



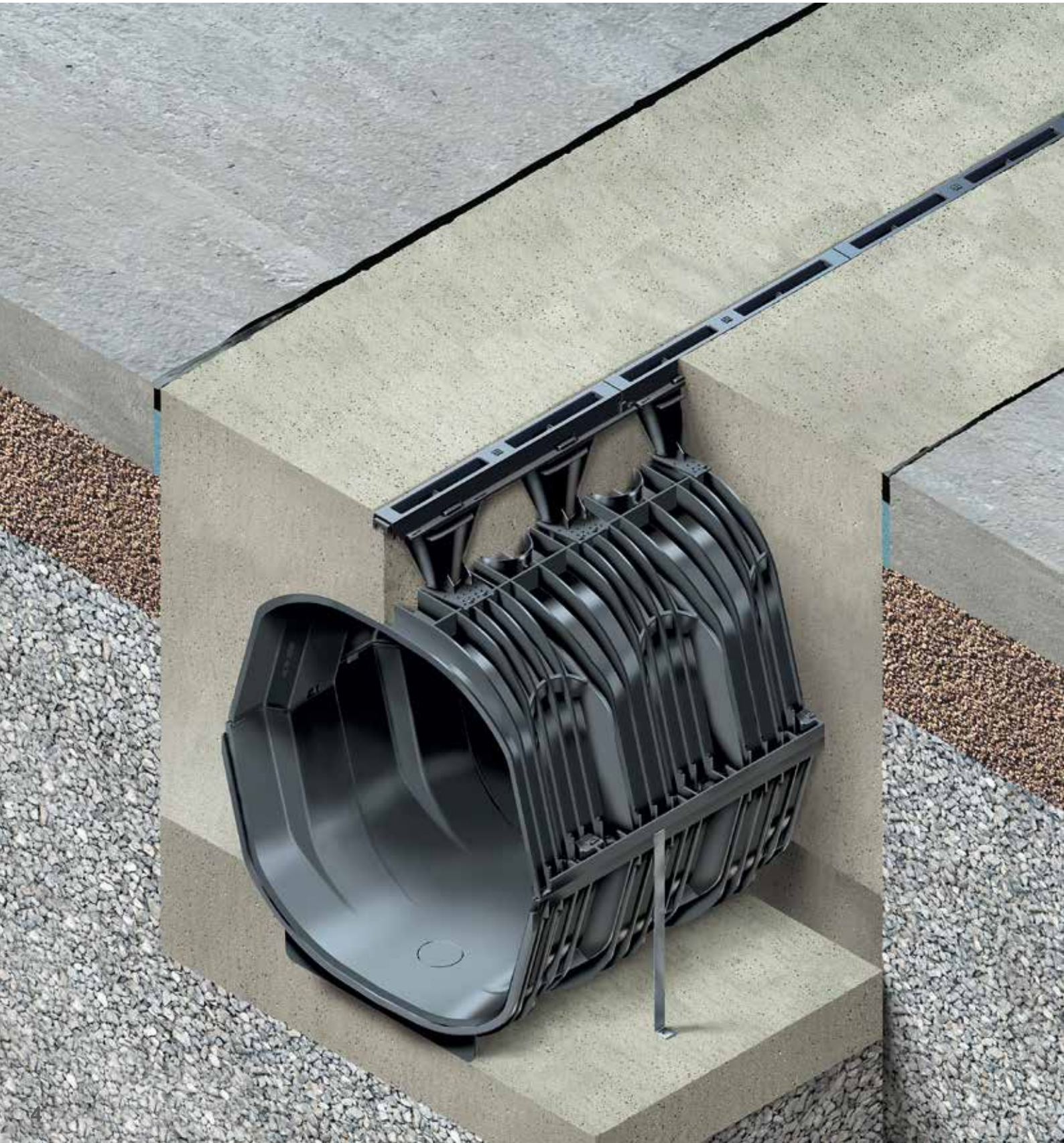
## Welcome to HAURATON

The new Mercedes-Benz museum in Stuttgart, the reconstructed Frauenkirche in Dresden and the Emirates stadium, home of the famous English football club Arsenal in London – these are all projects where innovative drainage solutions from HAURATON make sure that stormwater is drained away reliably and buildings are protected against decay. We are a family owned company which for the last 50 years have been successfully developing, producing and selling innovative drainage solutions all over the world. HAURATON offers individual solutions to all its customers – ranging from high-performance channels at airports, motorways and container stations to drainage systems for walk-on fl at roofs and terraces. This individual approach is our strength as a family-owned and run company with a short line of decision and focussed on this sector of the market.



