MADE IN ITALY

Jayna

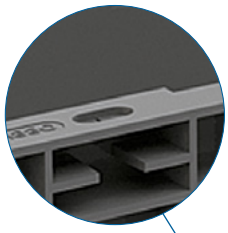
Technodrain

Technologies for linear drainage

Effective From 01.08.2024

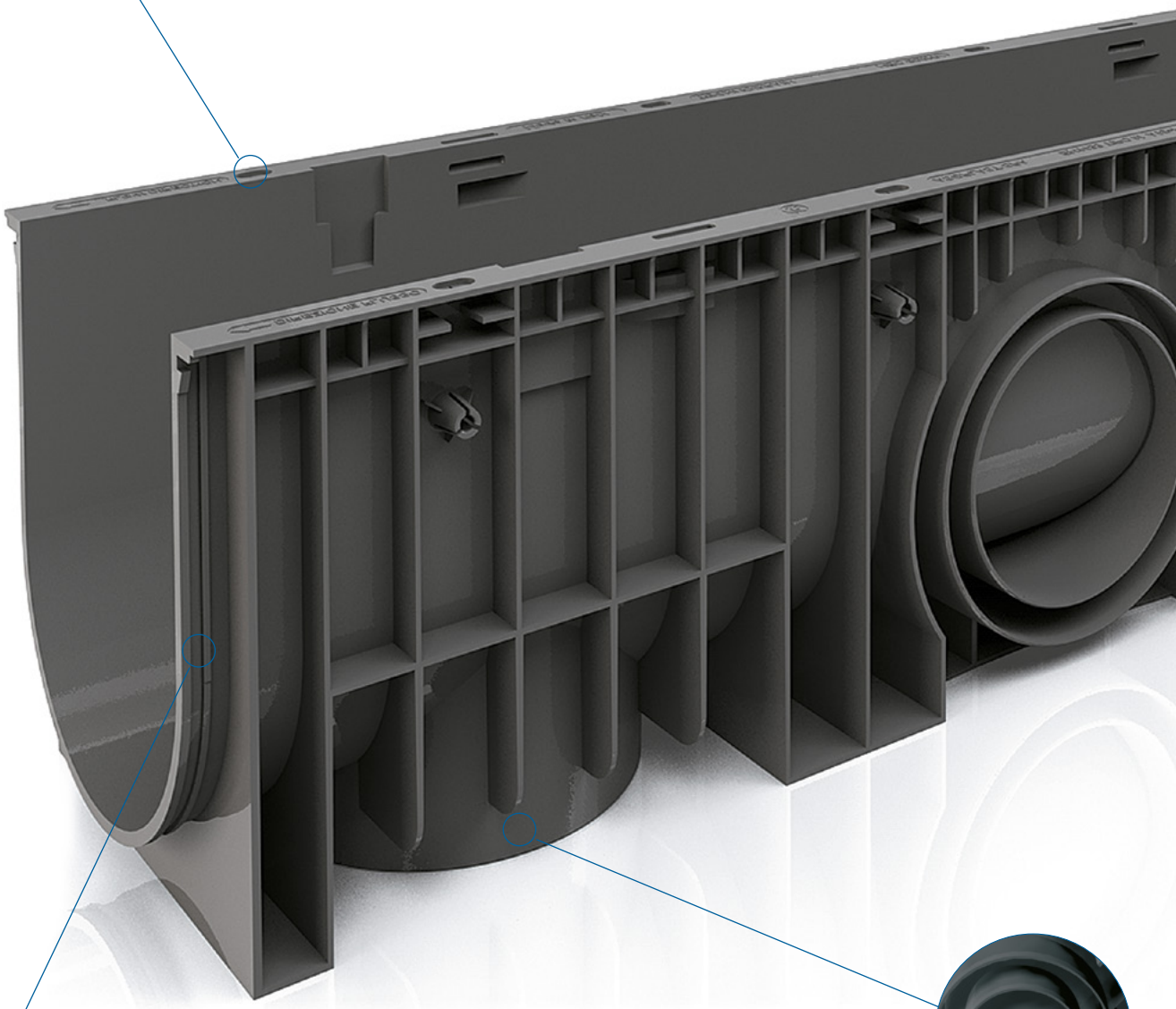
evo evomax neomax exel WAVEDRAIN

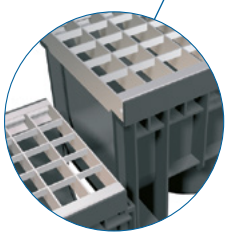
MAIN CHARACTERISTICS



Screw thread mountings

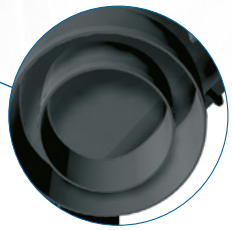
Mountings for the threading of screws closed by the appropriate diaphragm, to be opened only if necessary to avoid water infiltration external to the channel.





Groove and tongue joint

Allows for the installation of channels with a ready-mounted grating. Saving you time on site and supplying more accurate fixings.

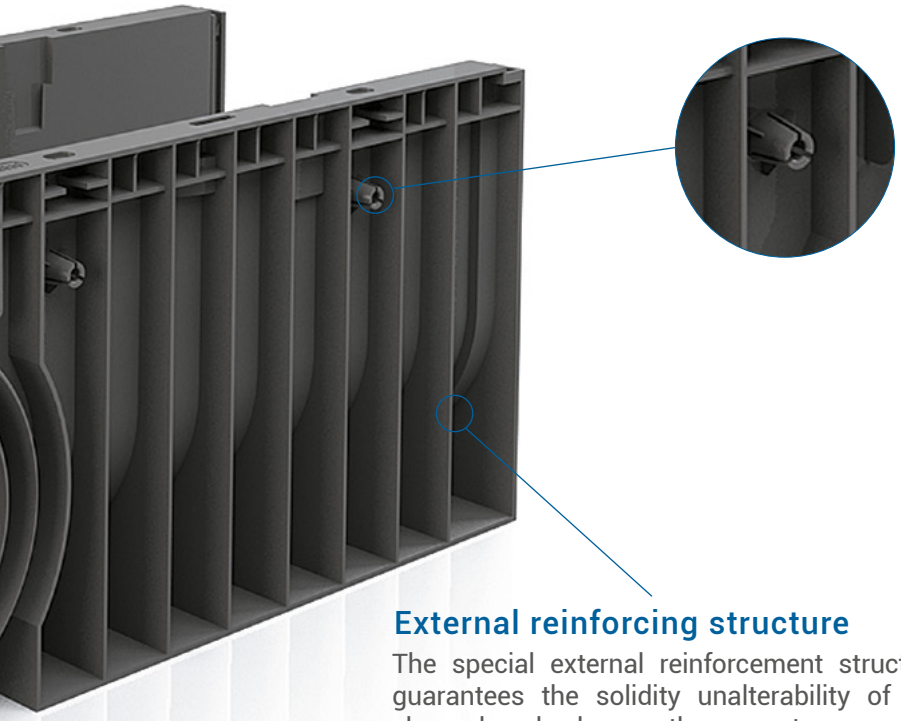


Drains up to Ø 250

All Technodrain units are equipped with lateral and vertical drains up to Ø 250 (magnum). It just takes a few minutes to hook up the drains to the run off pipes.

Housing for channel anchorage (Magnum, 200HV)

Some Technodrain models, have housing for the insertion of bars/accessories on the main channel, in order to increase the anchorage of the concrete support.



External reinforcing structure

The special external reinforcement structure guarantees the solidity unalterability of the channel and enhances the concrete support.

Drainage System Technodrain

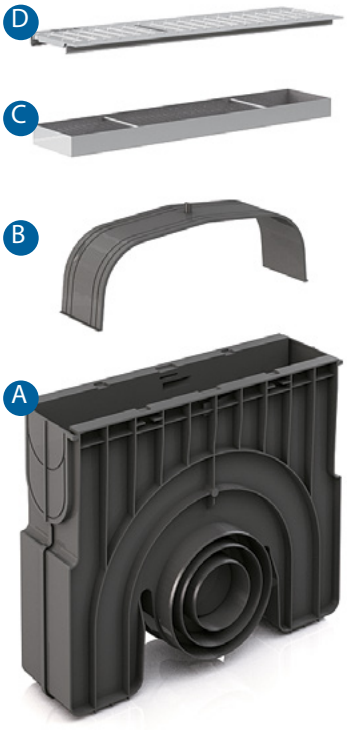
All solutions are conceived to supply the end customer with an innovative product that is easy to install.

