



RECYFIX MONOTEC

A monolithic drainage system designed to
accept large volumes of rainwater -
to load class D400kN

Contents

Product range		Loading category	Page
RECYFIX MONOTEC	Overview		3-5
	Features & Benefits		6-7
	Hydraulic capacity		8-9
	Applications		10-11
	Step Fall		12-13
RECYFIX MONOTEC 100	Types 230, 280 & 380 channels	Class D400	14
	Accessories - Trash box Connection plates - Types 230, 280 & 380	Class D400 N/A	15
	Accessories - Inspection box Connection plates - Types 230, 280 & 380	Class D400 N/A	16
	End caps Further accessories - step fall adapters	N/A N/A	17
	Accessories - Inspection Element	Class D400	18
RECYFIX MONOTEC 200	Type 450 channel Accessories - Trash box Connection plates - Type 450	Class D400 Class D400 N/A	19
	Accessories - Inspection box Connection plates - Type 450 End caps	Class D400 N/A N/A	20
	Accessories - Inspection Element	Class D400	21
RECYFIX MONOTEC	Installation examples	N/A	22-23



RECYFIX MONOTEC

Monolithic drainage system - lightweight and robust

Lightweight for simple, fast and low-cost installation

- maximum stability with minimum weight
- significantly lighter than channels made of mineral material
- simple to transport, handle and install



1m 100mm channel = 7,8kg
1m 200mm channel = 16,2kg



Fast installation



Simple processing

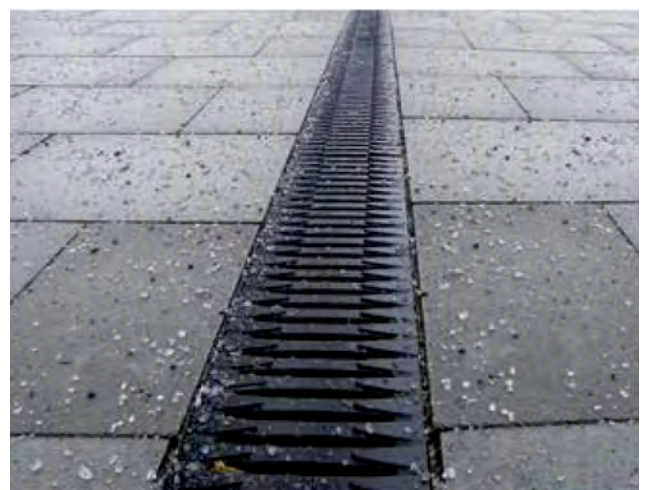


Easy transport

RECYFIX - corrosion free and extremely strong

- high-tech-material from renowned Plastic Research Institute
- permanently resistant to frost, de-icing salt and UV light
- extremely durable even with frequent traffic

100% corrosion free



100% corrosion free, especially in cases of frost and de-icing salt



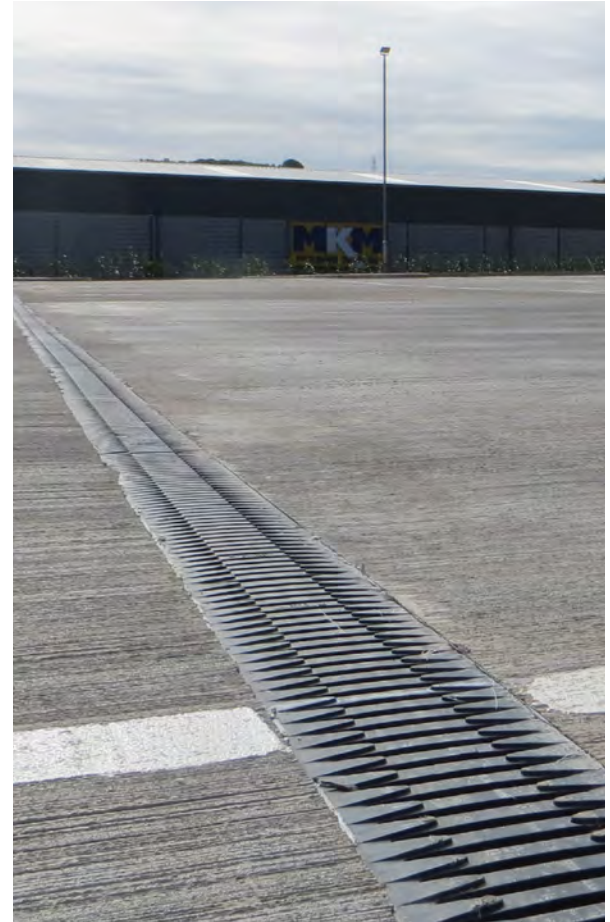
Asphalt installation



Concrete installation



Block paved installation



Frequently trafficked area

RECYFIX MONOTEC

Monolithic drainage system for heavily frequented traffic areas.

1 Requirements

Monolithic drainage channels in traffic areas must:

- be permanently corrosion-resistant
- be secure against vandalism
- be maintenance-free and drain reliably
- satisfy aesthetic demands

2 Application areas

- Parking areas
- Market places, public spaces
- School playgrounds
- Residential areas
- Gas stations
- Trafficked areas in trade and industrial sites

3 Solutions

Therefore, RECYFIX MONOTEC channels are especially suitable for draining such surfaces:

- Lightweight ensuring simple processing for cost-effective installation
- Channel made of specially resistant recycled modified polypropylene
- Leak-proof and chemical-resistant
- Extremely robust
- Very quick to install

A selection of Hydraulic Performance tables for the most popular sizes of FASERFIX and RECYFIX channels including the RECYFIX MONOTEC and RECYFIX HICAP ranges are available on request in an 8 page hard copy or PDF publication.

Hauraton channel drainage configurations are designed and sized using in-house **Hydraulic Design Software**. The accuracy of the software has been verified by physical testing of Hauraton systems within a hydraulic discharge test flume, replicating and evaluating hundreds of flow scenarios.

Hydraulic design software is also available free of charge to industry professionals. Intuitive and user friendly, **Hauraton Design Software** allows engineers to create drainage schemes for the company's range of civil engineering systems on tablets, desktop computers or through the internet (web-based application).

For smaller projects where a quick indication of the appropriate channel size and system is required for a given catchment area, Hauraton can provide their **Hydraulic Design App**.

For further details contact the Hauraton Technical Support Team.



RECYFIX MONOTEC - Class D400kN

Features & Benefits

100% corrosion free



high hydraulic capacity

- optimised inlet surface with composite corrosion free grating design
- high capacity with slim channel construction

= Safety



low weight ensures easy handling on site

- significantly lighter than channels made of mineral material
- simple to transport and install - one man lift

= Time and cost savings



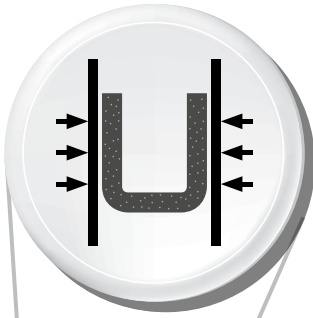
Fast installation



Easy transport



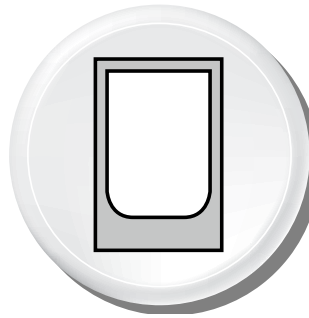
Simple processing



strong and durable

- impact resistant to D400kN loadings
- strong elastic material

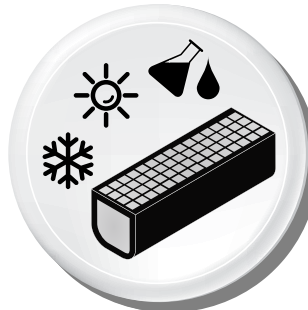
= **Longevity**



one piece channel

- highly stable monolithic channel
- anti theft design

= **Longevity**



high resistance

- high resistance to frost, de-icing salt and UV light
- withstands high temperature differences
- chemical-resistant

= **Durability**



low maintenance

- cleaning the system is simplified via inspection box units
- durable high-quality appearance

= **Time and cost savings**

RECYFIX MONOTEC

Optimum hydraulic capacity through slim design.

