

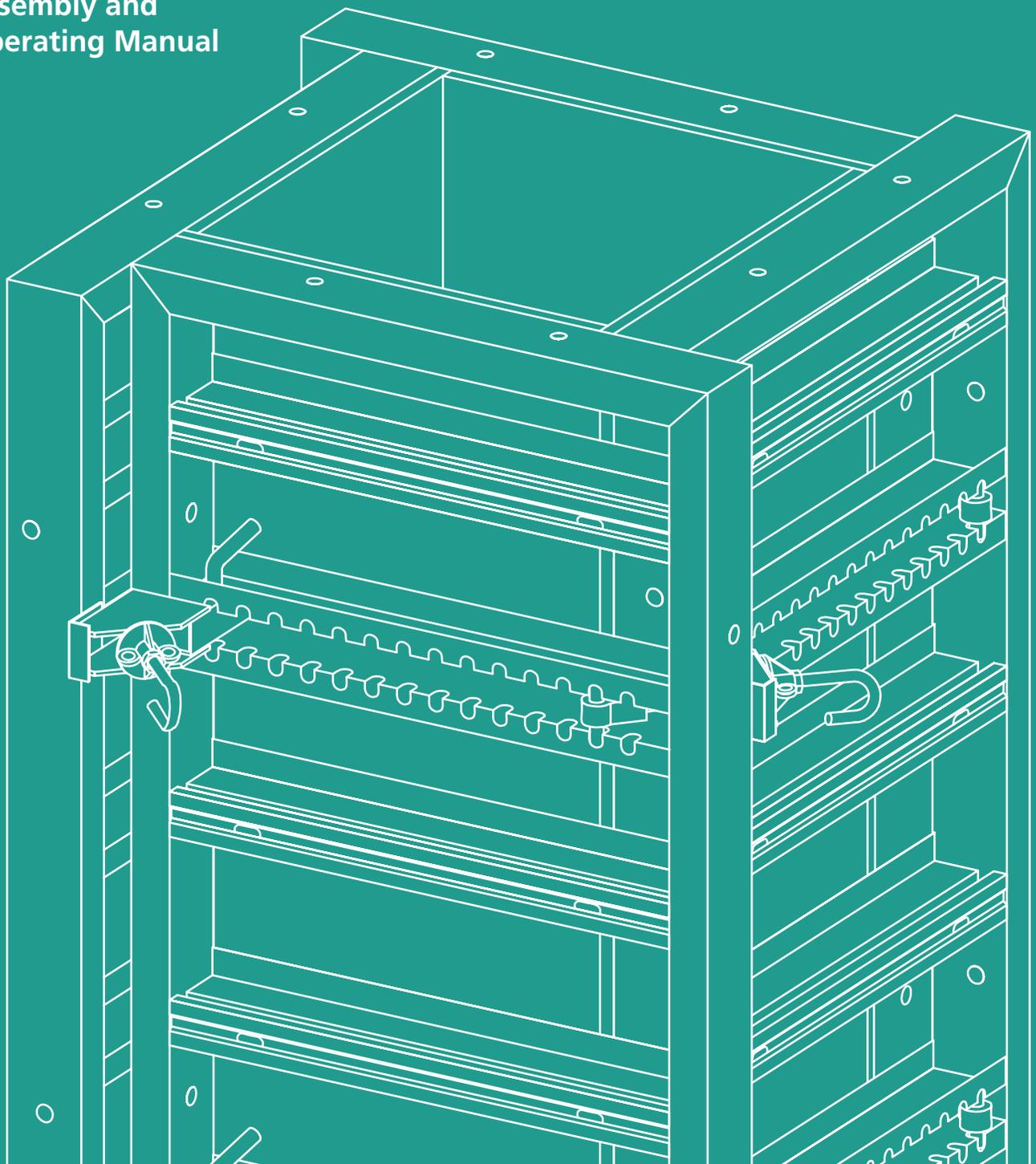


THE FORMWORK

NOE[®] Vario 2000

Dated: 05.2022

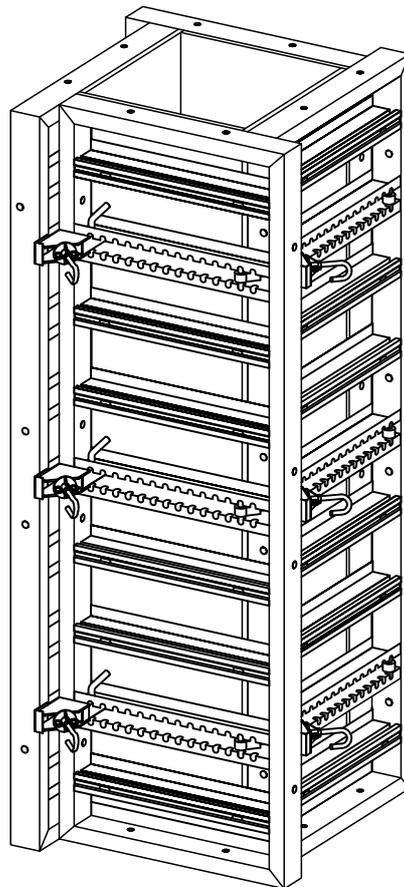
Assembly and
Operating Manual



NOE Vario 2000 column formwork

Assembly and Operating Manual

(Dated 05.2022)



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1. Safety advice, GSV guidelines

1.1 Advice on proper and safe use of formwork and falsework

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

- **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 through 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).



