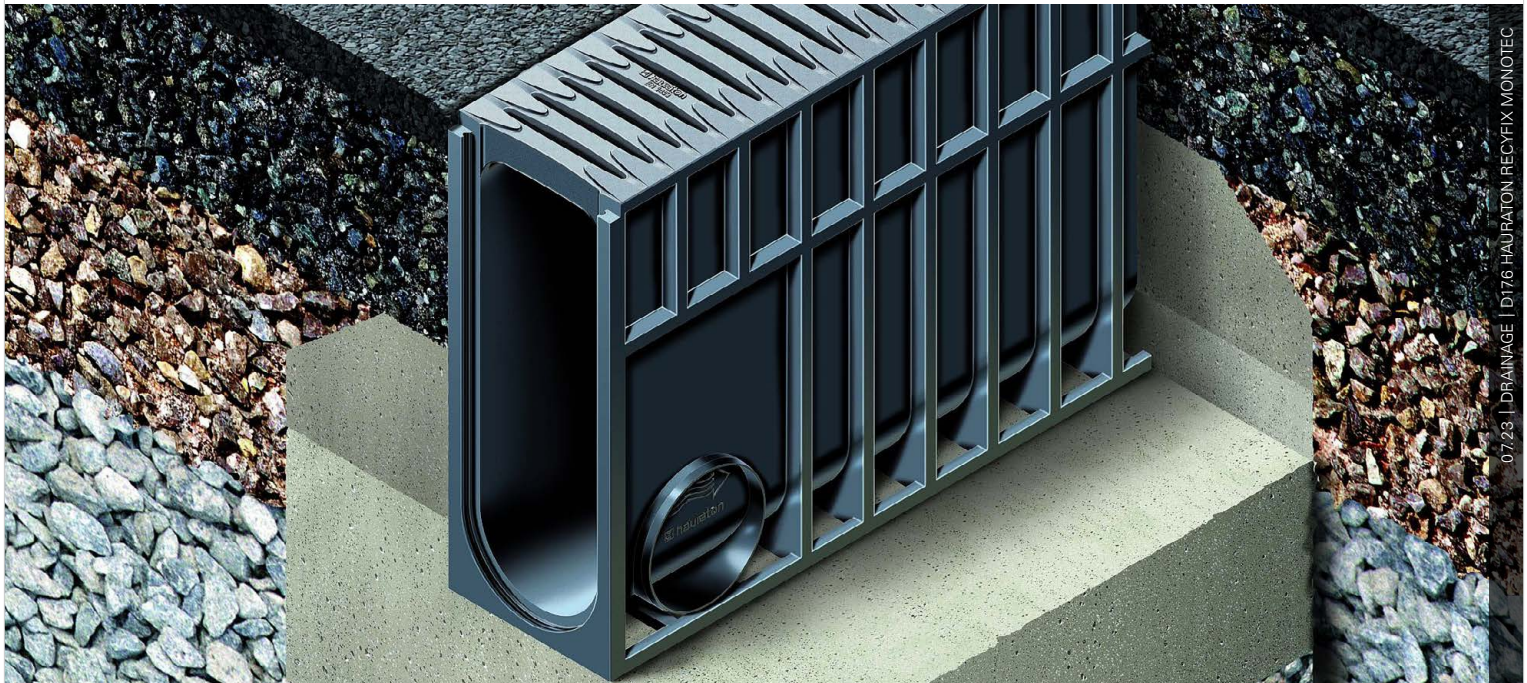


RECYFIX® MONOTEC

Technical Guide D17.6

A monolithic drainage system designed to accept and convey large volumes of rainwater.



Applications

High traffic areas
Parking areas
School playgrounds
Residential areas
Service stations
Public spaces

Product Attributes

Lightweight for easy, fast and low-cost installation
PE/PP material is 100% UV stable and has a high resistance against aggressive chemical liquids and freezing

Approval/ Standards

Load rating as per EN 1433

Quality

ISO 9001:2008 Quality Management System

We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.

RECYFIX® MONOTEC

Drainage system for traffic, parking and commercial areas.

