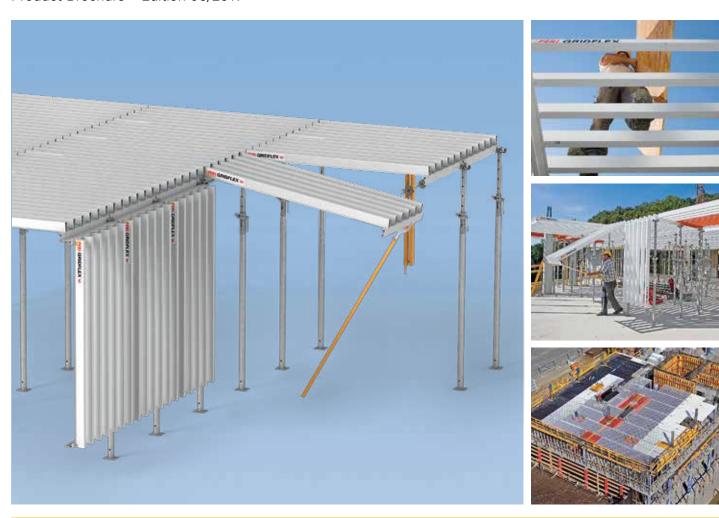


## **GRIDFLEX**

# The flexible slab formwork with safe accessible grid elements

Product Brochure – Edition 06/2017



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#### Edition 06/2017

#### Publisher

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#### Important notes

All current safety regulations and guidelines applicable in those countries where our products are used must be observed.

The photos shown in this brochure feature construction sites in progress. For this reason, safety and anchor details in particular cannot always be considered as conclusive or final. These are subject to the risk assessment carried out by the contractor.

In addition, computer graphics are used which are to be understood as system representations. For ensuring a better understanding, these and the detailed illustrations shown have been

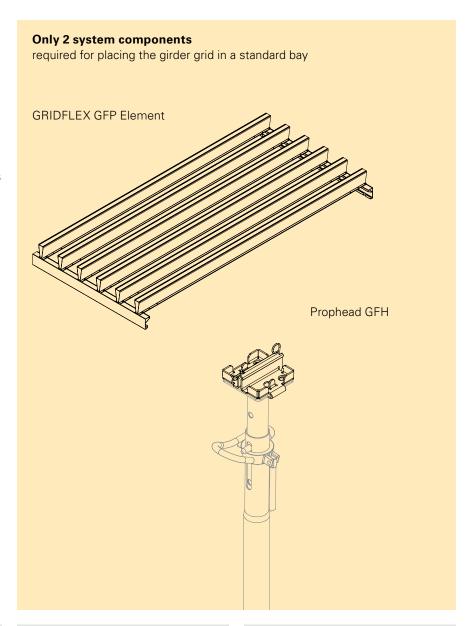
partially reduced to show certain aspects. The safety installations which have possibly not been shown in these detailed descriptions must nevertheless be available. The systems or items shown might not be available in every country.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required for any deviations from the standard design data.

The information contained herein is subject to technical changes in the interests of progress. Errors and typographical mistakes reserved.

The flexible slab formwork with safely accessible grid elements

The lightweight GRIDFLEX Slab Formwork is used for constructing residential and multi-storey buildings. Slab thicknesses up to 33 cm can be realized with the formwork. In order to concrete slabs up to 67 cm thick, the panels have to be additionally supported in the centre. The standard panel weighs only 20 kg and is swivelled upwards from the assembly area by means of the shuttering aid. Slab props are subsequently hooked in and vertically aligned. On the now accessible girder grid, the formlining of choice can be installed. The recurring systematic assembly sequence ensures fast working operations.



#### Safe shuttering procedure

by swivelling the panels upwards with site personnel positioned on the slab below

#### Simple working operations

through a systematic assembly sequence with only one standard and two compensation panels

#### Filler areas are quickly closed

through a simple change of direction of the panels along with the use of transverse and longitudinal infills

#### Assembly

Hook in the GRIDFLEX element from below, ...



... align horizontally with the shuttering aid, then attach the slab prop and position vertically.