# RECYFIX®HICAP®

High capacity drainage system for the highest load category.



**Yas Marina Circuit,  
Abu Dhabi, U.A.E.**



# RECYFIX®HICAP®

High capacity drainage system for the highest load category.

## 1 Requirements

Drainage system for extreme conditions with

- high hydraulic requirements
- high loads
- large areas
- ailing sewer systems

## 2 Application areas

- parking areas
- supermarkets/shopping centres
- pedestrian areas
- airports
- industrial estates
- container terminals
- ports
- circuits and test tracks

## 3 Solutions

Special features of RECYFIX HICAP:

- drainage and retention in one component
- large selection of nominal widths
- for all loading classes and all common road surface finishes
- less manholes and outlets
- provides an uniform visual appearance also in lage projects
- no separate gratings
- no expensive pipe installations required
- high hydraulic capacity
- easy to maintain



Airport Newquay, England



Renovation city centre Szentendre, Hungary



Skyscraper ZŁOTA 44 in Warsaw, Poland



Industrial estate, England



Teesport Container Terminal, UK

FASERFIX® SUPER

FASERFIX® KS

RECYFIX® PLUS X

RECYFIX® NC

RECYFIX® MONOTEC

RECYFIX® HICAP®

FASERFIX® POINT

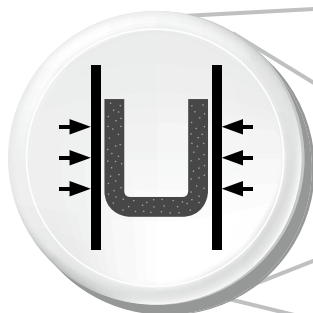
# Your benefits with **RECYFIX®**HICAP®F channels



## Fast & easy installation

- easy to handle and install
- integrated tongue and groove joint
- installation in one component
- less pipe installations

**= Cost saving**



## Top inlet made of high-quality ductile iron and channel body from sustainable PP

- material: ductile iron EN GJS-500-7
- 23 times higher tensile strength and 9 times higher compressive strength as polymer concrete
- various gratings
- surfaces extremely robust and indestructible

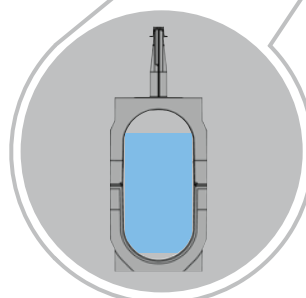
**= Security**



## Channel body made from sustainable material

- material from 100 % recycled PP
- very light and unbreakable material

**= Security**



## Large retention volume

- drainage and retention in one component
- high capacity and back-pressure capacity due to a variety sizes
- fewer trash boxes and pipe connections required

**= Flexibility/Security**





## Link&Lock facilitates the installation

- innovative linking system for ductile iron tops
- easy and quick alignment of each channel metre

= **Cost savings**



## Individual solutions

- possible radial installation
- cable and pipe installations can be laid through funnel
- ductile iron top on the surface can be interrupted while the channels on the underground continue

= **Flexibility**



## Various connecting possibilities

- end cap with canal connection option
- simple possibility for preparation of corner and T-connections
- end cap adapter for connecting the next nominal width
- various options for pipe connections exist on the channel

= **Flexibility**



## High stability

- designed for extreme conditions, especially for applications in heavy road traffic up to class F 900

= **Security**



## Wide range

- various gratings, also available with KTL coating for extra corrosion protection
- uniform design also in different nominal widths

