

MODERN RANGE OF **SURFACE DRAINAGE SYSTEM**




HAURATON PROJECTS




 Mandalika Street Circuit, Lombok, Indonesia




 Data Ran Merdeka in Kuala Lumpur, Malaysia



 Viettel Telecommunication Headquarters Hanoi, Vietnam



 Kuantan Port, Malaysia

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PRINCE PIPES – TOWARDS A BETTER FUTURE WITH INNOVATIVE SOLUTIONS

Prince Pipes stands for transformation and setting new trends in the piping industry. We are committed to constant innovations in plumbing, irrigation, and drainage & sewerage technologies so as to meet the nation’s ever-growing water and sanitation demands. We strive to pave the way for a future that provides clean water to every corner of India. Since our inception in 1987, our mission has been to usher in a revolution in the plastic piping industry through innovative solutions that also generate profitable growth and benefit our customers and society as a whole.



Greener Better Together

At Prince Pipes, our aim is to create products that act as solutions and make a difference. From our zero-defect manufacturing process that involves using **recycled plastic** to designing and equipping our plants with solar panels and several other **energy-saving measures**, we stand strong in our commitment to bring down emission levels. Our strong belief in the concept of “better lasts longer” has not only helped us deliver premium-quality products but also be consumption-conscious. Together with our channel partners and plumber associates, we sincerely pledge to leave behind a stronger and more sustainable legacy for generations to come.



JAIPUR EST. 2019



KOLHAPUR EST. 2012



CHENNAI EST. 2012



HARIDWAR EST. 2008



DADRA EST. 2000

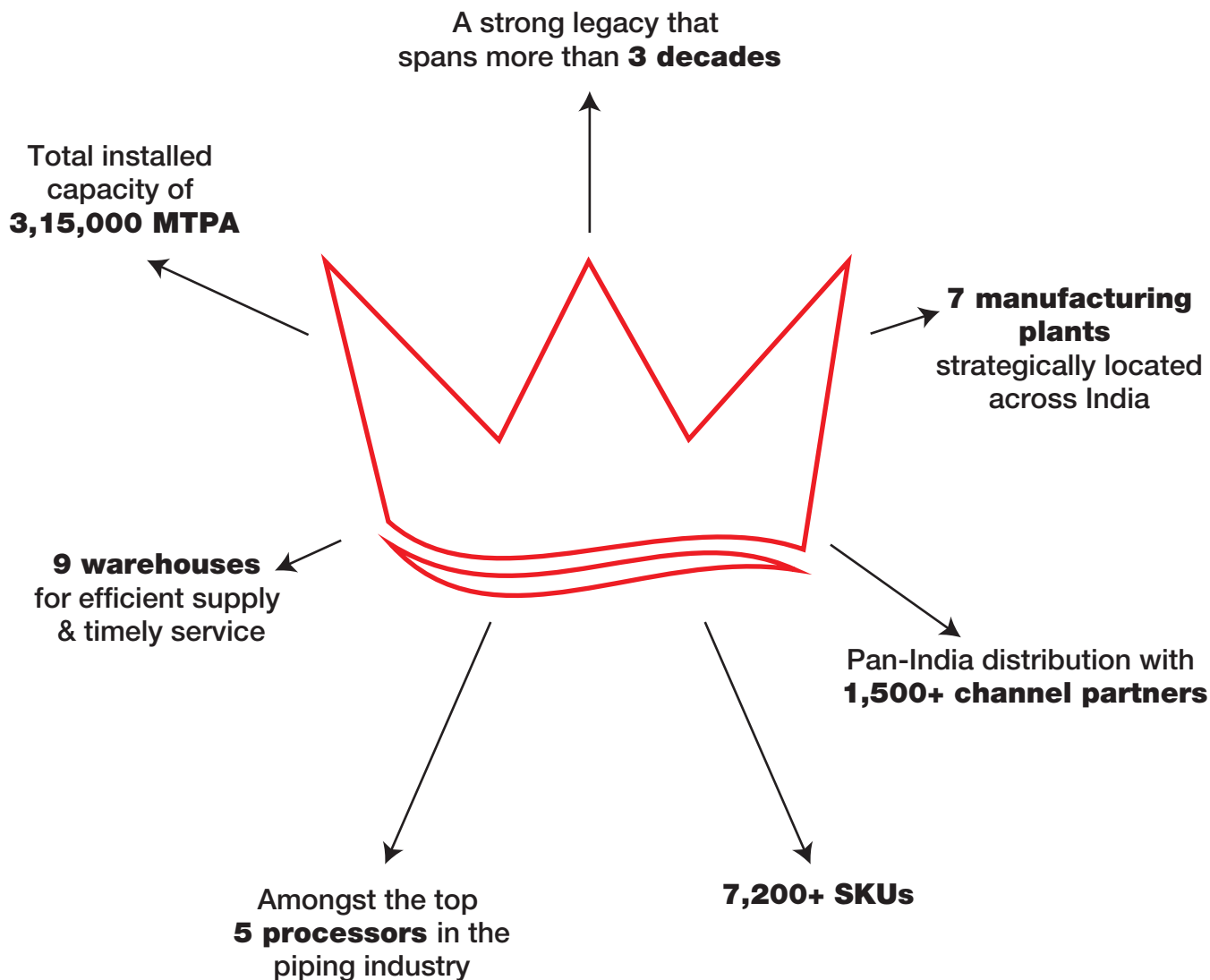


ATHAL EST. 1995



SANGAREDDY EST. 2021

COMPANY AT A GLANCE



TECHNICAL COLLABORATION



PRODUCT COLLABORATION



LEAP TOWARDS MODERN PLUMBING

Prince Pipes has a 30+ years legacy of being at the forefront of the piping industry, as the only brand in India to produce piping systems in four polymer categories - PPR, uPVC, CPVC and HDPE.

Prince's vision extends beyond the domestic segment but also provides a complete range of solutions ensuring the modern requirement is fulfilled by providing innovative solutions.

Introducing PRINCE HAURATON the Modern range of surface drainage systems.

Prince Pipes brings to you an innovative set of drainage systems developed by using German technology of Hauraton.

Hauraton has been one of the world leaders in supplying effective drainage systems for 65 years. Innovative drainage products from Hauraton make sure that the water flows away in proper course and the building remains safe all over the world. The drainage solutions have been installed in many high-profile projects globally.

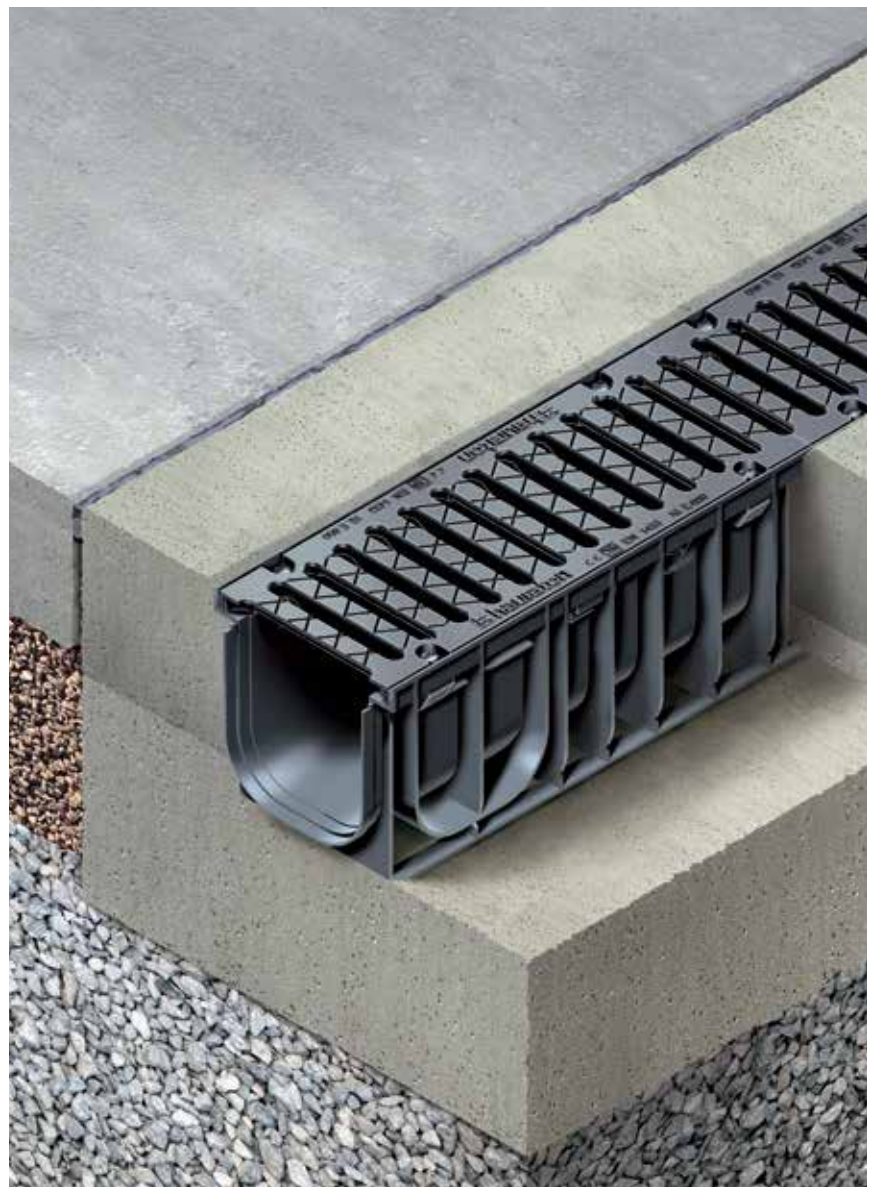


ABOUT HAURATON

The purpose of surface drainage systems is to keep water from flooding or pooling on property. The longer water sits stagnant, the more susceptible it is to become contaminated by outside influences.