Following this, install formlining of choice on the safely accessible girder grid.



#### **Certified many times**







### Safe shuttering procedure

Panels are swivelled upwards with site personnel positioned safely on the slab below

The special feature of the GRIDFLEX is the high level of safety requirements which extends throughout the entire sequence of operations. Initially, the system is securely fixed to the building in both longitudinal and transverse directions using the Wall Holder. This means that the system is securely held in position during the systematic shuttering procedure that follows.



#### Safe shuttering operations from the level below

The girder grid elements are simply swivelled upwards into position by means of the shuttering aid. Subsequently, the slab prop with Prophead is hooked into the panel and vertically positioned. The same systematic assembly sequence each time prevents any mistakes during forming.

#### Safety through guardrails installed on the building edges

The Guardrail GF 100 is pre-assembled on the ground and then swivelled upwards into position together with the panel. Bracing must be installed in order to ensure that the panel can be safely pushed upwards and secured throughout forming operations.







#### Safely accessible area for installing the formlining

The small beam spacing of only 13 cm provides a safe working area for site personnel to install the formlining.

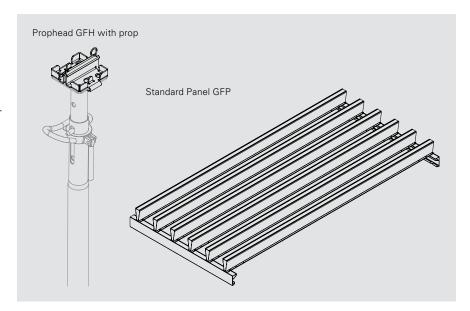


### Simple working operations

A systematic assembly sequence with only one standard and two compensation elements

#### A minimum of system components

The standard bay is formed using only two main components: the Standard Panel and GRIDFLEX Prophead. This simplifies forming operations and the entire logistics. The regular unchanging assembly sequence results in considerable time savings along with a high level of safety for site personnel.



#### Systematic installation

GRIDFLEX elements are safely hooked in from below and pushed upwards into position by means of the shuttering aid. Setting up and measuring of props is no longer necessary which means work is accelerated and mistakes are avoided. Furthermore, untrained personnel can quickly learn how to handle the system.

The standard bay has an area of 2 m<sup>2</sup> and requires only one slab prop whilst the prop loads are very low. With a slab thickness of up to 33 cm, work can be carried out using inexpensive steel tube slab props.



GRIDFLEX is optimized for PEP / PEP Ergo Slab Props. In the case of the standard slab thicknesses (up to 33 cm) used in residential construction, 0.5 props per m<sup>2</sup> of slab area are sufficient.

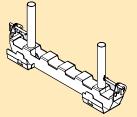


#### Ergonomic assembly with low individual weights

GRIDFLEX system components are particularly light and can be easily moved by hand. The 200 cm x 100 cm standard panel only weighs 20 kg/m.

#### Well thought-out details regarding storage and transportation

With the space-saving Stacking Device GF, GRIDFLEX panels can be stacked, stored and transported very compactly. For safe transportation and protection of the panels, the lashing is placed over the Tension Strap Rail GF.



#### **Tension Strap Rail GF 92**

Stacking Device GF

Standard Panel GFP 200 x 100

Filler Panel Cross GFC 200 x 100

For Standard Panels GFP 200 x 100 and Filler Panels GFL 150 x 100.

For separate stacking of the 3 panel types:

Filler Panel Longitudinal GFL 150 x 100.