The RECYFIX MONOTEC channel is made of highly resistant and robust polypropylene. Therefore, a particularly slender design is possible which has a positive effect with regard to drainage capacity. The smallest model, with a nominal width of 100 mm and a height of 230 mm, has a drainage cross-section of 190.5 cm². Monolithic channels, made from other materials, must have much thicker sidewalls which significantly reduces the drainage cross-section.

The RECYFIX MONOTEC channel range consists of 3 heights with a nominal width of 100 mm and one model with a nominal width of 200 mm. Long-term practical tests and computer-aided simulations lead to the same result: the RECYFIX MONOTEC accumulates heavy rainfall, provides a sufficient backwater reserve and drains large surfaces safely and reliably.



RECYFIX MONOTEC

Nominal size	Height	Drainage cross-section		Volume/Channel
100 mm	230 mm	190.5 cm ²		19.1 l
100 mm	280 mm	245.5 cm ²		24.6 l
100 mm	380 mm	355.5 cm ²		35.6 l
200 mm	450 mm	746.1 cm ²		74.6 l

Maximum hydraulic capacity

The fibre-reinforced polypropylene material enables a slim channel design. As a result, a maximum hydraulic capacity is achieved.



NW 100, Type 230



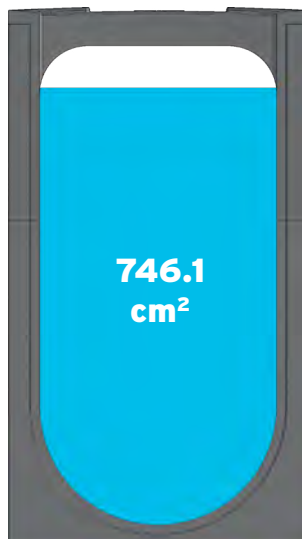
NW 100, Type 280



NW 100, Type 380



NW 200, Type 450



NW 200, Type 450



Lower drainage capacity, up to 45%, with monolithic channels made from other materials

FIBRETEC slotted grating: Proven to make progress

In 2010, HAURATON invented the FIBRETEC HEELSAFE slotted grating. This grating is specially designed for maximum hydraulic performance. Optimized inlet radii ensure that the largest amount of water is led into the channel within the shortest time. More than one million channels sold proves its great popularity. The FIBRETEC design has now been transferred to the RECYFIX MONOTEC system providing the perfect combination of water intake, retention and drainage.



Testing at HAURATON Hydraulic Center in Budapest

RECYFIX MONOTEC Applications

Monolithic drainage system for heavily frequented traffic areas.

RECYFIX MONOTEC channels meet the requirements of DIN EN 1433 and are suitable for the following load classes:



**Category C 250,
Load Class 250 kN**



**Category D 400,
Load Class 400 kN**

If in doubt, always select the higher class.

1

RECYFIX MONOTEC channels made of modified polypropylene, according to DIN EN 1433, CE-conform.

2

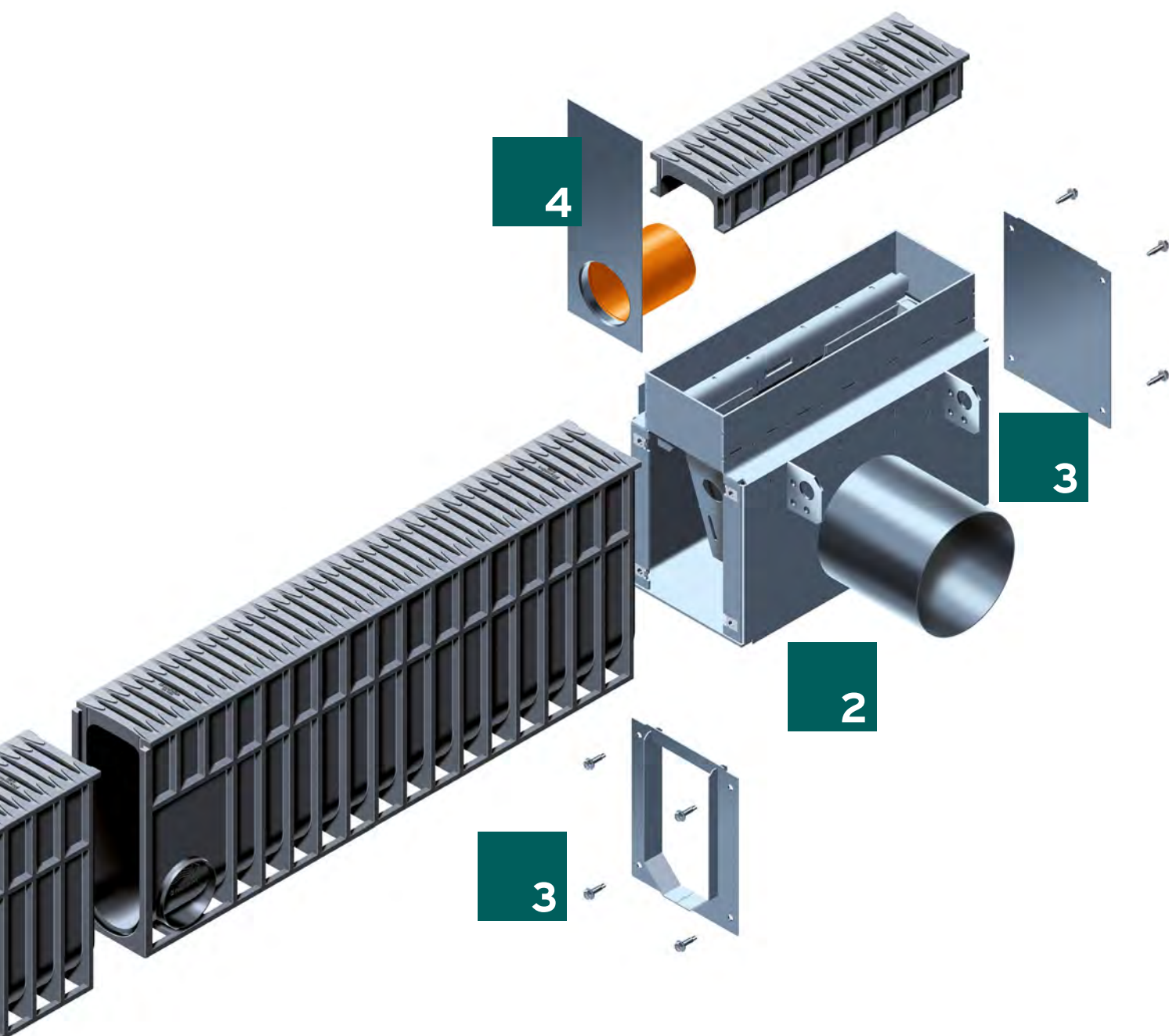
Trash box made of galvanized steel with pipe connection possibility DN 200. Removable grating made of modified polypropylene for access to channel system.

3

Connection plate for flexible connection to different channel types with the trash box.

