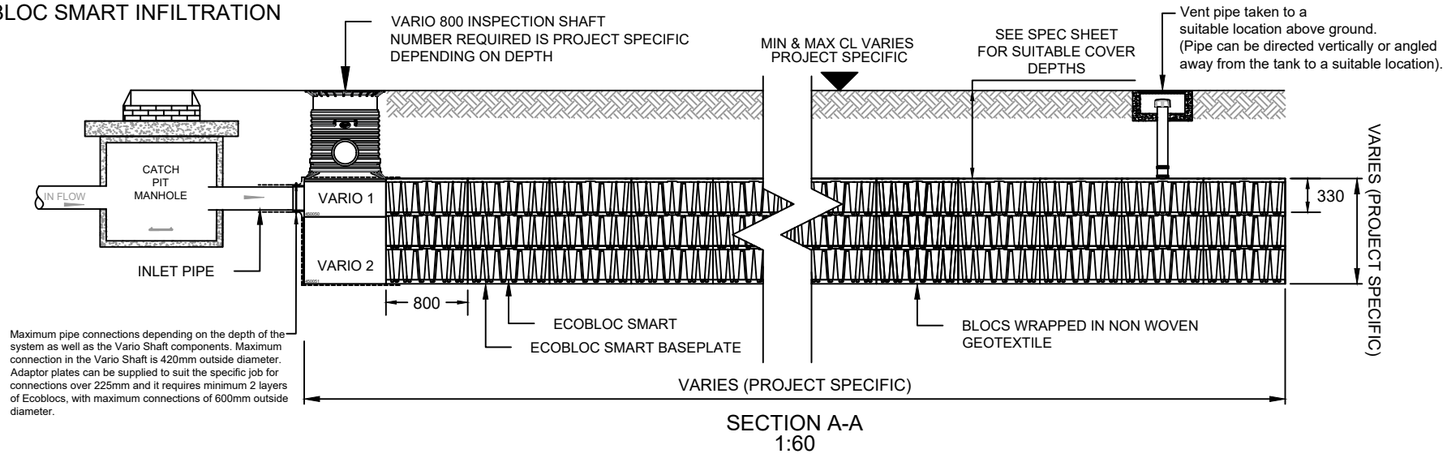
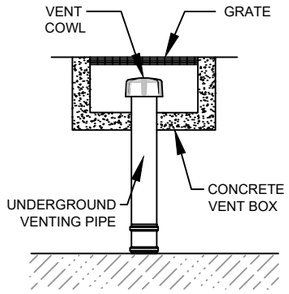
ECOBLOC SMART INFILTRATION



Maximum pipe connections depending on the depth of the system as well as the Vario Shaft components. Maximum connection in the Vario Shaft is 420mm outside diameter. Adaptor plates can be supplied to suit the specific job for connections over 225mm and it requires minimum 2 layers of Ecoblocs, with maximum connections of 600mm outside diameter.

SECTION A-A
1:60

VENT DETAIL

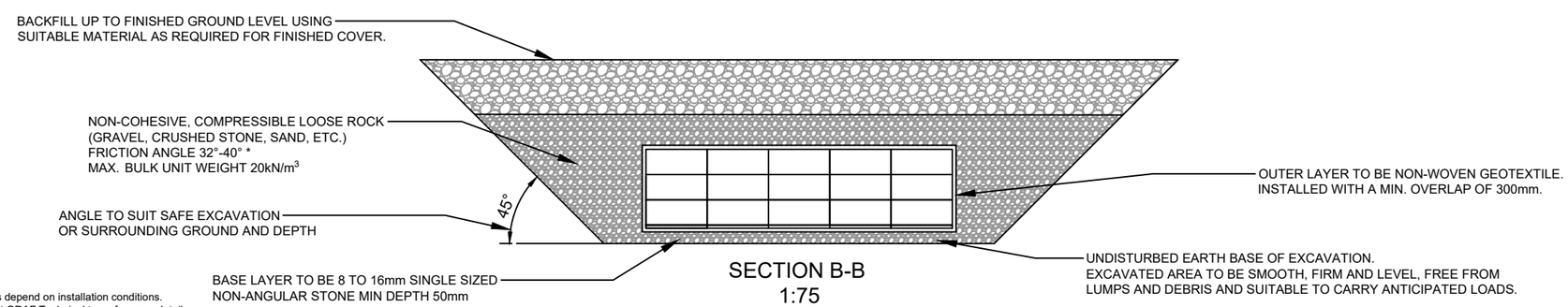


1:25

NB. The Infiltration tank must be vented to a suitable location above ground. For recommendation on venting size or location on the tank, please contact GRAF Australia.