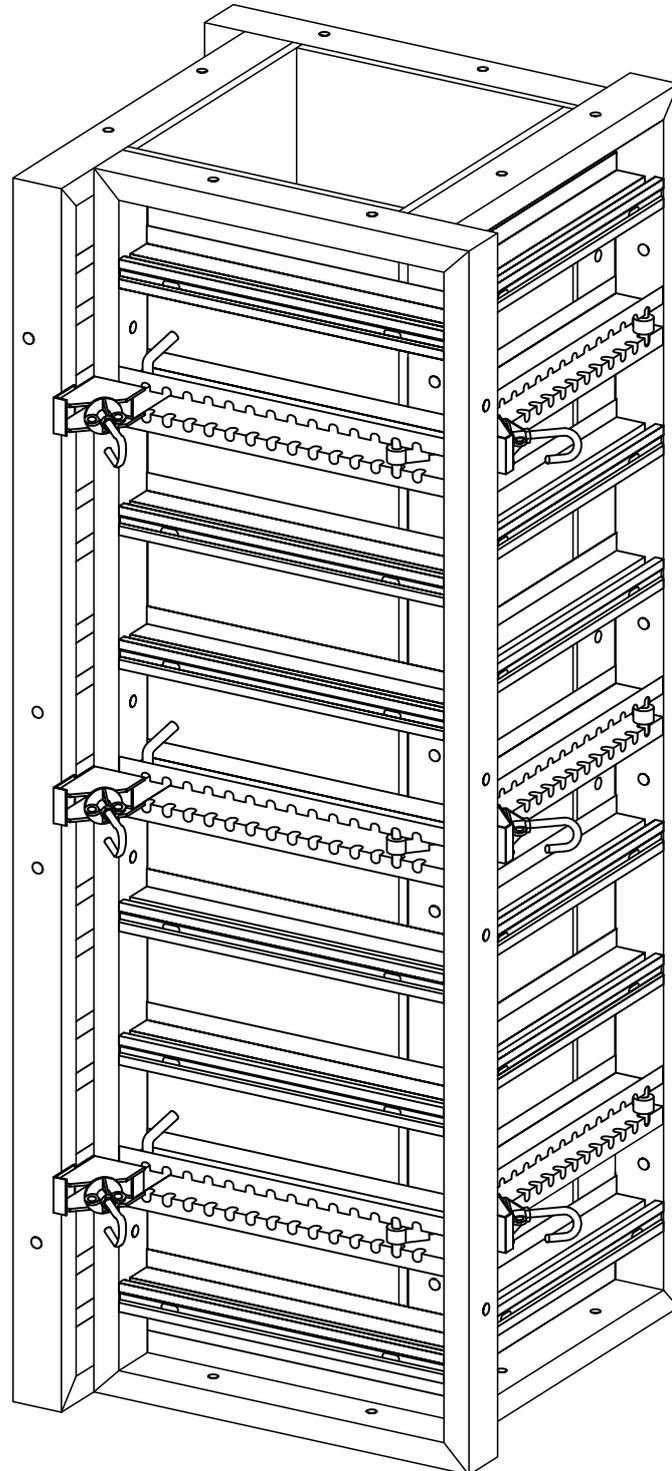
Visual check: The intended operation is to be subject to a visual check.



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.

2. NOE Vario 2000 column formwork



Permissible concrete pressure: 125 (kN/m²)