1



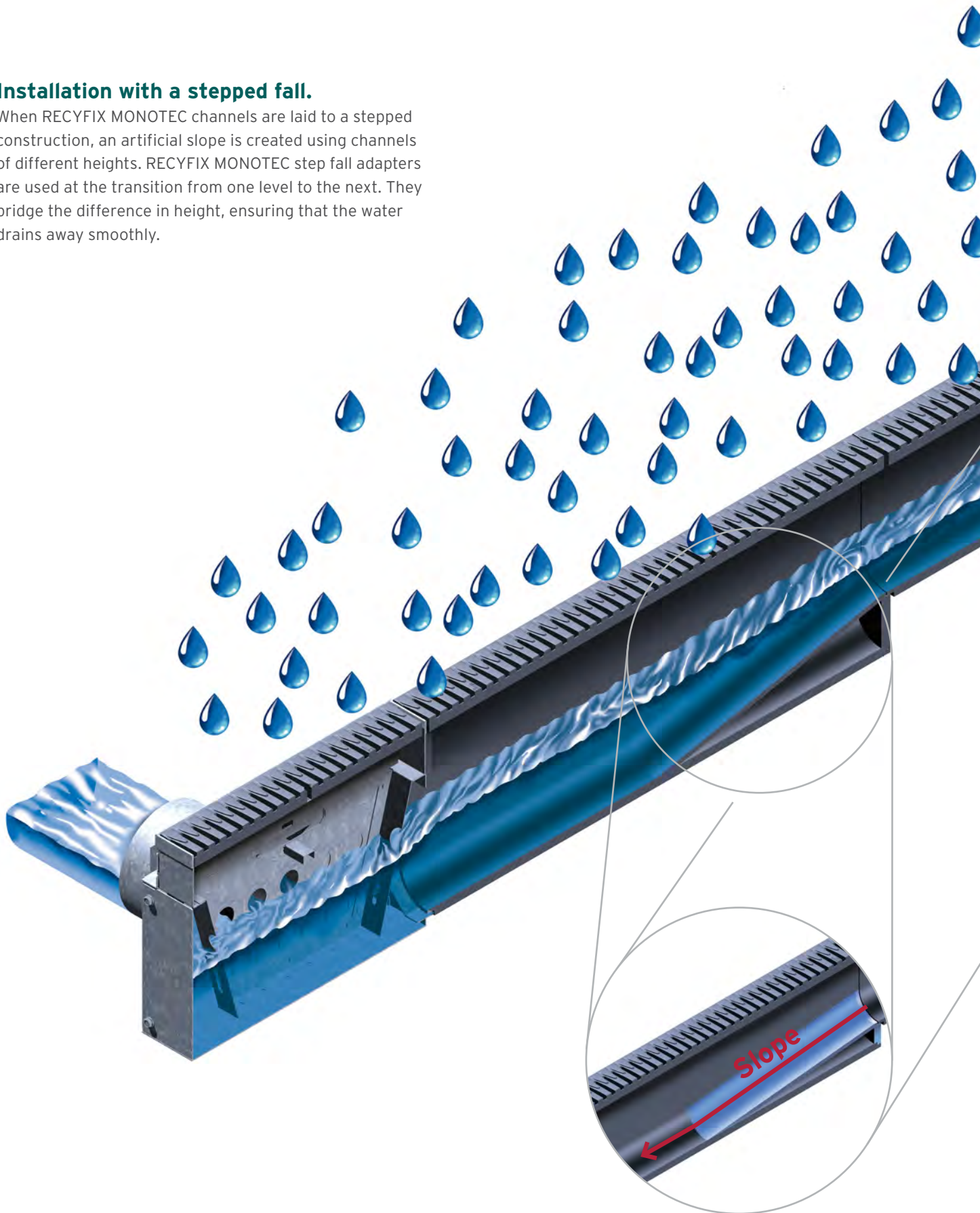


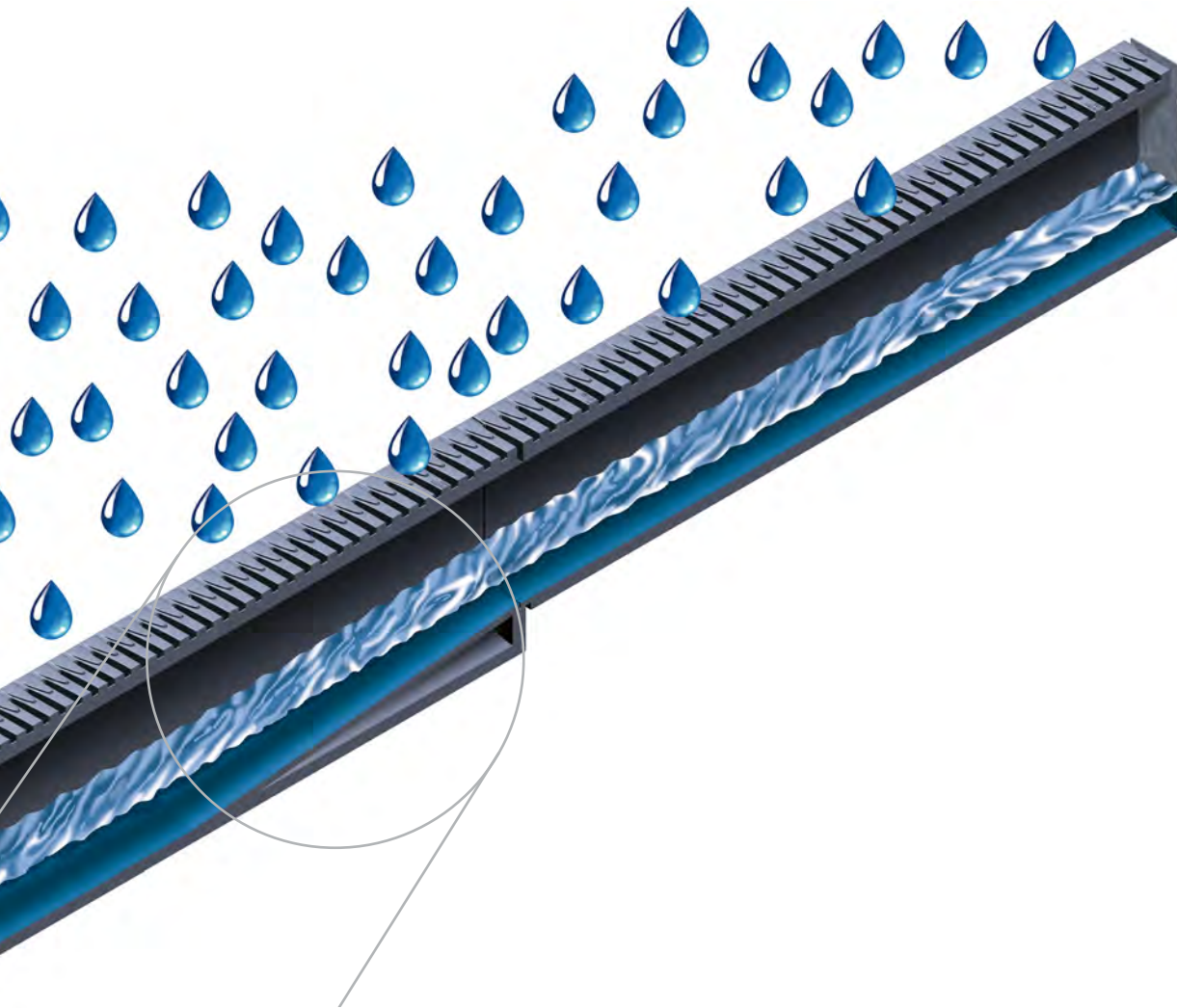
RECYFIX MONOTEC Step Fall

Reliable hydraulic performance for channel runs with a stepped fall.