The PE-HD (high density polythene) with which it is manufactured renders it light and immune to climatic and chemical attack, guaranteeing the solidity and unalterability of its structure.

The Technodrain system is manufactured in accordance with the Standard EN1433 on drainage systems.

Chemical Resistance List	
Some of many substances,that do not alter the performance of HD-PE	
Hydrochloric acid	Petrol
Sulfuric acid	Mineral oil
Acetic acid	Sodium chloride
Ethylic alcohol	Sodium phosphate
Ammonia	Sodium hydroxide
ntifreeze salts	Diesel
Soaps solutions and any industrial cleaning products	

Our Technical Department is to your disposal to give you deep information about other chemical substances and compounds



Siphon

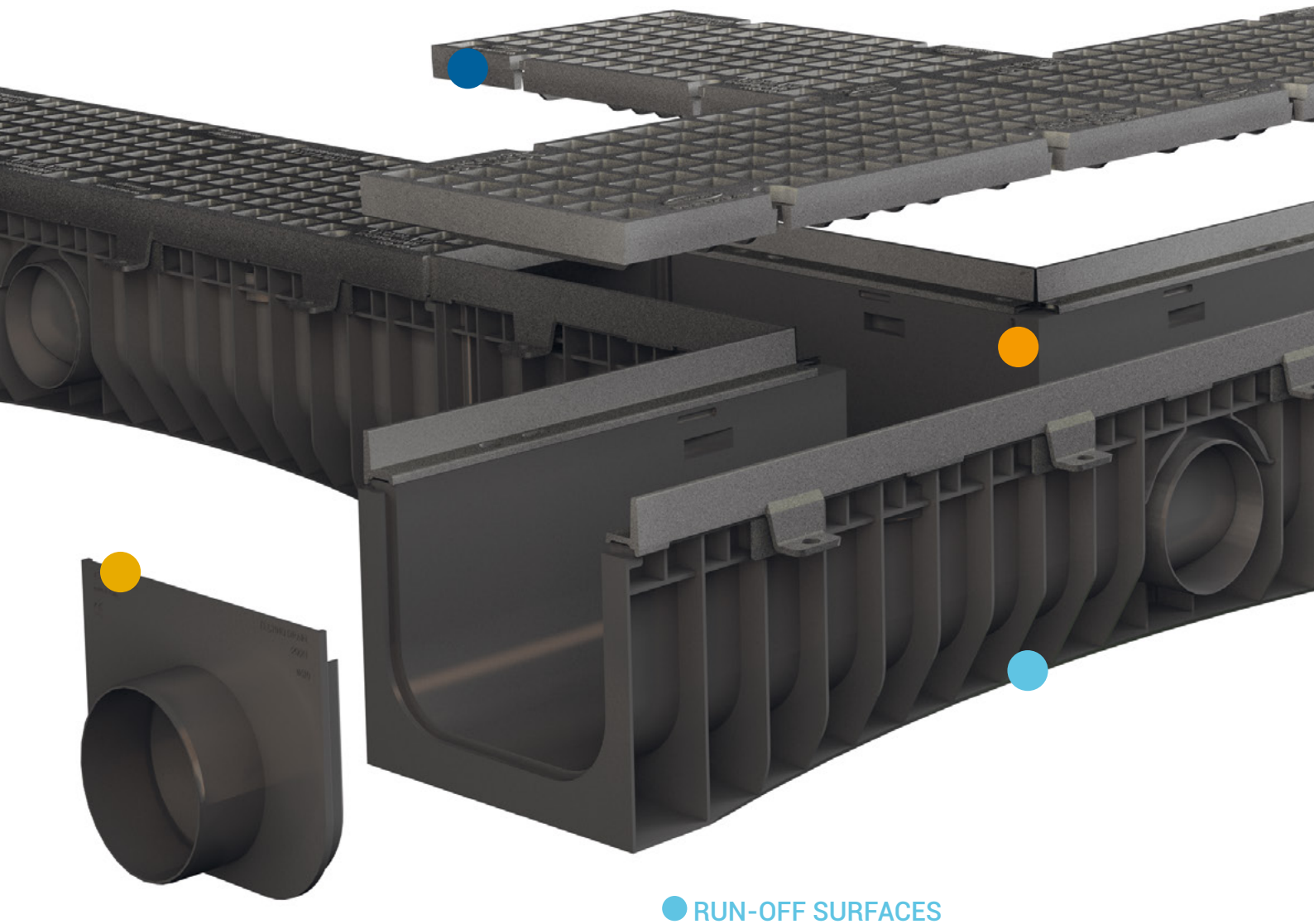
Complementary to this system is the Technodrain sump, composed of a body and a dismountable siphon system. The sump can be integrated perfectly with the drainage line.

A. Sump
B. Siphon cover
C. Filter
D. Grating

ADVANTAGES OF THE SYSTEM

GRATINGS

The Technodrain system is composed of a vast range of gratings for all load classes (A15-F900), in accordance with European Standard EN1433. The available materials are: PE-HD, galvanized and stainless steel and nodular ductile iron. All the gratings are designed to obtain the maximum drainage efficiency for traffic and the passing of pedestrians and cyclists. The Technodrain system can be supplied with all-ready mounted gratings.



RUN-OFF SURFACES

The internal surfaces of the channel, thanks to geometry and the PE-HD with which it is built, guarantees resistance and unalterability to a large range of chemical substances, hygiene products used to counter mould and micro-organisms. It has a high run-off coefficient. The internal surface of the Technodrain unit does not hinder the flow of water and minimizes inert deposits.