Concreting platform and ladders see
AuV NOE Concreting platform column formwork

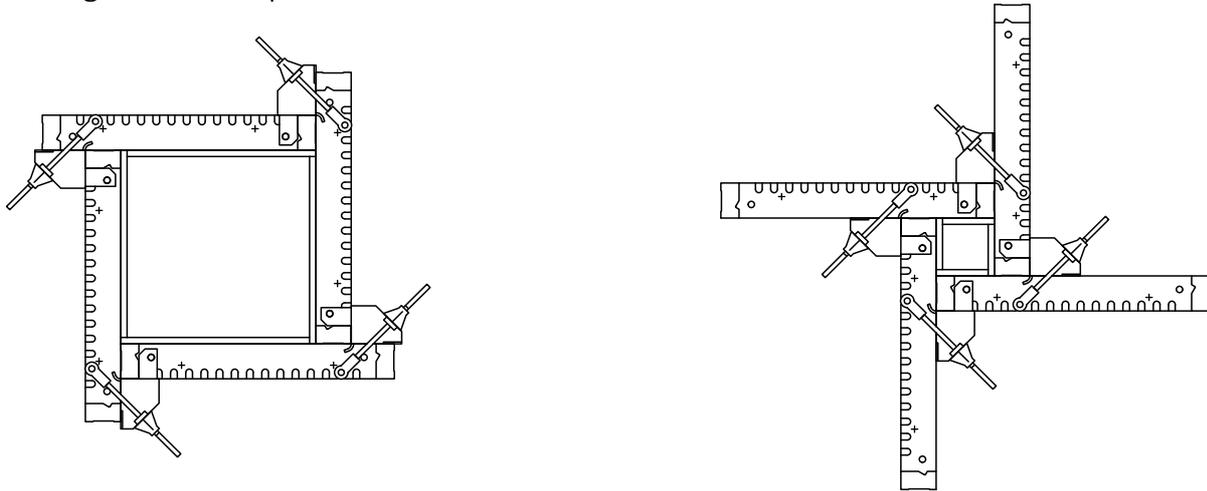
3. Scope of use

Column formwork infinitely adjustable

With 4 panels

max. 600 x 600 mm
 for facing thickness up to 24 mm

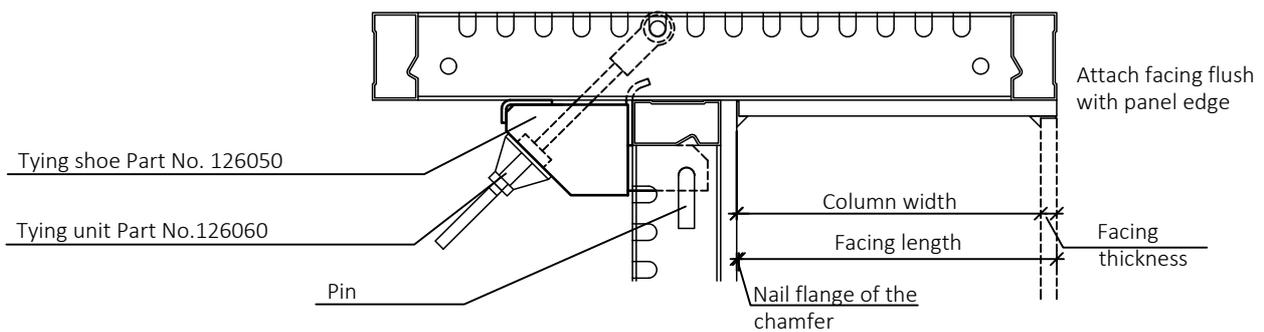
min. 150 x 150 mm



Detail of the installation of the tying shoe

Fasten tying shoe between U-profiles with pin. Thread in the tying unit turned through 90° and suspend it in the U-profiles.

When tightening the sprint nut, ensure that the tying unit is centralised in the tying shoe.



$$\text{Facing length} = \text{column width} + \text{facing thickness} - \text{nail flange of the chamfer}$$

Example :

Column width = 400 mm
 Facing thickness = 21 mm
 Nail flange of the chamfer = 3 mm

$$\text{Facing length} = 400 + 21 - 3 = 418 \text{ mm}$$

Possible facings

- 21 mm NOEform, smooth
- 22 mm three-ply panel, absorbent
- 24 mm boards, rough
- 22 mm boards, planed

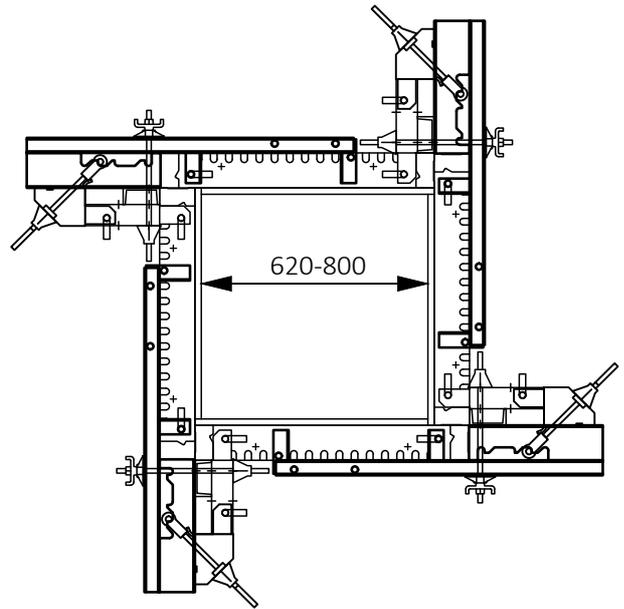
Assembly and Operating Manual

NOE Vario 2000 column formwork



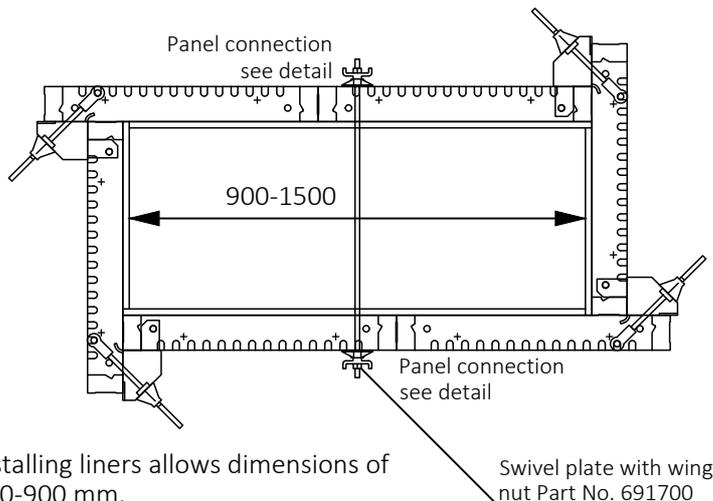
With 4 panels and extension set

For facing thickness up to 24 mm.
Column dimensions of 620 - 800 mm
Tie rod through the hole in the support bracket extension.