Installation with a stepped fall.

When RECYFIX MONOTEC channels are laid to a stepped construction, an artificial slope is created using channels of different heights. RECYFIX MONOTEC step fall adapters are used at the transition from one level to the next. They bridge the difference in height, ensuring that the water drains away smoothly.





RECYFIX MONOTEC Step Fall Adapter, black, for channel runs with step fall



Step Fall Adapter for transition from type 230 to 280

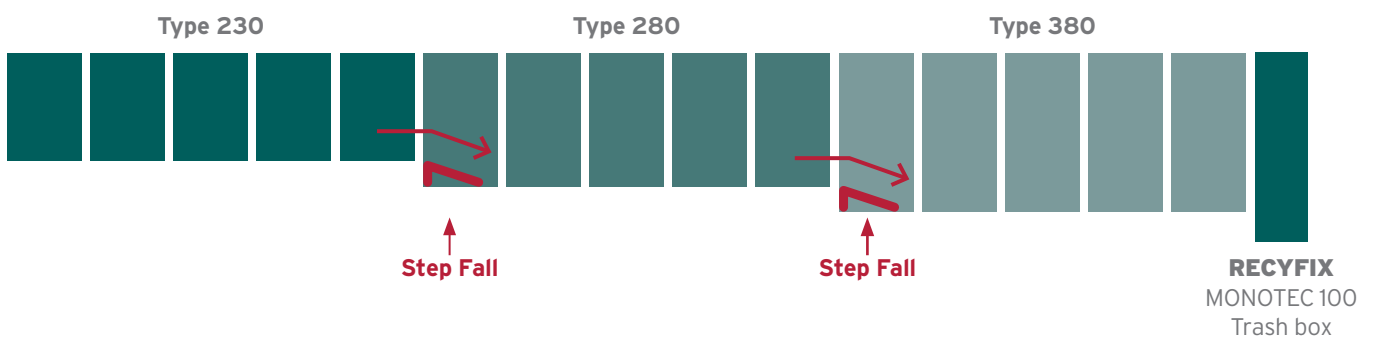


Step Fall Adapter for transition from type 280 to 380

NB: A step fall design providing an enhanced hydraulic water flow can also be made between a RECYFIX MONOTEC 100, type 380 channel run, connected to a 200 Inspection Box and then to a RECYFIX MONOTEC 200, type 450 channel run.

Refer page 20 for details.

RECYFIX MONOTEC Channels 100:

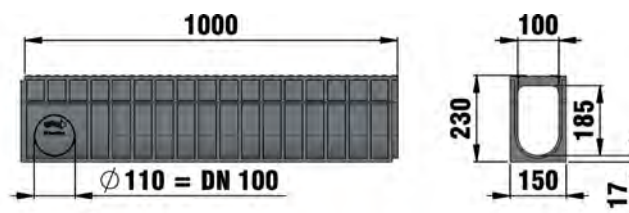
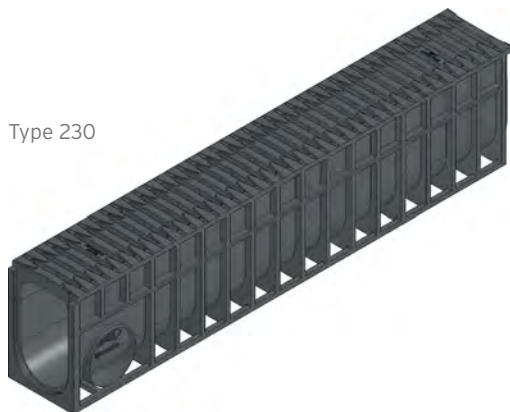


RECYFIX MONOTEC 100

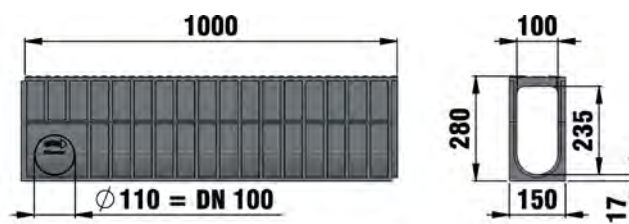
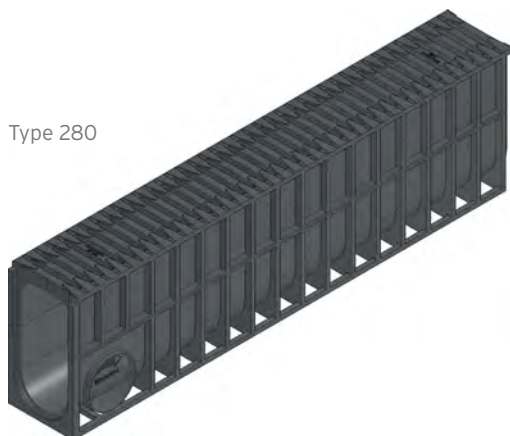
Monolithic channel

RECYFIX MONOTEC 100, class D 400

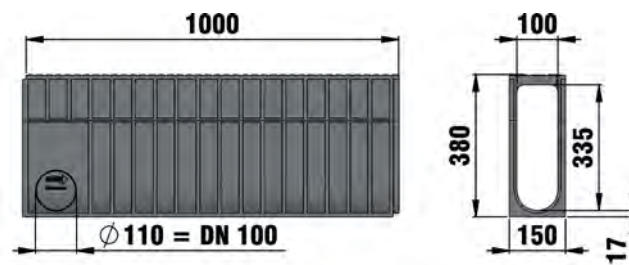
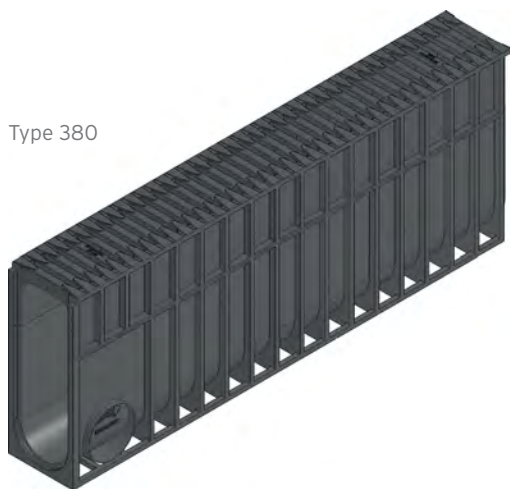
Type 230



Type 280



Type 380



	Length mm	Width mm	Height mm	Invert mm	Intake cross-sect. cm ² /m	Drainage cross-sect. cm ²	Weight kg	Item No.
Type 230 SW 9mm HEELSAFE	1000	150	230	213	372	190,5	7,85	36000
Type 280 SW 9mm HEELSAFE	1000	150	280	263	372	245,5	8,63	36005
Type 380 SW 9mm HEELSAFE	1000	150	380	363	372	355,5	10,25	36015