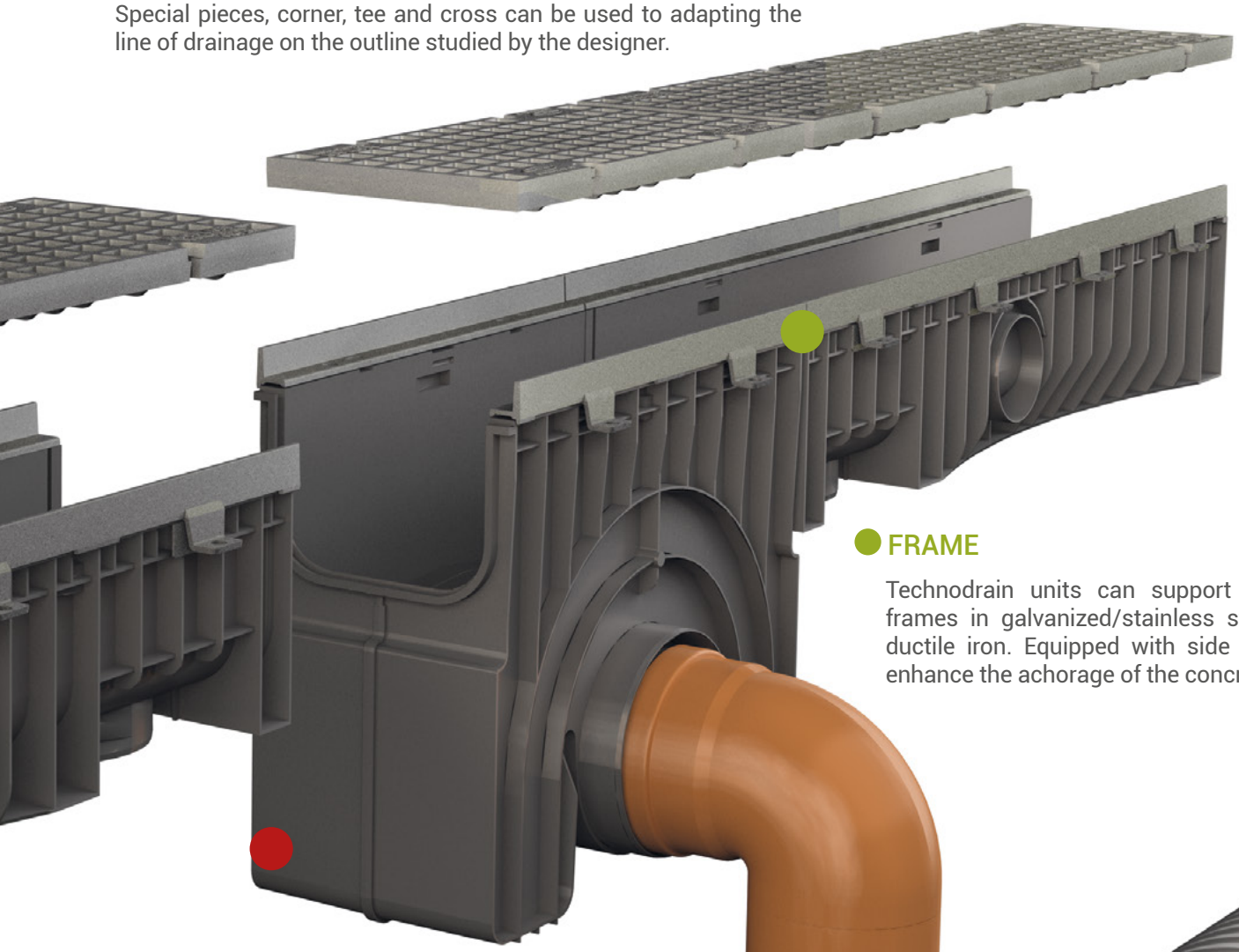
END CAP

The channel end caps are used to close the line of drainage or to install a discharge into the line. They can be installed in the appropriate housing at the edge of the channel in the case of partial length of the channel.

ADVANTAGES OF THE SYSTEM

SPECIAL PIECES

Special pieces, corner, tee and cross can be used to adapting the line of drainage on the outline studied by the designer.

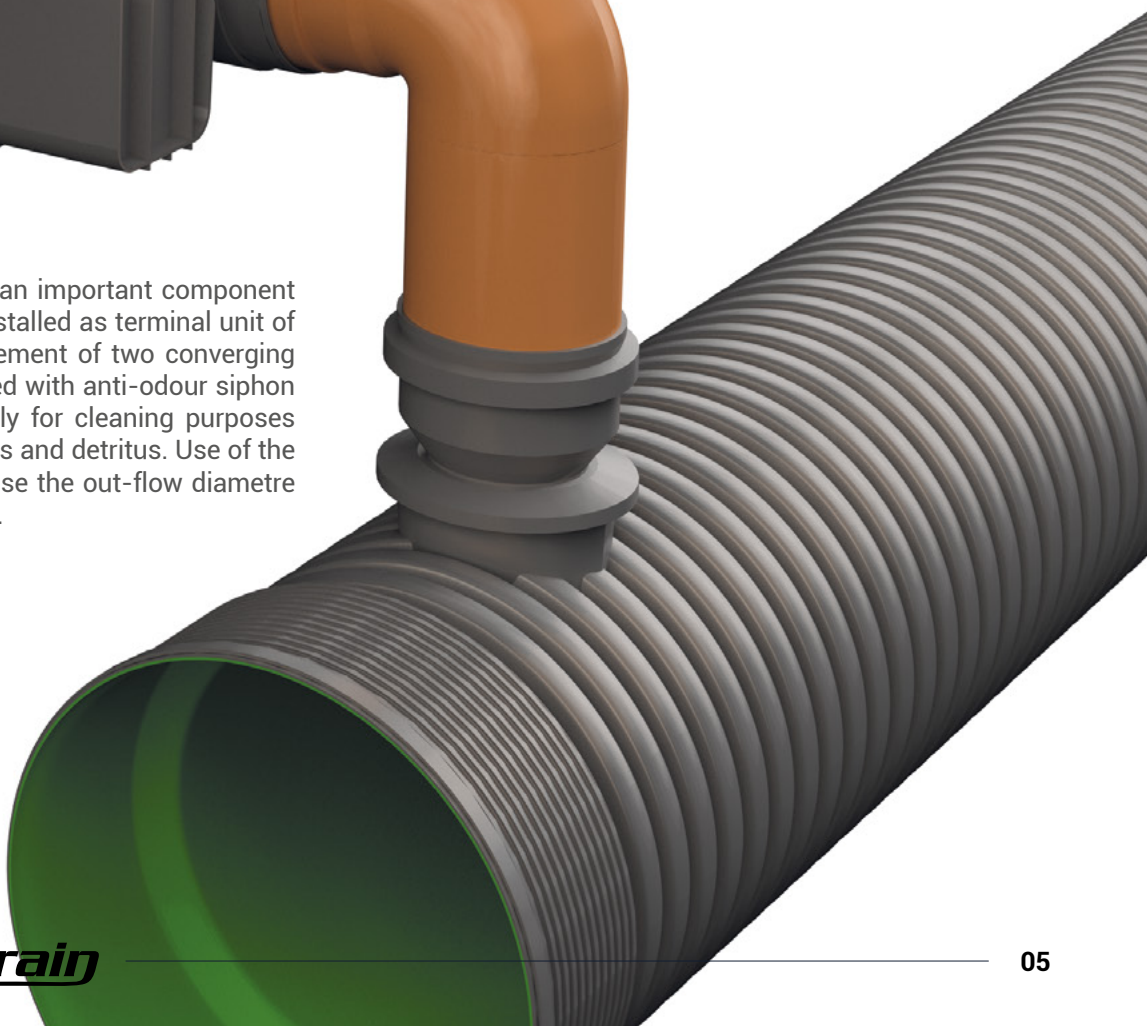


FRAME

Technodrain units can support reinforcing frames in galvanized/stainless steel and in ductile iron. Equipped with side anchors to enhance the achorage of the concrete.

SUMP UNIT

The Technodrain sump is an important component of the system. It can be installed as terminal unit of the line or as a central element of two converging lines. The sump is equipped with anti-odour siphon that can be removed easily for cleaning purposes and a grating to filter leaves and detritus. Use of the sump allows you to increase the out-flow diametre of all channels up to Ø 200.




AIRPORT
OUTLET
AIR FRANCE
P

RECOMMENDATIONS FOR THE INSTALLATION OF THE TECHNODRAIN SYSTEM (EN 1433 TYPE M)

Step 1 – Requested load class

The first step of the design of the drainage system start from the covers/gratings and channels to use on the basis of which characteristics are necessary.

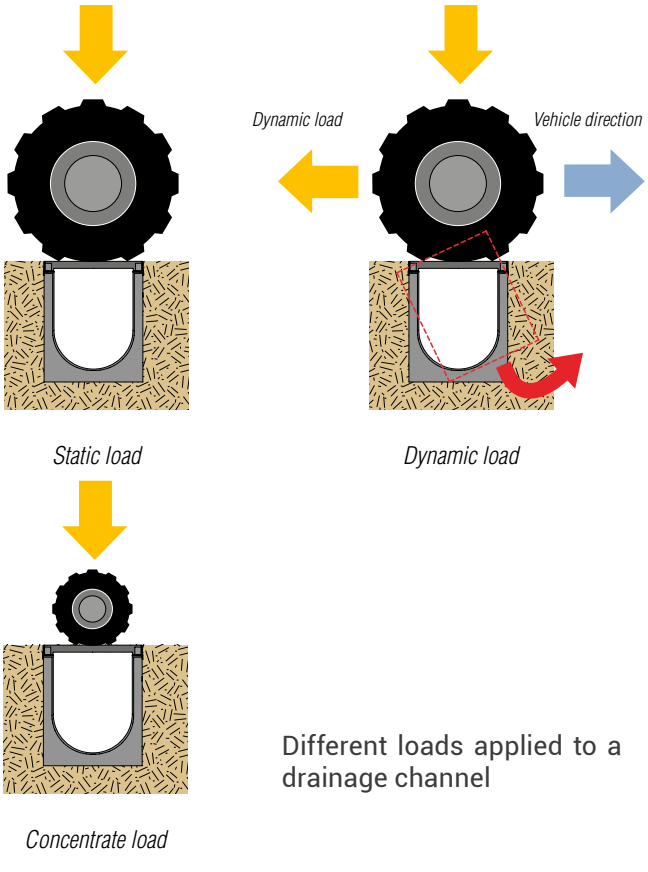
They are chosen on the basis of resistance to loads that the line of drainage must guarantee, materials foreseen from the architectural and technical project (e.g. anti heel grating), free drainage surface in relation to hydraulic sizing, technical materials (e.g. stainless steel gratings).