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

Solution

RECYFIX® MONOTEC channels are especially suitable for draining such surfaces:

- Lightweight and easy processing for cost-effective installation
- Channel made of specially resistant modified polypropylene
- Leak-proof and chemical-resistant
- Sturdy and unbreakable
- Very quick to install



FIG. 1 University of Huddersfield, UK

The benefits of RECYFIX® MONOTEC Channels



High resistance

- High resistance to frost, de-icing salt and UV light
- Withstands high temperature differences
- Chemical-resistant

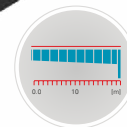
= **Durability**



Low weight ensures easy handling on site

- Significantly lighter than channels made of concrete or polymer/concrete
- Easy to transport and install

= **Cost Savings**



High hydraulic capacity

- Optimised inlet surface with composite corrosion free grating design
- High capacity through slim channel construction

= **Safety**



Strong & durable

- Impact resistant to D 400kN loadings
- Elastic and highly resistant material (PP)

= **Safety**



One piece channel

- Manufactured with two parts, which are put together to make a monolithic channel in a mirror welding process.
- Highly stable design
- Vandalism proof

= **Security**

Optimal hydraulic capacity through slim design.

Maximum hydraulic capacity

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



NC 100, Type 230



NC 100, Type 280



NC 100, Type 380



NC 200, Type 450

FIBRETEC® slotted grating: Proven to make progress

In 2010, HAURATON invented the FIBRETEC® 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 expresses its great popularity. It made sense for this design to be transferred to the RECYFIX® MONOTEC. Along with the enormous volume of the channel, a product with the highest hydraulic demands has emerged – the perfect combination of water intake, retention and drainage.



