight 13.5 kg



NOEtop FS guardrail 450 Part No. 124646 Weight 10.8 kg



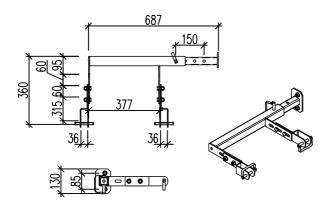
Each plus 2 spring pins Part No. 555990 to secure the connection

## **NOEtop FS**

## NOE

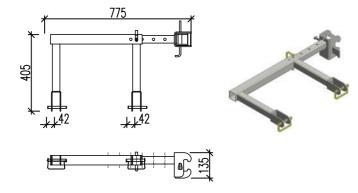
#### LSS ladder bracket

Including 3 spring pins to secure the connection and 6 M12x30 pins for the ladder connection Part No. 126706
Weight 5.3 kg



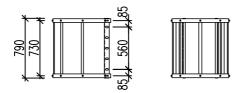
#### NOEtop ladder bracket

Part No. 126705 Weight 8.4 kg Alternatively to LSS ladder bracket with LSS ladder connection



#### Ladder cage 790

Part No. 126757 Weight 7.8 kg

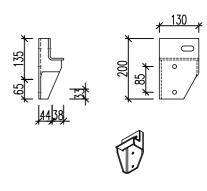


The items below are the minimum required for fastening each ladder cage:

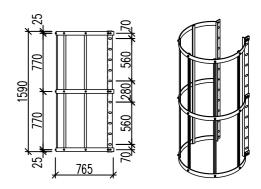
2 tie rods 60 cm Part No. 670600

4 Sprint nut Part No. 680580

## LSS ladder connection Part No. 126729 Weight 2.3 kg Plus hammer-head bolt Part No. 319338

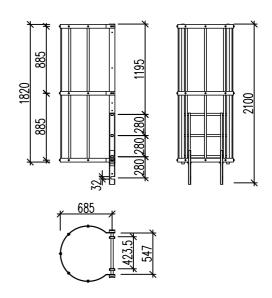


Ladder cage 1590 Part No. 126725 Weight 14.5 kg



Platform access ladder with ladder cage

Part No. 126726 Weight 15.1 kg



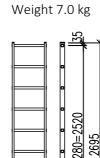
Plus 2 spring pins Part No. 555990 to secure the connection in the ladder support

## NOEtop FS



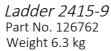
Ladder 2975-11 Part No. 126760 Weight 7.8 kg

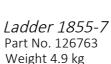
10x280=2800



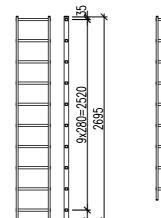
Ladder 2695-10

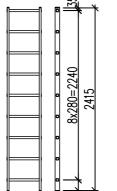
Part No. 126761

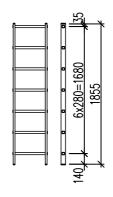


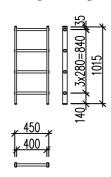


Ladder 1015-4 Part No. 126764 Weight 2.7 kg







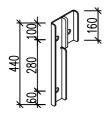


Each ladder butt joint requires the following items:

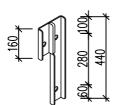
No.	Part No.	Description
1	126707	Ladder extender piece left
1	126708	Ladder extender piece right
2	670600	Tie rod 60 cm
4	680580	Sprint nut

Ladder extender piece left Part No. 126707

Weight 2.6 kg



Ladder extender piece right Part No. 126708 Weight 2.6 kg



*Tie rod Ø15* L=60 cm Part No. 670600 Weight 0.82 kg



Sprint nut

Part No. 680580 Weight 0.69 kg



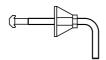
NOE spring pin

Part No. 555990 Weight 0.11 kg



Hammer-head bolt

Part No. 319338 Weight 1.15 kg



## NOEtop FS



## 8 Tables showing individual formwork part combinations

#### NOEtop FS with steel facing

Part No.	Description	Height in mm	3500	2750	1250	600
124566	NOEtop FS element S 750x3500 mm		4			
124564	NOEtop FS element S 750x2750 mm			4		
124562	NOEtop FS element S 750x1250 mm				4	
124560	NOEtop FS element S 750x 600 mm					4
124632	NOEtop FS bolt D20-150		68	46	24	13
124608	NOEtop FS sheet S		4	4	4	4
680580	Sprint nut 80		8	8	8	8
124635	NOEtop FS safety bow S		6	4	2	1
124637	NOEtop FS hinge S		18	12	6	3
841201	Double triangular chamfer strip 15X5 white, packaging unit 25 lm (installed on site)					