Heavy Rainfall, climate changes and unpredictable weather patterns are impacting the way we control surface water. Professional drainage trench systems are becoming an important element for groundwork infrastructure. These systems are designed to quickly and effectively remove surface water from a variety of application areas to help prevent flooding or standing water.

The drainage systems of Hauraton are efficient, sustainable and highly stable. They are made from 100% recycled Polypropylene (PP) and are certified according to European Standard EN 1433.



KEY FEATURES



High Stability

- Channels are extremely tough, can be packed, transported and transferred with ease.



Durability

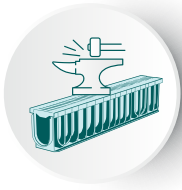
- Polypropylene (PP) reacts very slow on weathering such as air, light, wind, dust and therefore is extremely durable.

100% corrosion-free



Low weight ensures easy handling on site

- Much lighter than channels made of polymere concrete.
- Easy transport and installation.



Impact resistance

- Polypropylene's structure has a good tensile strength. This allows the material to withstand fairly heavy loads, despite being lightweight.



High Security

- Certified according to EN 1433.



High Resistance

- High chemical resistance against aggressive liquids.
- High resistance against freeze and de-icing salt.
- 100% UV-resistant.



Ecological and Sustainable material

RECYFIX channels are made of 100% recycled Polypropylene (PP) and this is very environmentally friendly.



WHY HAURATON?

Comparison between traditional system & Hauraton Recyfix

General problems of in-situ channels:

- poor quality and durability → concrete produced on-site often does not fulfil highest quality standards compared to factory made products and so often fail after a short time (e. g. cracks in concrete occur or breakdown of system happens)
- no traffic-secure solution → neither channel nor grating / cover can be tested for requested loading capacity



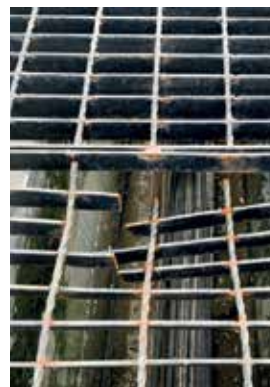
Poor security:

- unsecured gratings / covers → gratings / covers do not have any fixing with channel body
- risk of injury → bigger slots are dangerous for pedestrians



Unpleasant optical appearance:

- cracks in concrete → cracks start to destroy the channel / cover step by step and do not look good
- rusted gratings → cheap ductile iron gratings tend to rust immediately



Greater effort and costs for installation:

- time-consuming and costly installation → higher cost on formwork, leveling and finishing is required



Solution for in-situ channels:

- + pre-fabricated products are produced with high performance material and fulfil highest quality standards
- + additionally these systems fulfil EN 1433 and have a standard product guarantee

RECYFIX PRO



100 % corrosion-free

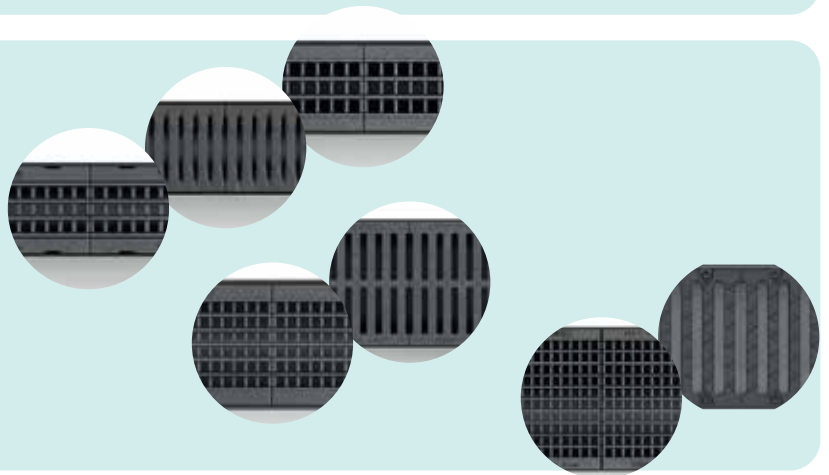
Solution for high security:

- + gratings are locked securely with locking handle or bolts or are built in a monolithic way
- + sizes of slot openings are safe for all kinds of traffic users



Solution for a nice visual appearance:

- + due to high quality material and production technology all products are durable and aesthetically pleasing over a long time
- + gratings are available in different materials and designs for an attractive appearance



Solution for low effort and costs to install:

- + installation of prefab systems can be done much quicker and with less concrete surrounding



LOAD CLASS FOR SURFACE DRAINAGE SYSTEMS



C 250

Public areas with light traffic and moderate frequency

Possible applications

- Public areas
- Car parks (e. g. supermarket, DIY store)
- Residential building
- Parks



