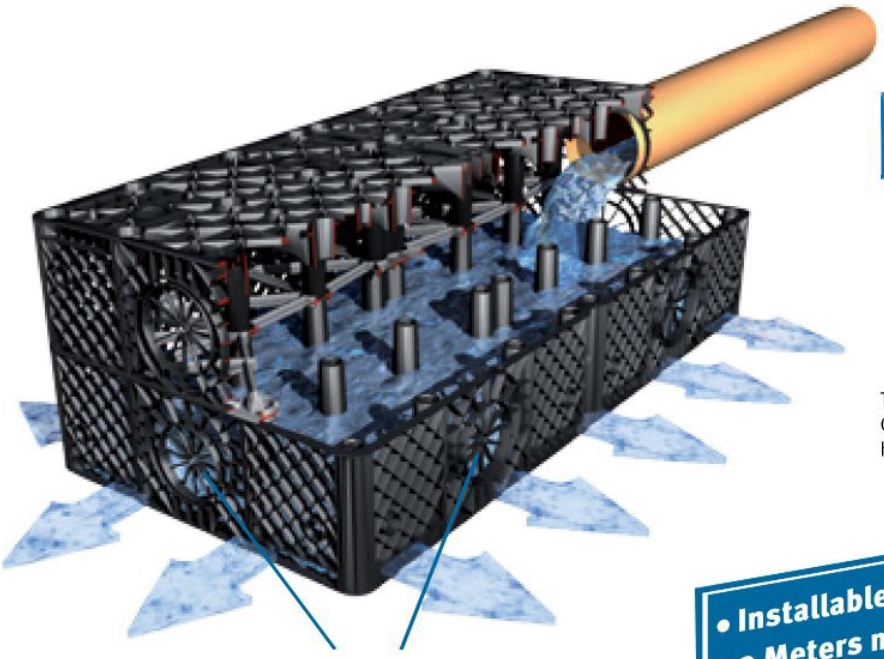
Rain Bloc black



Flexible connection options - length and crossways DN 100/125/150.

60 t

The special construction of the GRAF Rain Bloc guarantees lasting, high infiltration performance.

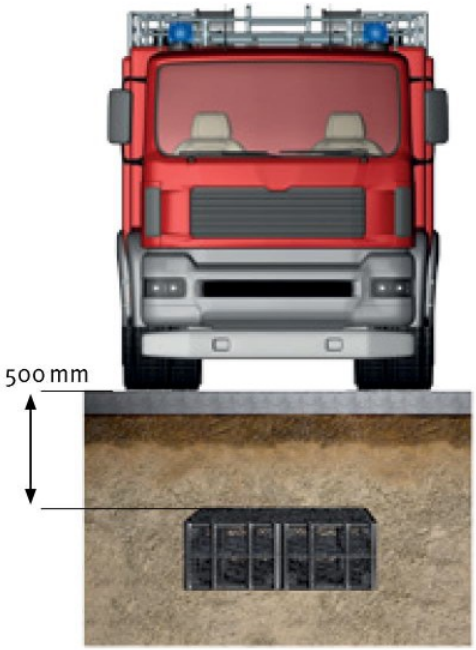
- Installable in up to 10 layers
- 2 Meters maximum earth covering

Rain Bloc black

Capacity [litres]	Length [mm]	Width [mm]	Height [mm]	Colour	Order no.
300	1200	600	420	black	360014

Webcode G4102

Technical data	
Volume	300 litres (79 US-gallons)
Length	1200 mm (47.2 inches)
Width	600 mm (23.6 inches)
Height	420 mm (16.5 inches)
Connectors	12 x DN 150 6 x DN 125 6 x DN 100
Material	
Weight	approx. 18 kilos
Material	Rain Bloc black: 100 % polypropylene (PP) recycling material



Lorry-bearing 60 t

Installation guide

Rain Bloc

Earthworks - Formation level

This will be done according to the rules of good practice (extra width at the foot of the structure and appropriate slope angle) relating to open-cut earthworks.

The adjustment is done:

- **flat formation level:**
  - small structures (length of less than 20 m), flatness tolerance 2 cm,
  - big structures (length greater than 50 m), flatness tolerance 5 cm,
  - medium-sized structures (length between 20 and 50 m), tolerance of 0.1 % on the length,
- **for retention:** sloping Formation level with a ditch of between 0.5 and 1 %
  The bad bearing capacity of the Formation level should be taken into account and where necessary amendments to the installation design should be made to overcome weak ground conditions.

Installation bed

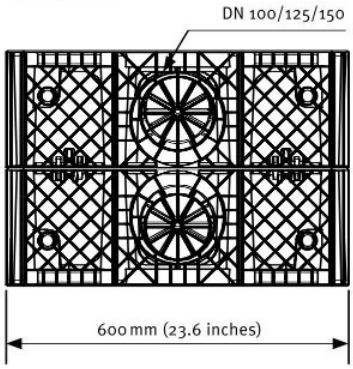
This will be done according to the rules of good practice (extra width at the foot of the structure and appropriate slope angle) relating to open-cut earthworks.

