



SPORT

Surface Drainage and other
products for Sports Venues

Version 4.6

The product range for stadiums and sports venues

Modern construction products designed specifically for the use in sports venues

Modern sports venues in Germany have gained an excellent reputation all over the world. Top-level international competitions such as the Football World Cup and the World Athletic Championships in recent years showed the stadiums in which they took place provided ideal conditions for both competitors and fans alike.

HAURATON SPORT products have also been specified at venues outside Germany. For example, at international events including the Euro Football Championship in Poland/Ukraine and the World Football Championship in Brasil it was the company's responsibility to supply and install products that drained playing and surrounding surfaces reliably. The products shown in this catalogue have been designed especially for sports facilities and demonstrate Hauraton's expertise and competence in this field. This know-how has not failed to impress designers, engineers, clients and contractors alike.

HAURATON is member of IAKS





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Basic information for sports venues

The comprehensive product ranges for all sports facilities.

1 Requirements

Water has to be removed quickly and reliably from sports fields and competition areas. The drainage channels that are used have to comply with the latest standards and also meet IAAF requirements. Sports facilities should be designed and equipped to prevent serious injury to sportspeople if falls or accidents occur.



2 Solution

The SPORTFIX range offers products that comply with these requirements, e.g. drainage channels made from 100% recycled PP which can be laid precisely around sport fields. These channels are break proof and lightweight, therefore quickly and easily installed. Soft kerbs with elastic rubber padding, sand traps, water jump kit and distribution shafts also belong to our product range.

3 Application areas

- Sports facilities with synthetic running tracks
- Sports facilities with artificial grass surfaces
- Sports facilities with natural grass
- Hockey pitches
- Jumping pits
- Water jump kits
- Mini pitches
- Tennis courts
- Playgrounds



Drainage for running tracks



Sand pit with sand trap channels

Benefits for designers

- ✓ Compliance with all international guidelines as set out by the IAAF
- ✓ Individual design support
- ✓ Service free of charge: hydraulic calculations, installation plans, project-specific tender proposals

Some HAURATON sport references out of thousands:

- Arena Corinthians in São Paulo, Brazil
- St.-Jakob-Stadion in Basel, Switzerland
- Estádio do Maracanã in Rio de Janeiro, Brazil
- Arena da Amazônia in Manaus, Brazil
- Easy Credit Stadium in Nuremberg, Germany
- Ceahlău Stadion in Piatra Neamt, Romania
- Stadium Zvezdinskij in Moscow, Russia
- Red Star Stadium in Belgrade, Serbia
- Estádio da Luz in Lisbon, Portugal
- PGE Arena in Gdansk, Poland
- National Stadium in Warsaw, Poland
- Stadium in Wroclaw, Poland
- Multi-function Arena in Poznan, Poland
- Cenard Stadium in Buenos Aires, Argentina
- Khalifa Stadium in Doha, Qatar
- Stadium in Rennes, France
- MM Arena in Le Mans, France
- Cardiff City Stadium, UK
- Wembley Stadium in London, UK
- FC Emirates Stadium (Arsenal) in London, UK
- ...



Equipment for athletic stadium and sports ground construction

Sample arena:

- 1 Main pitch 68 m x 105 m
- 2 Eight lanes
- 3 High jump area in the segmented section (south)
- 4 Pole vault area in the segmented section (north)
- 5 Long jump area with two run-up directions (north and south)
- 6 Shot put area with two throwing directions (north and south)
- 7 Hammer throw area in the segmented section (south)
- 8 Javelin area with two throwing directions (north and south)
- 9 Includes water jump kit for steeplechase
- 10 Distribution shaft for electrical cables or water conduits



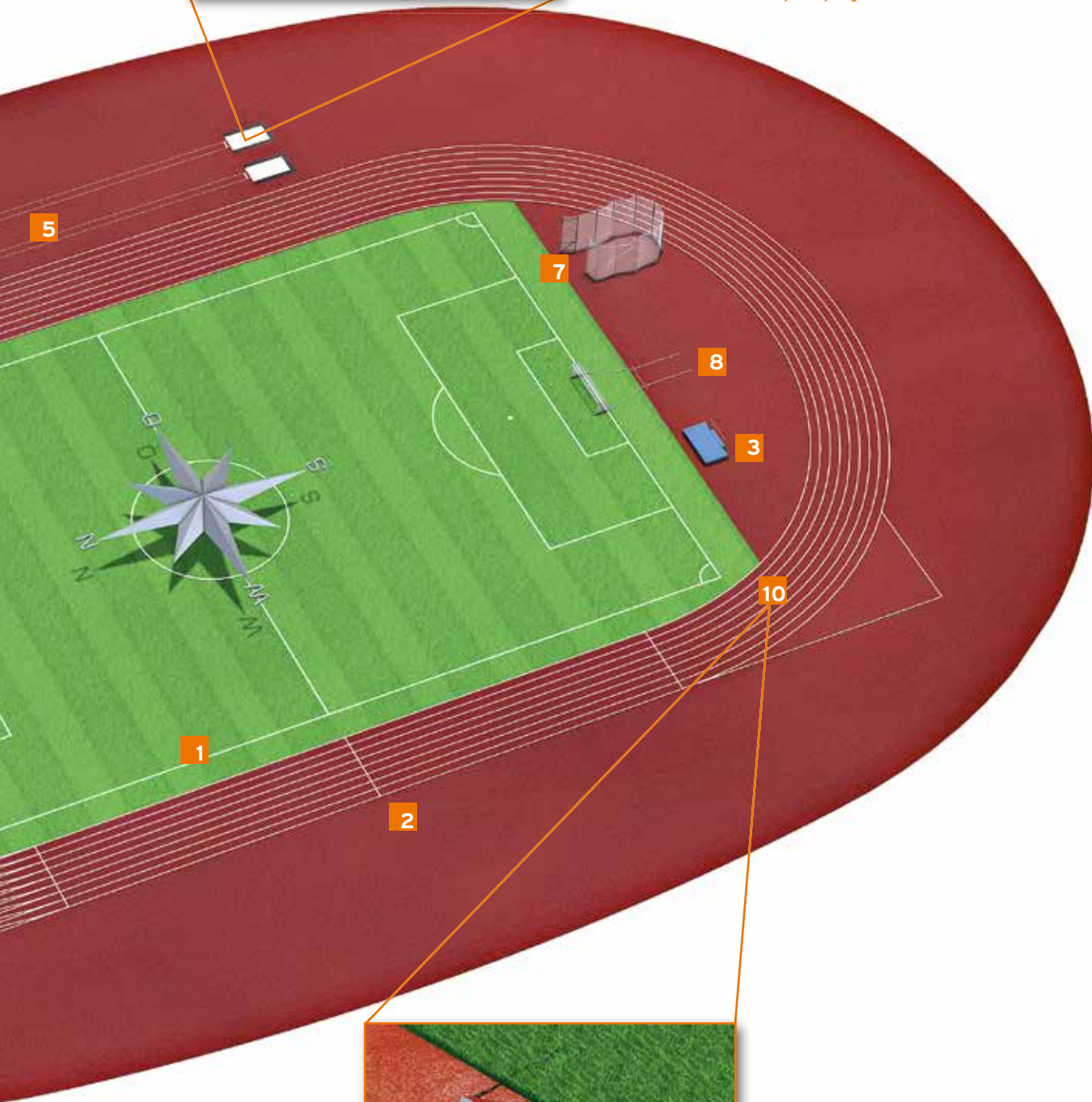
SPORTFIX® Water jump Aluminium - page 40