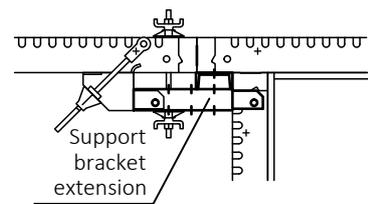


With 6 panels

Column dimensions of 900 - 1500 mm with
additional central tie rod



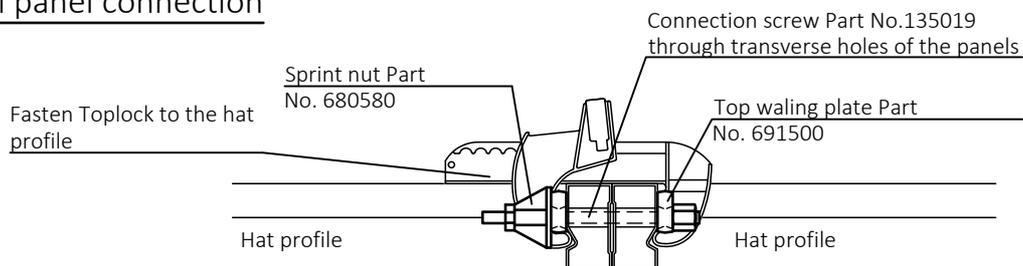
Installing liners allows dimensions of 800-900 mm.



When using the short support bracket extension (Part No. 126190), dimensions of 650-1250 mm are possible.

When using the support bracket extension (Part No. 126180), dimensions of 600-1200 mm are possible, in each case without bracing extension.

Detail panel connection



Unit height	Bolts	Toplock
3000 mm	4 x over the height	4 x over the height
2750 mm	4 x over the height	4 x over the height
2500 mm	4 x over the height	4 x over the height
1000 mm	2 x over the height	1 x over the height
500 mm	Not required	1 x over the height

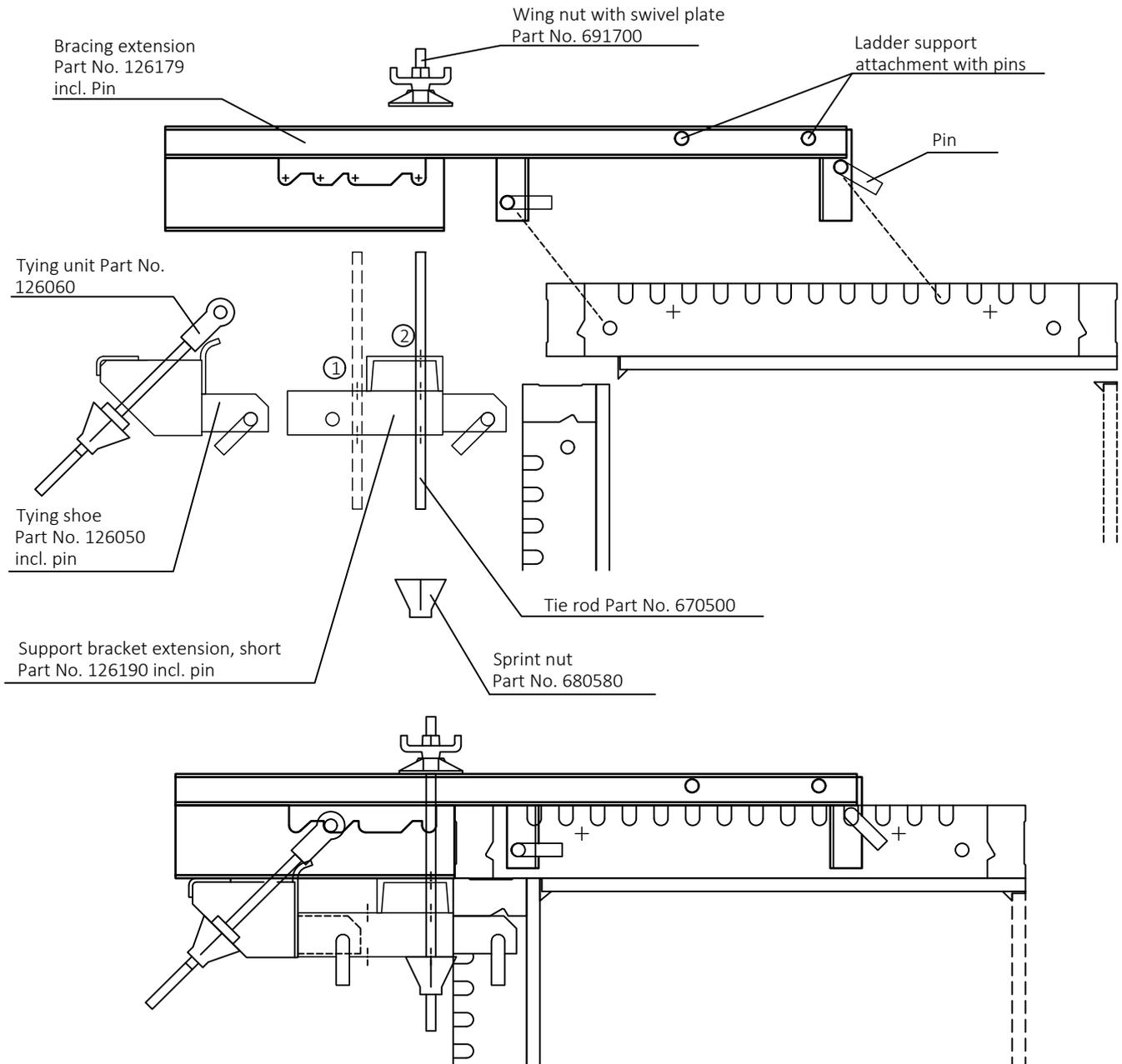
Detail of the installation of the extension set:

Insert the tying shoe into the support bracket extension and fasten with pin.

Insert both parts and the bracing extension into the U-profile of the panel and secure with pins.

Insert the tie rod through hole (1) or (2) in the support bracket extension as close as possible to the column panel.

Push through the tying unit turned through 90° and suspend it in the toothed profile of the bracing extension. When tightening the sprint nut, ensure that the tying unit is centralised in the tying shoe.

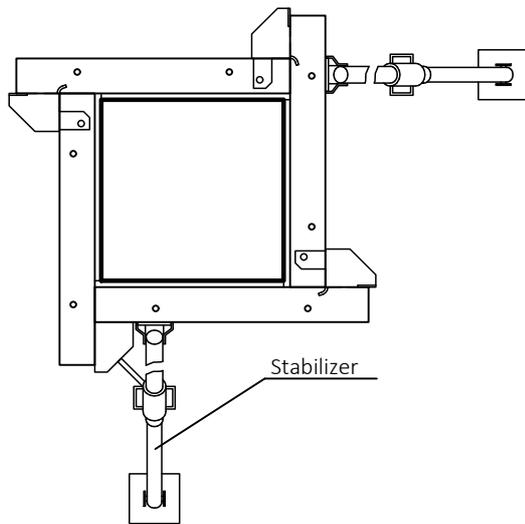


1 extension set is required per connection with support bracket extension.

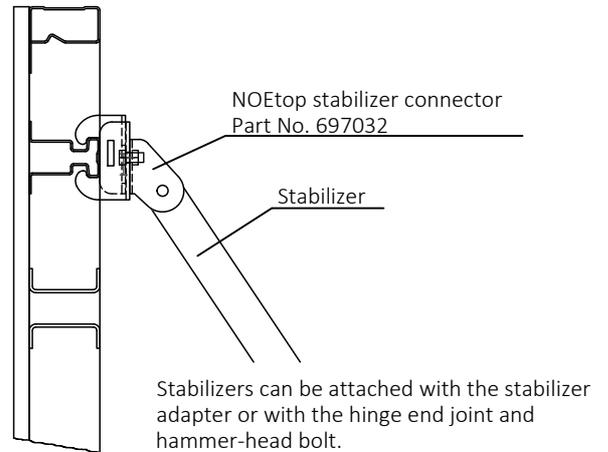
1 extension set consists of :

- | | |
|--|-----------------|
| 1 Bracing extension incl. 2 pins | Part No. 126179 |
| 1 Support bracket extension, short incl. 1 pin | Part No. 126190 |
| 1 Tying shoe incl. 1 pin | Part No. 126050 |
| 1 Tying unit | Part No. 126060 |
| 1 Sprint nut | Part No. 680580 |
| 1 Wing nut with swivel plate | Part No. 691700 |
| 1 Tie rod | Part No. 670500 |

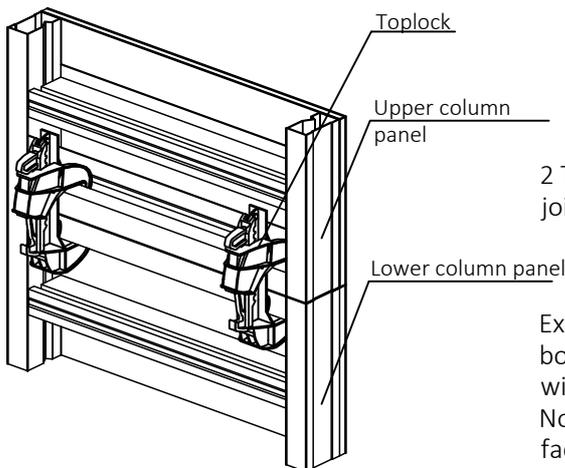
4. Formwork stabilizer



Detail of fastening



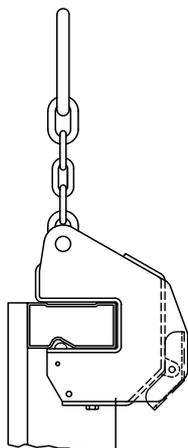
5. Formwork extension



2 Toplocks are required per panel at the butt joint for an extension of the formwork

Extensions for panel heights over 4.25 m require additional bolting of the panels through the transverse holes on the rear with a tie rod and sprint nut or M18x160 hexagonal bolt, Part No. 318900. This is also necessary for preassembled panels with facings that have to be transported by lorry.