The adjustment is done:

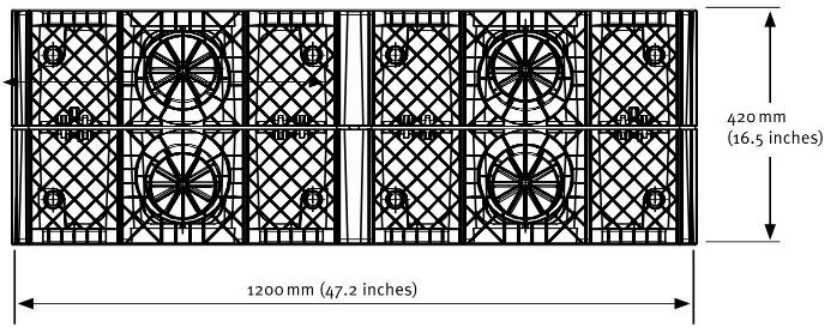
Geotextile - Geomembrane

The nature of the geosynthetic complex depends upon the application.
A non woven or woven geotextile is suitable for infiltration applications, see Rain Bloc Accessoires.
For retention applications a non woven geotextile fleece should be used to protect the non permeable geomembrane.
Installation will be done according to the rules of good practice and in particular by overlapping by 30-50 cm of the strips of geotextile in order to prevent any materials from getting into the structure.
The placement of the geomembrane will be done by gluing or welding (water-tightness around the pipes must also be assured).

Front view



Side view



Installation guide

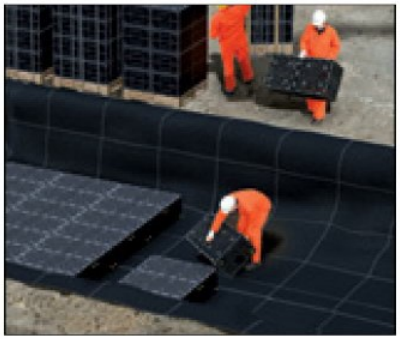
Rain Bloc

Receipt of product at site - Handling - Storage

The Rain Bloc crates are delivered in packs.
They are unloaded with fork-lift trucks or manually in the case of depalletisation.
They should be stored on a flat, clean surface.
In the event of prolonged storage (several months), it is advisable to protect them against ultra-violet light radiation.

Assembly of modules

It is recommended to align the first elements of the structure on the width of the tank. Special attention must be paid to the proper alignment of this row, as this conditions the proper layout of the structure.
The subsequent rows will then be made parallel to the first one then joined up with the clips.



Specification Summary

Rain Bloc

Ultra-light and strong grid structure

- Flat Formation level
- Polypropylene materials
- Dimensions 1.20 x 0.60 x 0.42
- Vol. ratio: 95 %
- Link between modules by clips, 2 per contact face
- Modules inspectable for the bottom and lateral surface
- Traditional modules for layers 2 and subsequent
- Resistance to heavy loads (HGV up to 60 t)
- Minimum earth covering under heavy loads: 0,50 m
- Maximum installation depth depending on the nature of the soil in place

Placement

Earthworks

These are carried out in accordance with the rules of good practice (extra width at the base of the structure and slopes of batters) relating to open-cut earthworks.

Formation level

This is made up of a 10 cm bed of filler materials (gravel or any other non angular granular material)

Geosynthetic complex (geotextile/ geomembrane)

The geosynthetic complex should have sufficient tensile strength to suit the application. Fitting is done as per the rules of good practice. For retention applications, typically a 2.0 mm thick membrane will be required with welded joints and a heavy duty protection fleece. For infiltration applications a geotextile with sufficient filtration properties is required.

Installation - Fitting

Placement by alignment of the first elements of the structure on the width of the tank. The subsequent rows are produced parallel to the first one then joined up with clips (each contact face between the modules must have a minimum of one clip).

Backfilling

The backfilling and compacting should be carried out in accordance with the rules of good practice, in layers with light compaction.

Deaeration

The regulating of the internal pressure of the structure and its ventilation will be done via vents: 1 deaeration end DN 100 for 100 modules or 3 deaeration end DN 100 for 250 modules.

Connection

- Mains of DN < 150: direct connection onto the module
- Mains of DN 200, 250 and 300: connection onto specially equipped module
- Connection to tank at bottom of modules (no fall connection)

Filtration

The presence of structures upstream of the filtration has special importance for it enables the collection of the maximum amount of floating material or material in suspension in the rainwater drained and capable of clogging up the structure.

Placement limits

For loads of up to 60 tons:

- minimum earth covering = 0.50 m
- maximum earth covering = 2 m
- maximum installation depth = 5 m