SPORTFIX® Hurdles - page 41





SPORTFIX® Soft kerbs - page 36
SPORTFIX® Sand traps - page 38



SPORTFIX® Distribution shafts - page 42

Drainage channels for IAAF facilities



	1	2	3	Accessory	
	SPORTFIX® Slotted channel	SPORTFIX® PRO	SPORTFIX® STANDARD	SPORTFIX® Trash boxes	
	<p>without upstand</p> <p>with upstand</p>	<p>with FIBRETEC slotted grating</p> <p>with GUGI-Grating</p>			
To be used in section ...	a b c	a b	a b	a b c	a b
On page ...	16	16	22	26	of corresponding channel system

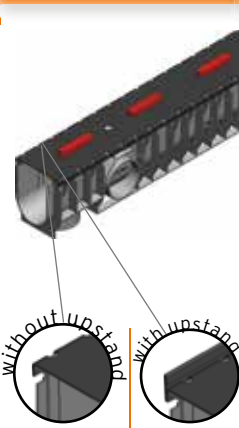


Boundary for **IAAF** facilities

Boundary	Compatible with channel ...	On page ...
<p>SPORTFIX® Aluminium Curbings</p> 	<p>1 2 3</p>	<p>20</p>

Drainage channels for **further** running tracks



All channel systems can be combined and used in every section **a b c** !

	1	2	3	Accessory
	SPORTFIX® Slotted channel	SPORTFIX®PRO	SPORTFIX® STANDARD	SPORTFIX® Trash boxes
		with FIBRETEC slotted grating with GUGI- Grating		
On page ...	16	16	22	26
				of corresponding channel system

Boundary solutions

Boundary	Compatible with channel ...	On page ...
<p data-bbox="188 506 432 562">SPORTFIX® Aluminium Curbings</p> 	<p data-bbox="612 629 820 680">1 2 3</p>	<p data-bbox="983 640 1031 678">20</p>

Equipment for stadiums and sports facilities

HAURATON references for football stadiums:

- Arena Corinthians in São Paulo, Brazil
- St.-Jakob-Stadion in Basel, Switzerland
- Wembley Stadium in London, UK
- Stádio Municipal do Maracanã in Rio de Janeiro, Brazil
- Estádio da Luz in Lisbon, Portugal
- Khalifa Stadium in Doha, Qatar
- Arena da Amazônia in Manaus, Brazil
- FC Emirates Stadium (Arsenal) in London, UK
- Easy Credit Stadium in Nuremberg, Germany
- Stadium Zvezdovskij in Moscow, Russia
- PGE Arena in Gdansk, Poland
- National Stadium in Warsaw, Poland
- ...

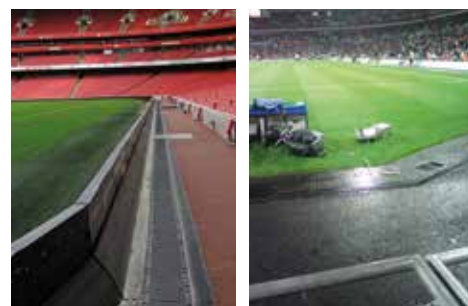


For hockey pitches :

SPORTFIX® Channel type ROME I
page 30

For artificial turf applications with filled
pole layer:

SPORTFIX® Channel type ROME II
page 33

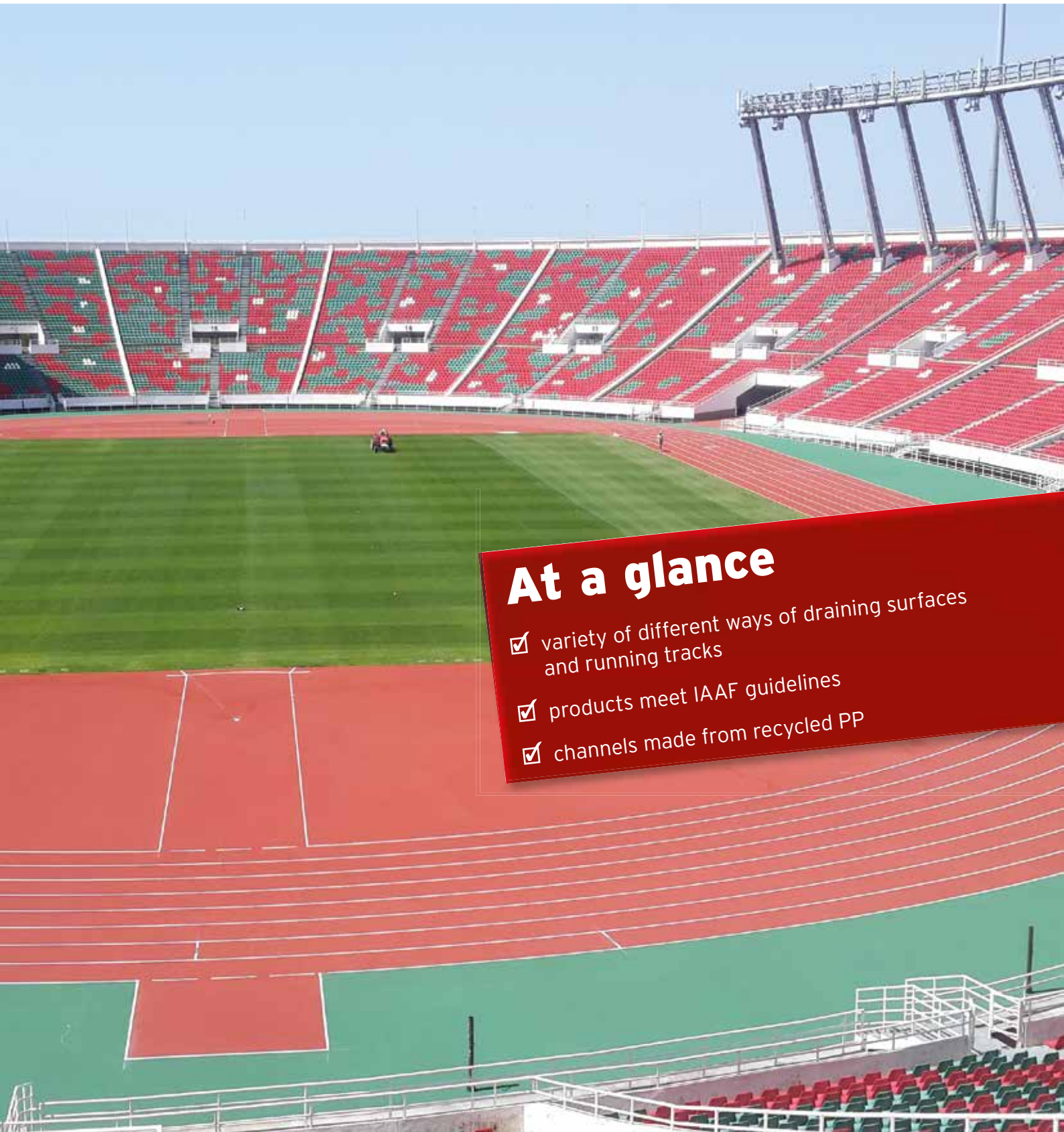


SERVICE Channels
page 43

SPORTFIX® Channels

Perfect drainage channels for IAAF accredited sports facilities.





At a glance

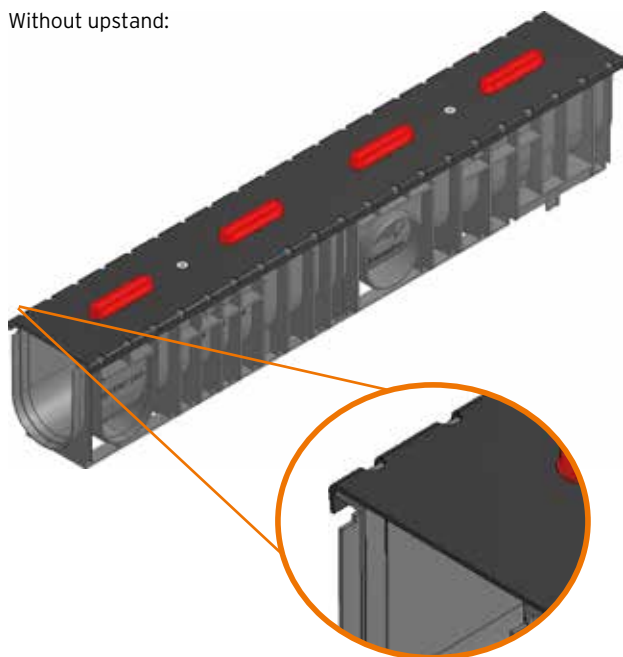
- ✓ variety of different ways of draining surfaces and running tracks
- ✓ products meet IAAF guidelines
- ✓ channels made from recycled PP

SPORTFIX® Slotted Channels

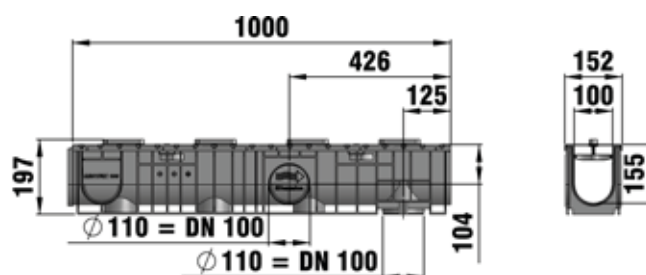
SPORTFIX® Slotted Channels

- CDP-coating to ensure a perfect join with the running track surface.
- EPDM slots that are easily opened using a screwdriver once the track surface has been laid.

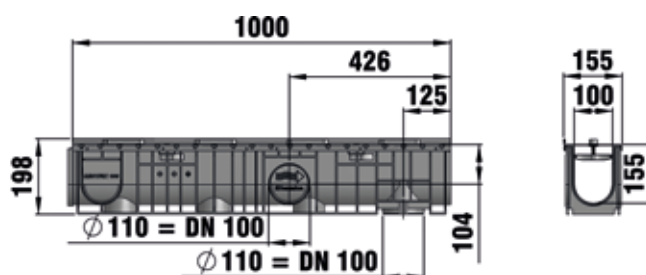
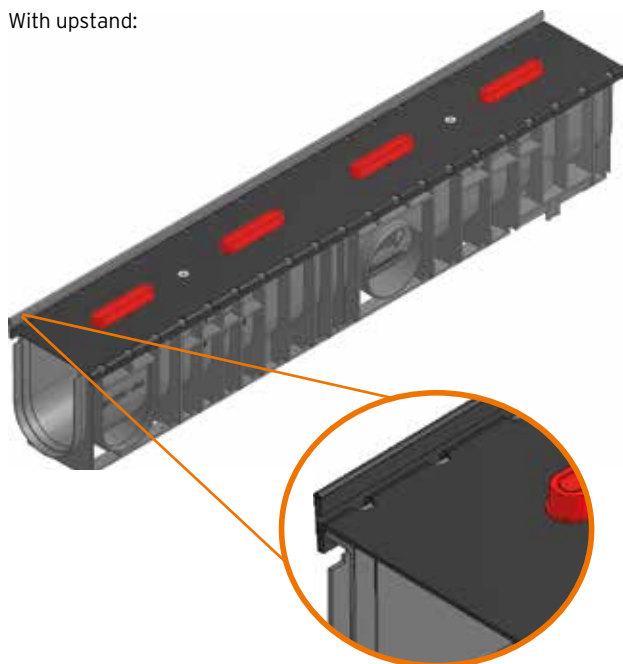
Without upstand:



Optional second drainage level - page 18



With upstand:

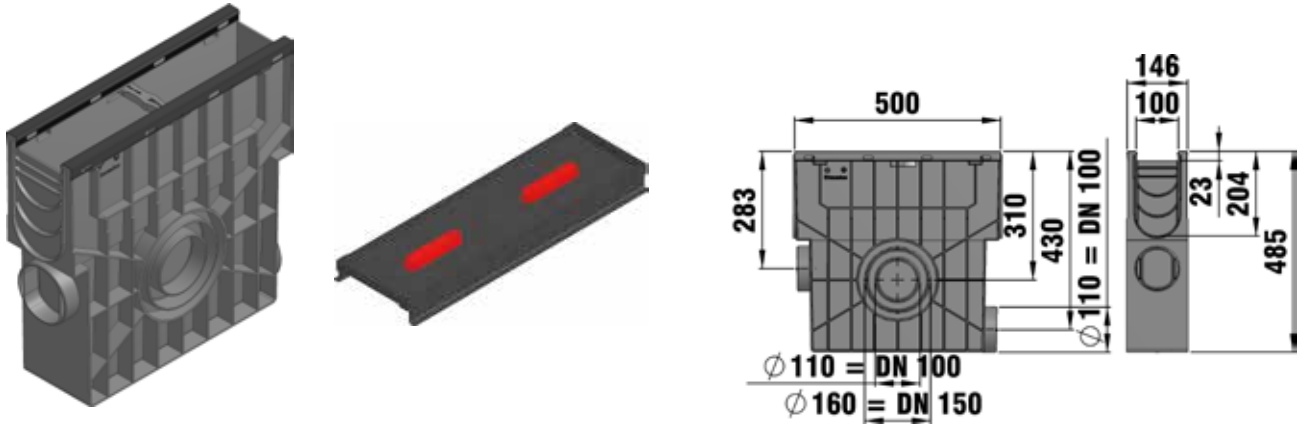


Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
SUPER type O1 without upstand, straight	1000	152	133	5,2	7811
SUPER type O1, with upstand, straight	1000	152	148	6,4	7821
SUPER type O10 without upstand, straight	1000	152	184	5,8	7810
SUPER type O10, with upstand, straight	1000	152	199	6,4	7820

SPORTFIX® Trash box

- made of PP
- fits seamlessly with the corresponding channel

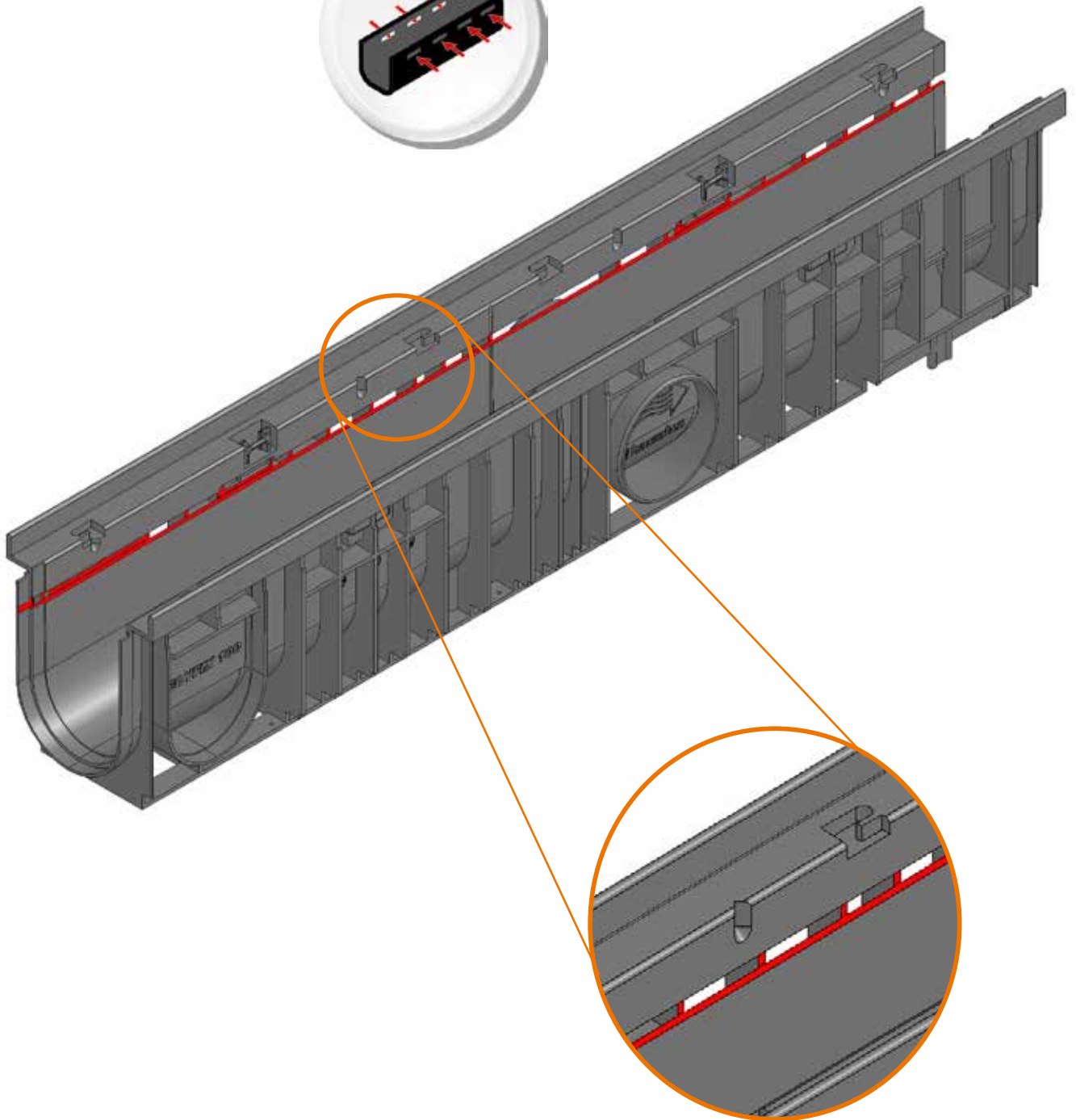
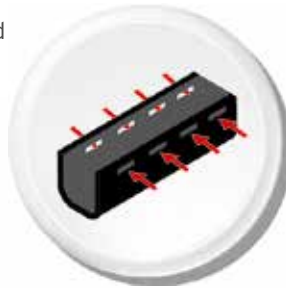
Trash box 100 with mud bucket