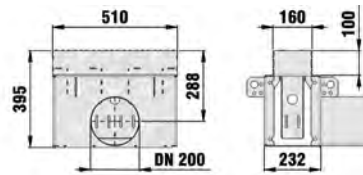
RECYFIX MONOTEC 100

Accessories

Trash box



Trash box with galvanised bucket



Technical drawing, trash box with galvanised bucket



Connection plate with screw set, galvanised, channel type 230

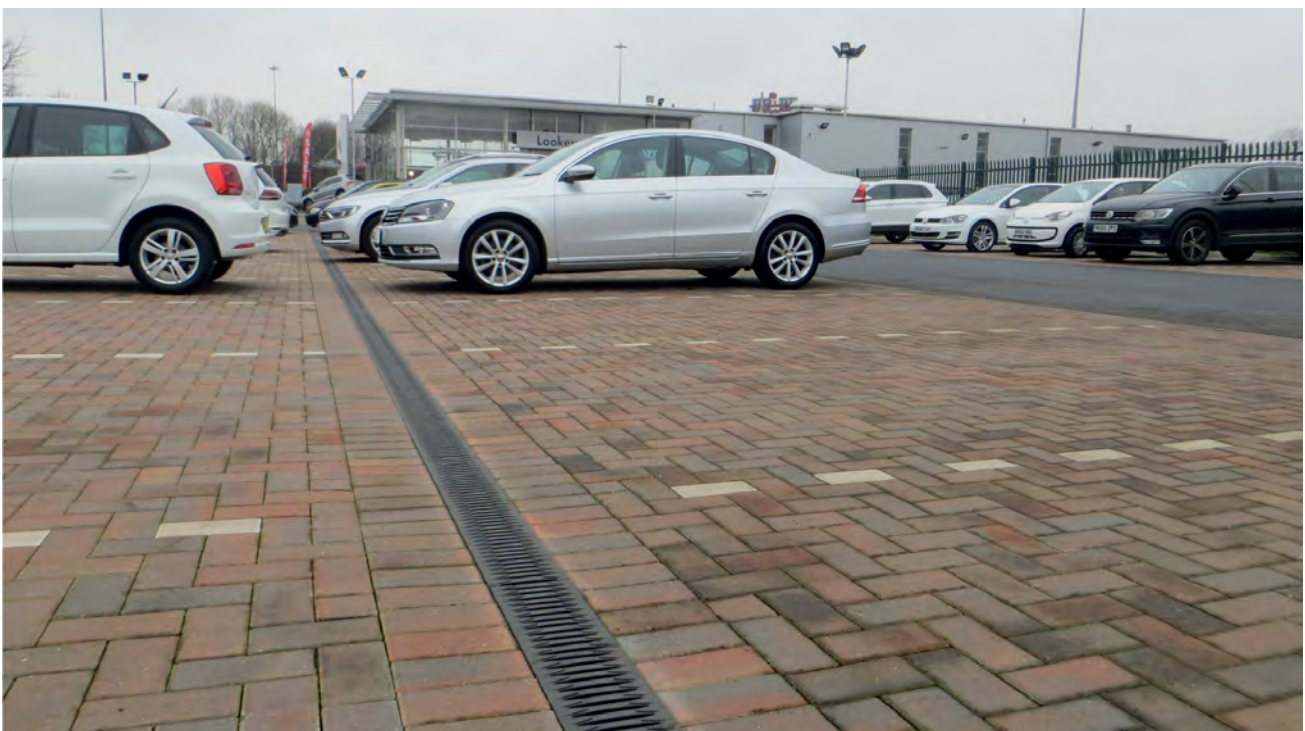


Closing cap with screw set, galvanised

	Length mm	Width mm	Height mm	Weight kg	Item No.
Trash box with galvanised bucket	510	160	395	-	36045
Locking handle with screw for protection against vandalism	-	-	-	-	36098
Connection plate with screw set, galvanised, channel type 230	-	216	283	-	36032
Connection plate with screw set, galvanised, channel type 280	-	216	283	-	36037
Connection plate with screw set, galvanised, channel type 380	-	216	283	-	36047
Closing cap with screw set, galvanised, for trash box/inspection box	-	216	283	-	36023
Flexible Coupling 180-200/160-180	-	150	-	-	AC6000
Flexible Coupling 260-285/180-205	-	159	-	-	AC9001

All trash boxes are factory-made with the end face open to enable a modular use for all application situations:

- Option 1: one-sided channel connection: You will need 1 connection plate with the same channel height (= same type) and a closing cap.
- Option 2: two-sided channel connection: You will need 2 connection plates with the same channel height (= same type).



RECYFIX MONOTEC 100

End caps



End cap closed, galvanised, type 230



End cap with horizontal UPVC-outlet DN 100, galvanised, type 280

	Length mm	Width mm	Height mm	Weight kg	Item No.
End cap closed, galvanised, type 230	-	150	225	0,5	36080
End cap closed, galvanised, type 280	-	150	275	0,6	36082
End cap closed, galvanised, type 380	-	150	375	0,8	36086
End cap with horizontal UPVC-outlet DN 100, galvanised, type 230	-	150	225	-	36090
End cap with horizontal UPVC-outlet DN 100, galvanised, type 280	-	150	275	-	36092
End cap with horizontal UPVC-outlet DN 100, galvanised, type 380	-	150	375	-	36096

Further accessories



Step Fall Adapter for step slope, from type 230 to 280



Step Fall Adapter for step slope, from type 280 to 380

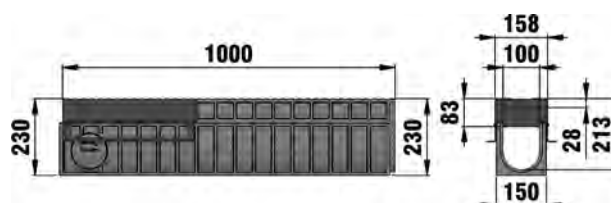
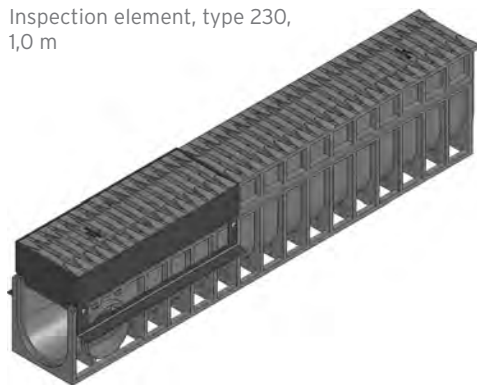
	Length mm	Width mm	Height mm	Weight kg	Item No.
Step Fall Adapter for step slope, from type 230 to 280	510	125	112,5	0,7	36070
Step Fall Adapter for step slope, from type 280 to 380	510	125	162,5	0,8	36071

RECYFIX MONOTEC 100

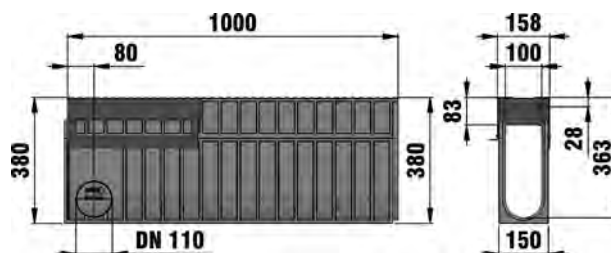
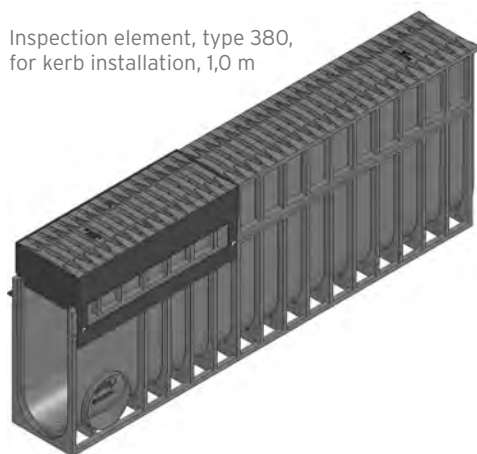
Accessories