FIBRETEC® Slotted Grate



NC 200, Type 450



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

Components

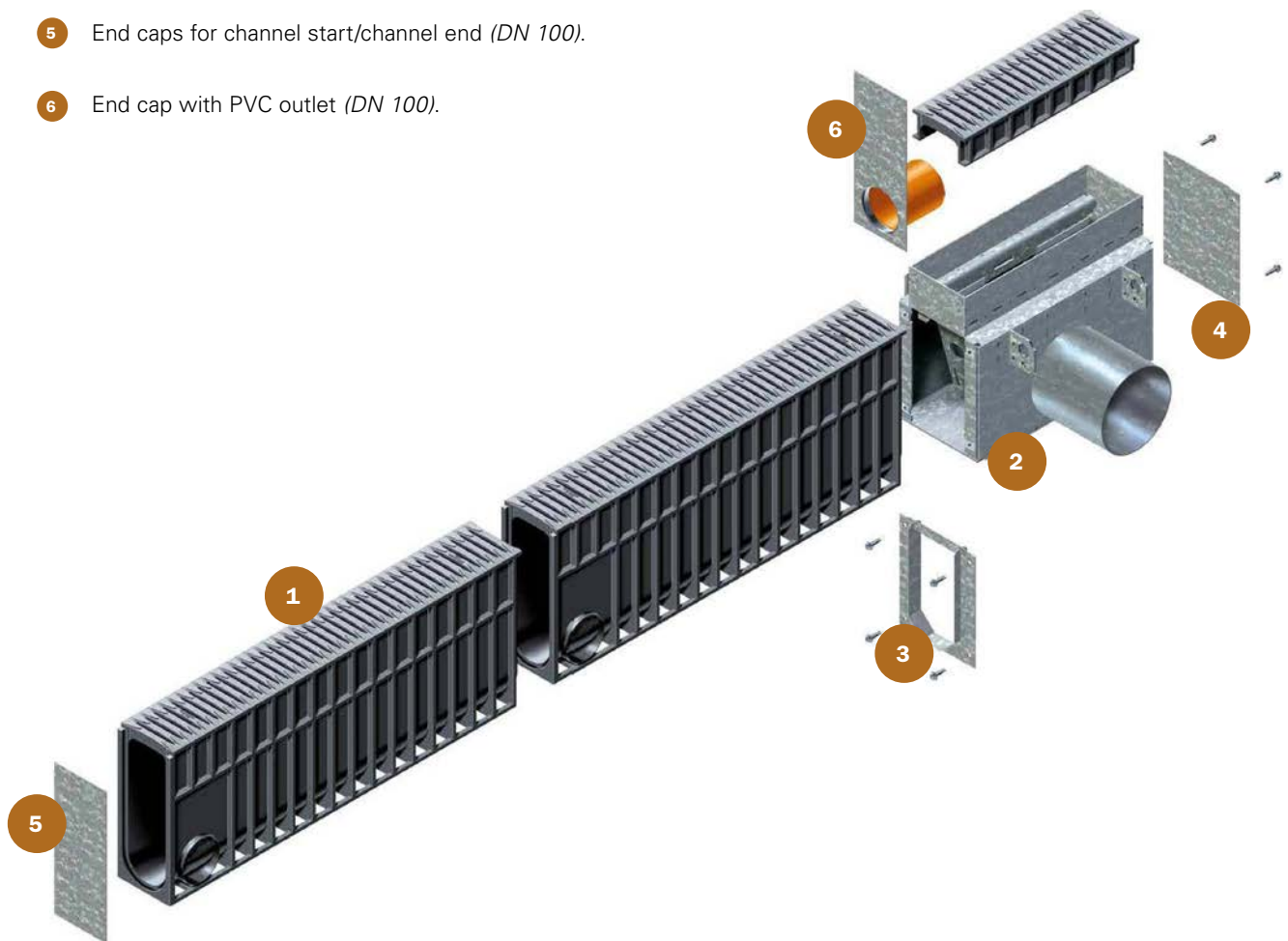
Load Classes

European Standard EN 1433



Load Class D 400kN
Approximate Wheel Load 8,000kg

- 1 RECYFIX® MONOTEC channels made of modified polypropylene, according to EN 1433.
- 2 Trash box made of galvanised steel with DN 175 pipe connection. Removable grating made of modified polypropylene for access to channel system.
- 3 Connection plate for flexible connection of different channel types with the trash box.
- 4 Closing end cap for the closing of trash box.
- 5 End caps for channel start/channel end (DN 100).
- 6 End cap with PVC outlet (DN 100).



RECYFIX® MONOTEC 100

Class D 400kN - Type 230

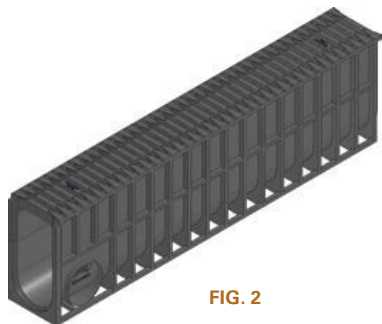
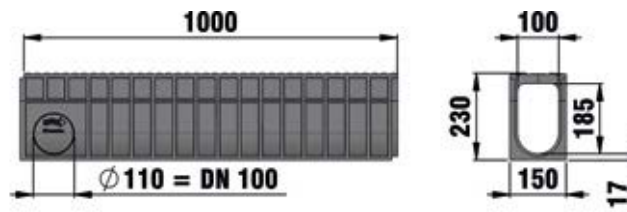


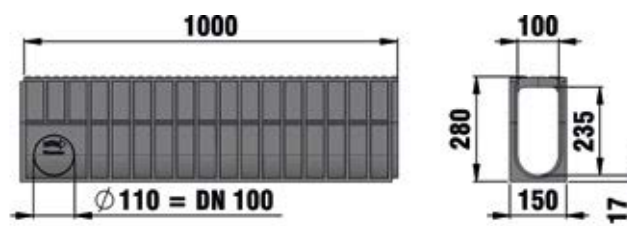
FIG. 2



Class D 400kN - Type 280



FIG. 3



Class D 400kN - Type 380



FIG. 4

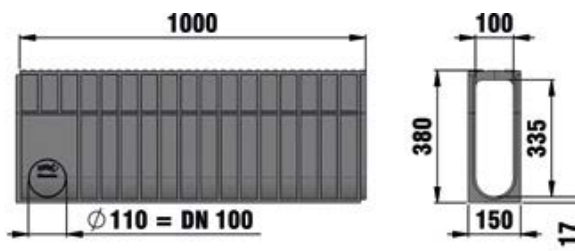


TABLE 1 RECYFIX® MONOTEC 100 D 400kN Channel

Code	Description	Intake cross-sect cm ² /m	Drainage cross-sect. cm ² /m	Weight kg	Figure #
CHH01401600	Channel MONOTEC 100 Type 230	372	190	7.85	2
CHH01401603	Channel MONOTEC 100 Type 280	372	245	8.63	3
CHH01401606	Channel MONOTEC 100 Type 380	372	355	10.25	4