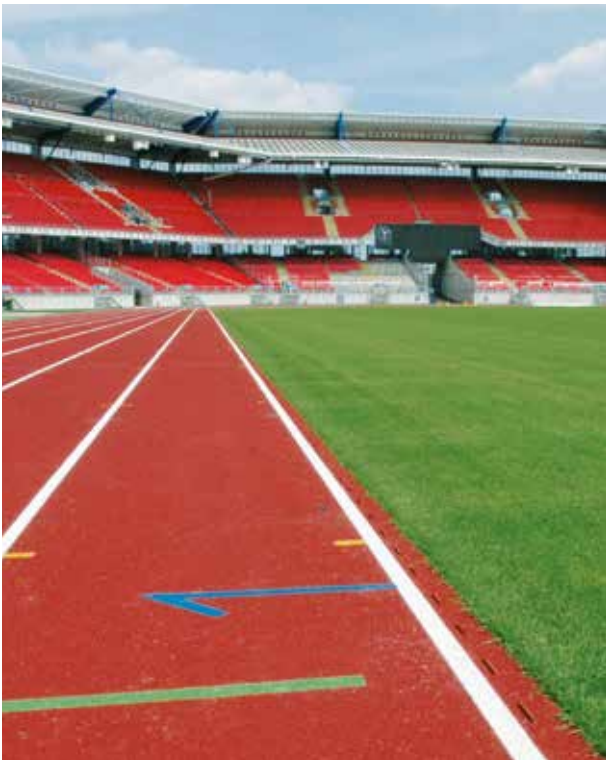


Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
Trash box 100 with mud bucket	500	146	485	4,4	7830
Access cover, KTL-coated	500	168	41	2,8	7785

Lateral openings for channels - Second drainage level

- optional one-sided or double-sided
- for every channel system





SPORTFIX® Aluminium Curbings

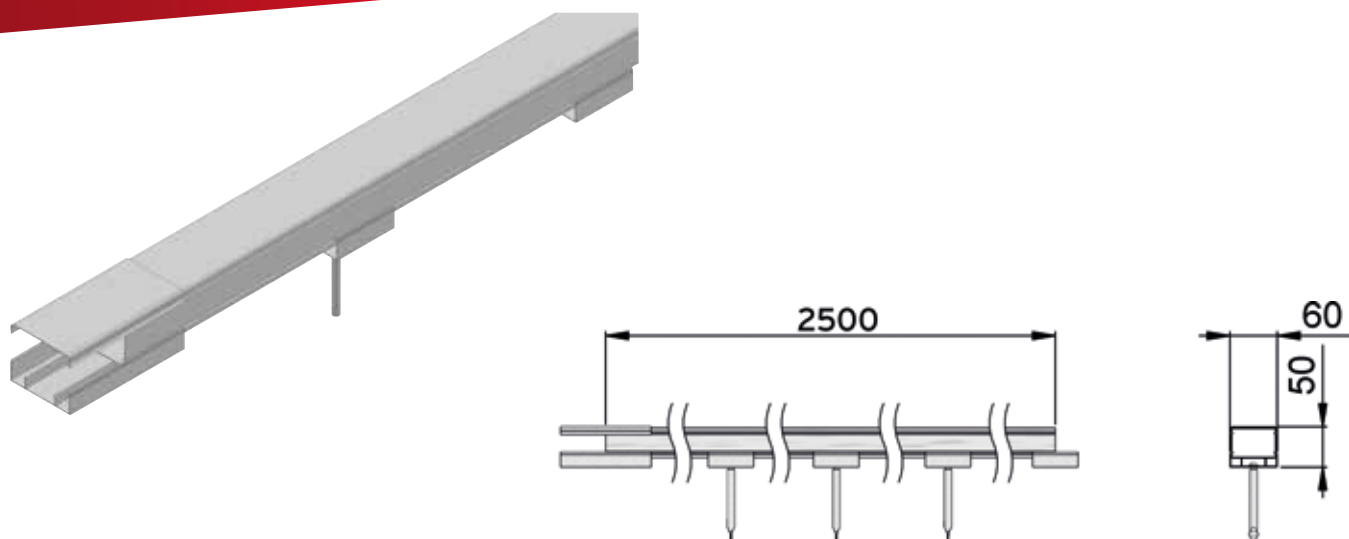
SPORTFIX® Aluminium Curbings

Many various events that are held at sport facilities often require moveable boundaries. Such boundaries may be provided and removed easily with SPORTFIX Aluminium Curbings.

The SPORTFIX Aluminium Curbings are suitable for the usage as mobile border for running track as well as a cover for slotted channels. They are manufactured as a complete unit with integrated push-in elements and fixing pegs.

SPORTFIX Aluminium Curbings are made of an aluminium-magnesium alloy. The set consists of 170 straight units and 230 curved units, both in 2.5 m lengths. The radius of the curved units is 36.5 m (special radii on request).

Product complies with IAAF guidelines



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
set (160 pieces) for 400 m track, including fixing material	2500	60	50	406	7085



SPORTFIX® PRO

Light and durable track drainage.



A long, dark, ribbed drainage channel is installed on a reddish-brown carpeted floor. The channel is positioned diagonally across the frame, starting from the bottom left and curving towards the top right. The carpet has a fine, textured pattern. The channel itself has a series of parallel ridges and grooves along its length.