6. Crane suspension

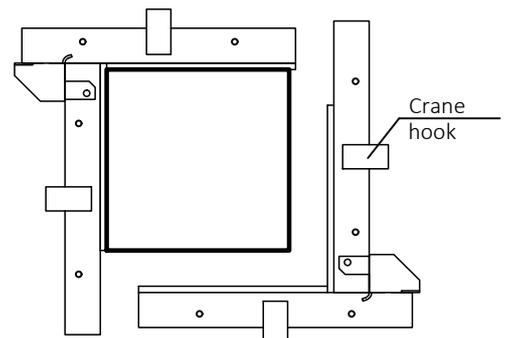


Crane hook
 Part No. 135904
 Weight 6.8 kg

Load max. 20 kN
 under vertical tension

Use permitted only in accordance with the operating instructions !

Moving the corner unit using 2 crane hooks

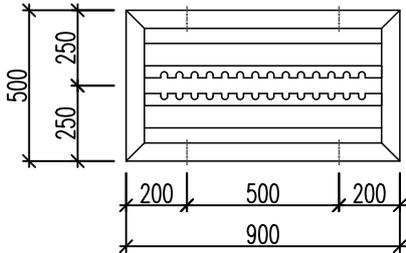


7. Column formwork panels

Unit 500 mm

Part No. 125255

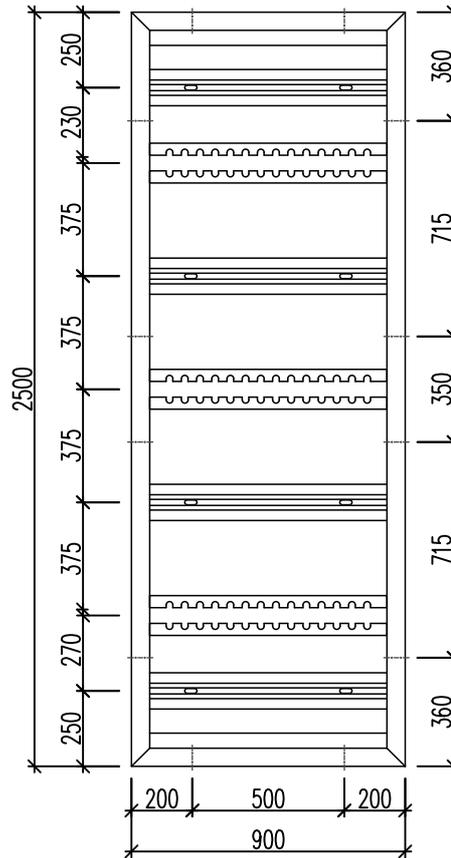
Weight 36 kg



Unit 2500 mm

Part No. 125253

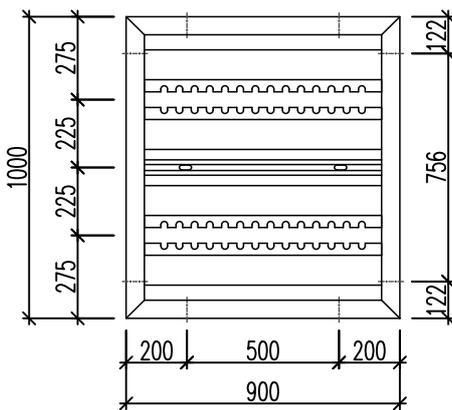
Weight 118 kg



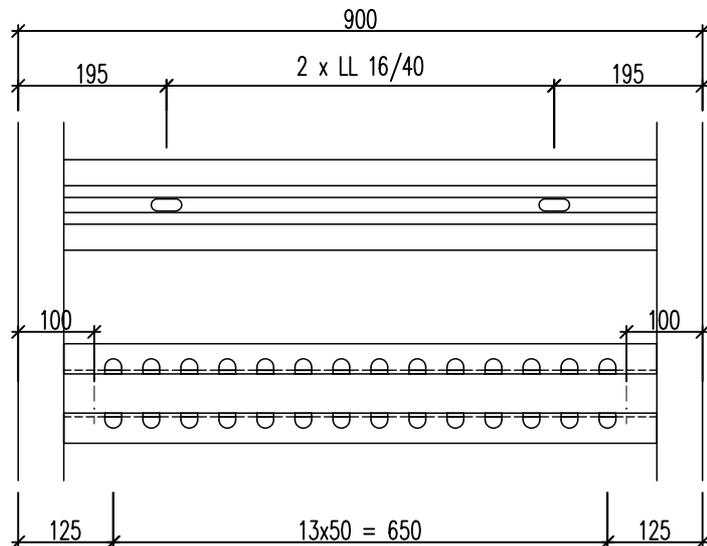
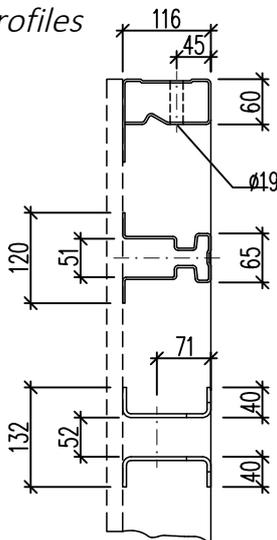
Unit 1000 mm

