

The logistical miracle - can be laid in rows





Stormwater management ► Infiltration Tunnel / twin

Easy installation

The GRAF Infiltration Tunnels are laid in lines and can be flexibly adapted to specific conditions and to the individual storage volume requested. The installation of the modules is easy, quick and variable. The installation is possible without heavy equipment, as one Infiltration Tunnel only weighs 11 gram (24.3 lbs). The tunnel modules are simply stuck together in one line and equipped with 2 end plates per line.





300 l Volume

The compact dimensions combined with a storage coefficient of 100 % result in a useful volume of 300 l (79 US gal.).

Lorry-bearing up to 60 tons

In order to enable the free arrangement of surfaces above it, the Infiltration Tunnel features long-term resistance with 59 kN/m 2 (Infiltration Tunnel twin 35 kN/m 2) and is therefore lorrybearing.



The typical shape of the Infiltration Tunnel enables complete utilisation of the available volume for the temporary storage of rainwater.



Infiltration Tunnel twin – Twice the volume with the same space requirement

Upon request, the Infiltration Tunnel twin 600 litres (158 US gal.) offers volume through the connection of two identical Infiltration Tunnel modules.



Connections up to DN 300 (12")

Large infiltration volumes require large pipe diameters. For the GRAF Infiltration Tunnel, this is not a problem: each end plate features connections in the sizes DN 100 (4"), 150 (6"), 200 (8") and 300 (12"). In addition, connections in the sizes DN 100 (4") and 200 (8") are provided on the upper surface for the connection of a ventilation system or an inspection opening.



Up to 12,000 litres infiltration volume per pallet

Thanks to its special design, the GRAF Infiltration Tunnel can be stacked easily. Consequently, the shipment of up to 40 Infiltration Tunnels on one pallet saves considerable transport and storage costs.



up to 500,000 litres per lorry
975 items per 40" HC container

High infiltration performance

The ditch elements are placed directly upon an even layer of gravel. The sides are then covered with geotextile and the end faces are closed using end plates. This installation and the side slats ensure a permanent high infiltration performance.

Installation depth of over 4 metres (13' 1.5")

The GRAF Infiltration Tunnel can be installed at a depth of up to 4.25 metres (13' 11"), even under heavy loads. The maximum installation depth for the Infiltration Tunnel twin is 2.5 metres (8' 2.4").





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Infiltration Tunnel lorry

Volume	Length	Width	Height	Weight	Colour	Order no.
300 l (79 US gal.)	1160 mm (45.7")	800 mm (31.5")	510 mm (20")	11 kg (24.4 lbs)	black	230010

Q Webcode G4103





Infiltration Tunnel twin car

Consisting of two tunnels and 1 set of click-bolt connectors

Volume	Length	Width	Height	Weight	Colour	Order no.
600 l (158 US gal.)	1160 mm (45.7")	800 mm (31.5")	1020 mm (40")	22 kg (48.8 lbs)	black	410130

Q Webcode G4104



End plate for Infiltration Tunnel / twin

Item	Colour	Order no.
End plates (Set of 2 units)	black	231004

Item	Colour	Order no.
End plates (Set of 2 units)	black	231004

Infiltration Tunnel / twin accessories

Inspection end DN 200 (8") Order no. 340527



Deaeration end DN 100 (4") Order no. 369017

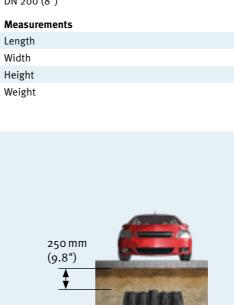
GRAF click-bolt connectors Connector for Infiltration Tunnel twin (set of 6 for one Infiltration Tunnel twin car) Order no. 410094



GRAF-Tex geotextile For one Infiltration Tunnel Size of 2.50 x 2.50 m (8' 2.4" x 8' 2.4") Order no. 231006

Sold by the metre, roll width 5 m (16' 4.8") Order no. 231002

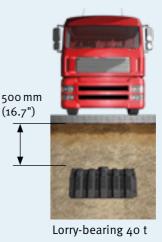
Sold by the metre, roll width 2,5 m (8' 2.4") Order no. 231007