Load classes foreseen for linear drainage systems are identified in the Standard EN 1433 that shows the technical characteristics of the drains in relation to the loads, (e.g. presence and thickness of metallic frames).

In the case vehicle traffic we must inspect the speed they can support and consequently choose the type of grating and fastenings, vehicles travelling at high speed or ones that steer and brake on the gratings apply a more impregnating dynamic load than a simple static load.

A very common case is the channel located on an access ramp or in an underpass.

It is necessary to pay attention to possible future uses of the project site, an area that is rarely subjected to, or in specific cases, to heavy and dynamic loads (e.g passing of Fire Engine, goods unloading, forklift trucks) has to be furnished with the appropriate channels and gratings for the most sustainable demanding use, the wheel of a forklift applies a more concentrated load to the ground with regards to a vehicle of the same weight.



Different loads applied to a drainage channel

Loading Class with recommended channels (EN1433)

A 15(15 KN) • Pedestrian areas, parks and gardens, sporting installations and cycle paths
(Recommended: EVO/ WAVEDRAIN)

B 125 (125KN) • Pavements, residential parking areas and multi-storey car parks
(Recommended: EVO/ EVOMAX/ WAVEDRAIN)

C 250 (250 KN) • Car parking, roadside drainage
(Recommended: NEOMAX/EVOMAX)

D 400 (400 KN) • Carriageways, crossings, commercial areas, and areas where heavy vehicles parking
(Recommended: EXEL)

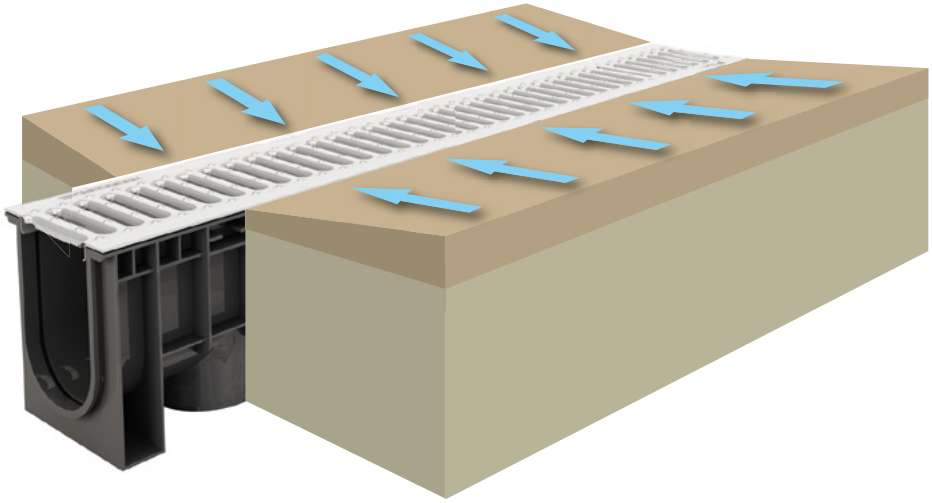
E 600 / F 900 (600/900 KN) • Port and airport areas, industrial areas with traffic of forklift trucks
(Recommended EXEL)

(*KN=KILONEWTONS)

Step 2 – Hydraulic sizing of the drainage system

The water collection and disposal system (channel + outflow pipes) should be sized according to the pluviometric and meteorological characteristics of the relevant site, form and sloping on the collection area, type of paving used (asphalt, concrete, paving stones, etc.), possible aggressive characteristics of disposable liquid.

Attention must be paid to access roads that can pour water directly into the drainage area, in this case the area considered for drainage must be the sum of all these components (open-area, possible access routes, coverings).
It will also be necessary to consider recent climate change that entails frequency of rain of short duration but high intensity, capable of saturating the existing drainage networks in short time. For this reason, an appropriate security coefficient will have to be considered, to be applied to the maximum drainage capacity of the system chosen.



Step 3 – Installation

The Technodrain is a type M (EN 1433) channel, therefore it needs a concrete support with adequate depth to distribute the vertical and horizontal loads.

A. Preparation of the installation area, measuring of the excavation area:

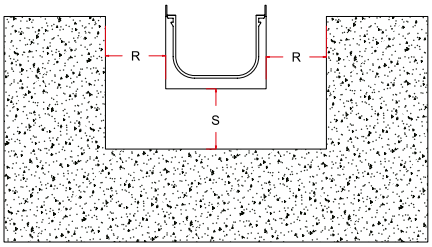
The excavation/trench for the installation of a technodrain drainage system, should be measured considering the external blocking of the channel and of the necessary depths of concrete for the support and the foundation described in Table 1, as well as the above depths R and S.

The excavation must foresee the size of possible out-flow pipes.

The installation area must have a load-bearing capacity that is in line with the foreseen load classes, this can be increased by adequately tramping the installation surface or reinforcing the foundation and possibly the concrete support with electro-welded net or steel reinforcing rods.

Reinforcement is highly recommended for cases of high vehicular traffic or high concentrated loads (E600 – F900).

Table. 1. Recommended depth for foundation and concrete support in relation to the loading class



Loading Class EN 1433	A15	B125	C250	D400	E600	F900
Applicable load EN 1433 (kN)	15	125	250	400	600	900
S - depth of foundation (mm)	100	100	150	200	250	250
R - depth of support (mm)	100	100	150	200	250	250
Resistance class concrete (EN 206-1)	C 20/25 C 30/37 XF4*	C 25/30 C 30/37 XF4*	C 25/30 C 30/37 XF4*	C 30/37 C 35/45 XF4 *	C 30/37 C 35/45 XF4 *	C 35/45 C 40/50 XF4 *

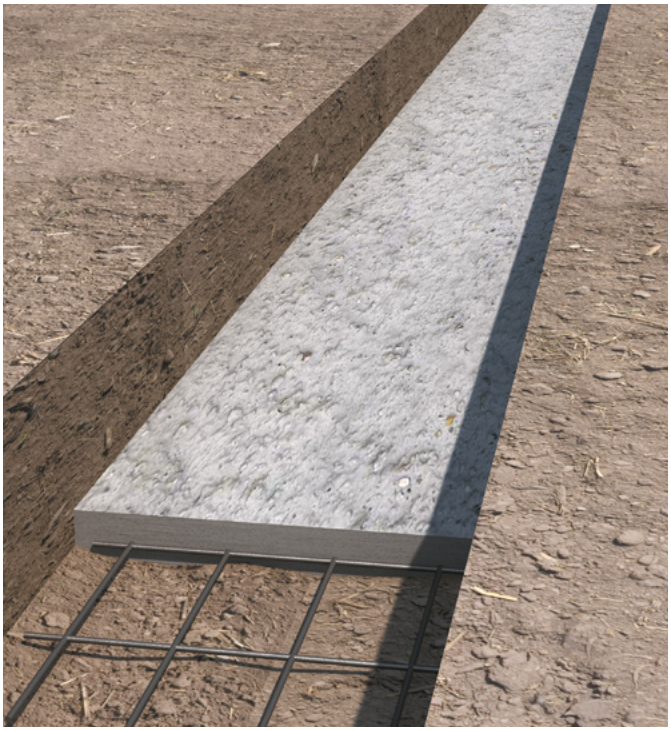
*To be used in cases where concrete is exposed to cycles of freezing and thaw