### **Tension Strap Rail GF 125**





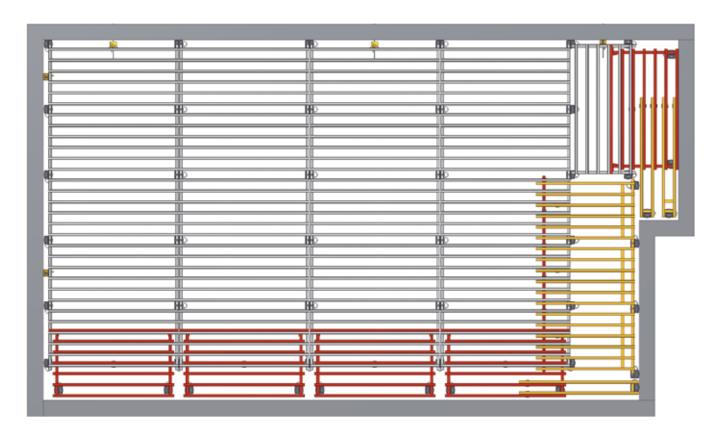
The spring mechanism secures the Prophead to the slab prop. In so doing, the Prophead is attached to the end plate of the slab prop without the need of pins or screws. The slab props can therefore be changed extremely quickly, e.g. to accommodate different slab heights.



A minimum of time and effort: Mounting of the Prophead GFH on the slab prop.

### Filler areas are quickly closed

Simple change of direction, use of longitudinal and transverse infills



A system slab formwork must offer the corresponding flexibility in order to be able to adapt to different floor ground plans. GRIDFLEX provides this flexibility

through a change in the shuttering direction as well as corresponding filler panels.

#### **Changing direction**

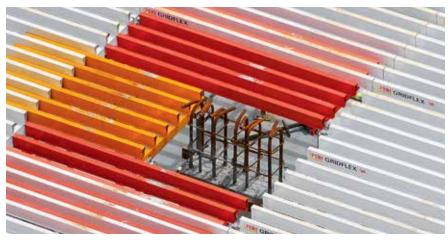
The direction of the GRIDFLEX panels can be changed as required by 90° so that the standard panels can be used for the largest possible area. In this way, filler areas are reduced to a minimum whereby savings are made regarding panel and prop utilization. Also when the direction has been changed, forming continues to take place as before from the ground.



#### Filler areas are quickly shuttered

In order to close any remaining filler areas, GRIDFLEX offers the corresponding longitudinal and transverse filler panels. The elements must be installed with an overlap to the standard panels. In this way, filler areas can be easily closed in longitudinal as well as in transverse directions whereby columns under construction can also be accommodated.

For ensuring easy handling, GRIDFLEX elements are colour-coded: Standard Panels are white, Filler Panels Longitudinal are red and Filler Panels Cross are yellow. This simplifies both forming operations and logistics.





#### Free choice of plywood sheet

The type of formlining can be freely selected depending upon requirements so that a wide range of requirements regarding the slab underside can be met. Individual plywood sheets are fixed directly with nails to the GRIDFLEX panels.





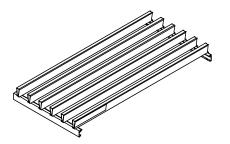


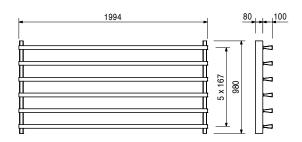
 Item no.
 Weight kg

 110038
 20.300

#### Standard Element GFP 200 x 100

Aluminium, nailable, white powder-coated.



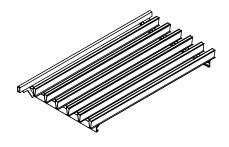


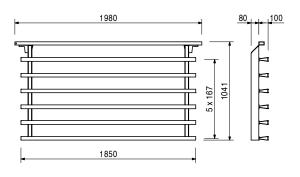
110040

22.100

#### Filler Element Cross GFC 200 x 100

Aluminium, nailable, red powder-coated.



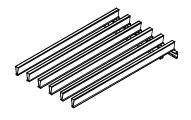


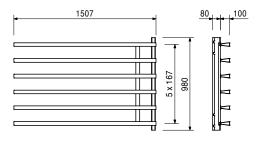
110486

15.000

#### Filler Element Longitudinal GFL 150 x 100

Aluminium, nailable, yellow powder-coated.



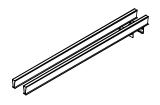


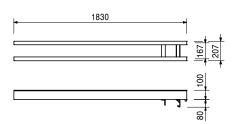
110646

5.800

#### Filler Element Longitudinal GFL 183 x 20

Aluminium, nailable yellow powder-coated.