= **Flexibility**

FASERFIX®SUPER

FASERFIX®KS

RECYFIX®PLUS X

RECYFIX®NC

RECYFIX®MONOTEC

RECYFIX®HICAP®

FASERFIX®POINT

# RECYFIX®HICAP®

**Effectively drained - modularly built.  
Drainage and retention system for larger areas.**

## Report from the field: RECYFIX®HICAP®F channels for Heathrow Airport, London

With 67 million travellers annually, Heathrow Airport in London is Europe's busiest airport. Worldwide it takes third place behind Atlanta and Chicago. This important hub in international air traffic is operated by BAA, British Airports Authority, the largest airport operator worldwide. 75 % of the British Airways fleet is based at Heathrow Airport.



At the southern section of the airport the British Airways service park was expanded. The construction site abutted right on the runway and taxiway. The demands on the new service site were immense: here airplanes of all types and sizes pass - including the Airbus A380, which was

also a main reason for the reconstruction. The aircraft tugs alone weigh 80 tons and, just as the airplanes, drive and turn on the traffic areas. The demands on the drainage systems are accordingly high.

### Project progress

In 1999 BAA was supplied with FASERFIX SUPER channels for the Gatwick airport and installed in the British Airways hangars and Concorde maintenance hangars. One year later, FASERFIX SUPER KS 100 channels were delivered to London City Airport. The assigned engineering office was very satisfied with the quality and service. In 2003 BAA broached the topic of installation and handling of drainage systems. The main topic of the discussions was the extreme weight of the products and the associated high employment of machines during installation.

On multiple occasions, HAURATON contacted various departments of BAA and presented the advantages of RECYFIX products (lightweight, easy handling, meets British "Health and Safety Regulations" = One-man-lift = max. 25 kg). Drainage channels from this line were presented in various meetings and BAA decided across the board to work with HAURATON in the area of RECYFIX.



## RECYFIX®HICAP®F - eco-friendly and 'easy to handle'

Another key criterion for BAA was recycling. Airport planning and operation are subject to stringent environmental requirements. Products made of recycled plastic are therefore especially suited.

Suppliers routinely need to present BAA with product innovations which offer cost savings in installation and maintenance. In 2006 the time came for HAURATON to present the new line RECYFIX HICAP. The feedback was very positive, with BAA immediately recognising the resulting advantage in installation and maintenance, and the installation at Heathrow was decided.

### Installed items

- 380 m RECYFIX HICAP F 8000
- 100 m RECYFIX HICAP F 5000
- 100 m RECYFIX HICAP F 3000



Lightweight elements, installed by one single worker.

### Other examples of RECYFIX®HICAP®F



# RECYFIX®HICAP®F

High capacity drainage system for the highest load category

## Sample calculation:

### RECYFIX®HICAP®F with mesh 13/28 mm grating

The hydraulic advantages of RECYFIX HICAP channels can be demonstrated by the following calculation:

Inlet capacity of a mesh 13/28 mm grating, determined at Prague Technical University:

**4.0 l/s per metre**

Frequently occurring yield from rain events:

**150.0 l/s per hectare**

$$150 \text{ l/s ha} = 0.015 \text{ l/s m}^2$$

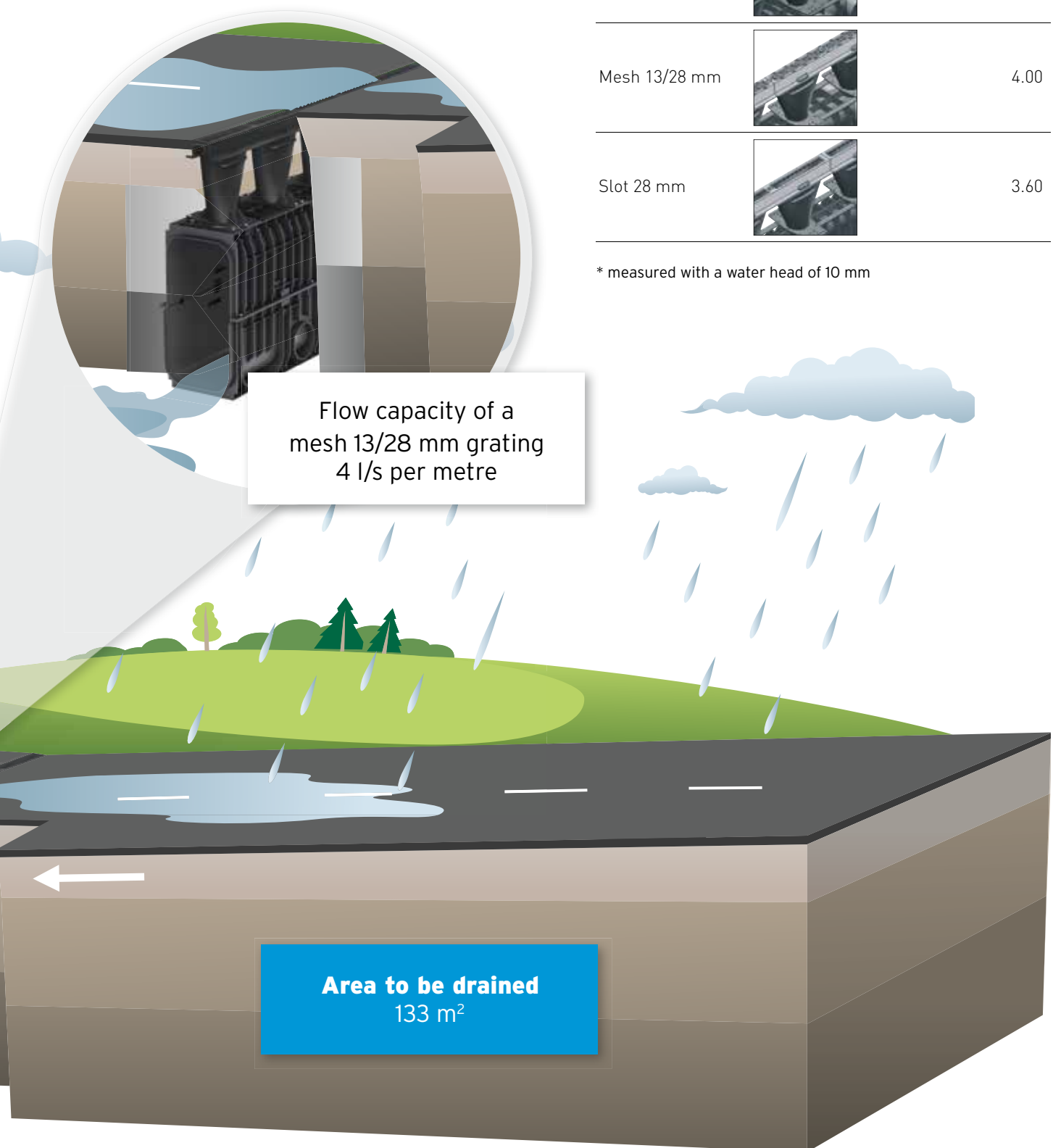
$$\frac{4.0 \text{ l/s m}}{0.015 \text{ l/s m}^2} = 266.67 \text{ m}$$

### Result of this example:

1 m RECYFIX HICAP channel with mesh 13/28 mm grating can discharge the rainwater from 266.67 m² when the yield is 150 litres per second and hectare.