B. Concrete foundation

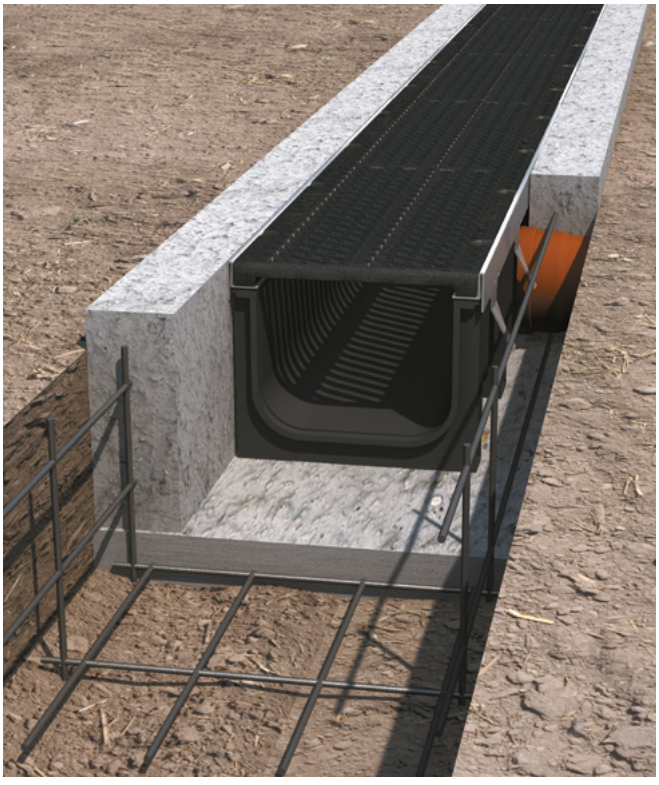
The installation area must be have a concrete foundation of S depth, the concrete used for the foundation and the support of the Technodrain unit must possess fluid characteristics capable of encouraging the filling of all the cavities formed by the reinforcement structure of the channel

(S4 – EN 206-01), for this same reason, the size of stone aggregates in the concrete must not go over a 15-18 mm diameter.

The minimum resistance class of concrete for the foundation must be compatible with the foreseen loading class. It might be useful to use pre-mixed mortar. These types of mortars, guarantee low volumetric shrinkage of the concrete and reduces the time necessary for the negotiability of the drainage line, in circumstances that require the immediate passage of vehicular activity. Possible sloping of the drainage line will have to be carried out.



C. Channel installation



To correctly install the Technodrain unit, begin installation from the out-flow point (sump), connecting the sewage exit or the rainwater treatment system.

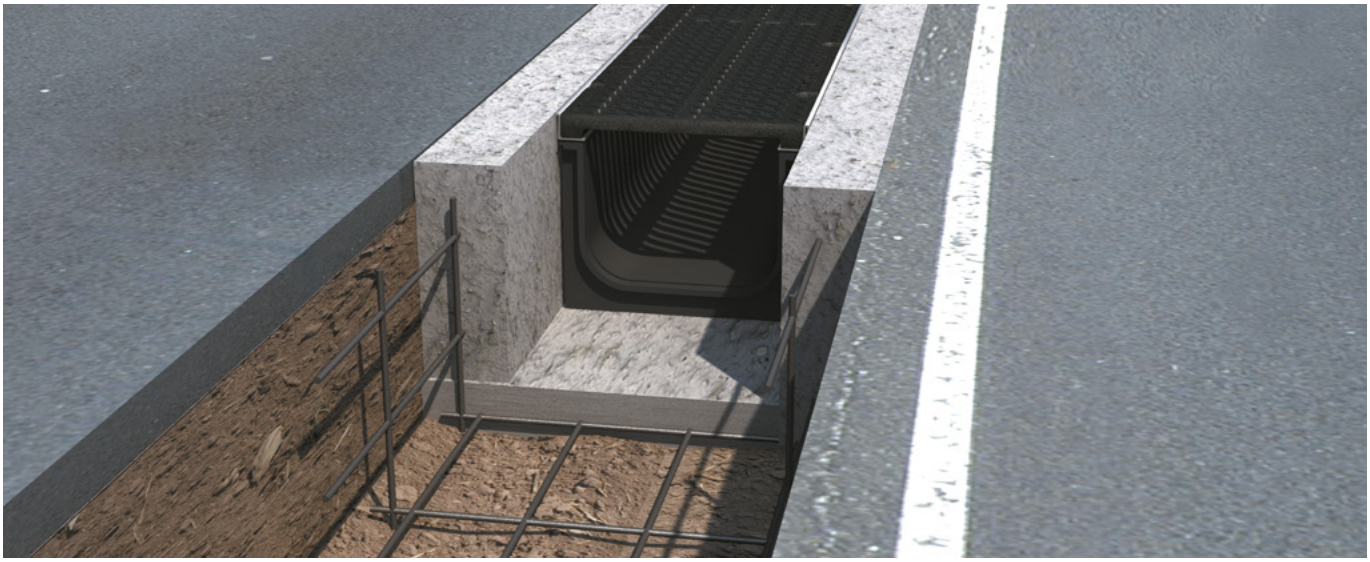
For a perfect hydraulic hold of Technodrain unit groove and tongue joint you can use a bituminous based thixothropic sealant.

The Technodrain units can be installed with pre-mounted gratings, therefore it is recommended to carry out this procedure prior to the final installation, taking special precautions on the positioning of the gratings and tightening of the screws/bolts (fixing elements).

In every case it is extremely important to insert the gratings prior to applying the concrete support, so as to avoid deformation on the sides of the channel which can lead to difficulties in the installation of the gratings.

During installation avoid possible damage to the gratings and/or the side of the channel caused by the movement of mechanical vehicles adopting the satisfactory precautions.

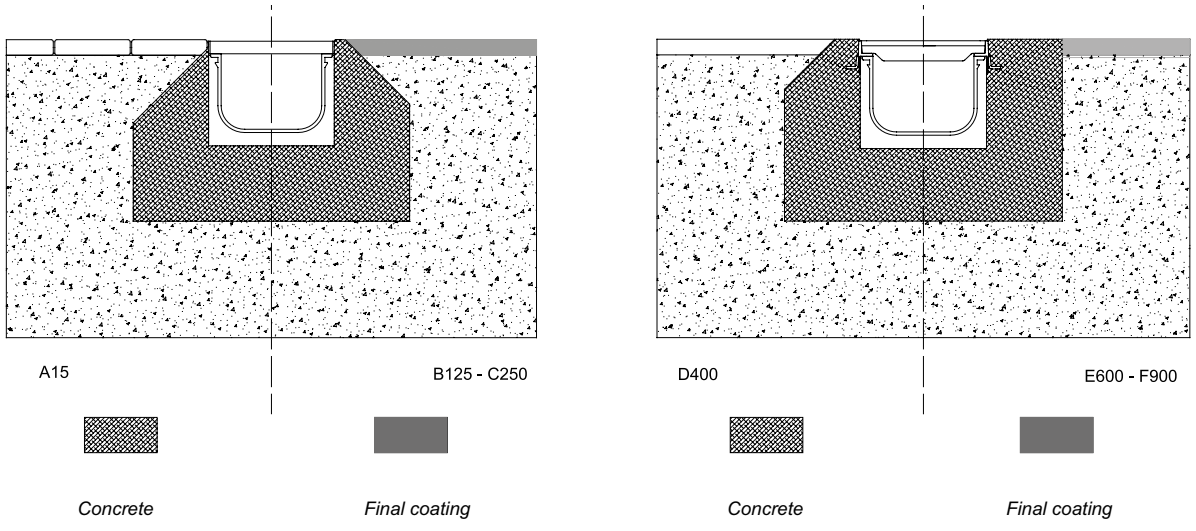
D. Final coating



The Technodrain unit will therefore be supported by concrete with an R depth up to the height foreseen for final coating and the specific project. It is important that the finished surface of the coating remains 3-5 mm above the out-flow surface of the grating. The concrete coating should protect the sides of the finished grating surface with an adequate depth. In the case of pavements subject to horizontal forces, it is necessary to arrange adequate dilation joints laterally to the drainage line, according to the design and at an minimum distance of 100 cm. It is important that the concrete reach the required resistance before subjecting the channel to the expected loads.