Inspection elements

Inspection element, type 230,
1,0 m



Inspection element, type 380,
for kerb installation, 1,0 m



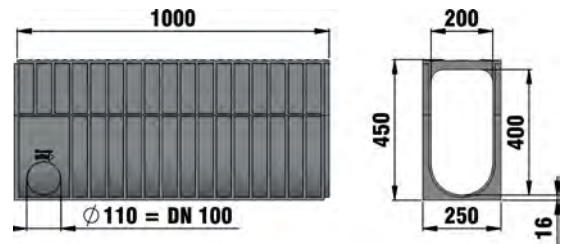
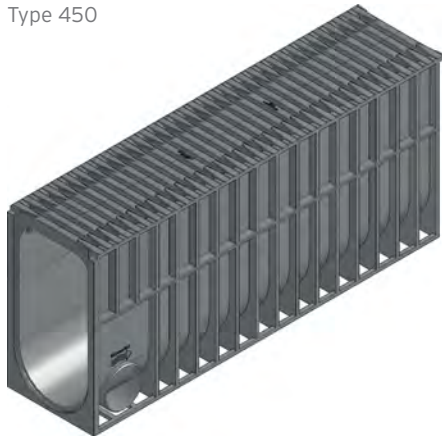
	Length mm	Width mm	Height mm	Internal channel cross-sect. cm ² /m	Intake cross-sect. cm ² /m	Weight kg	Item No.
Inspection element, type 230, 1,0 m	1000	158	230	130	351	10,89	36062
Inspection element, type 280, 1,0 m	1000	158	280	185	351	11,79	36063
Inspection element, type 380, 1,0 m	1000	158	380	295	351	13,72	36065
Inspection element, type 230, for kerb installation, 1,0 m	1000	158	230	130	351	11,12	36066
Inspection element, type 280, for kerb installation, 1,0 m	1000	158	280	185	351	12,11	36067
Inspection element, type 380, for kerb installation, 1,0 m	1000	158	380	295	351	14,10	36069

RECYFIX MONOTEC 200

Monolithic channel

RECYFIX MONOTEC 200, class D 400

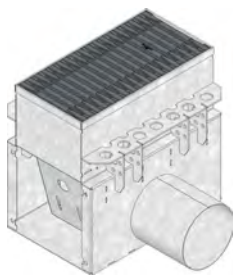
Type 450



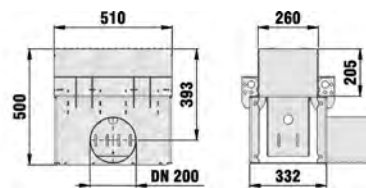
	Length mm	Width mm	Height mm	Invert mm	Intake cross-sect. cm ² /m	Drainage cross-sect. cm ²	Weight kg	Item No.
Type 450 SW 9mm HEELSAFE	1000	250	450	434	656	746,1	16,2	36215

Accessories

Trash box



Trash box with galvanised bucket



Technical drawing, trash box with galvanised bucket



Connection plate with screw set, galvanised, channel type 450



Closing cap with screw set, galvanised, for trash box/inspection box

	Length mm	Width mm	Height mm	Weight kg	Item No.
Trash box with galvanised bucket	510	260	500	-	36245
Looking handle with screw for protection against vandalism	-	-	-	-	36298
Connection plate with screw set, galvanised, channel type 450	-	316	283	-	36247
Closing cap with screw set, galvanised, for trash box/inspection box	-	316	283	-	36223

All trash boxes are factory-made with the end face open to enable a modular use for all application situations:

- Option 1: one-sided channel connection: You will need 1 connection plate with the same channel height (= same type) and a closing cap.
- Option 2: two-sided channel connection: You will need 2 connection plates with the same channel height (= same type).

RECYFIX MONOTEC 200

Accessories

End caps



End cap closed, galvanised, type 450



End cap with horizontal UPVC-outlet DN 100, galvanised, type 450

	Length mm	Width mm	Height mm	Weight kg	Item No.
End cap closed, galvanised, type 450	-	250	445	1,7	36286
End cap with horizontal UPVC-outlet DN 100, galvanised, type 450	-	250	445	-	36296



Armley Retail Park Leeds



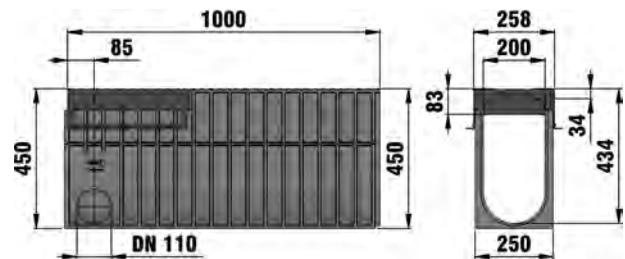
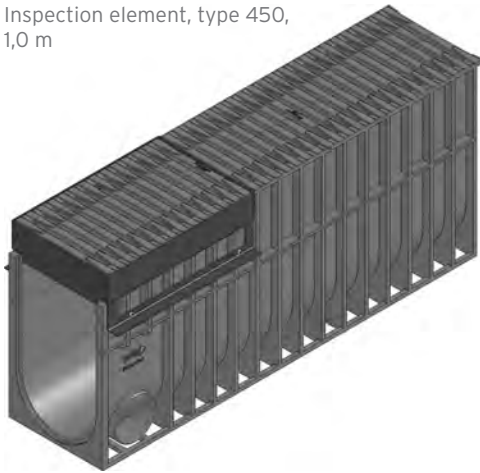
Parkgate Retail Rotherham

RECYFIX MONOTEC 200

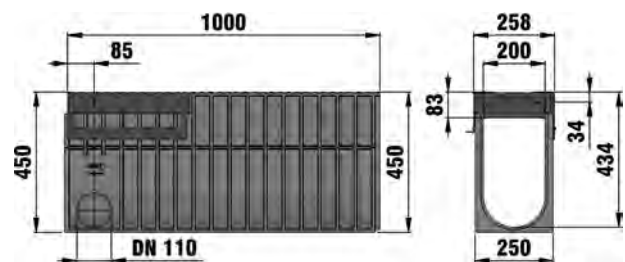
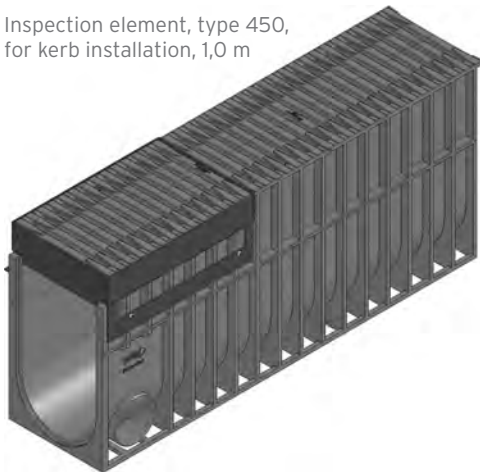
Accessories