**Rain event**  
150 l/s per hectare

**Area to be drained**  
133 m²



## Inlet capacity of RECYFIX®HICAP®F

(applies to all nominal widths)

Slot 6 mm		3.80
Mesh 13/28 mm		4.00
Slot 28 mm		3.60

\* measured with a water head of 10 mm

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FASERFIX®KS

RECYFIX®PLUS X

RECYFIX®NC

RECYFIX®MONOTEC

RECYFIX®HICAP®

FASERFIX®POINT

# RECYFIX®HICAP®F

High capacity drainage system for the highest load category

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



**Category  
A 15**



**Category  
B 125**



**Category  
C 250**



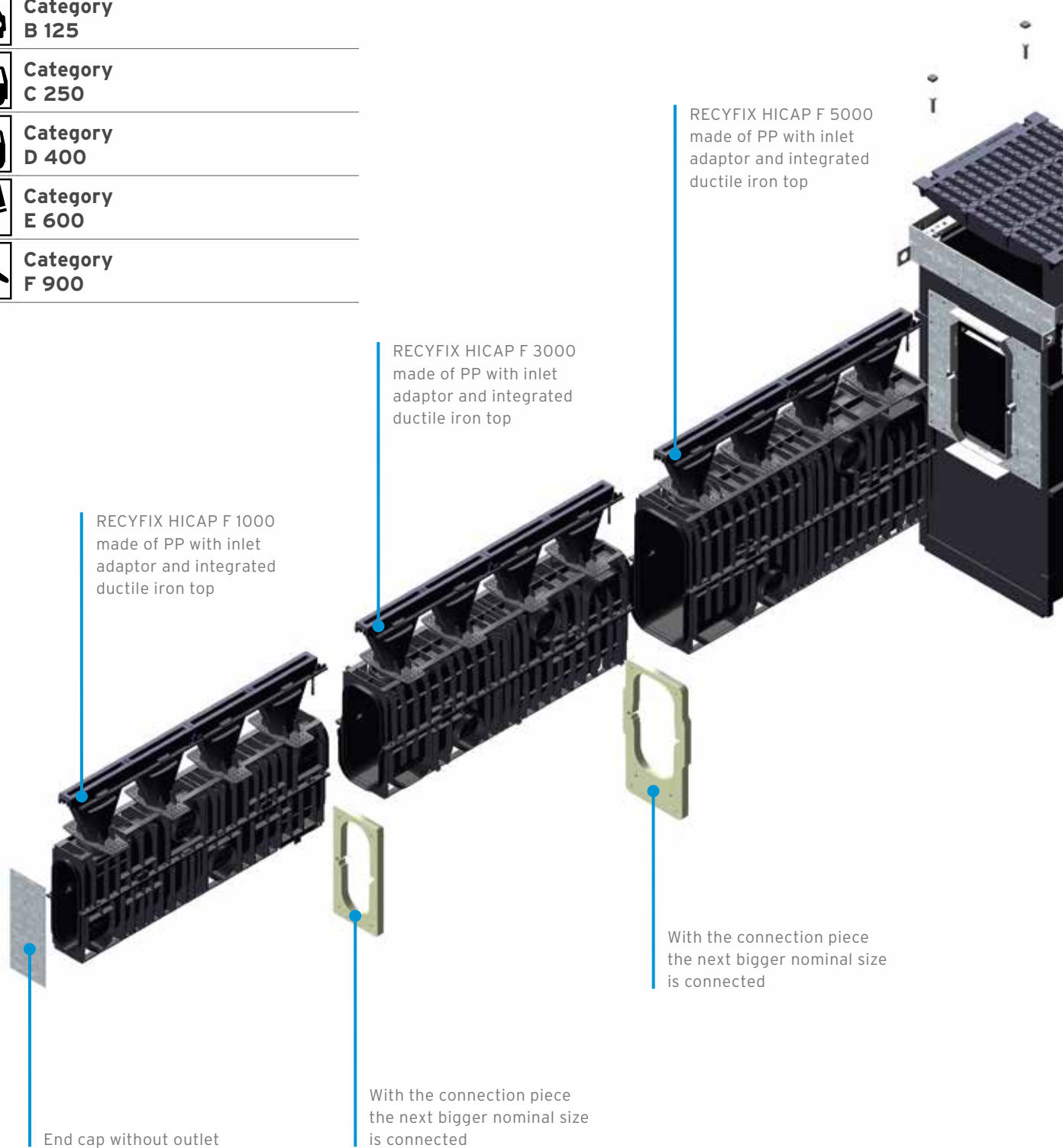
**Category  
D 400**

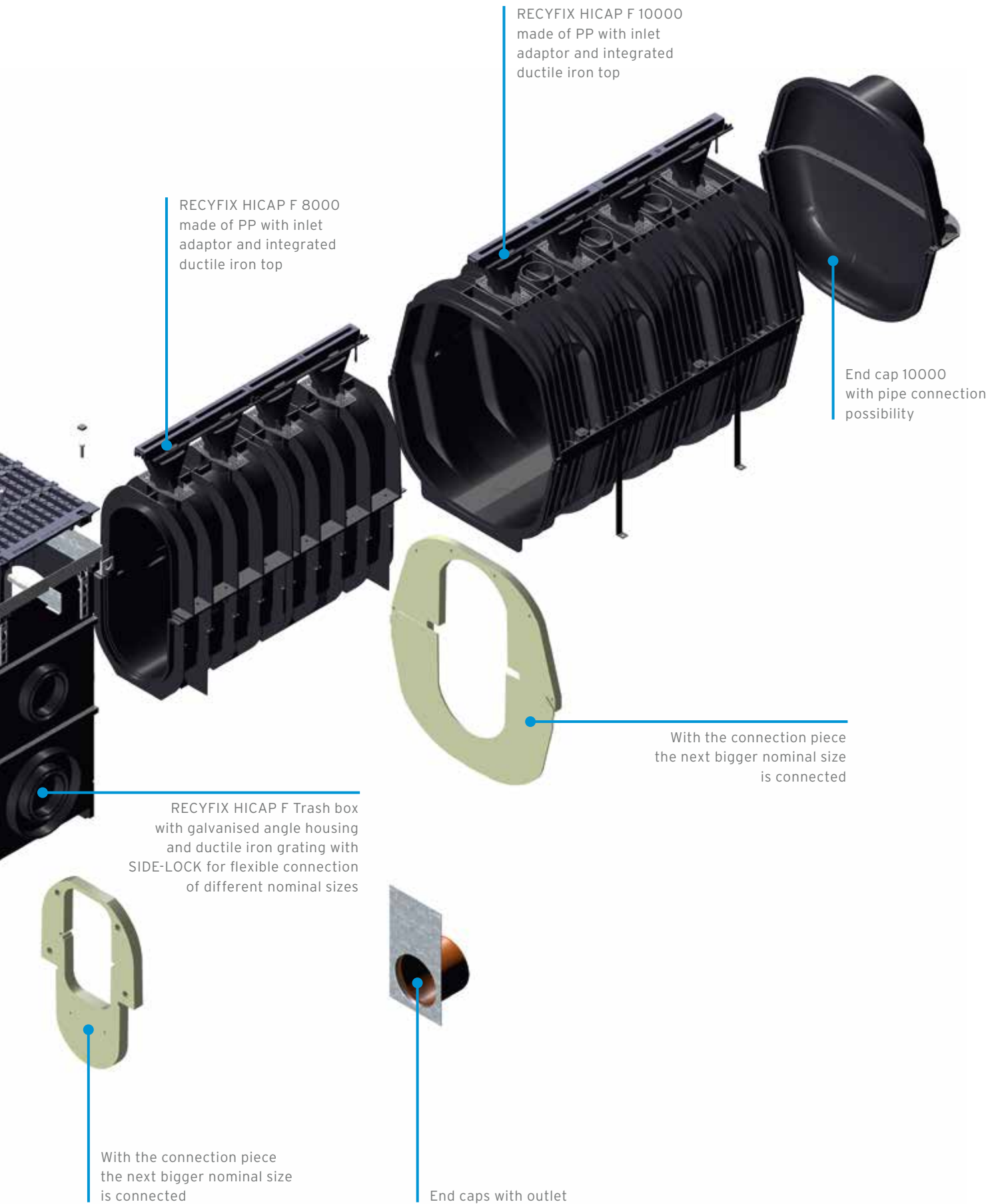


**Category  
E 600**



**Category  
F 900**







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