It is important as far as the protection of the grating is concerned, to protect the grating from the residual concrete during casting, cover with a plastic film or apply concrete anti-stick liquid with the appropriate brush.
A correct installation increases the life and the hydraulic functionality of the system avoiding possible breakages and malfunctions that cause accidents and disputes.

Final Installation of the Technodrain unit with final coating

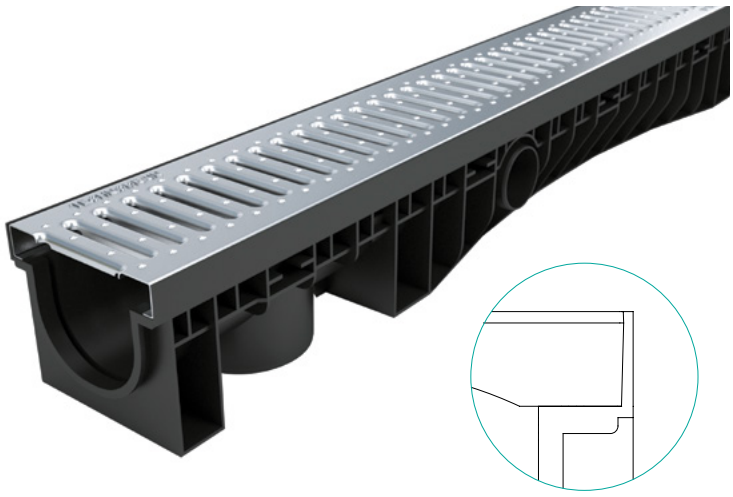


EN1433 - Loading class

SUITABLE FOR

A 15 B 125

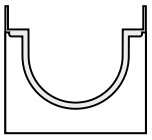
evo



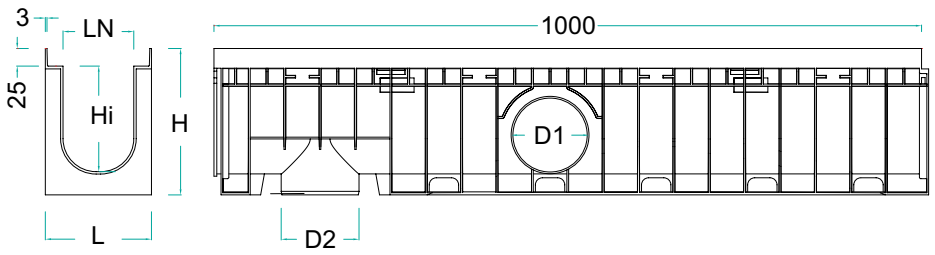
The Technodrain Evo system is composed of:

- Channel body in PE-HD including containing edge of 3 mm depth.
- Height of edge, 25 mm.
- Can be used with PE-HD gratings
- Extremely versatile, it is ideal for DIY, parking areas, parks and gardens, swimming pools and sporting installations.
- Various systems for fastening gratings

Channel Dimensions



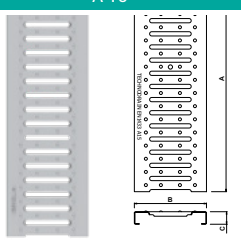
EVO 100 S



Cat Model	Grating	Load Class	Size	L	H	LN	Hi	D1	D2	MRP (₹)
EVO 100 S (A)	Slotted Stainless steel 304	A 15	1000	150	133	100	75	2x ø 63	1xø110	13,500
EVO 100 S (B)	Slotted Galvanized Steel	A 15	1000	150	133	100	75	2x ø 63	1xø110	5,500
EVO 100 S (C)	Galvanized Mesh 30 X 10	B 125	1000	150	133	100	75	2x ø 63	1xø110	12,800
EVO 100 S (D) *	PE-HD	A 15	1000	150	133	100	75	2x ø 63	1xø110	4,850

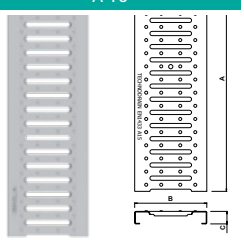
All sizes are in mm

A 15



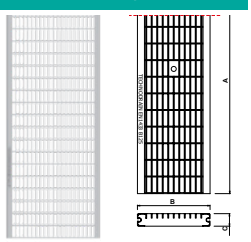
Slotted Stainless Steels 304

A 15



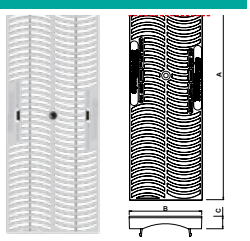
Slotted Galvanized Steel

B 125



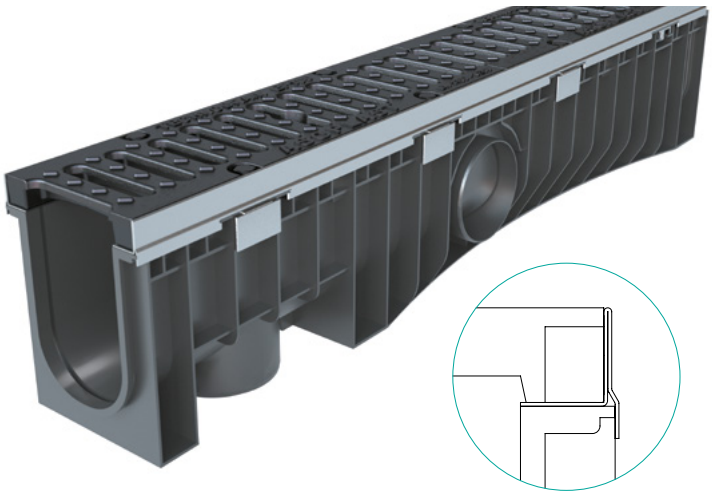
Galvanized Mesh 30x10

A 15



PE-HD

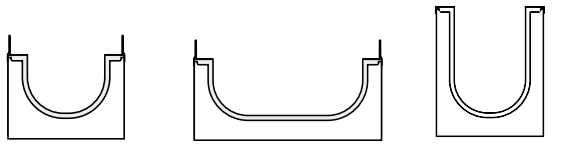
*On Request



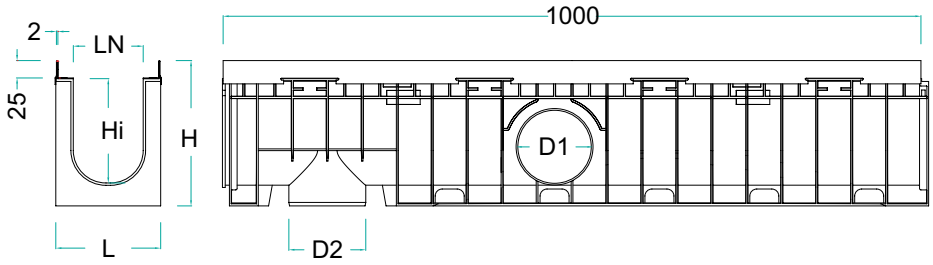
The Technodrain Evomax system is composed of:

- Channel body in PE-HD with a galvanized steel frame, 2 mm depth
- Height of frame 25 mm
- Can be used with Evo gratings up to the class C250
- Ideal for parking areas and brick pavements

Channel Dimensions



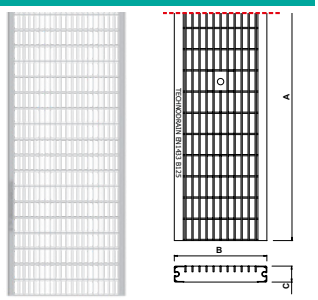
EVOMAX 100 S **EVOMAX 200 S** **EVOMAX 100H**



Cat Model	Grating	Load Class	Size	L	H	LN	Hi	D1	D2	MRP (₹)
EVO MAX 100 S	Galvanized Mesh 30x10	B 125	1000	150	134	100	75	2x ø 63	1xø110	16,500
EVO MAX 200 S	Ductile Iron Grating (18 mm slot)	C 250	1000	250	134	200	75	2x ø 63	1xø110 1xø160	29,500
EVO MAX 100 H *	Polyamide Grating (18mm Slot)	C 250	1000	150	209	100	150	2x ø 110	1xø110	16,900