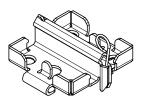


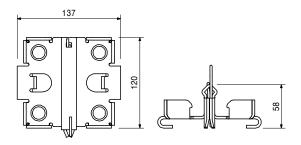
 Item no.
 Weight kg

 109910
 0.845

Prophead GFH, galv.

With spring retention. Supports GRIDFLEX elements.





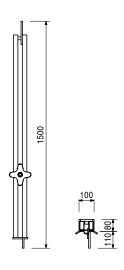
110238

4.880

Wall Holder GFW

For horizontal anchoring of the formwork on the





110044

2.340

**Shuttering Aid GFA** 

For forming of GRIDFLEX.



**Technical Data** 

Adjustable in 7.5-cm-increments.



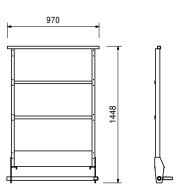


Item no. Weight kg 110326 7.150

#### Guardrail GF 100

As guardrail for cantilevers. Guardrail height above top edge of plywood = 1.30 m.





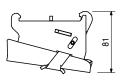
110556

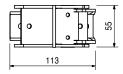
0.690

#### Clamp GFK, galv.

For attaching filler panels to the standard elements.





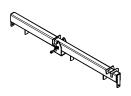


110045

5.120

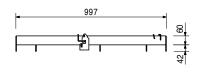
#### **Traverse GFT**

With securing wedge for fixing to the main beam of the element.



#### Note

For assembly of length compensation, with props as centre support and support for cantilever elements on the slab edge.







Item no. Weight kg 110595 0.411

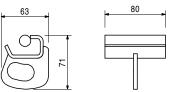
Tension Sleeve GFO

For bracing cantilevered elements.



#### Technical Data

Permissible tension force 3.0 kN.



065074

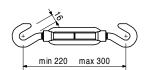
0.450

Turnbuckle 3.0 kN, M12

**Technical Data** 

Permissible tension force 3.0 kN.





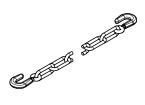
065073

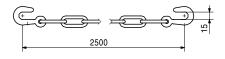
1.370

Anchor Chain 3.0 kN, I = 2.5 m

**Technical Data** 

Permissible tension force 3.0 kN.





028100

1.830

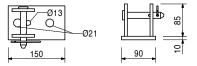
**Base Plate for RS** 

For assembly of RS Push-Pull Props.

Complete with 1 pc. 018050 Pir

1 pc. 018050 Pin Ø 16 x 65/86, galv. 1 pc. 018060 Cotter Pin 4/1, galv.





124777

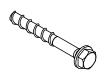
0.210

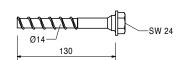
Anchor Bolt PERI 14/20 x 130

For temporary fixation to reinforced concrete structures.

See PERI data sheet! Drilling Ø 14 mm.

Note





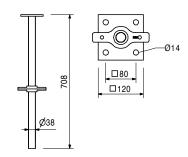


Item no. Weight kg 111291 4.690

Head Spindle GTR 38-70/50

For using GRIDFLEX in combination with PERI UP shoring.





110939 21.700

Stacking Device GF, galv.

For stacking 10 Standard Elements GFP 200  $\times$  100, Filler Elements Cross GFC 200  $\times$  100 or Filler Elements Longitudinal GFL 150  $\times$  100 respectively. Suitable for crane and fork-lift transport. 2 pieces per stack.

Complete with

2 pc. 111392 Extension GF 10

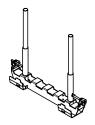
Note

Follow Instructions for Use!

**Technical Data** 

Permissible load-bearing capacity

- = 175 kg per device
- = 350 kg per stacking





Tension Strap Rail GF 92 Tension Strap Rail GF 125 1085

111392

115427

115385

2.970

2.090

4.230

Extension GF 10





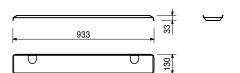
115427

2.090

Tension Strap Rail GF 92

As transport protection for GRIDFLEX Elements GFP 200  $\times$  100 and GFL 150  $\times$  100. Yellow powder-coated.