PLAN VIEW - FIRST LAYER
1:60

NOTE: EXCAVATION TO EXCEED TANK SIZE BY 500MM ON ALL SIDES TO ALLOW FOR ACCESS. IF THERE IS ANY GROUNDWATER CONDITIONS TO BE CONSIDERED PLEASE CONTACT GRAF TECHNICAL TEAM.



SECTION B-B
1:75

* These values depend on installation conditions.
Please, contact GRAF Technical team for more details.

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NOTES:-

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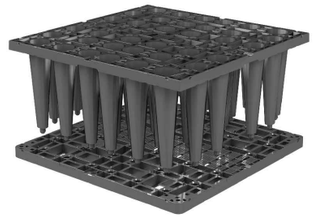
2. All dimensions are nominal and may vary within manufacturing tolerances.
3. All site temporary enabling works by others.
4. Graf products to be installed in strict accordance with Graf installation instructions.
5. This drawing is intended for guidance only. Confirmation of the suitability for a particular project should be sought from the consulting engineers prior to final design or commencement of any construction works.

ECOBLOC SMART



	Ecobloc	Baseplate
Dimensions (mm)	800 x 800 x 330	800 x 800 x 40
Gross Volume (m3)	0.211m³	0.025m³
Net Volume (m3)	0.202m³	0.024m³
Material	Polypropylene	Polypropylene
Weight	9.9kg	4.2kg
Void Ratio	>96% depending on number of layers	
Inspectable	Yes	
Comply to load requirements of AS5100		

REV.	DESCRIPTION	BY	DATE
2	LATEST REVISION	AA	04.01.2023
1	LATEST REVISION	MV	13.09.2022

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DRAWN : AA DATE : 04.01.2023
CHECKED : MV SCALE : VARIOUS@A3

PROJECT
GRAF STANDARD DETAILS

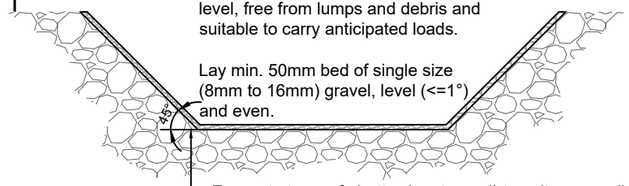
DESCRIPTION
INFILTRATION TANK
using GRAF ECOBLOC SMART &
VARIO SHAFT

DRAWING No. DWG-355 REV. 2 (Pg.1)

1

Excavation to comply with the size and depth of the tank proposed.
Excavation area to be smooth, firm and level, free from lumps and debris and suitable to carry anticipated loads.

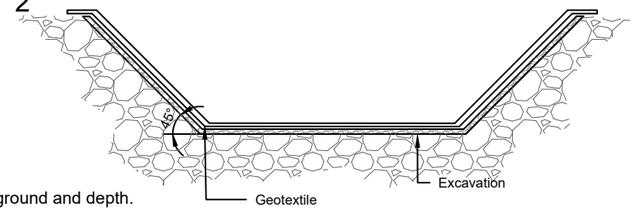
Lay min. 50mm bed of single size (8mm to 16mm) gravel, level (<=1°) and even.

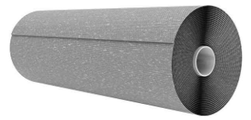


Excavate to a safe batter (or stepped) to suit surrounding ground and depth.
Maximum height of vertical sides to be according to local regulations.

2

Lay the geotextile on the base of the excavation and over the sides of the trench.