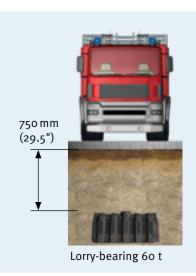


Lorry 12/H-10/H-15

Connections on front

max. earth covering





Infiltration module Infiltration Tunnel lorry Infiltration Tunnel twin car Gross / net volume 300 litres (79 US gal.) 600 litres (158 US gal.) Load Short-term max. 100 kN/m² max. 75 kN/m² Long-term max. 59 kN/m² max. 35 kN/m² min. earth covering 250 mm (9.8") 250 mm (9.8") Without traffic load max. earth covering 3750 mm (12' 3.2") 1500 mm (4' 10.3") max. installation depth 4250 mm (13' 11.3") 2500 mm (8' 2.4") min. earth covering 250 mm (9.8") 500 mm (16.7") Vehicle max. earth covering 3500 mm (11' 5.4") 1500 mm (4' 10.3") max. installation depth 4000 mm (13' 1.5") 2500 mm (8' 2.4") min. earth covering 500 mm (16.7")

3250 mm (10' 7.5")

max. installation depth 3750 mm (12' 3.6") ground level min. earth covering 500 mm (16.7") min. – max. max. earth covering Lorry 30 max. earth covering 2750 mm (10' 7.6") instal max. installation depth 3250 mm (10' 8") max. number Tunnel depth of layers min. earth covering 500 mm (16.7") Lorry 40/HS-20 max. earth covering 2500 mm (8' 2") min. 1 m (3' 3.3") max. installation depth 3000 mm (9' 10.1") min. earth covering 750 mm (29.5") max. groundwater Lorry 60/HS-25 max. earth covering 1750 mm (5' 8.5") max. installation depth 2250 mm (7' 4.6")

DN 100 (4") 2 X 4 X DN 150 (6") 2 X 1 X DN 200 (8") 1 X 2 X DN 300 (12") 1 X 2 X Connections on top DN 100 (4") DN 200 (8") 1 X 1 X

1160 mm (45.7"), 1220 mm (48") (incl. end plates) 800 mm (2' 7.5")

510 mm (24") 1020 mm (48") approx. 11 kilos (24.2 lbs) approx. 2 x 11 kilos (2 x 24.2 lbs) Weight

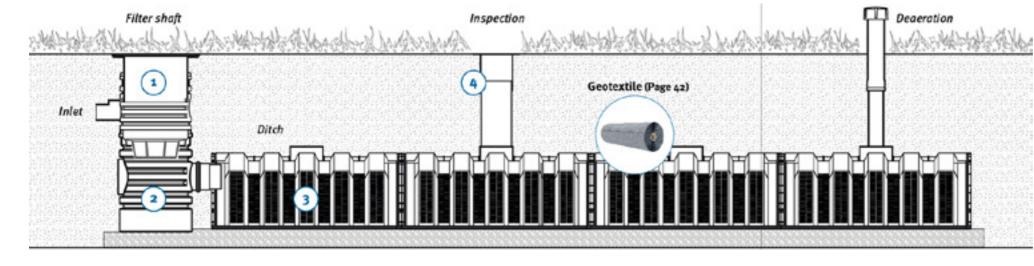
Infiltration Tunnel/twin

Areas of application

Stormwater management > Infiltration Tunnel / twin



Ditch infiltration with Infiltration Tunnel



1 Telescopic dome shaft · Choice of pedestrian, car or HGV loading

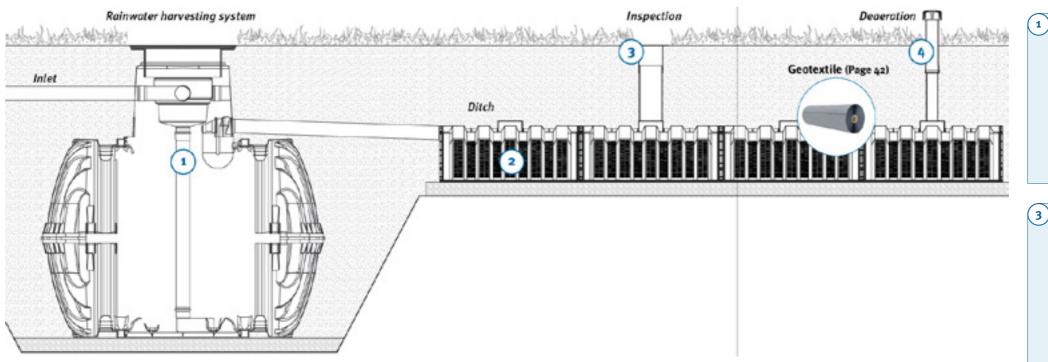
2 Infiltration shaft DN 400 (16") • 2 x DN 150 (6") • For connections of up to DN 150 (6") Page 50