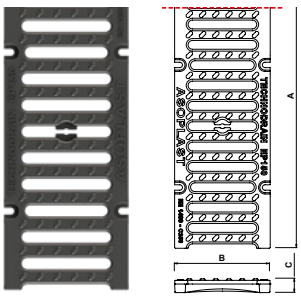
All sizes are in mm

B 125



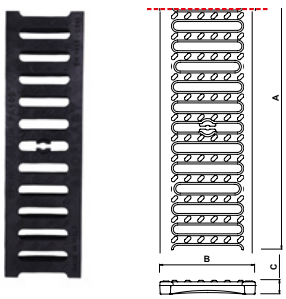
Galvanized Mesh 30x10

C 250



Ductile iron grating (18 mm slot)

C 250



Polyamide grating (18 mm slot)

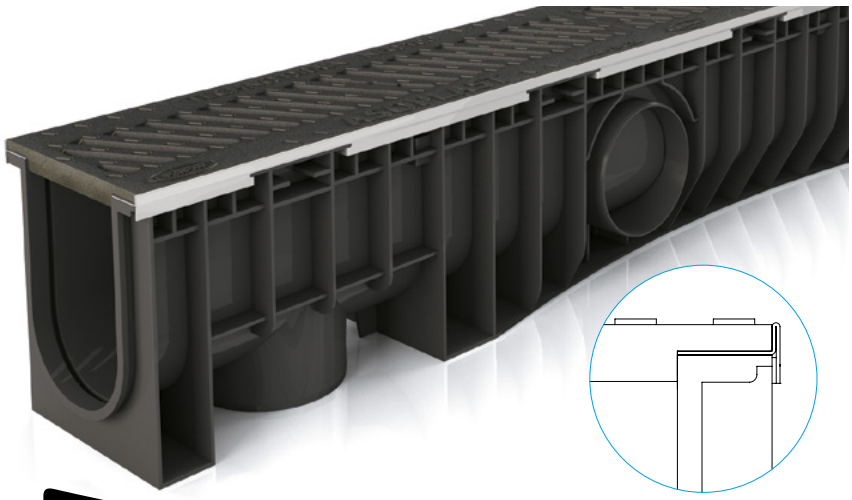
*On Request

EN1433 - Loading class

SUITABLE FOR

C 250

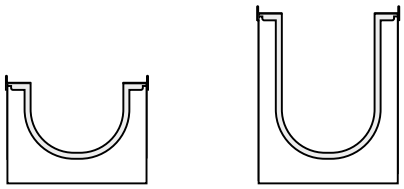
neo max



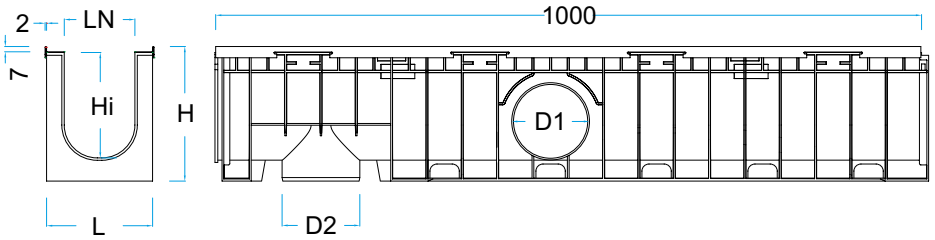
The Technodrain Neomax system is composed of:

- Channel body in PE-HD with a galvanized steel frame, 2 mm depth.
- Height of frame 7 mm.
- Can only be used on ductile iron gratings of the Neo range
- Ideal for multi-storey car parks and garage entrances
- Fastening of grating with tie bar

Channel Dimensions



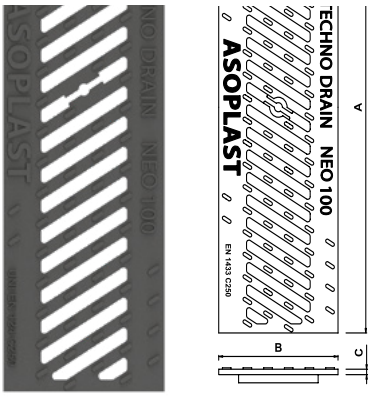
NEOMAX 100 S **NEOMAX 100 H**



Cat Model	Grating	Load Class	Size	L	H	LN	Hi	D1	D2	MRP (₹)
NEOMAX 100 S	Ductile Iron grating (10 mm slot)	C-250	1000	150	116	100	75	2x ø 63	1xø110	20,800
NEOMAX 100 H	Ductile Iron grating (10 mm slot)	C-250	1000	150	191	100	150	2x ø 110	1xø110	22,100

All sizes are in mm

C 250

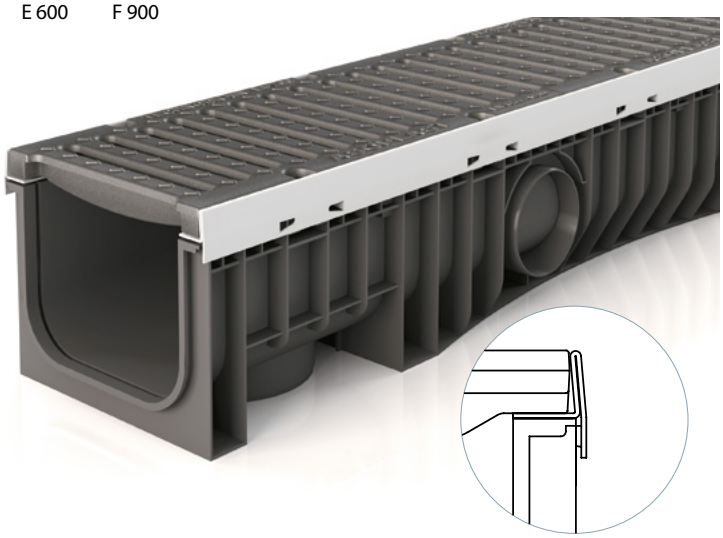


Ductile iron grating (10mm slot)

EN1433 - Loading class

SUITABLE FOR

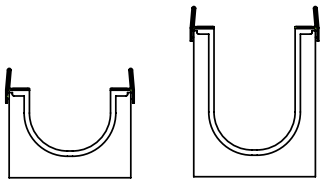
D 400 E 600 F 900



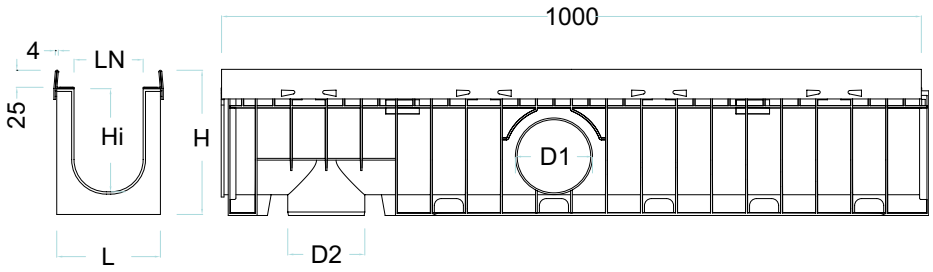
The Technodrain Exel system is composed of:

- Channel body in PE-HD with a galvanized steel frame, 4 mm depth
- Height of frame, 25 mm
- Can be used up to class F900
- Ideal for road drainage, crossings, parking and unloading areas for heavy vehicles, where the system has to support high loads linked with high crossing speeds