Part No. 125254

Weight 61 kg



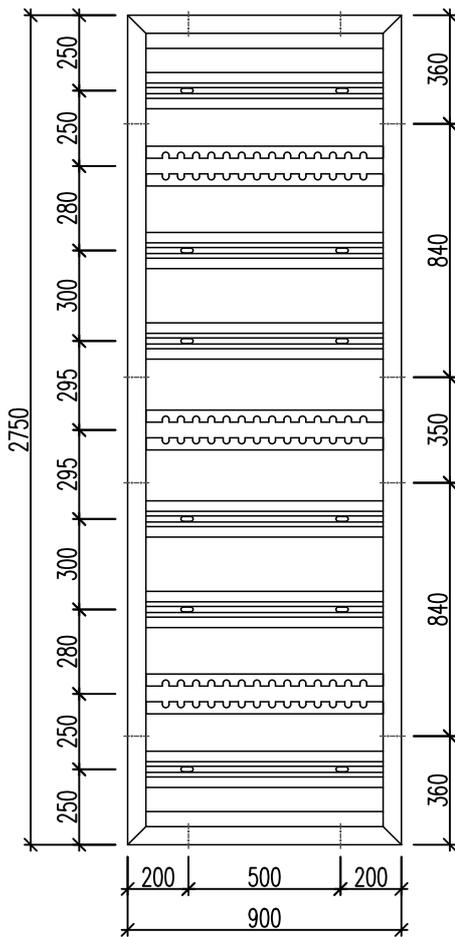
Detail of the
 formwork panel
 profiles



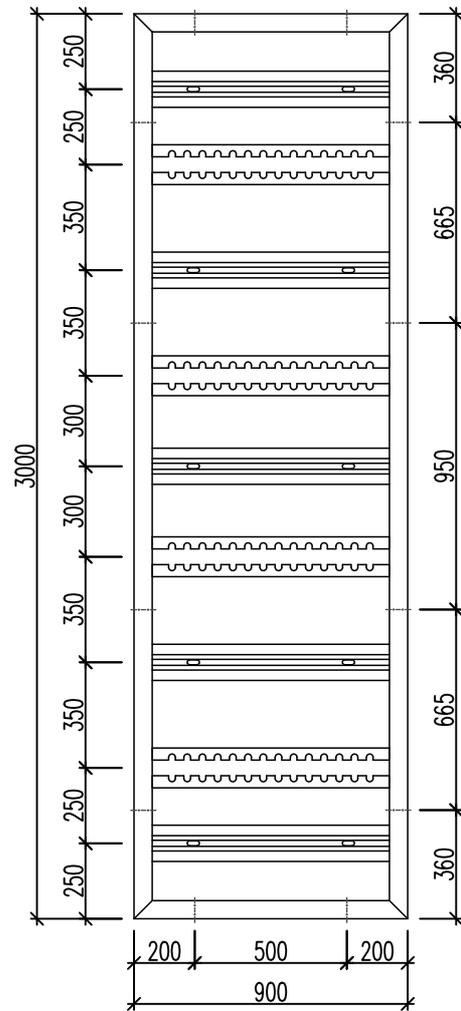
Assembly and Operating Manual
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Unit 2750 mm
Part No. 125252
Weight 137 kg