At a glance

- ✓ channels made from recycled PP
- ✓ easy and fast to install
- ✓ installation in straight and curved areas possible

SPORTFIX® PRO

SPORTFIX® PRO Channels:

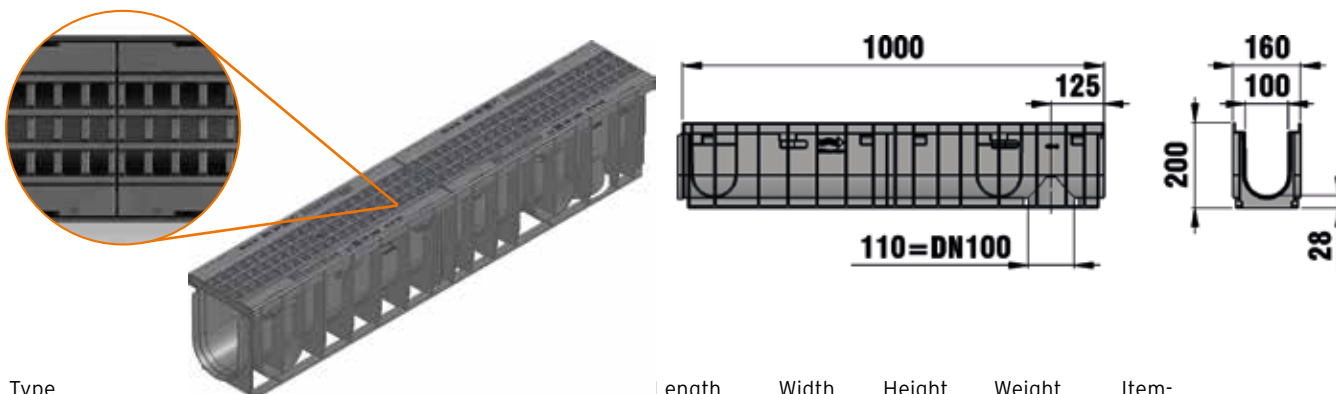
- channels made of PP and gratings made of high-quality PA-GF (Polyamide)
- drainage system according EN 1433
- lightweight, robust and easy to install
- no gap in the curved area through the groove and tongue system



Optional second drainage level - page 18

SPORTFIX® PRO Channel

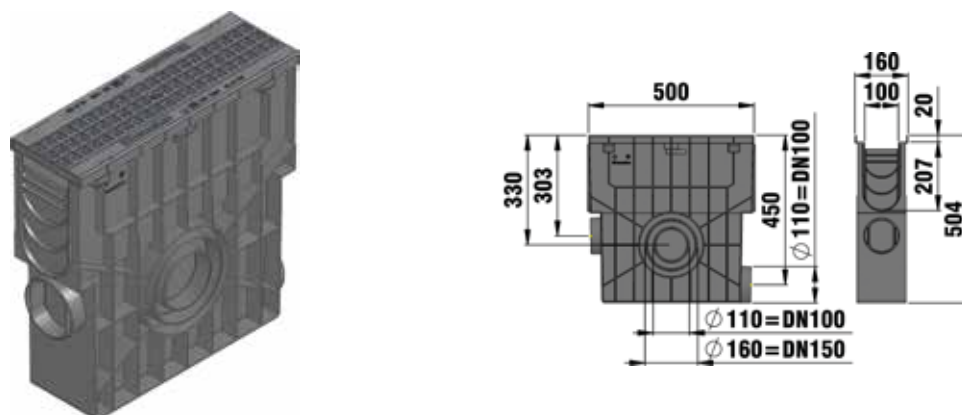
Type 010, with GUGI-Grating made of PA-GF, MW 15/25, black, locked



Type	Length mm	Width mm	Height mm	Weight kg	Item-no.
Type 01, with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	150	4,2	7511
Type 010, with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	200	4,6	7510
Type 01005, with GUGI-Grating made of PA-GF, MW 15/25, black, locked	500	160	200	2,53	7512
Type 020, with GUGI-Grating made of PA-GF, MW 15/25, black, locked	1000	160	250	5,5	7513

SPORTFIX® PRO Trash box

Trash box with mud bucket and GUGI-Grating made of PA-GF, MW 15/25, black, cl. B 125, locked



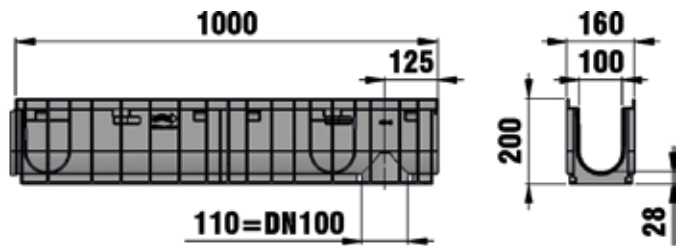
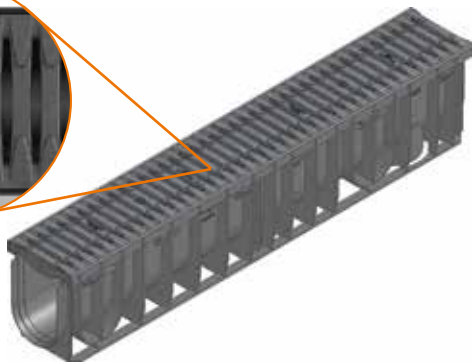
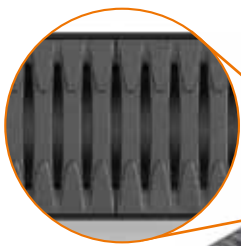
Type	Length mm	Width mm	Height mm	Weight kg	Item-no.
Trash box with mud bucket and GUGI-Grating made of PA-GF, MW 15/25, black, cl. B 125, locked	500	160	504	5,8	7515



**also available in
colours on request**

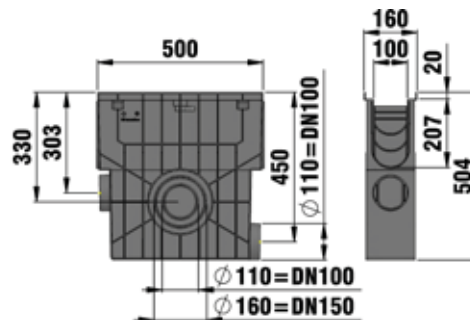
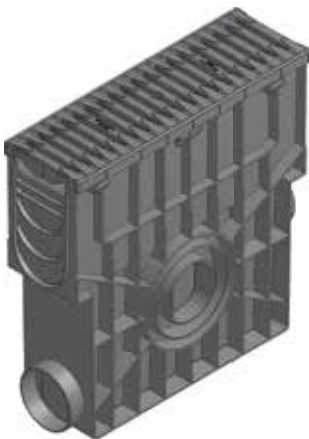
SPORTFIX® PRO Channels