F 900

Surfaces with extremely high wheel loads and dynamics

Possible applications

- Airports
- Ports
- Container terminals
- Race and test tracks

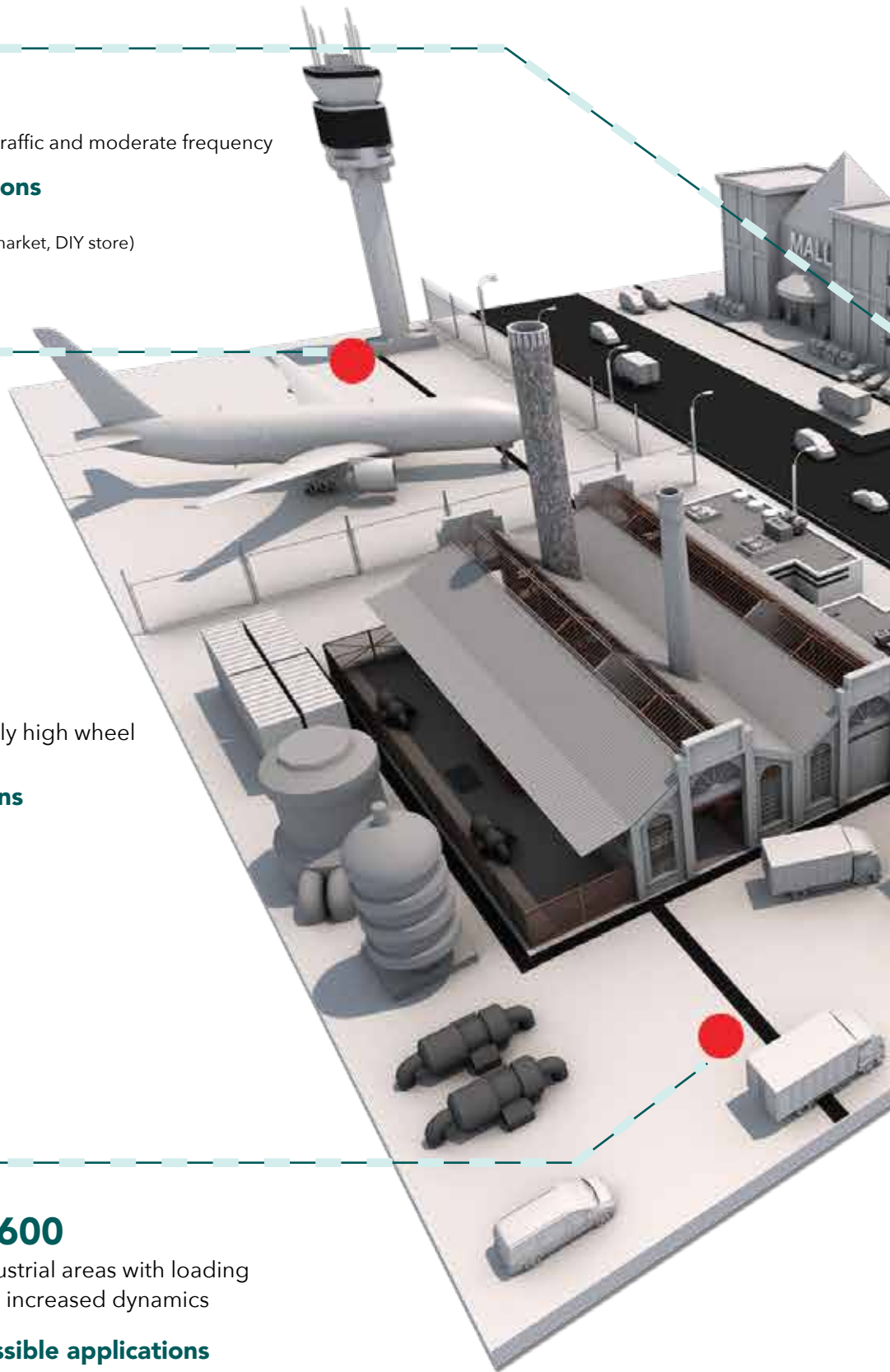


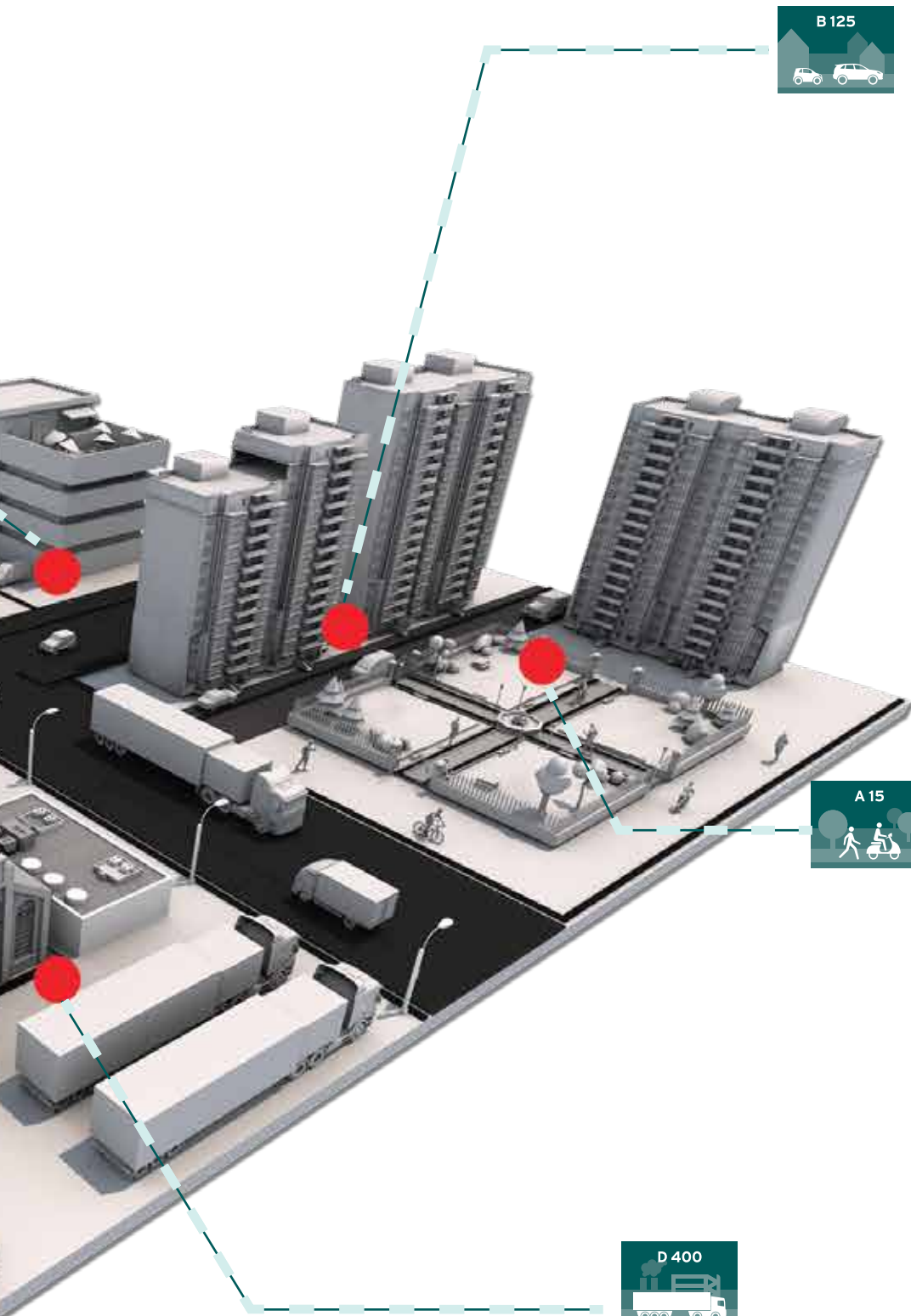
E 600

Industrial areas with loading and increased dynamics

Possible applications

- Industrial yards
- Loading areas





B 125

Traffic areas on private premises

Possible applications

- Driveways
- Courtyards
- Terraces
- Gardens

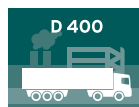


A 15

Traffic areas without car access

Possible applications

- Footpaths
- Cycle paths



D 400

Roadways and streets
(not for installation in the carriageway
in motorways)

Possible applications

- Logistics centres
- Commercial areas
- Bus stations and bus terminals
- Petrol stations
- Lorry parking spaces

Disclaimer to be included; Dynamic forces and increased traffic frequency change the stress on drainage systems! If in doubt, choose a higher load class.

LANDSCAPES

Squares & Parks | Railway Platform | Private & Public Areas
Terraces | Gardens



CIVILS

Airport | Container Terminals
Circuits & Test Tracks | Petrol Stations
Car Parks

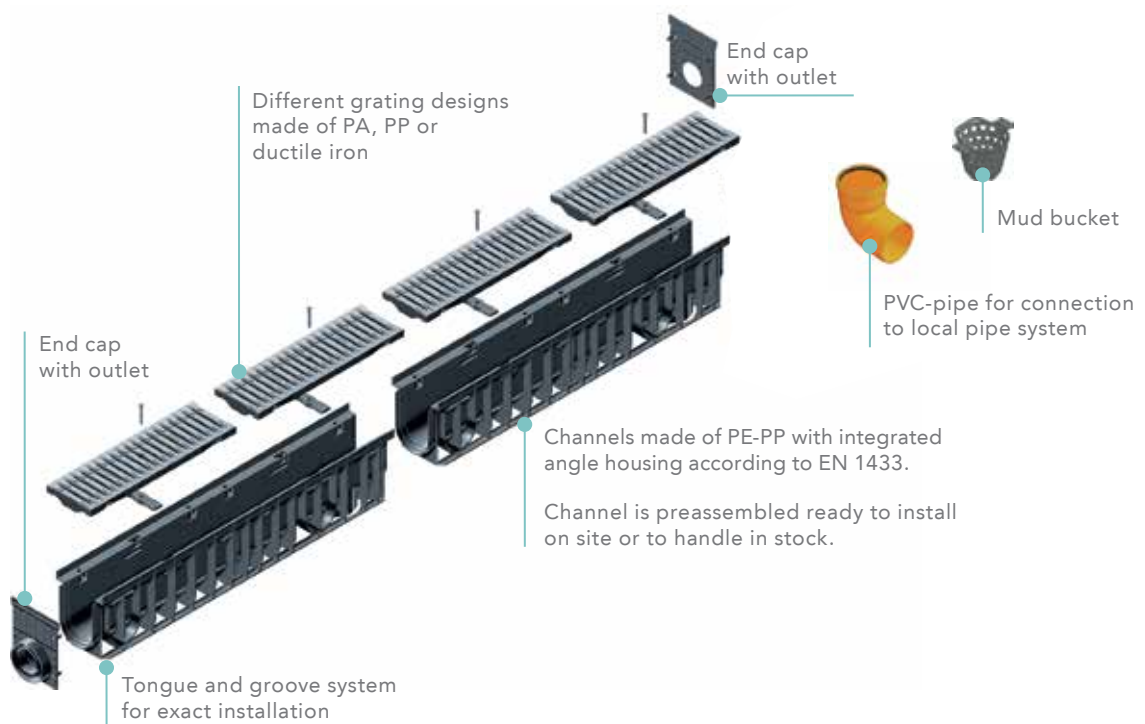


RECYFIX PRO

Corrosion-free linear drainage for private and public areas, such as parks, driveways and parking lots.



- Market squares
- Public areas
- Private premises

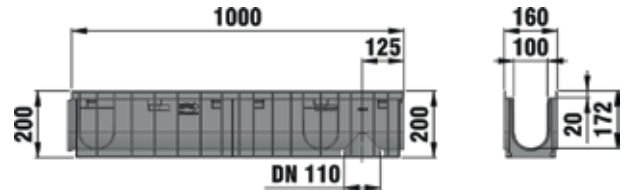
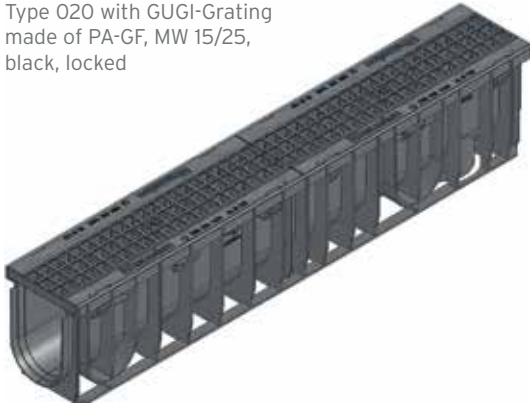


RECYFIX PRO 100

Combi article

RECYFIX PRO 100, class B 125

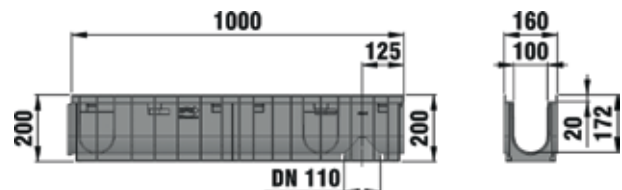
Type O20 with GUGI-Grating made of PA-GF, MW 15/25, black, locked



	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O1 with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	150	92	444	4.3
Type O10 with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	200	142	444	4.7
Type O20 with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	250	192	444	5.5
Type 75 with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	75	35	444	2.9
Type 95 with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	95	55	444	3.6

RECYFIX PRO 100, class C 250

Type O1 with FIBRETEC slotted grating, SW 9 mm, black



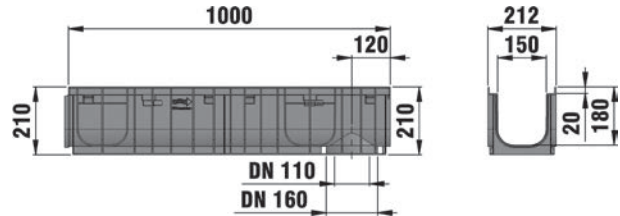
	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O1 with FIBRETEC slotted grating, SW 9 mm, black	1000	160	150	92	372	4,6
Type O10 with FIBRETEC slotted grating, SW 9 mm, black	1000	160	200	142	372	4,9
Type O20 with FIBRETEC slotted grating, SW 9 mm, black, locked	1000	160	250	192	372	5,8
Type 75 with FIBRETEC slotted grating, SW 9 mm, black	1000	160	75	35	372	3,4
Type 95 with FIBRETEC slotted grating, SW 9 mm, black	1000	160	95	55	372	3,7

RECYFIX PRO 150 & 200

Combi article

RECYFIX PRO 150, class B 125

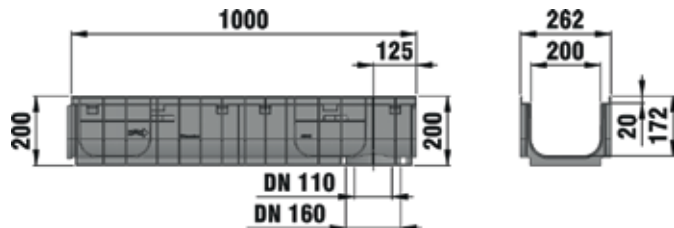
Type O1 with FIBRETEC design
slotted grating, SW 9 mm,
black, locked