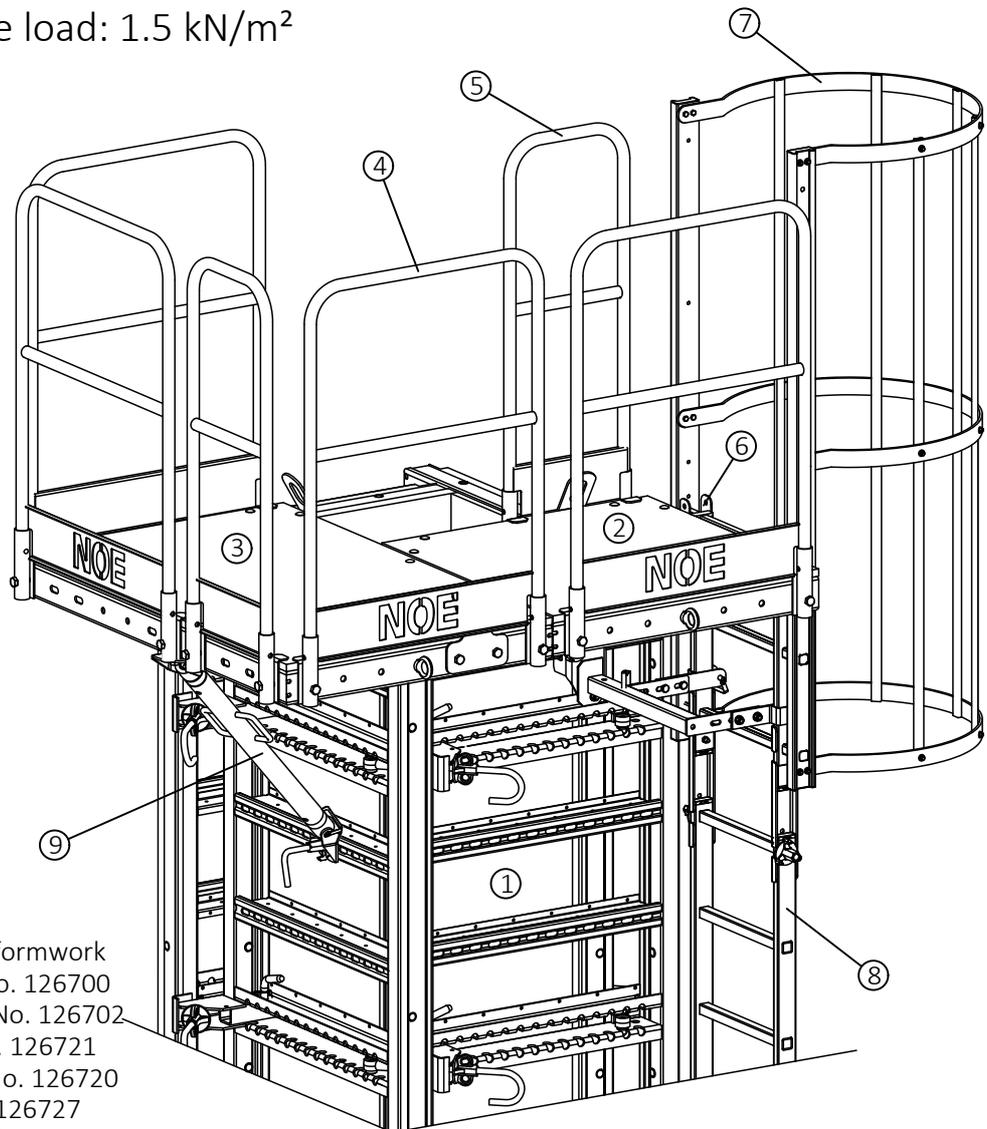
Unit 3000 mm
Part No. 125256
Weight 145 kg



Overview of system components concreting platform

NOE Vario 2000 column formwork

Max. permissible live load: 1.5 kN/m²



- 1 NOE Vario 2000 column formwork
- 2 Platform 875x875 Part No. 126700
- 3 Platform 875x1375 Part No. 126702
- 4 Guard rail 75 cm Part No. 126721
- 5 Guard rail 37.5 cm Part No. 126720
- 6 Ladder support Part No. 126727
- 7 Platform ladder with ladder cage Part No. 126726
- 8 Ladder
- 9 Strut

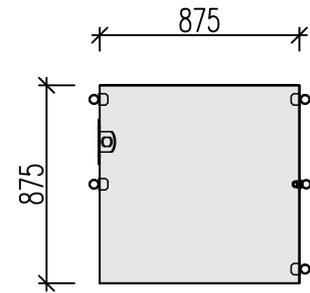
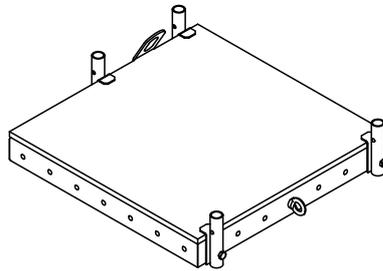
For the assembly and use of the concreting platforms and ladders the instructions for assembly and use NOE Concreting Platform Column Formwork of NOE must be applied.



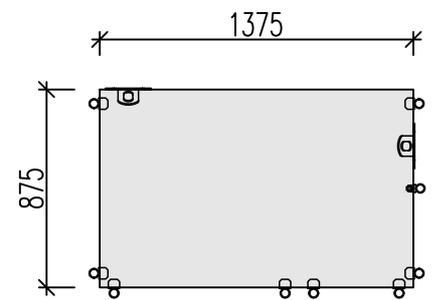
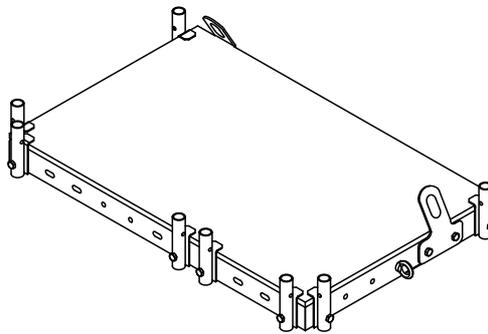
In addition the safety-related and country-specific laws, standards as well as other safety regulations in the respective version have to be observed.

5 Individual parts

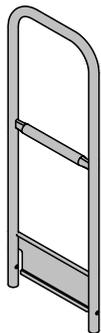
RS platform 875x875



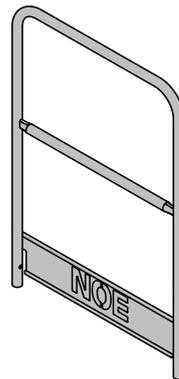
RS platform 875x1375



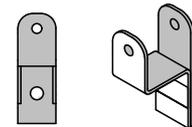
RS platform guard rail 375



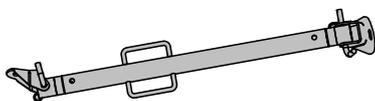
RS platform guard rail 750



RS-Platform Guard rail holder



Strut 1,00-1,20 m





THE FORMWORK



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