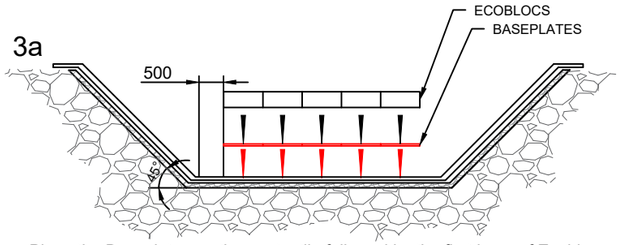




Geotextile:
150g/m² Non-woven

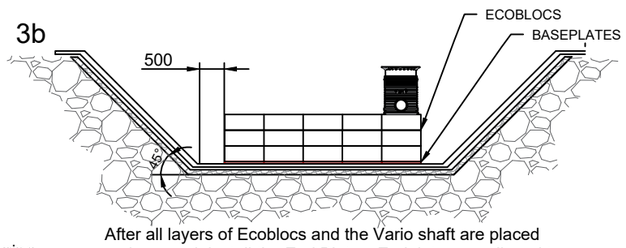
Geotextiles with characteristics less than those specified are unlikely to be suitable and are therefore not recommended for use with Graf Australia systems for this application

3a



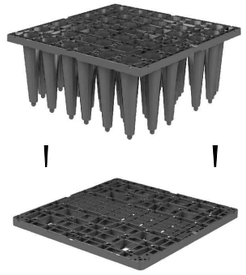
Place the Baseplates on the geotextile followed by the first layer of Ecoblocs securing them with connectors. Make sure the Vario shaft is the correct position for inspection.

3b



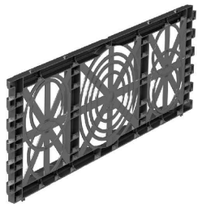
After all layers of Ecoblocs and the Vario shaft are placed and secured, install the End Plates. Endplates are clipped to the tank where it is required.

Assemble EcoBloc Smart module and Baseplate as shown below.