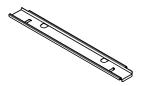


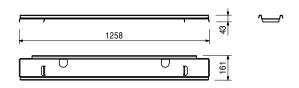


Item no. Weight kg 115385 4.230

Tension Strap Rail GF 125

As transport protection for GRIDFLEX Elements GFC 200 x 100. Red powder-coated.





111396 28.100

Pallet RP 80 x 110, galv.

For stacking GF 100 guardrails.

Complete with

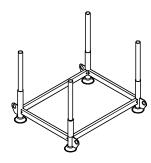
4 pc. 111392 Extension GF 10

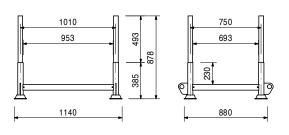
Note

Follow Instructions for Use!

**Technical Data** 

Permissible load-bearing capacity 500 kg.





111738

Pallet GF 85 x 210, galv. 63.900

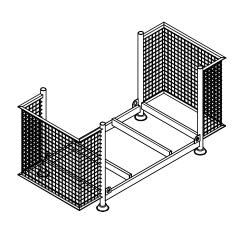
For stacking and transportation of GRIDFLEX Filler Panel GFL 183 x 20.

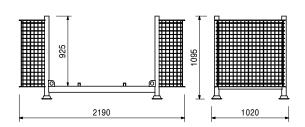
Note

Follow Instructions for Use!

**Technical Data** 

Permissible load-bearing capacity 750 kg.







Item no. Weight kg 111566 106.000

#### Platform GIP 200, complete

Platform with 12 mm thick decking and insertable guardrail. Delivered as individual components.

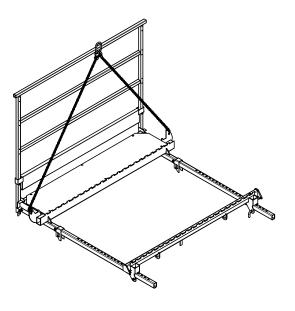
#### Complete with

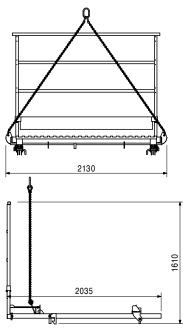
1 pc. 111703 Platform Frame GIP 200 1 pc. 111700 Platform Handrail GIP 200 2 pc. 111702 Main Beam GIP 200

1 pc. 111701 Cross Beam GIP 200

#### **Technical Data**

Permissible load 150 kg/m<sup>2</sup>.





111379 265.000

#### **Corner Platform GCP, complete**

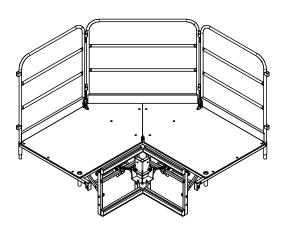
Platform with 21 mm thick decking and insertable guardrail. Delivered as individual components.

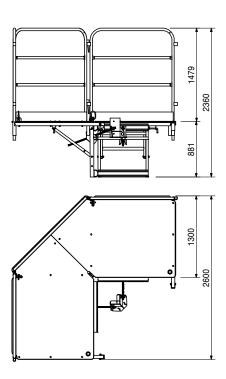
#### Complete with

pc. 111378 Corner Platform GCP
 pc. 111332 Handrail GCP 130, galv.
 pc. 111340 Handrail GCP 160, galv.
 pc. 111324 Internal Angle GCP

#### **Technical Data**

Permissible live load 150 kg/m<sup>2</sup>.







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## The optimal System for every Project and every Requirement



Wall Formwork



Column Formwork



Slab Formwork



**Climbing Systems** 



Bridge Formwork



**Tunnel Formwork** 



Shoring Systems



**Construction Scaffold** 



Facade Scaffold



**Industrial Scaffold** 



Access



**Protection Scaffold** 



Safety Systems



**System-Independent Accessories** 



Services



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