

# Installation instructions and maintenance for the GRAF drainage block 300

Graf drainage block 300 lorry

Order Nr: 360014

Graf drainage block 300 lorry

inspect

Order Nr: 360015

Graf drainage block 300 car

Order Nr: 360016

Graf drainage block 300 car

inspect

Order Nr: 360017

**Accessories:** 

**Connection elements (10 pieces)** 

Order Nr: 369012

Geo-textile 200 (Per m., roll wid. 5m)

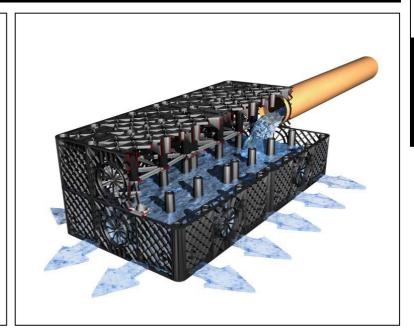
Order Nr: 369014

The points described in these instructions must be followed correctly. If not correctly observed, any right to claim on the guarantee may be refused. For all additional GARANTIA articles purchased there are separate installation instructions enclosed in the transportation packing.

Any missing instructions must be requested directly from us.

A complete check of the tank for possible damage must be carried out before the installation in the excavation begins.

The installation must be carried out by a professional firm.



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#### 1. General notes

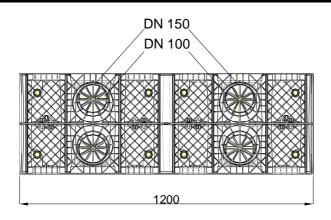
#### 1.1 Safety

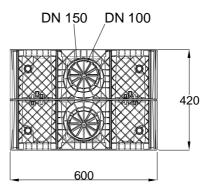
When working, the appropriate accident prevention regulations must be followed.

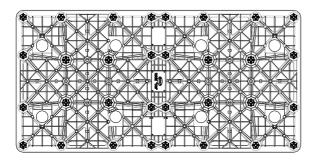
Furthermore, when carrying out assembly and installation work, inspection, maintenance and repairs, all work regulations and norms must be followed.

The GRAF company offers an extensive range of accessories that are all compatible with one another and may be used to construct a complete system. The use of other manufacturers accessories can impair the function of the system and liability for any resulting damages will no longer be covered under the guarantee.

## 2. Technical data







Volume Gross 300 Litre Net 285 Litre

Length 1200 mm Width 600 mm Height 420 mm

Connections 12 x DN 150 + 6 x D 125 + 6 x DN 100 Weight Rain Bloc car: 15,5 kg

Rain Bloc car inspect: 16,5 kg
Rain Bloc lorry: 17,5 kg
Rain Bloc lorry inspect: 18,5 kg

Material Drainage block for HGV: 100 % Polypropylene (PP)

Drainage block for light traffic: 100 % Polypropylene (PP)

Recycling materials

# 3. Installation requirements

#### 3.1 Choice of location:

- Distance from basement > 6 m
- Distance from ground water minimum > 1 m
- The distance from the existing or planned trees must be at least the expected spread of the trees crown.

#### 3.2 Excavation dimensions

The measurements of the excavation is in accordance with the number of drainage blocks to be installed by multiplying the length and width dimensions.

The following table gives the required earth covering and the maximum installation depth to the lower edge of the blind drain;

Transportation loads		Rain Bloc car and car inspect	Rain Bloc lorry and lorry inspect
Short duration Long duration		Max. 7,5 t/m² Max. 3,5 t/m²	Max. 10,0 t/m² Max. 5,0 t/m²
Light traffic(and without traffic loads)	max. Earth covering* max. Installation depth* max. Number of layers min. Earth covering	2000 mm 3500 mm 7 layers 250 mm	2750 mm 5000 mm 10 layers 250 mm
HGV 12	max. Earth covering* max. Installation depth* max. Number of layers min. Earth covering	- - - -	2750 mm 5000 mm 10 layers 500 mm
SLW 30	max. Earth covering* max. Installation depth* max. Number of layers min. Earth covering	- - - -	2500 mm 5000 mm 10 layers 500 mm
SLW 40	max. Earth covering* max. Installation depth* max. Number of layers min. Earth covering	- - - -	2250 mm 5000 mm 10 layers 500 mm
SLW 60	max. Earth covering* max. Installation depth* max. Number of layers min. Earth covering	- - - -	2000 mm 5000 mm 10 layers 500 mm

The maximum installation depth or earth covering\* is related to the ground substance with an inside angle of friction from  $\phi = 50.0^{\circ}$ 

#### 4. Installation

#### 4.1 Connecting the inlet and venting pipes

To connect the inlet and venting piping there are prepared positions for the openings to be cut out of the plastic ribbing. The pipes must extend at least 20 cm into the module. Should an installation over a wider area be proposed, then there must also be an appropriately greater number of inlet pipes to ensure an even distribution of the water.

#### 4.2 Installation of the drainage blocks

The geo-textile must be laid out in the excavation that has an even bottom surface with an overlap of not less than 30-50 cm. The modules are then positioned on the geo-textile (only laying down, never in the standing position) and all fastened together with the fastening pieces. For fastening lengthwise as well as widthwise, at least two fastening pins are required in each direction. When the system is to be built in several levels, then the individual layers must be arranged both lengthwise and crosswise (widthwise) to one another to ensure a stable interconnection. Before filling, the module must be completely wrapped in the Geo-textile and special attention must be paid to ensure that all the ends and edges of each fleece roll overlap by at least 30-50 cm. To conclude the installation, the excavation is evenly backfilled and compacted. The terrain of the ground surface and substructure should be the expected load to be prepared. If it is intended that grass should be sown over the GRAF drainage blocks, then a heavy duty plastic sheeting should first be laid over the drainage blocks and this then covered by an approximately 10 cm thick layer of clay otherwise the grass will dry out too quickly.

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