Accessories

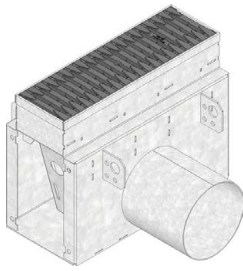


FIG. 5

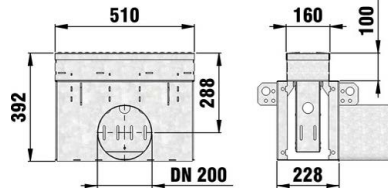


FIG. 6



FIG. 7



FIG. 8



FIG. 9

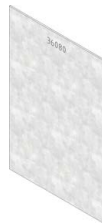


FIG. 10

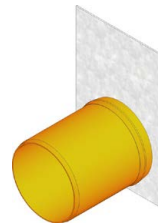


FIG. 11

TABLE 2 RECYFIX® MONOTEC 100 D 400kN Accessories

Code	Description	Length mm	Width mm	Height mm	Figure #
CHH01401609	Trash Box MONOTEC 100 Galv	510	160	392	5 & 6
CHH01401612	Closing End Cap Trash Box MONOTEC 100 Galv with Screw Set	-	216	283	7
CHH01401615	Locking Catch and Bolt MONOTEC 100	28	117	14	8
CHH01401618	Trash Box Connection MONOTEC 100 Type 230 Galv with Screw Set	-	216	283	9
CHH01401621	Trash Box Connection MONOTEC 100 Type 280 Galv with Screw Set	-	216	283	9
CHH01401624	Trash Box Connection MONOTEC 100 Type 380 Galv with Screw Set	-	216	283	9
CHH01401627	End Cap MONOTEC 100 Type 230 Galv Blank	-	150	224	10
CHH01401630	End Cap MONOTEC 100 Type 280 Galv Blank	-	150	274	10
CHH01401633	End Cap MONOTEC 100 Type 380 Galv Blank	-	150	374	10
CHH01401636	End Cap MONOTEC 100 Type 230 Galv with 100mm PVC Outlet	-	150	224	11
CHH01401639	End Cap MONOTEC 100 Type 280 Galv with 100mm PVC Outlet	-	150	274	11
CHH01401642	End Cap MONOTEC 100 Type 380 Galv with 100mm PVC Outlet	-	150	374	11

Notes:

All trash and inspection 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).

Further Accessories



FIG. 12



FIG. 13

TABLE 3 RECYFIX® MONOTEC 100 Further Accessories

Code	Description	Length mm	Width mm	Height mm	Figure #
CHH01401645	Step Fall Adaptor MONOTEC 100 Type 230-280	510	125	113	12
CHH01401648	Step Fall Adaptor MONOTEC 100 Type 280-380	510	125	163	13

RECYFIX® MONOTEC 200

Class D 400kN - Type 450



FIG. 14

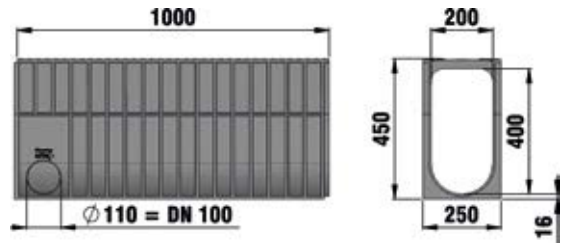


TABLE 4 RECYFIX® MONOTEC 200 D 400kN Channel

Code	Description	Intake cross-sect cm ² /m	Drainage cross-sect cm ² /m	Weight kg	Figure #
CHH01401651	Channel MONOTEC 200 Type 450	656	746	16.2	14