Channel Dimensions



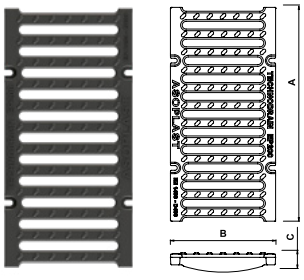
EXEL 100 S **EXEL 100 H**



Cat Model	Grating	Load Class	Size	L	H	LN	Hi	D1	D2	MRP (₹)
EXEL 100 S *	Ductile Iron Grating (18 mm Slot)	D400	1000	150	135	100	75	2x ø 63	1xø110	25,900
EXEL 100 H *	Ductile Iron Grating (18 mm Slot)	E600-F900	1000	150	210	100	150	2x ø 110	1xø110	29,900

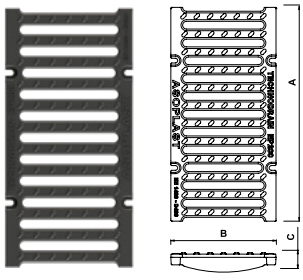
All sizes are in mm

D 400



Ductile iron grating (18mm slot)

E600-F900



Ductile iron grating (18mm slot)

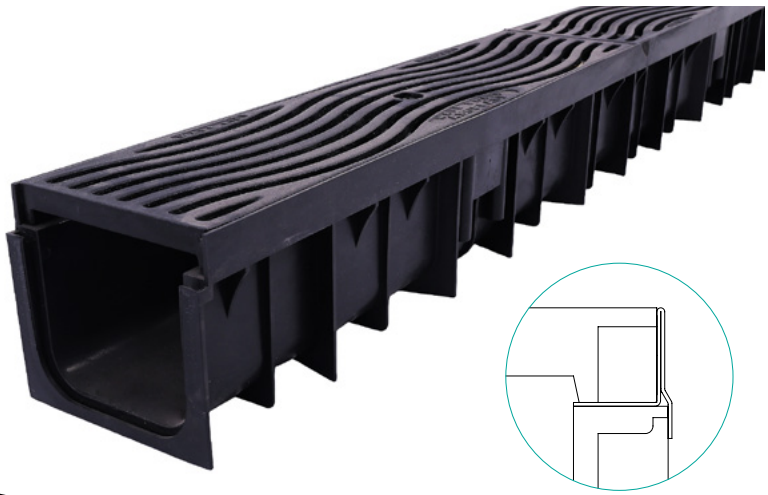
*On Request

EN1433 - Loading class

SUITABLE FOR

A 15 B 125

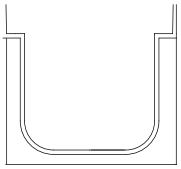
WAVEDRAIN



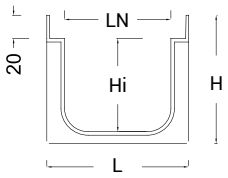
Wavedrain 110 is composed of:

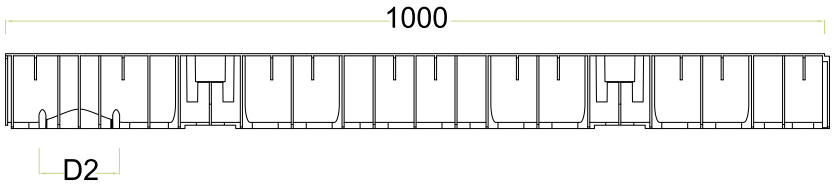
- PE-PP channel body with integrated protection edges high 20 mm.
- Wide range of gratings from A15 to B125.
- HDPE fixing bars for gratings.
- Perfect for residential construction, gardens and sports installations.

Channel Dimensions



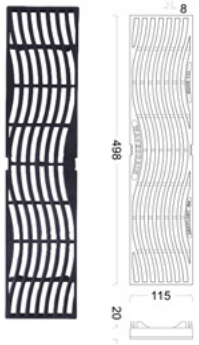
WAVEDRAIN 110





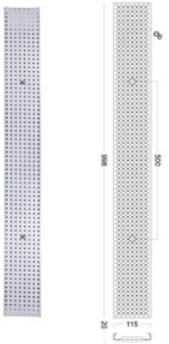
Cat Model	Grating	Load Class	Size	L	H	LN	Hi	D1	D2	MRP (₹)
WAVEDRAIN 110 (A)*	HDPE Black Grating	-	1000	120	110	90	80	-	1xø110	3,200
WAVEDRAIN 110 (B)*	Galvanized Perforated Grating	A 15	1000	120	110	90	80	-	1xø110	3,600
WAVEDRAIN 110 (C)*	Ductile Iron Grating	B 125	1000	120	110	90	80	-	1xø110	8,700

All sizes are in mm



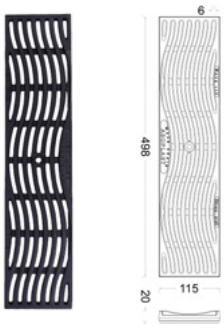
HDPE black grating

A 15



Galvanized perforated grating

B 125



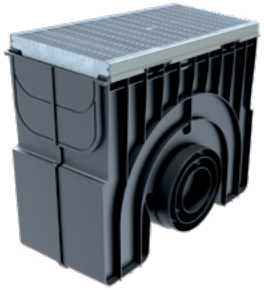
Ductile Iron grating

*On Request

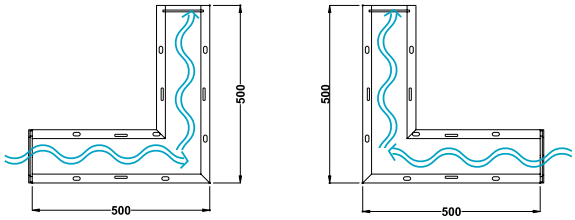
END CAP

Cat Model	MRP (₹)
100 S	950/-
100 H	1,500/-
200 H	1,350/-

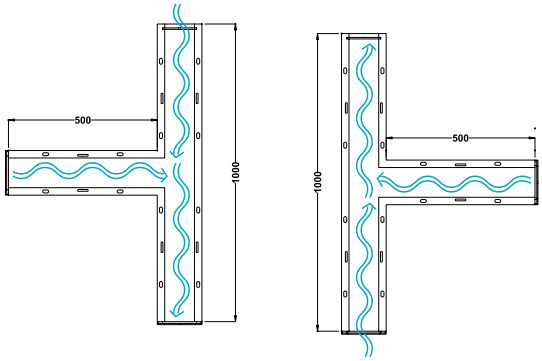
* SUMP UNIT



* ANGLE

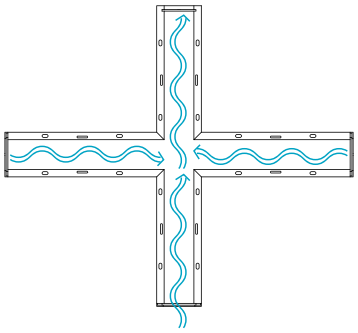


* TEE



Ti SX Ti DX

* CROSS



Cr.

*Available on request

NOTES

LUXE(PVD)_Collection

Scan to Downlad the
Luxe (PVD) Collection Catalouge

Scan to download the
Complete catalouge

Jayna_Technodrain

Scan to download the
Jayna Techno Drain Catalouge.

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Sharda Puri, Opp.
Mansarovar Garden
Near Sant Nirankari
Satsang Bhawan,
Delhi-110015,

Phone:
011-45027843

Bengaluru

13-B, Ground
Floor, Gem Plaza,
Infantry Road,
Bengaluru-560 001,

Phone:
080-42017203

Mangalore

Ground Floor,
Samarpan Complex,
Opp: Pio Mall, Bejai
Church Road,
Mangalore - 575004.
Karnataka, India
Phone :
0824-4254707,
9141458822

Jayna Branch Office

Mumbai

15, Koteshwar Palace,
Jiwa Mahale Marg,
Opp. Garware
Andheri(East),
Mumbai-400069,

Phone: 9310351299

Corporate Office:

Jain Brothers Sanitation Pvt. Ltd.

12-SSI, Industrial Estate, G.T. Karnal Road,
Delhi – 110033 India

Tel : +91 11 47020864/47087668

E-mail : info@jaynasinks.com

www.jaynasinks.com

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The Kitchen Essentials

Note: This Price List is effective from 01.08.2024 & applicable all over India. All sizes are approximate. Company reserves the right to alter prices, models & specifications without any prior notice.