ECOBLOC SMART

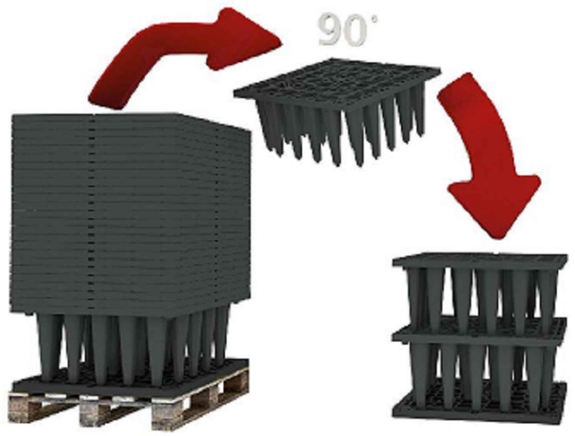
BASEPLATE

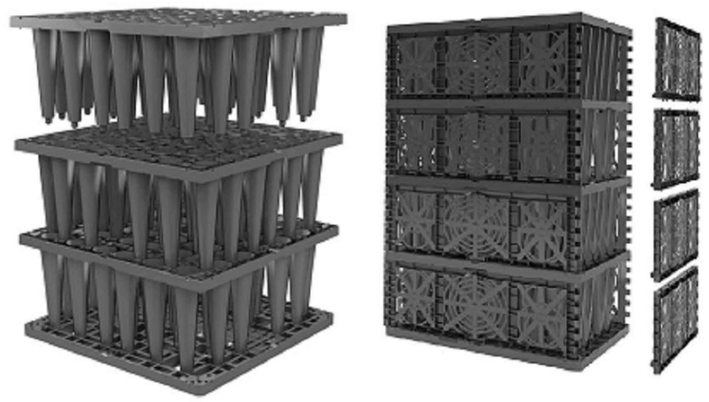


ENDPLATE

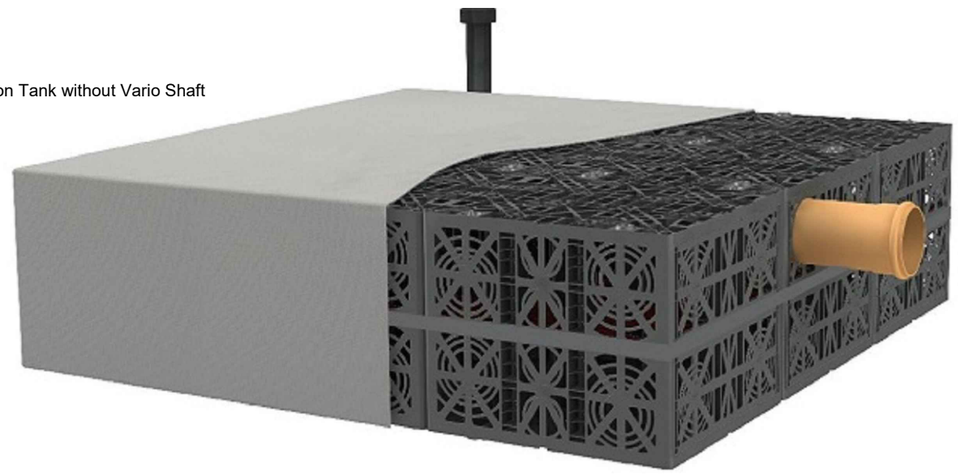
Place the one layer of Ecoblocs on top of the previously placed layer of EcoBlocs ensuring the connector clips are clipped locking the Ecoblocs together.

Connector clips are Red for illustration purposes only and are Grey in colour



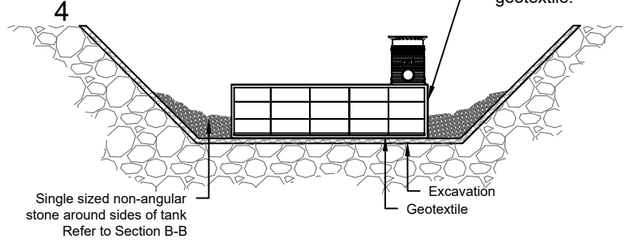


Infiltration Tank without Vario Shaft



Finally, wrap the blocs with the geotextile.

4



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INSTALLATION METHOD:

1. a) Excavate the trench with a safe batter (or stepped) ensuring the footprint allows for sufficient space between tank and the sides (minimum 500mm around all sides of the tank).
   b) Mark out the position of the tank including inlets.
   c) Lay min. 50mm of single sized non angular stone (8 to16mm) as a base for the tank. This can be laid to a maximum fall of 1°.

2. a) Lay the geotextile over the base the excavation, overlapping any joins by a minimum of 300mm.
   b) The geotextile used must meet the specification stated on the drawing.

3. a) Place EcoBlocs Smart Baseplates on top of the geotextile, according to inspection orientation. Baseplates do not require clipping. If a Vario shaft is to be included within the tank make sure the Vario Shaft base is in position located (Vario Shaft base do not not require a EcoBloc baseplate).
   b) Place EcoBlocs Smart on the baseplates according to inspection orientation, position leg ends into corresponding holes in the Baseplate. The bloc will only fit in the correct orientation. Push down firmly to ensure the EcoBloc is located correctly, clipping each adjacent bloc using the connectors until the first layer is completed.
   c) Make sure the row of EcoBlocs Smart are in the correct located position where inspection run is required.
   d) To install the next layer of blocs remove from the stack and turn 90° and position directly above the bloc below. Push down firmly to ensure the bloc is located correctly.
   e) Continue until all EcoBlocs Smart have been installed, ensuring clips are used to secure each bloc.
   f) Fit Endplates to the sides of each bloc by positioning the bottom in place then pushing firmly on the top section to locate into place.

4. a) Fix adaptor plates to the sides of the blocs in the required position for the inlet and if required.
   b) Cut a hole in the geotextile for inlet connections.
   c) Pull geotextile up around the sides and fully wrap the blocs, securing the top in place.
   d) Install vent pipe connection into the top of the tank at a suitable location.
   e) Backfill around the tank in 300mm layers increments using non-cohesive, compressible loose rock (gravel, crushed rock, sand, etc).
   f) In order to prevent silt from entering the tank it is recommended that silt traps or catchpit manholes are installed upstream of any inlet.These should be regularly maintained to avoid the buildup of any silt.

N.B. Installation method may vary depending on depth of the tank and is project specific. For more information or technical questions please contact our Technical Department at Graf Australia Pty Ltd.