Type 010, with FIBRETEC slotted grating,
SW 9 mm, black, locked



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
Type 01, with FIBRETEC slotted grating, SW 9 mm, black, locked	1000	160	150	4,5	7521
Type 010, with FIBRETEC slotted grating, SW 9 mm, black, locked	1000	160	200	4,9	7520
Type 01005, with FIBRETEC slotted grating, SW 9 mm, black, locked	500	160	200	2,4	7522
Type 020, with FIBRETEC slotted grating, SW 9 mm, black, locked	1000	160	250	5,7	7523

Trash box with mud bucket and FIBRETEC
slotted grating, SW 9 mm, black, cl. C 250



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
Trash box with mud bucket and FIBRETEC slotted grating, SW 9 mm, black, cl. C 250	500	160	504	5,9	7525

SPORTFIX®STANDARD



Light and durable track drainage.



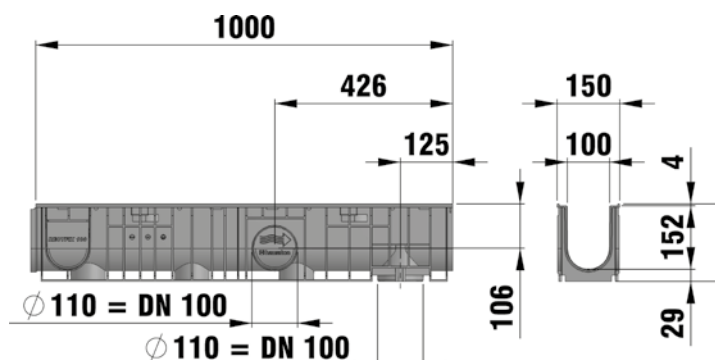
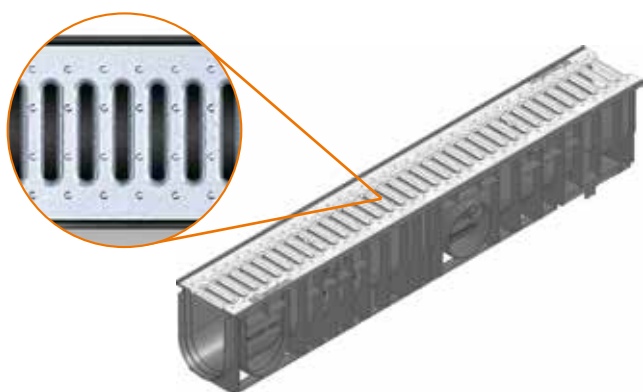
Optional second
drainage level - page 18

SPORTFIX®STANDARD Channel:

- channel made from recycled PP making it environmentally friendly
- high resistance against frost and road salt
- very light which makes it quick and easy to install

SPORTFIX®STANDARD Channel, trafficable

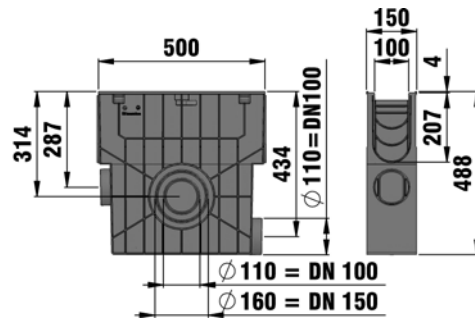
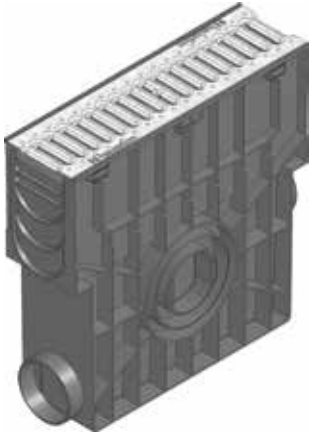
Type 010, with slotted grating, SW 75/9, locked



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
Type 01, with slotted grating, SW 75/9, locked	1000	150	134	3,8	7531
Type 0105, with slotted grating, SW 75/9, locked	500	150	134	1,8	7532
Type 010, with slotted grating, SW 75/9, locked	1000	150	185	5,3	7530
Type 01005, with slotted grating, SW 75/9, locked	500	150	185	2,6	7533

SPORTFIX® STANDARD Trash box

Trash box with mud bucket and slotted grating, SW 75/9, trafficable, locked



Type	Length mm	Width mm	Height mm	Weight kg	Product code
Trash box with mud bucket and slotted grating, SW 75/9, trafficable, locked	500	158	420	4,9	7535



Drainage systems for all sports surfaces

Artificial turf has become an indispensable part of today's sports world. The reasons for this are: it is maintenance-friendly, impervious to weather and always provides the best playing conditions. With all these properties, the artificial turf offers a versatile use.

A general distinction is made between artificial turf with:

- filled pole layer
- unfilled pole layer

An artificial turf with a filled pole layer consists of a mixture of sand with rubber granulate or sand with cork. The unfilled pole layer refers to the traditional artificial turf on the elastic layer. The DIN 18035 Part 4-7 regulates all requirements of floor coverings for sports facilities.



Mini-pitches



Hockey field

Proper surface drainage is very important for protection of the entire sports complex, the coverings as well as the athletes. For decades artificial turf and hockey have been inseparable. For this application, artificial turf with unfilled pole layer has prevailed. The **SPORTFIX channel ROME I** (page 30) is the drainage system for hockey pitches. This drainage system ensures the flatness of the surface and directs surplus accumulating surface water quickly.

For applications with filled pole layer, the drainage systems **SPORTFIX Channel ROME II** (page 33) and **SPORTFIX Channel BASEL** (page 34) guarantee smooth surface drainage.



Football stadium



Football stadium

SPORTFIX® Channel ROME

For artificial turf surfaces that need to be secured.