Accessories

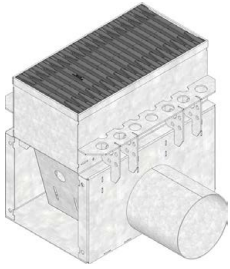


FIG. 15

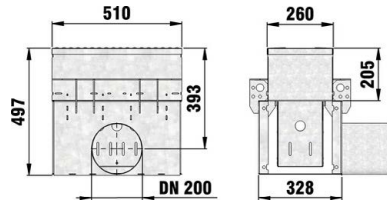


FIG. 16



FIG. 17

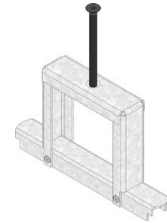


FIG. 18



FIG. 19



FIG. 20



FIG. 21

TABLE 5 RECYFIX® MONOTEC 200 D 400kN Accessories

Code	Description	Length mm	Width mm	Height mm	Figure #
CHH01401654	Trash Box MONOTEC 200 Galv	510	260	497	15 & 16
CHH01401657	Closing End Cap Trash Box MONOTEC 200 Galv with Screw Set	-	316	283	17
CHH01401660	Locking Catch and Bolt MONOTEC 200	-	206	120	18
CHH01401663	Trash Box Connection MONOTEC 200 Type 450 Galv with Screw Set	-	316	283	19
CHH01401666	End Cap MONOTEC 200 Type 450 Galv Blank	-	250	441	20
CHH01401669	End Cap MONOTEC 200 Type 450 Galv with 100mm PVC Outlet	-	250	441	21

Notes:

All trash and inspection 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).