#### NOEtop FS set with timber facing

Part No.	Description	Height in mm	3500	2750	1250	600
124576	NOEtop FS element H 750x3500 mm		4			
124574	NOEtop FS element H 750x2750 mm			4		
124572	NOEtop FS element H 750x1250 mm				4	
124570	NOEtop FS element H 750x 600 mm					4
124632	NOEtop FS bolt D20-150		68	46	24	13
124609	NOEtop FS sheet H		4	4	4	4
680580	Sprint nut 80		8	8	8	8
124636	NOEtop FS safety bow H		6	4	2	1
124638	NOEtop FS hinge H		18	12	6	3

#### Table of stabilizers, depends on the formwork height

Part No.	Description Formwork he	eight mm	≤ 1500	≤ 4000	≤ 7000	≤ 10500
697026	Push-Pull Brace 1.00- 1.51 m		3	3		3
697027	Push-Pull Brace 2.10- 3.65 m			3	3	3
697028	Push-Pull Brace 2.77- 5.00 m				3	
697036	Push-Pull Brace 6.40- 10.30 m					3
697014	Supporting plate for raking props		3	3	3	6
697010	L-prop pin D16		6	12	12	18
913304	Spring pin D4 wire 3.6		6	12	12	18
697032	NOEtop stabilizer joint	•	3	6	6	9

## NOEtop FS



#### For each set of NOEtop FS extension and bottom panels

Part No.	Description	No.
	For butt joint with no sheet	
318900	Hex. bolt M18X160 + nut + plain washer	8
	Alternatively for butt joint with sheet	
137976	NOE Toplock V	8
	Additionally for 600 mm height	
697010	L-prop pin D16	4
913304	Spring pin D4 wire 3.6	4

#### NOEtop FS platform and ladder access

124639	NOEtop FS crane suspension	uspension 6	
680580	Sprint nut 80		
124640	NOEtop FS platform 850x 990 mm		
124641	NOEtop FS platform 850x1575 mm	1	
124645	NOEtop FS guardrail 900 mm		
126721	NOEtop FS guardrail 750 mm 2		
124646	NOEtop FS guardrail 450 mm 1		
555990	Spring pin 12 X 80	10	
697010	L-prop pin D16	2	
913304	Spring pin D4 wire 3.6	2	

4 x for attaching the platforms, 2 x for crane transport of half sets without platforms.

#### NOEtop FS ladders and ladder cages

	·		i	
126726	Platform access ladder with ladder cage	1		
555990	Spring pin 12 X 80	2		
126725 Ladder cage 1590 mm			The number of parts required depends on the formwork height and combination.	
126757	Ladder cage 790 mm			
126740	-		The connection of the ladders with the ladder	
126741			cage is done with tie rods and Sprint nuts through the ladder rungs.	
126742	Ladder 3640 mm		the ladder range.	
126705	NOEtop ladder bracket		1 x ladder connection and bracket and 1 x	
Ladder bracket with connection to hat profile			additional at the base of the bottom ladder.	
126729	LSS ladder connection	1		
126706	LSS ladder bracket	1		
319338	Hammer-head bolt handle, head length 125 mm	1		
126707	Ladder extender piece left	1	Für Verlängerung einer Leiter außerhalb vom Rückenschutz, stumpf oder versetzt gestoßen.	
126708	Ladder extender piece right	1		
670600	Tie rod D15,1 600 mm	2		
680580	Sprint nut 80	2		

#### THE FORMWORK



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