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2	LATEST REVISION	AA	04.01.2023
1	LATEST REVISION	MV	13.09.2022

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DRAWN : AA DATE : 04.01.2023
CHECKED : MV SCALE : VARIOUS@A3

PROJECT
GRAF STANDARD DETAILS

DESCRIPTION
INFILTRATION TANK
using GRAF ECOBLOC SMART & VARIO SHAFT

DRAWING No. DWG-355 REV. 2 (Pg.2)

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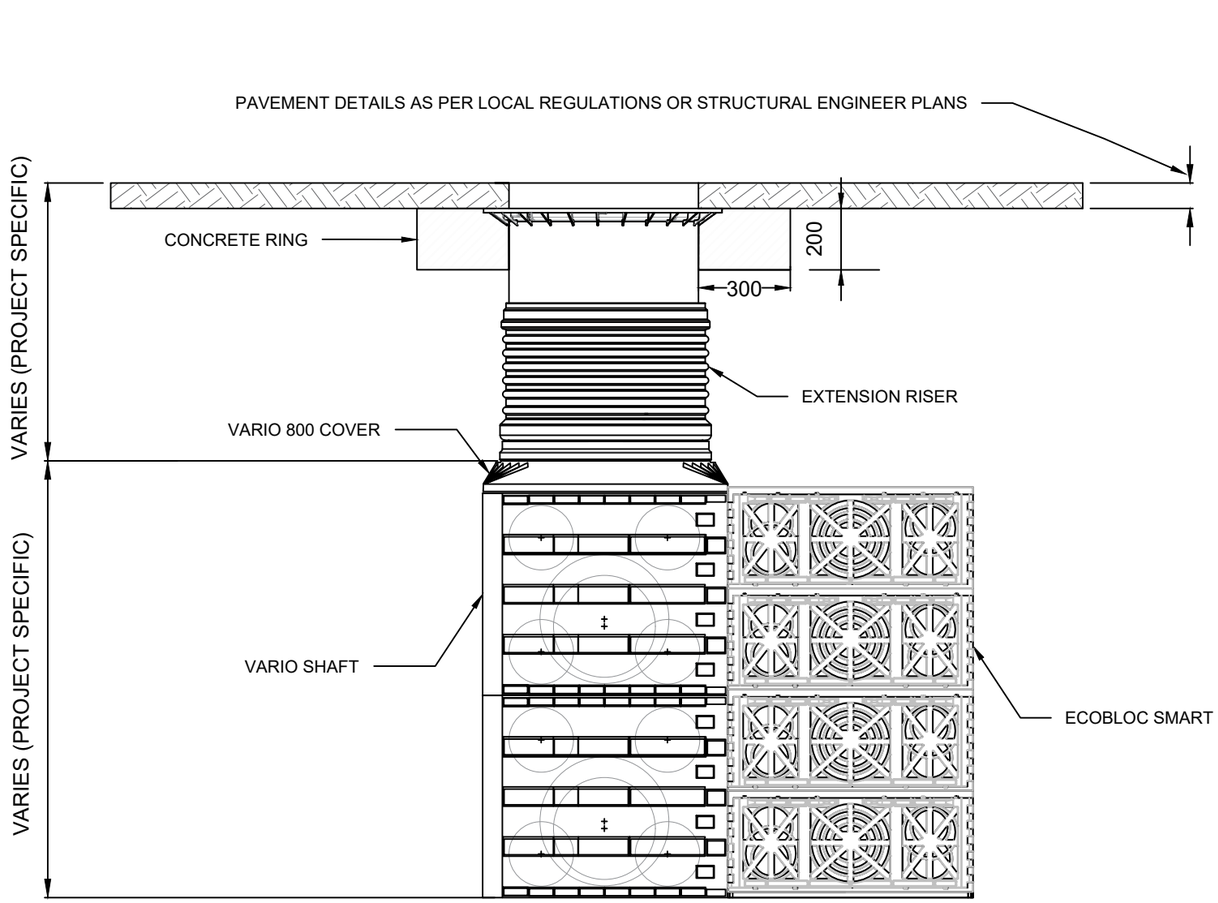
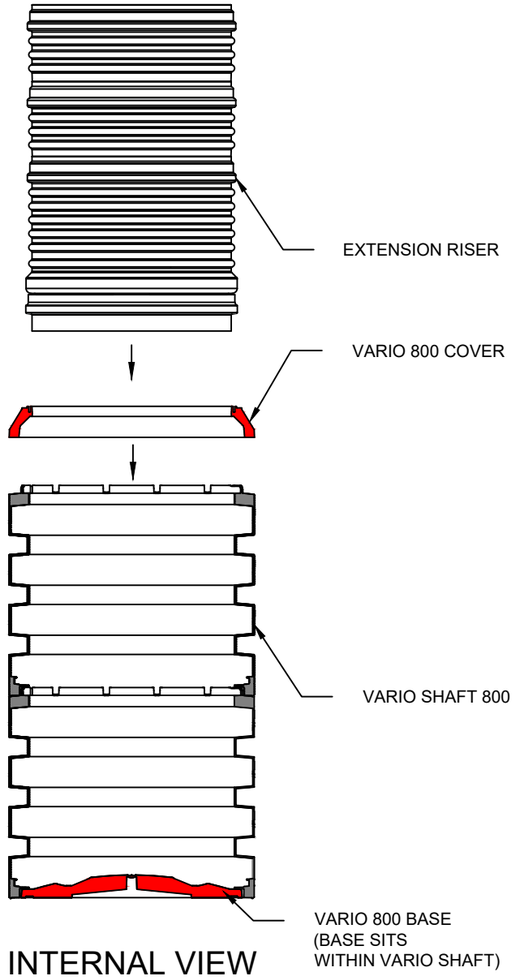