Inspection elements

Inspection element, type 450,
1,0 m



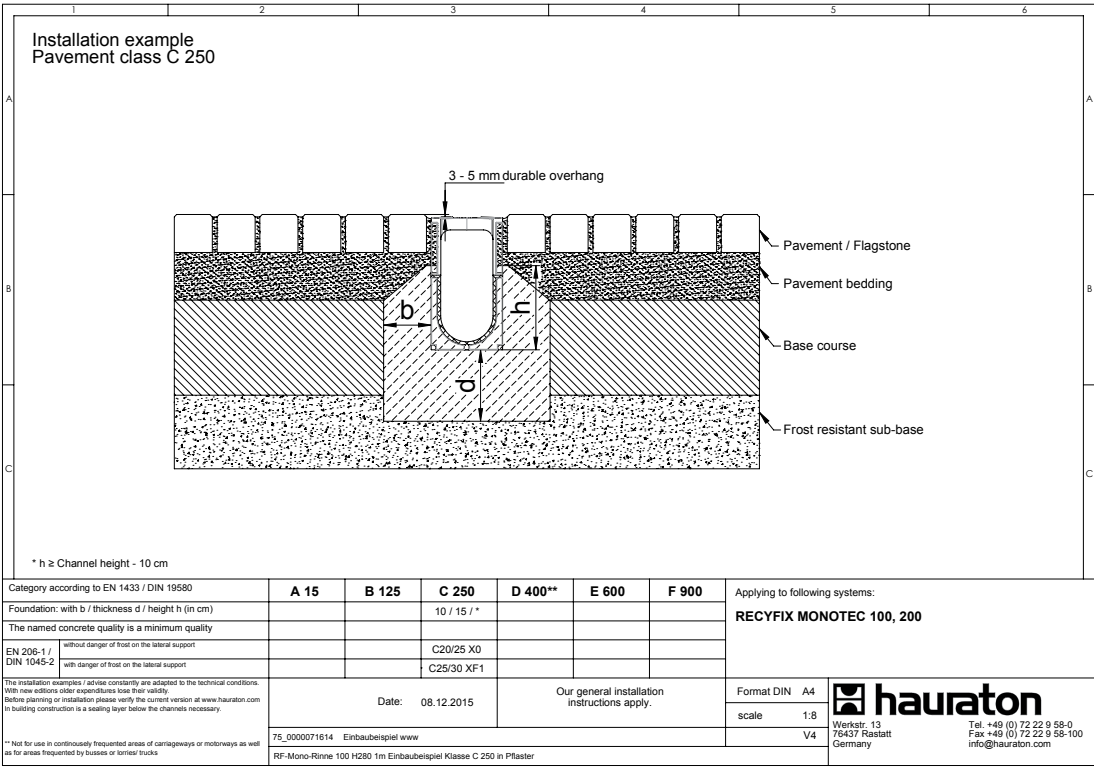
Inspection element, type 450,
for kerb installation, 1,0 m



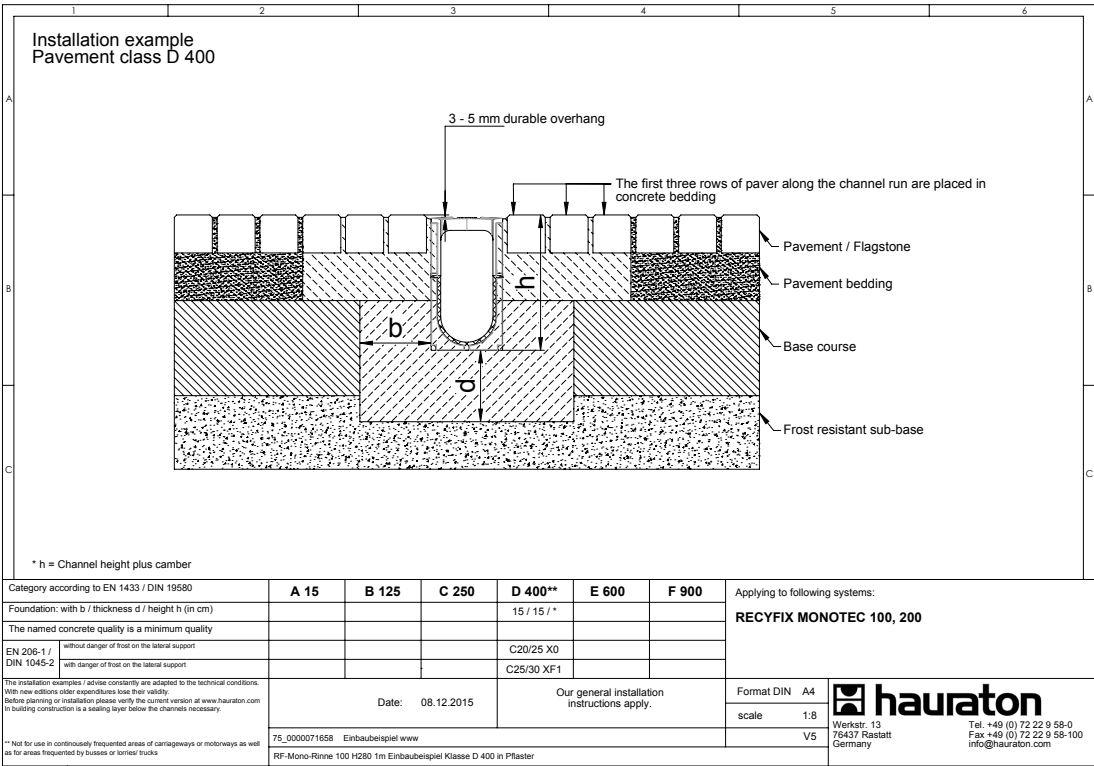
	Length mm	Width mm	Height mm	Internal channel cross-sect. cm ² /m	Intake cross-sect. cm ² /m	Weight kg	Item No.
Inspection element, type 450, 1,0 m	1000	258	450	648	307	19,69	36262
Inspection element, type 450, for kerb installation, 1,0 m	1000	258	450	648	307	19,22	36266

Installation examples **RECYFIX MONOTEC**

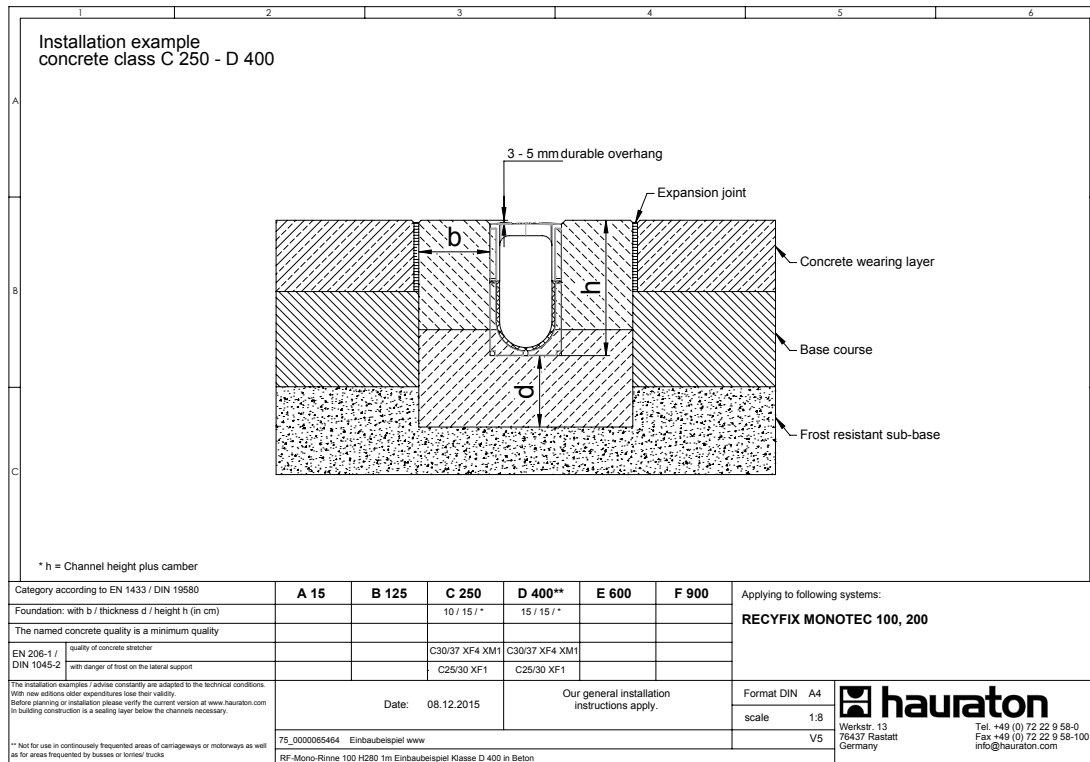
Installation example **pavement, class C 250**