	Length mm	Width mm	Height mm	Internal channel cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O1 with FIBRETEC design slotted grating, SW 9 mm, black, locked	1000	212	210	230	500	7.40

RECYFIX PRO 200, class B 125

Type O10 with FIBRETEC
slotted grating, SW 9 mm,
black, locked



	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O10 with FIBRETEC slotted grating, SW 9 mm, black, locked	1000	262	200	294	656	8.3
Type 115 with FIBRETEC slotted grating, SW 9 mm, black, locked	1000	262	115	150	656	7.0

Grating options **RECYFIX PRO 100**

Coloured **FIBRETEC** Gratings



GUGI-Mesh gratings, composite material
Mesh width: 15 X 25 mm



Longitudinal ductile iron gratings, galvanised
Bar distance: 9 mm



Longitudinal ductile iron gratings, KTL
Bar distance: 9 mm



Mesh gratings, galvanised
Mesh width: 30 X 30 mm



Slotted gratings and reinforced slotted gratings, galvanised and stainless steel
Bar distance: 80 X 10 mm



Ductile iron grating, METROPOLIS, KTL



FIBRETEC Slotted gratings, in Black
Bar distance: 9 mm



FIBRETEC Slotted gratings, in Fern
Bar distance: 9 mm



FIBRETEC Slotted gratings, in Sand
Mesh width: 9 mm



FIBRETEC Slotted gratings, in Stone
Bar distance: 9 mm

Grating options

RECYFIX PRO 150



Longitudinal ductile iron gratings, KTL
Bar distance: 9 mm



FIBRETEC Slotted gratings, composite material
Bar distance: 9 mm

Grating options

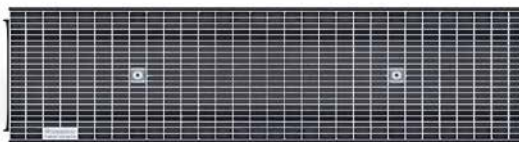
RECYFIX PRO 200



Longitudinal ductile iron gratings, KTL
Bar distance: 9 mm



FIBRETEC Slotted gratings, composite material
Bar distance: 9 mm



Mesh gratings, galvanised and stainless steel
Bar distance: 30 X 10 mm



Ductile iron gratings, G-TEC
Bar distance: 2 X 85 X 9 mm



Ductile iron grating, METROPOLIS, KTL

Grating options

RECYFIX PRO 300



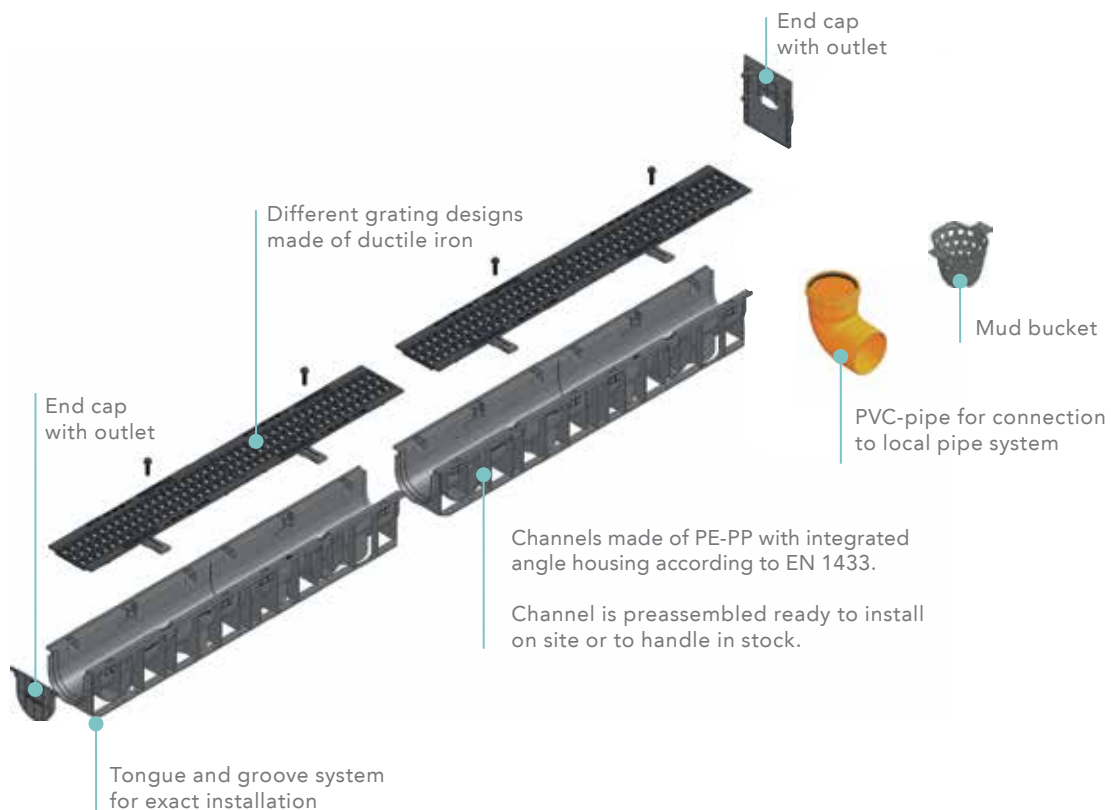
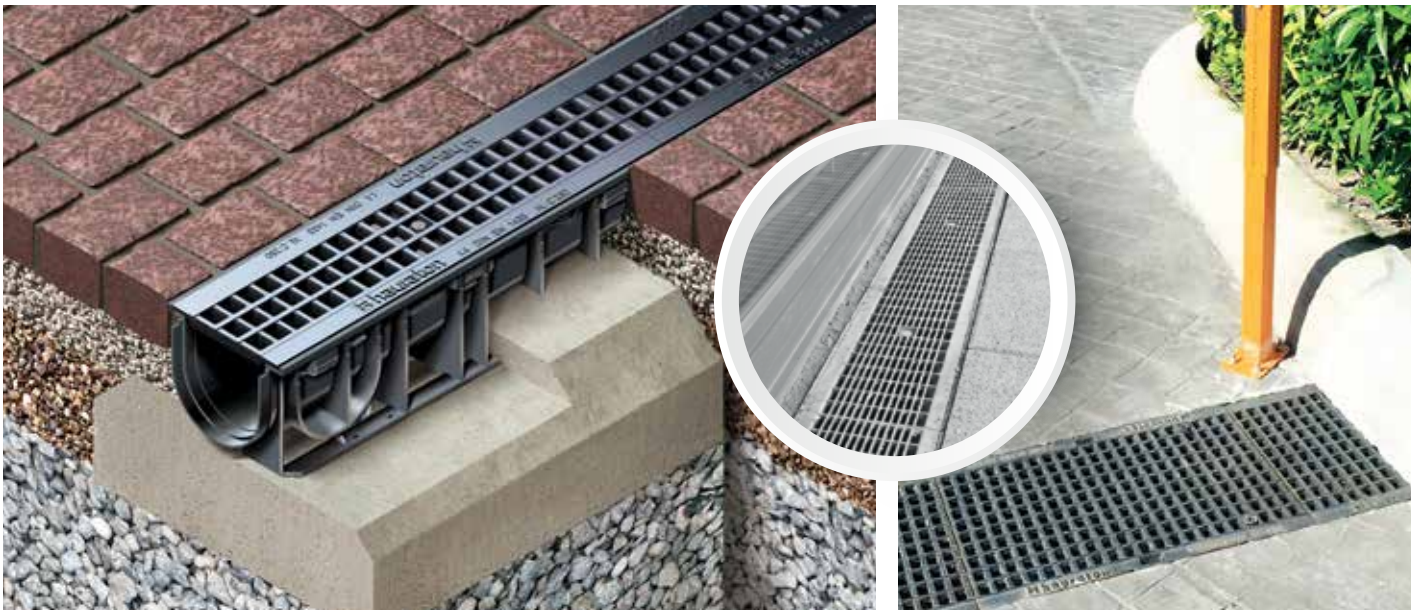
Ductile iron gratings, G-TEC
Bar distance: 2 X 141 X 9 mm

RECYFIX STANDARD

Linear drainage channels for public and commercial areas



- Market squares
- Public areas
- Private premises

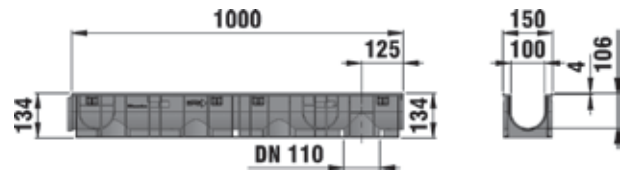
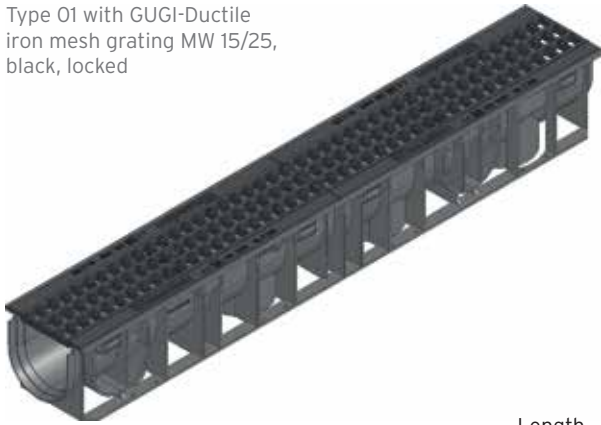