EXTERNAL VIEW



INTERNAL VIEW

VARIO 800 TYPE 1

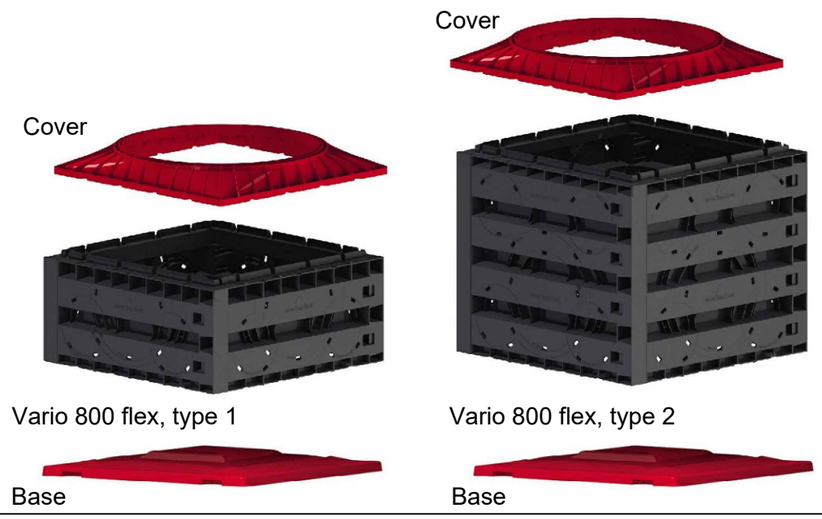
Dimensions (mm) 800 x 800 x 355
Weight 14kg
Volume 230 (litres)

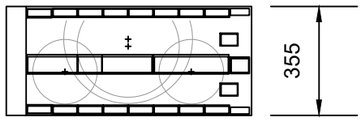
VARIO 800 TYPE 2

Dimensions (mm) 800 x 800 x 660
Weight 24kg
Volume 420 (litres)

VARIO 800 BASE/COVER SET

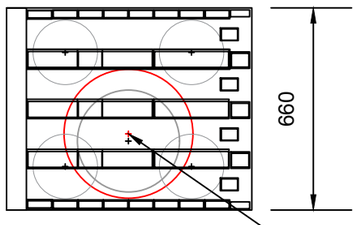
Dimensions (mm) 800 x 800 x 100
Weight 11kg





Vario 800 flex, type 1

Do not drill or use for inspection



Vario 800 flex, type 2

Drill DN400 on the mark towards the Ecobloc to access the tank for inspection

Vario 800 are modular and are easily assembled in a push fit manner.

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PROJECT
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DESCRIPTION
INFILTRATION TANK
using GRAF ECOBLOC SMART & VARIO SHAFT

DRAWING No. DWG-355 REV. 2 (Pg.3)