Installation Guidelines

Installation example in asphalted areas class C 250 - D 400

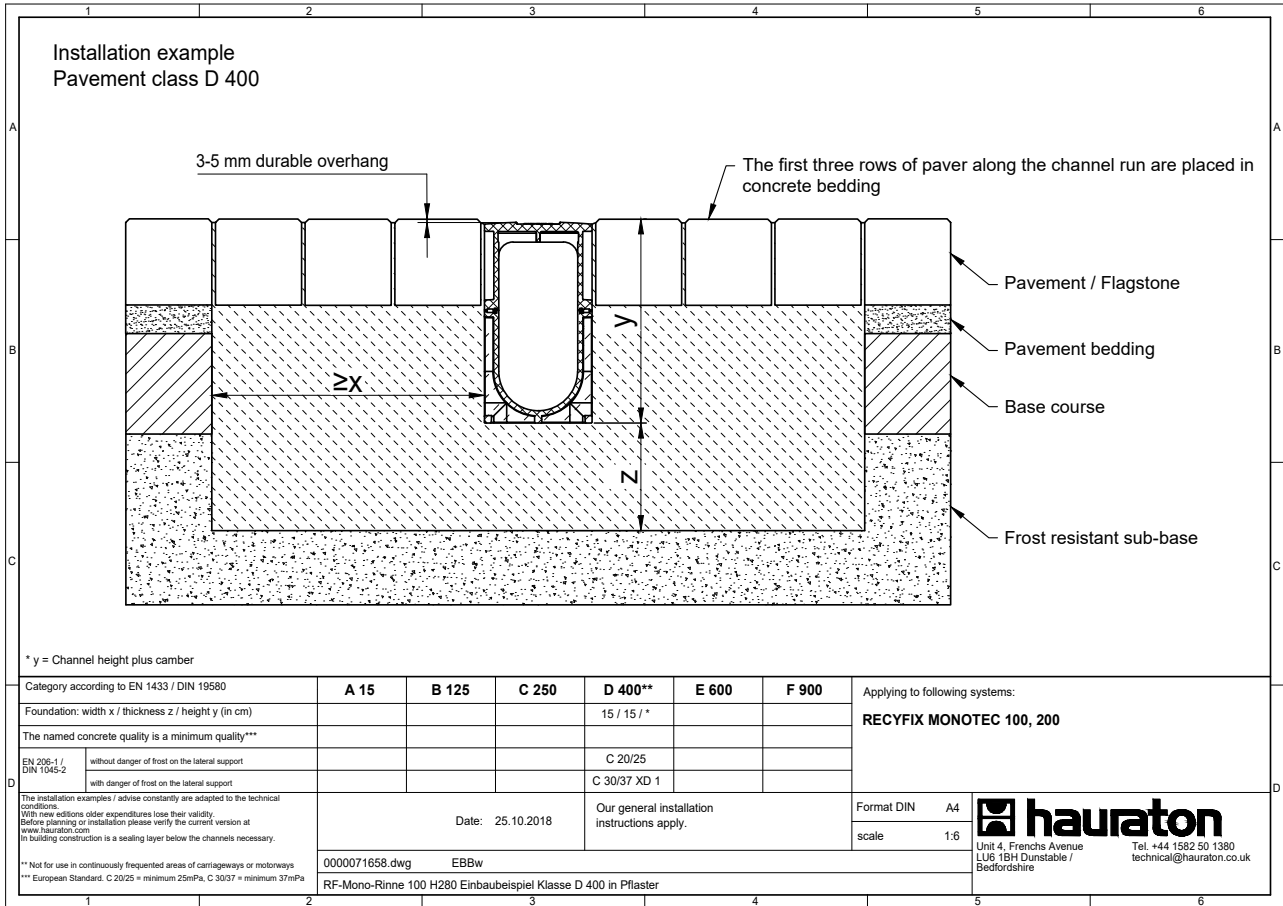
* $y \geq$ Channel height - 10 cm

Category according to EN 1433 / DIN 19580	A 15	B 125	C 250	D 400**	E 600	F 900	Applying to following systems:
Foundation: width x / thickness z / height y (in cm)			10 / 15 / *	15 / 15 / *			RECYFIX MONOTEC 100, 200
The named concrete quality is a minimum quality***			C 20/25	C 20/25			
EN 206-1 / DIN 1045-2	without danger of frost on the lateral support		C 30/37 XD 1	C 30/37 XD 1			
	with danger of frost on the lateral support						
The installation examples / advise constantly are adapted to the technical conditions. With new editions older expenditures lose their validity. Before planning or installation please verify the current version at www.hauraton.com in building construction is a sealing layer below the channels necessary.		Date: 25.10.2018	Our general installation instructions apply.		Format DIN	A4	 Unit 4, Frenchs Avenue LU6 1BH Dunstable / Bedfordshire Tel. +44 1582 50 1380 technical@hauraton.co.uk
0000069666.dwg EBBw				scale	1:6		
** Not for use in continuously frequented areas of carriageways or motorways *** European Standard. C 20/25 = minimum 25mPa, C 30/37 = minimum 37mPa		RF-Mono-Rinne 100 H280 Einbaubeispiel Klasse D 400 in Asphalt					

Installation example concrete class C 250 - D 400

* $y =$ Channel height plus camber

Category according to EN 1433 / DIN 19580	A 15	B 125	C 250	D 400**	E 600	F 900	Applying to following systems:
Foundation: width x / thickness z / height y (in cm)			10 / 15 / *	15 / 15 / *			RECYFIX MONOTEC 100, 200
The named concrete quality is a minimum quality***			C 30/37 XF 4	C 30/37 XF 4			
EN 206-1 / DIN 1045-2	quality of concrete stretcher		C 30/37 XD 1	C 30/37 XD 1			
	with danger of frost on the lateral support						
The installation examples / advise constantly are adapted to the technical conditions. With new editions older expenditures lose their validity. Before planning or installation please verify the current version at www.hauraton.com in building construction is a sealing layer below the channels necessary.		Date: 30.10.2018	Our general installation instructions apply.		Format DIN	A4	 Unit 4, Frenchs Avenue LU6 1BH Dunstable / Bedfordshire Tel. +44 1582 50 1380 technical@hauraton.co.uk
0000065464.dwg EBBw				scale	1:6		
** Not for use in continuously frequented areas of carriageways or motorways *** European Standard. C 20/25 = minimum 25mPa, C 30/37 = minimum 37mPa		RF-Mono-Rinne 100 H280 Einbaubeispiel Klasse D 400 in Beton					



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