RECYFIX STANDARD 100

Combi article

RECYFIX STANDARD 100, class C 250

Type 01 with GUGI-Ductile iron mesh grating MW 15/25, black, locked



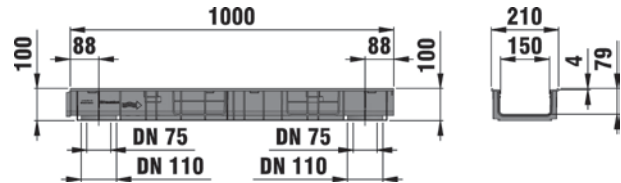
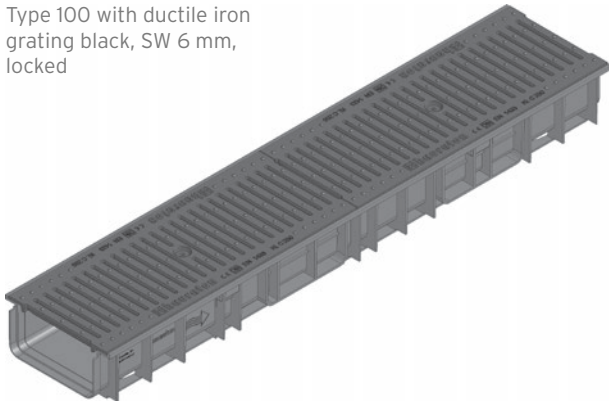
	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type 01 with GUGI-Ductile iron mesh grating MW 15/25, black, locked	1000	150	134	92	444	7.1
Type 010 with GUGI-Ductile iron mesh grating MW 15/25, black, locked	1000	150	185	142	444	8.6
Type 60 with GUGI-Ductile iron mesh grating MW 15/25, black, locked*	1000	150	60	35	444	5.4
Type 80 with GUGI-Ductile iron mesh grating MW 15/25, black, locked*	1000	150	80	55	444	5.5

* For frequently used areas we recommend FASERFIX KS Channels shallow (see CIVILS).
Type 60/type 80 with preformed outlet DN 70.

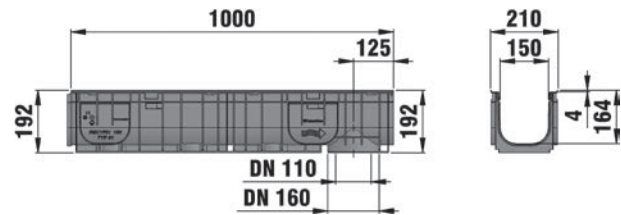
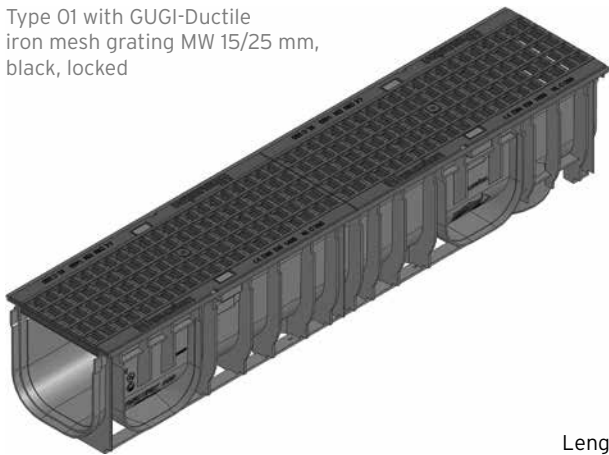
RECYFIX STANDARD 150

RECYFIX STANDARD 150, class C 250

Type 100 with ductile iron grating black, SW 6 mm, locked



Type 01 with GUGI-Ductile iron mesh grating MW 15/25 mm, black, locked



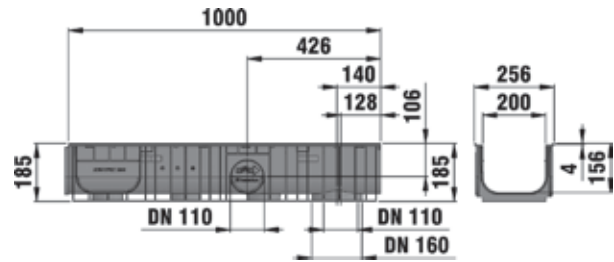
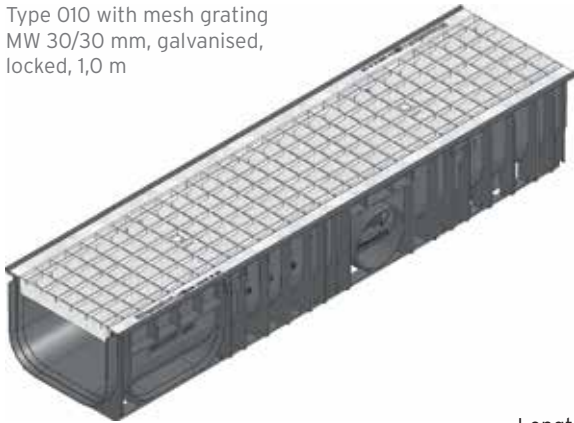
	Length mm	Width mm	Height mm	Internal channel cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type 01 with ductile iron grating black, SW 6 mm, locked	1000	210	192	225	400	14.00
Type 0105 with ductile iron grating black, SW 6 mm, locked	500	210	192	225	400	6.60
Type 100 with ductile iron grating black, SW 6 mm, locked	1000	210	100	116	400	13.00
Type 01 with GUGI-Ductile iron mesh grating MW 15/25 mm, black, locked	1000	210	192	225	745	12.40
Type 0105 with GUGI-Ductile iron mesh grating MW 15/25 mm, black, locked	500	210	192	225	745	6.00
Type 100 with GUGI-Ductile iron mesh grating MW 15/25 mm, black, locked	1000	210	100	116	745	11.60

RECYFIX STANDARD 200

Combi article

RECYFIX STANDARD 200, class B 125

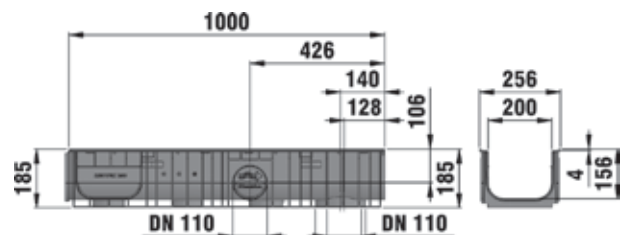
Type 010 with mesh grating
MW 30/30 mm, galvanised,
locked, 1,0 m



	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type 010 with mesh grating MW 30/30 mm, galvanised, locked, 1,0 m	1000	256	185	290	825	15.4

RECYFIX STANDARD 200, class C 250

Type 010 with GUGI-Ductile
iron mesh grating MW 15/25,
black, locked



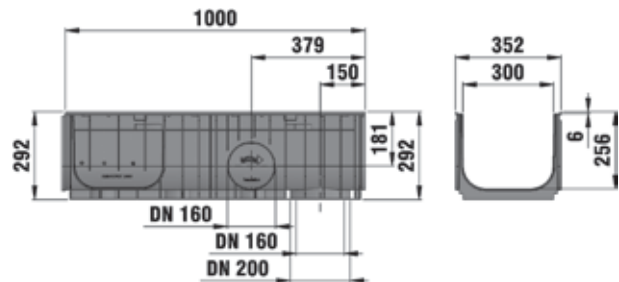
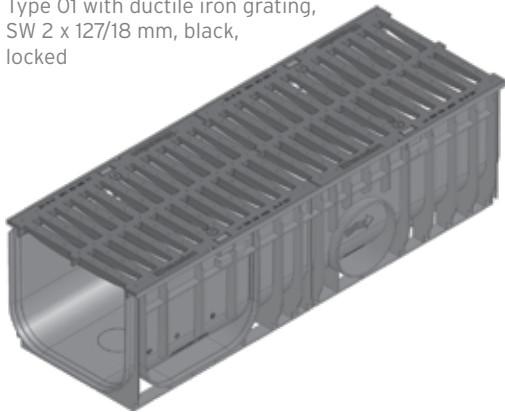
	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type 010 with GUGI-Ductile iron mesh grating MW 15/25, black, locked	1000	256	185	290	825	15.4
Type 020 with GUGI-Ductile iron mesh grating MW 15/25, black, locked	1000	256	235	366	825	15.8
Type 100 with GUGI-Ductile iron mesh grating MW 15/25, black, locked	1000	256	100	150	825	14.1

RECYFIX STANDARD 300

Combi article

RECYFIX STANDARD 300, class B 125

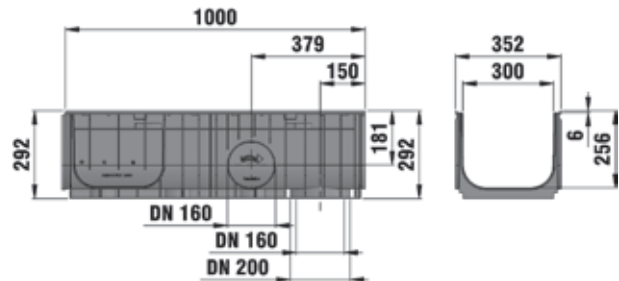
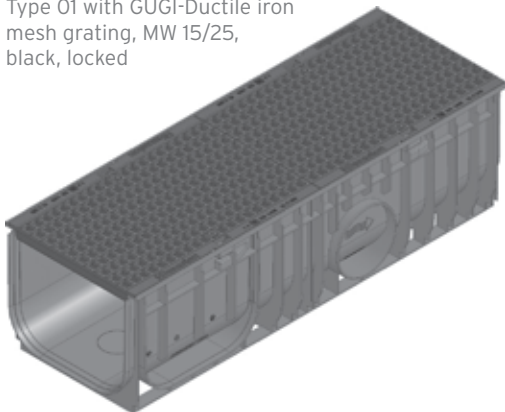
Type 01 with ductile iron grating, SW 2 x 127/18 mm, black, locked