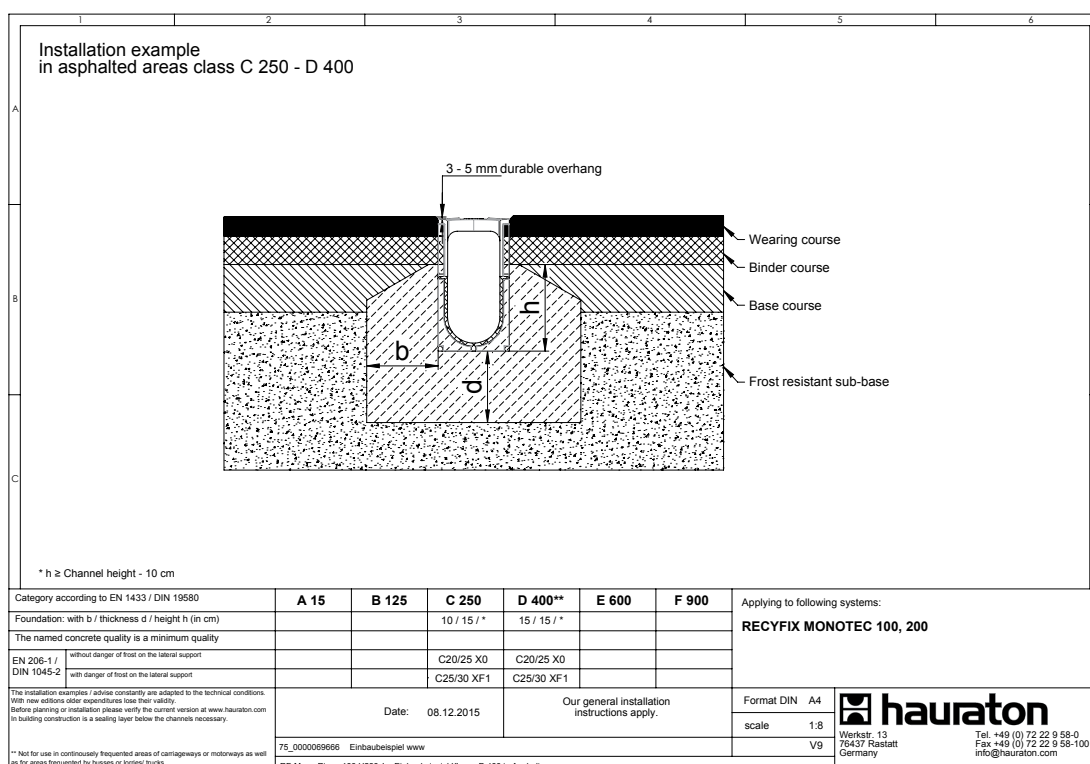
Installation example **pavement, class D 400**

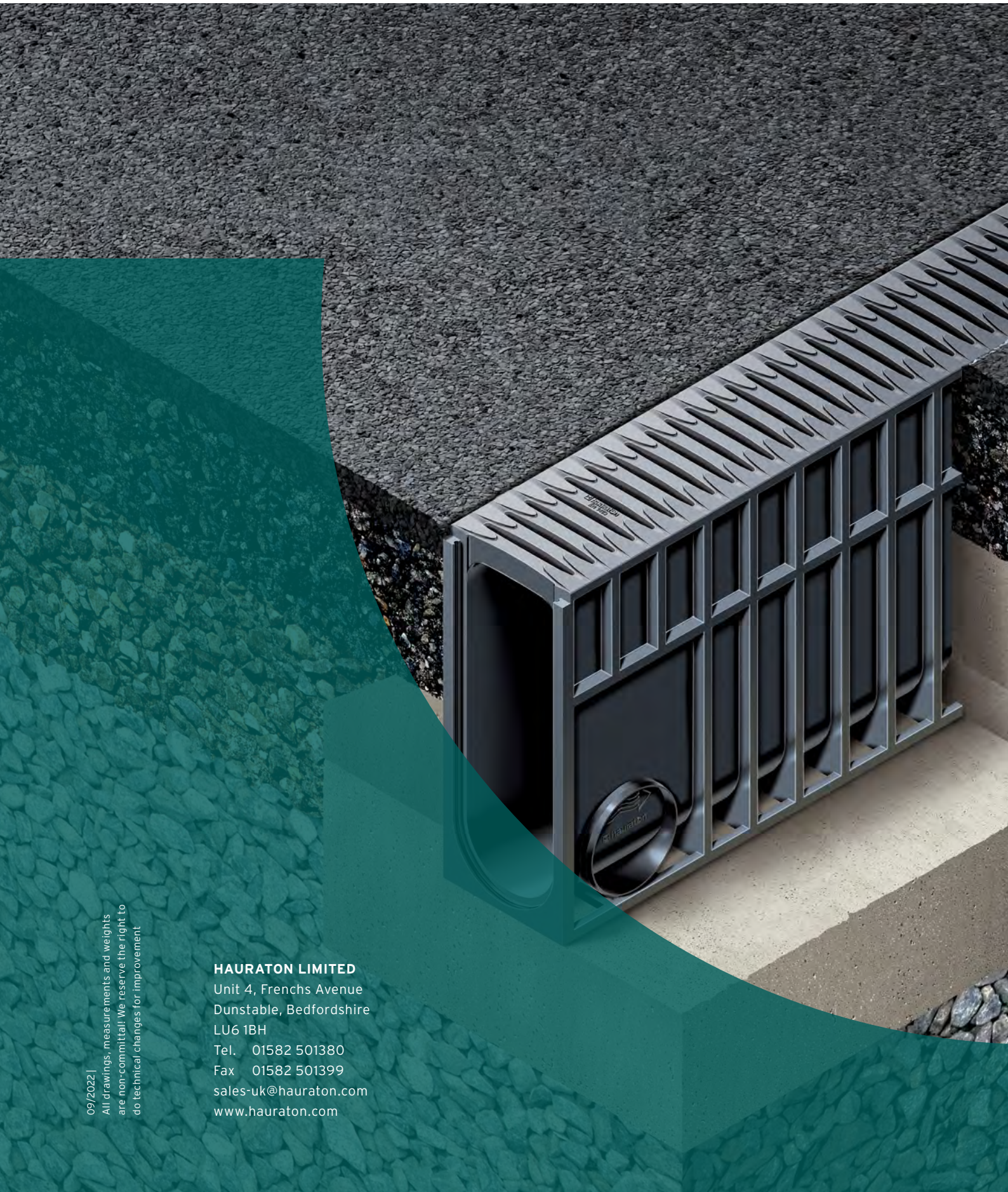


Installation example **concrete, class C 250 - D 400**



Installation example **asphalt, class C 250 - D 400**





09/2022
All drawings, measurements and weights
are non-committal! We reserve the right to
do technical changes for improvement

HAURATON LIMITED
Unit 4, Frenchs Avenue
Dunstable, Bedfordshire
LU6 1BH
Tel. 01582 501380
Fax 01582 501399
sales-uk@hauraton.com
www.hauraton.com