3 Infiltration Tunnel • The logistical miracle can be laid in rows Page 42

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Combined rainwater harvesting and infiltration with Infiltration Tunnel



Rainwater harvesting You can find more information about our Carat S Rainwater tank in our catalogue, "Rainwater harvesting solutions"

2 Infiltration Tunnel • The logistical miracle can be laid in rows Page 42

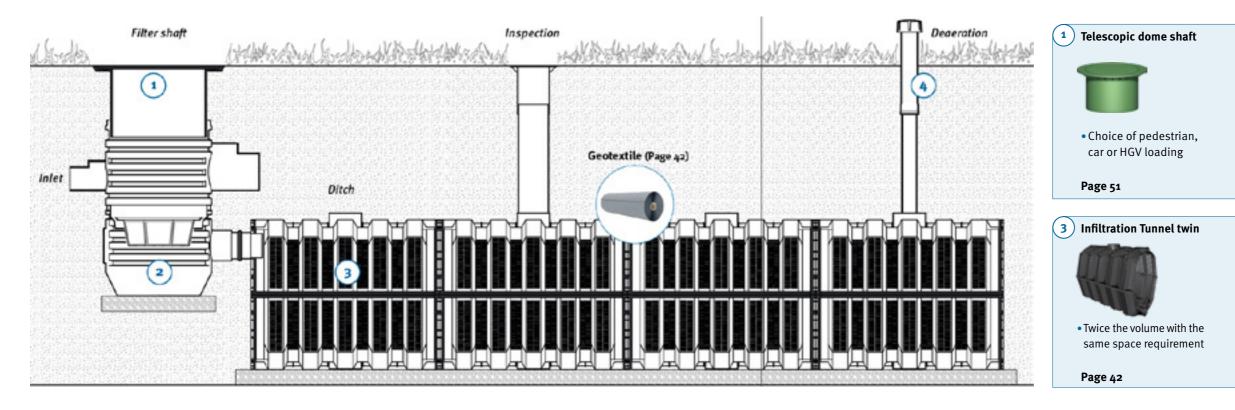
(3) Inspection end • DN 200 (8") Page 42

4 Deaeration end • DN 100 (4") • For separate ventilation Page 42

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Ditch infiltration with Infiltration Tunnel twin



2 Infiltration shaft DN 600 (24")



- 2 x DN 150 (6")
- For connections of up to DN 150 (6")

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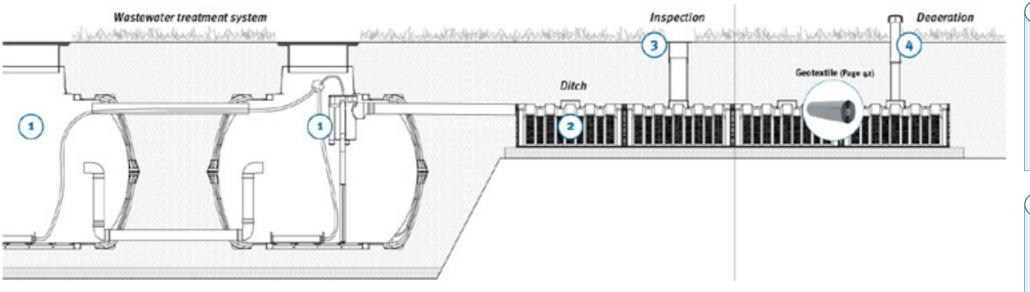
4 Deaeration end

1

- DN 100 (4")
- For separate ventilation

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Combined wastewater treatment and infiltration with Infiltration Tunnel



1 Wastewater treatment

You can find more information aboutwastewater treatment in our catalogue, "Wastewater Treatment Solutions"

2 Infiltration Tunnel



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(3) Inspection end



• DN 200 (8")

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4 Deaeration end



- DN 100 (4")
- For separate ventilation

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