	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type 01 with ductile iron grating, SW 2 x 127/18 mm, black, locked	1000	352	292	725	-	22.7

RECYFIX STANDARD 300, class C 250

Type 01 with GUGI-Ductile iron mesh grating, MW 15/25, black, locked



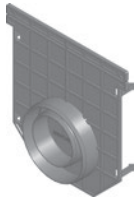
	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type 01 with GUGI-Ductile iron mesh grating, MW 15/25, black, locked	1000	350	292	725	1385	29.1
Type 010 with GUGI-Ductile iron mesh grating, MW 15/25, black, locked	1000	420	381	857	1385	33.20

Accessories - End Caps

RECYFIX PRO



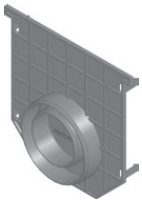
End cap closed for type O1



End cap combined, PP with outlet DN/OD 75/110 for type O1

	Length mm	Width mm	Height mm	Weight kg.
End cap closed for type O1	-	160	124	0.00
End cap closed for type O10	-	160	176	0.10
End cap made of PP, type O20	-	160	250	0.10
End cap combined, PP with outlet DN/OD 75/110 for type O1	-	210	218	0.10
End cap combined made of PP closed / with outlet DN/OD 110, type O10	-	258	217	0.20

RECYFIX STANDARD



End cap combined made of PP with outlet DN/OD 75/110, type O1



End cap combined made of PP closed / with outlet DN/OD 110, Type O10



End cap closed, galvanised, type O1

	Length mm	Width mm	Height mm	Weight kg.
End cap combined made of PP with outlet DN/OD 75/110, type O1	-	210	203	0.10
End cap combined made of PP closed / with outlet DN/OD 110, Type O10	-	260	275	1.10
End cap closed, type 100	-	262	100	0.10
End cap closed, galvanised, type O1	-	360	340	1.80
End cap closed, galvanised, type O10	-	420	380	2.80

Grating options RECYFIX STANDARD 100



Ductile iron gratings
Slot width: 80 x 14 mm



Mesh gratings, galvanised and stainless steel
Mesh width: 30 x 10 mm



Ductile iron gratings
Slot width: 80 x 6 mm



Slotted gratings, galvanised and stainless steel
Slot width: 75 x 9 mm



GUGI ductile iron gratings
Mesh width: 15 x 25 mm



Perforated gratings, stainless steel
Hole diameter: 6 mm

Grating options RECYFIX STANDARD 150



GUGI ductile iron gratings
Mesh width: 15 x 25 mm



Mesh gratings, galvanised
Mesh width: 30 x 30 mm



Ductile iron gratings
Slot width: 130 x 6 mm



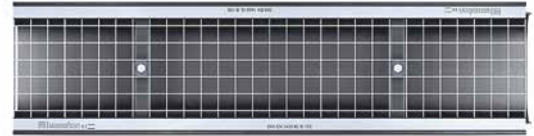
Mesh gratings, galvanised
Mesh width: 30 x 10 mm

Grating options

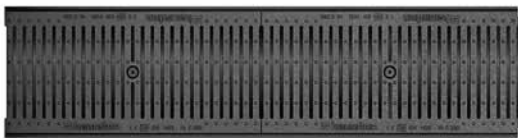
RECYFIX STANDARD 200



Ductile iron gratings
Slot width: 2 x 85 x 20 mm



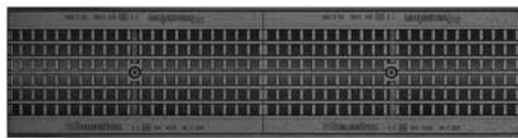
Mesh gratings
Mesh width: 30 x 30 mm



Ductile iron gratings
Slot width: 180 x 6 mm



Mesh gratings, galvanised
Mesh width: 30 x 10 mm



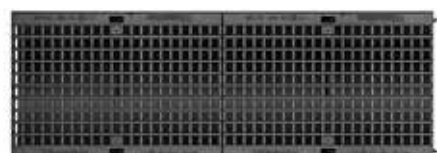
GUGI ductile iron gratings
Mesh width: 15 x 25 mm

Grating options

RECYFIX STANDARD 300



Ductile iron gratings
Slot width: 2 x 127 x 18 mm



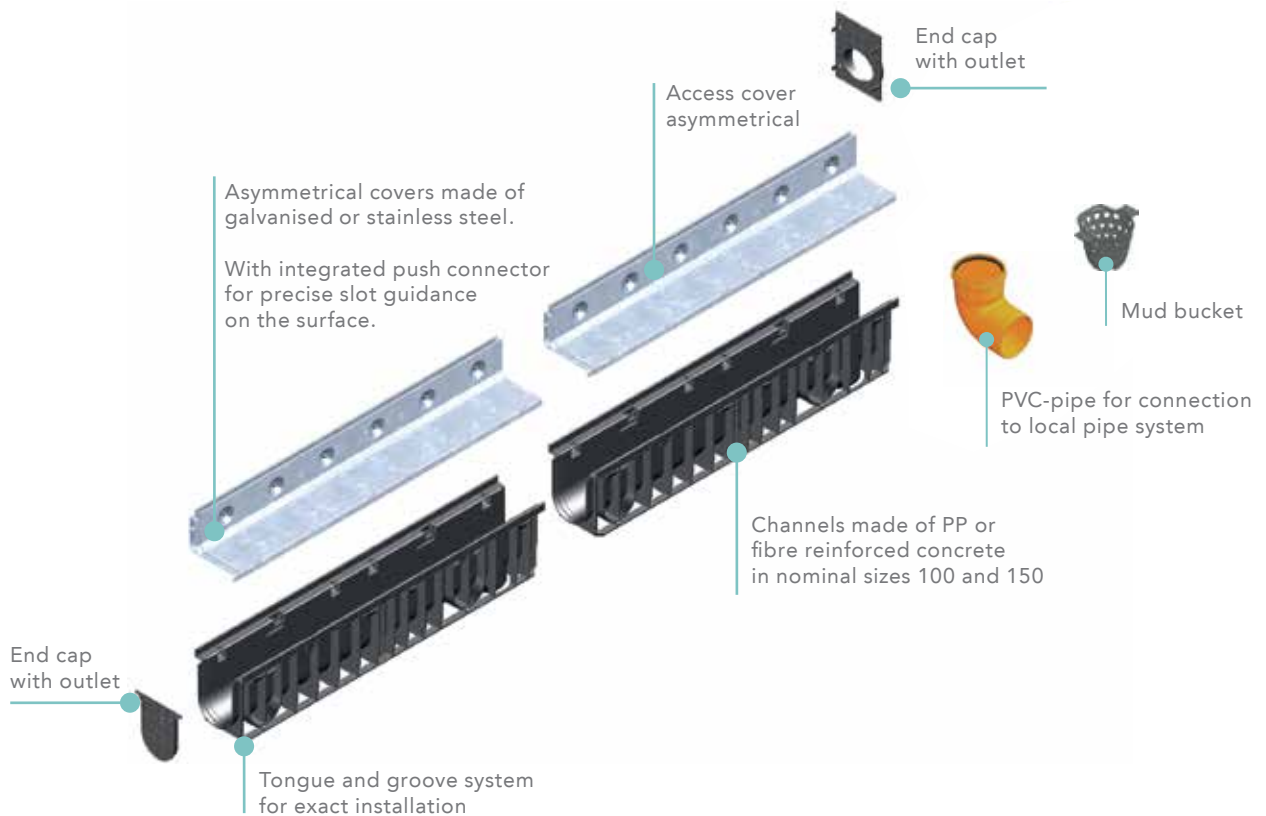
GUGI ductile iron gratings
Mesh width: 15 x 25 mm

SLOTTED CHANNEL

Slotted channels for design-sensitive applications



- Market squares
- Public areas
- Private premises

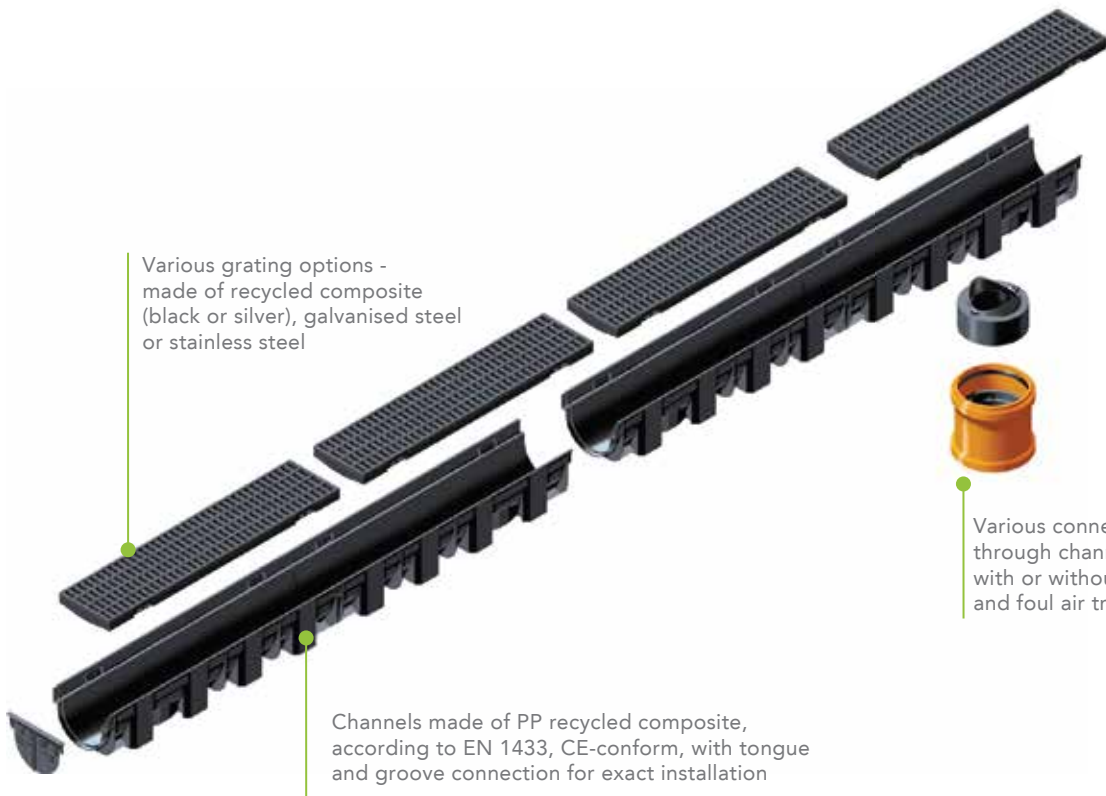


TOPX

Drainage channels for private driveways, courtyards, patios and gardens.



- Predominately private areas
- Garage entrances
- Courtyard areas
- Terraces gardens
- Parks



Various grating options - made of recycled composite (black or silver), galvanised steel or stainless steel



Various connection possibilities through channel or universal box with or without leaf collector and foul air trap

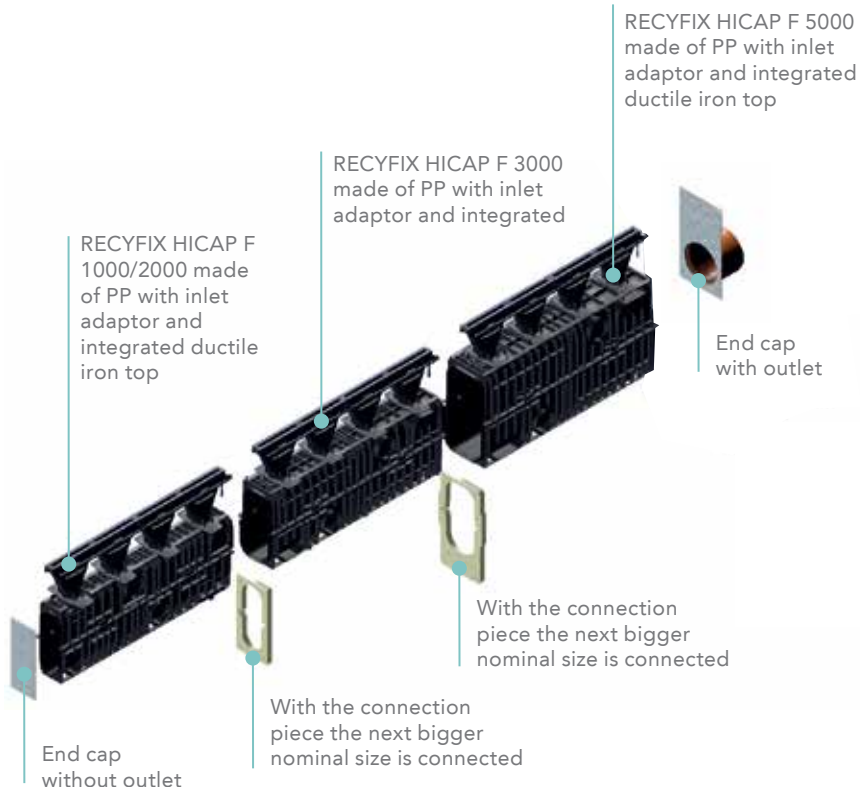
Channels made of PP recycled composite, according to EN 1433, CE-conform, with tongue and groove connection for exact installation

RECYFIX HICAP F

Linear drainage and retention system for the highest load areas, such as airports, industrial estates and container terminals.



- High capacity drainage channel
- Suitable for heavy load areas
- No expensive crane or machine hours required for installation

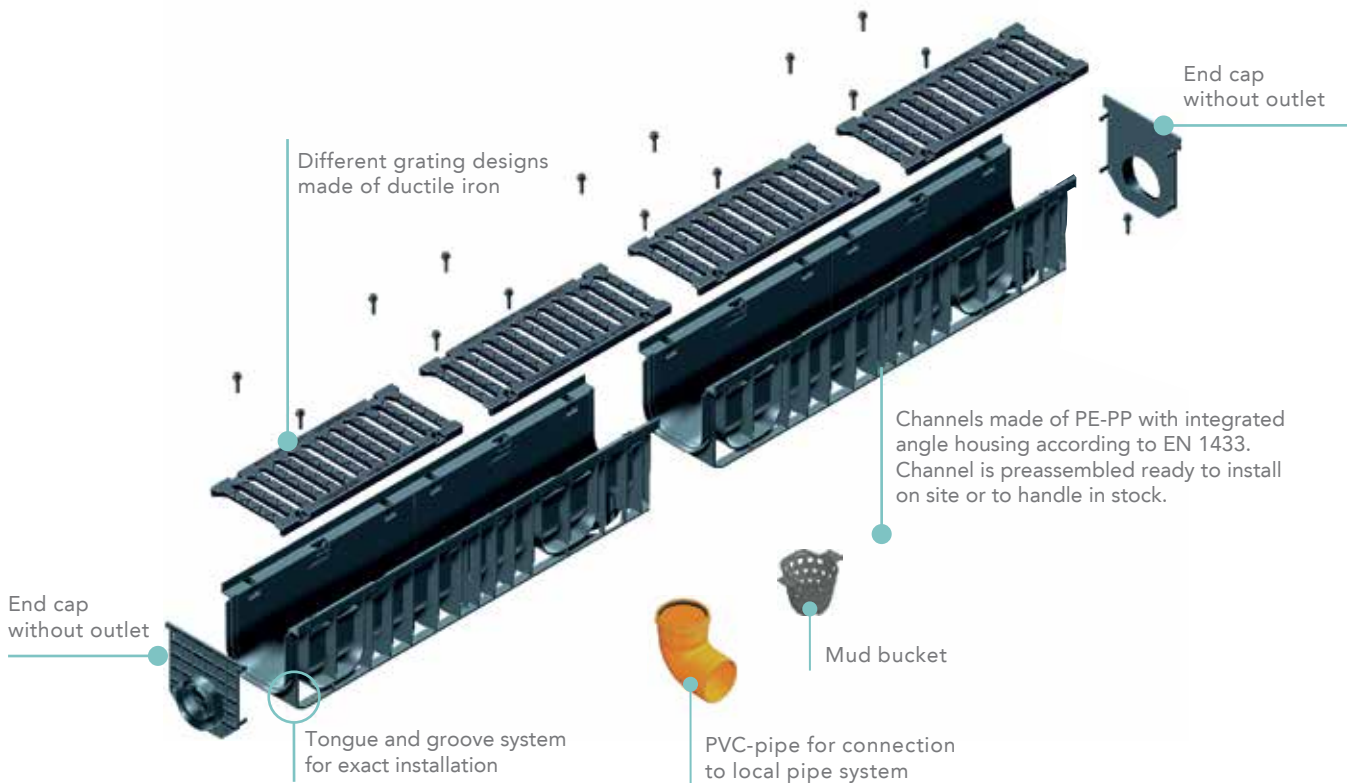


RECYFIX NC

Heavy duty applications with higher traffic up to class E 600, such as car parks, industrial estates and petrol stations.



- Industrial yards
- Streets (alongside)
- Commercial areas

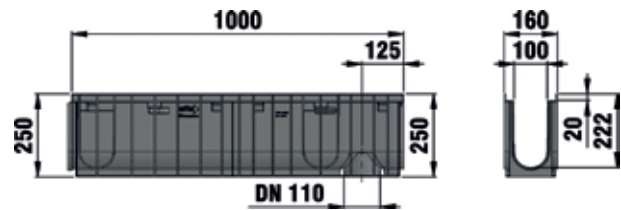


RECYFIX NC 100 & 200

Combi article

RECYFIX NC 100, class E 600

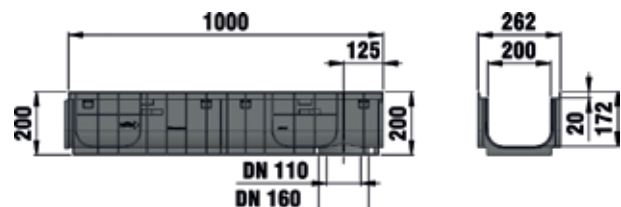
Type O20 with ductile iron grating, SW 10, black, 8-fold bolted



	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O1 with ductile iron grating, black, SW 10 mm, 8-fold bolted	1000	160	150	92	427	10.7
Type O10 with ductile iron grating, black, SW 10 mm, 8-fold bolted	1000	160	200	142	427	11.6
Type O20 with ductile iron grating, SW 10 mm, black, 8-fold bolted	1000	160	250	192	427	12.5
Type 75 with ductile iron grating, black, SW 10 mm, 8-fold bolted	1000	160	75	35	427	10.2

RECYFIX NC 200, class E 600

Type O10 with ductile iron grating, black, SW 18 mm, 8-fold bolted



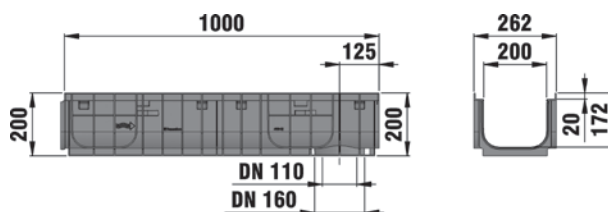
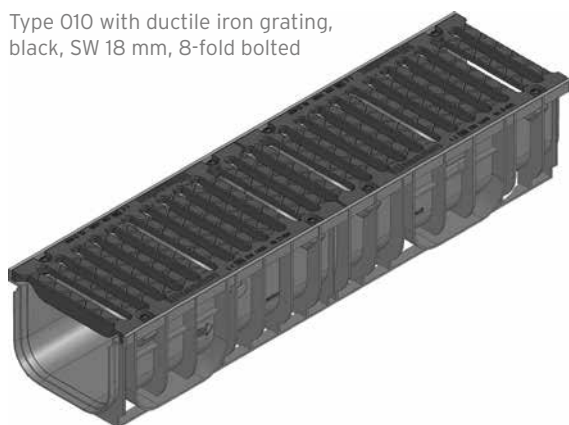
	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O10 with ductile iron grating, black, SW 18 mm, 8-fold bolted	1000	262	200	294	936	20,8

RECYFIX NC 200

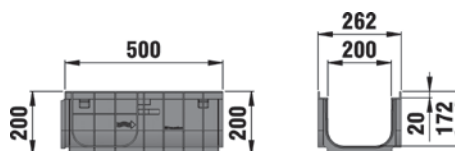
Combi article

RECYFIX NC 200, class D 400

Type 010 with ductile iron grating, black, SW 18 mm, 8-fold bolted



Type 01005 with ductile iron grating, black, SW 18 mm, 4-fold bolted

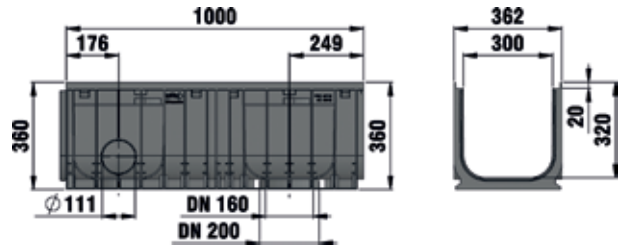
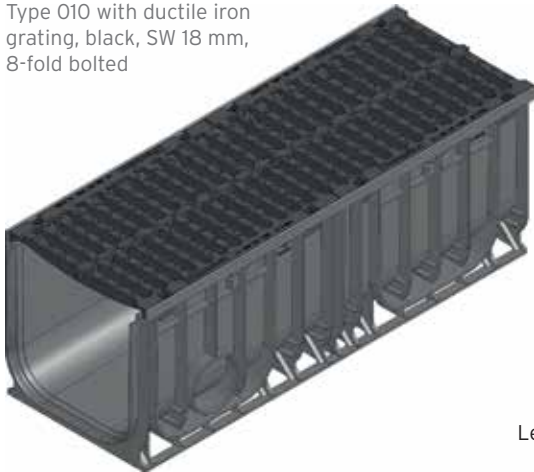


	Length mm	Width mm	Height mm	Internal channel cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type 010 with ductile iron grating, black, SW 18 mm, 8-fold bolted	1000	262	200	294	936	20.80
Type 01005 with ductile iron grating, black, SW 18 mm, 4-fold bolted	500	262	200	294	936	10.40

RECYFIX NC 300 & 400

RECYFIX NC 300, class E 600

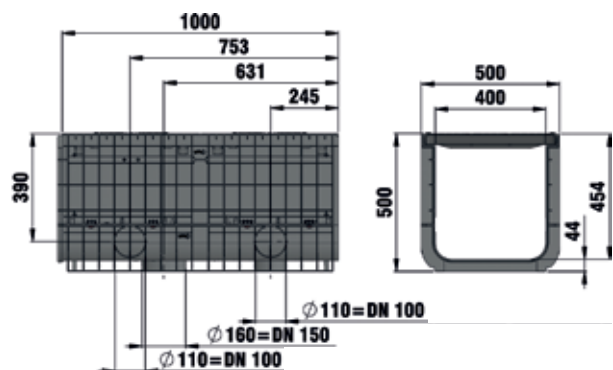
Type O10 with ductile iron grating, black, SW 18 mm, 8-fold bolted



	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O10 with ductile iron grating, black, SW 18 mm, 8-fold bolted	1000	362	360	873	1293	35.0

RECYFIX NC 400, class D 400

Type O10 with ductile iron grating, black, SW 18 mm, 8-fold bolted



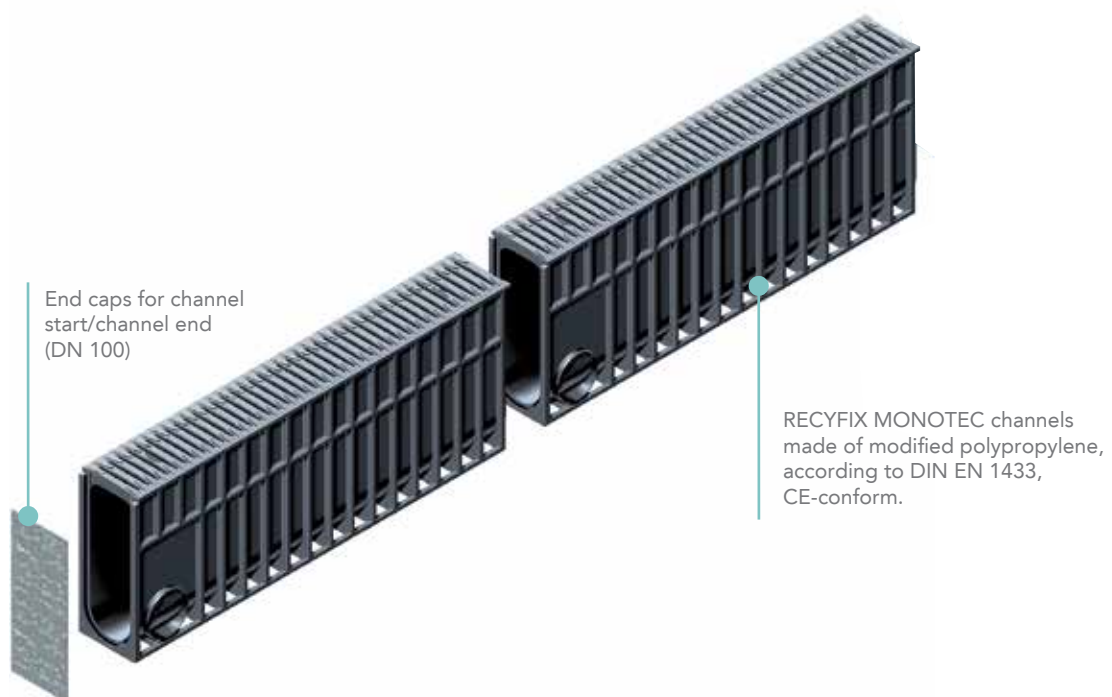
	Length mm	Width mm	Height mm	Drainage cross-sect. cm ²	Intake cross-sect. cm ² /m	Weight kg
Type O10 with ductile iron grating, black, SW 18 mm, 8-fold bolted	1000	500	500	1640	1753	57.2

RECYFIX MONOTEC

Heavily frequented applications with high retention volume up to class D 400, such as supermarkets, car parks and petrol stations.

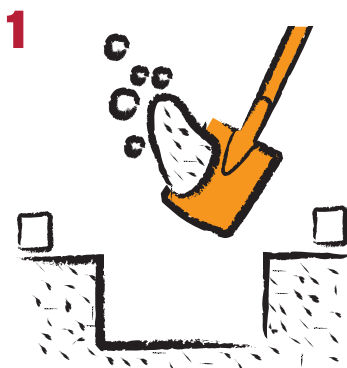


- Parking areas
- Residential areas
- Commercial areas

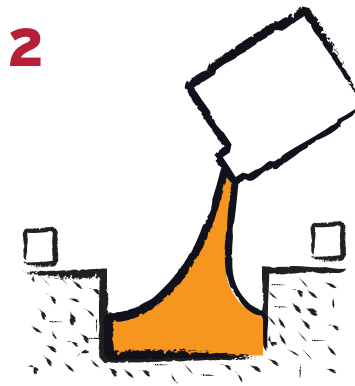


STEP BY STEP INSTALLATION INSTRUCTIONS

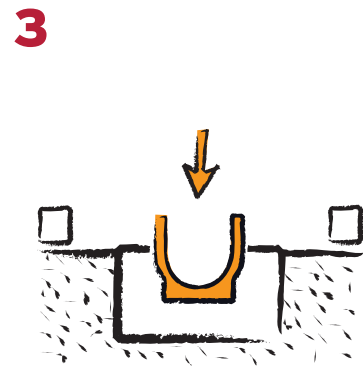
An example for paving installation



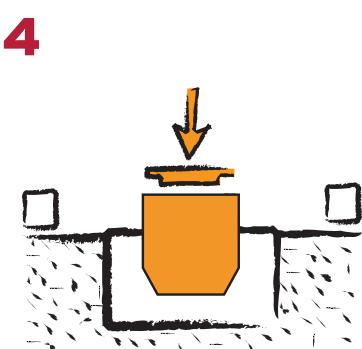
1 Dig a trench.



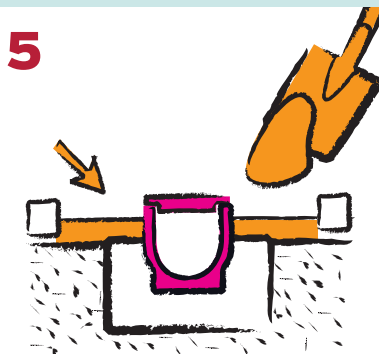
2 Fill with concrete and space it out evenly.



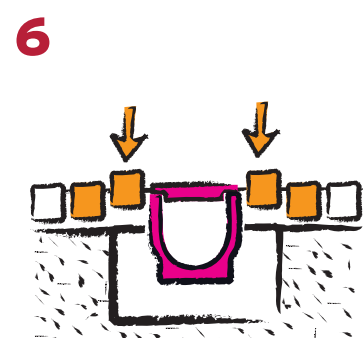
3 Stretch a line along the installation line. Lay the channel along this line. Connection to the sewage pipe: with trash boxes or endcap with outlet.



4 Place the closed end cap at the start of the channel run.



5 Prepare a lateral backing structure made of concrete.



6 **Lay paving. Fill joints.** Important: adjoining surface finishes are laid to finish permanently 3 to 5 mm higher than the top edge of the channel.

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