At a glance

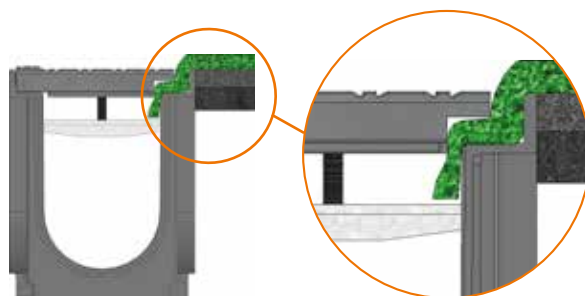
- ✓ ROME I: for hockey pitches, artificial turf with unfilled pole layer
- ✓ ROME II: for artificial turf with filled pole layer

SPORTFIX®Channel ROME

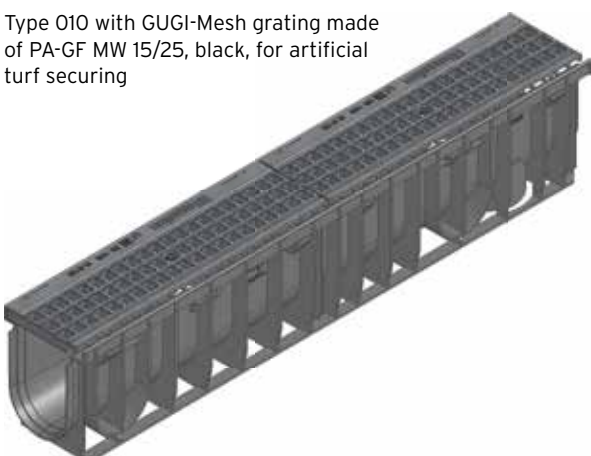
SPORTFIX®Channel ROME I

The SPORTFIX channel ROME I is primarily used for hockey pitches. The system can be adapted to any size of artificial turf which needs no tension.

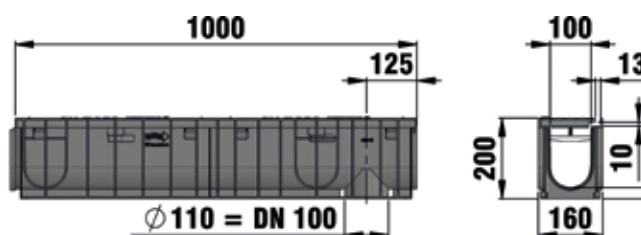
The artificial turf is just layed into the channel and jammed with the GUGI-Mesh grating which is locked with a locking handle (two per metre). This ensures that the turf covering remains securely in place.



Type 010 with GUGI-Mesh grating made of PA-GF MW 15/25, black, for artificial turf securing



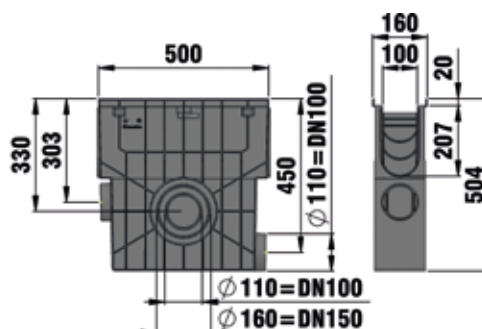
Optional second drainage level - page 18



Type	Length mm	Width mm	Height mm	Weight kg	Item-no.
Type 010 with GUGI-Mesh grating made of PA-GF MW 15/25, black, for artificial turf securing	1000	160	200	4,7	7862
Type 01005 with GUGI-Mesh grating made of PA-GF MW 15/25, black, for artificial turf securing	500	160	200	2,4	7869
Type 020 with GUGI-Mesh grating made of PA-GF MW 15/25, black, for artificial turf securing	1000	160	250	4,0	7867

SPORTFIX®Accessory ROME I

Trash box with mud bucket, with GUGI-Mesh grating made of PA-GF, MW 15/25, black, for artificial turf securing



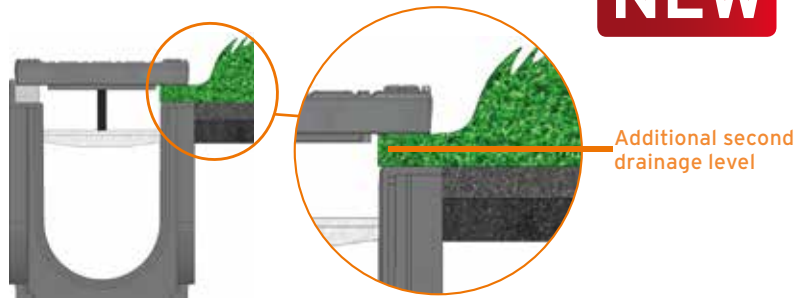
Type	Length mm	Width mm	Height mm	Weight kg	Item-no.
Trash box with mud bucket, with GUGI-Mesh grating made of PA-GF, MW 15/25, black, for artificial turf securing	500	160	504	5,4	7870

NEW

SPORTFIX®Channel ROME II

The SPORTFIX channel ROME II is for artificial turf with filled pole layer (e.g. football fields).

With the help of a special construction profile the gratings are positioned just above the top edge of the angle housing. The artificial turf is just layed under the grating, remains securely in place and creates a second drainage level.



Type 010 with GUGI-Mesh grating made of PA-GF MW 15/25, black, for artificial turf securing



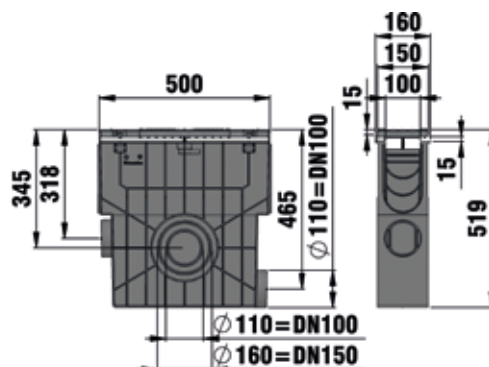
At a glance

- ✓ ROME I: for hockey pitches
- ✓ ROME II: for artificial turf with filled pole layer

Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
Type 010 with GUGI-Mesh grating made of PA-GF MW 15/25, black, for artificial turf securing	1000	160	215	-	7863
Type 01005 with GUGI-Mesh grating made of PA-GF MW 15/25, black, for artificial turf securing	500	160	215	-	7868

SPORTFIX®Accessory ROME II

Trash box with mud bucket, with GUGI-Mesh grating made of PA-GF, MW 15/25, black, for artificial turf securing



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
Trash box with mud bucket, with GUGI-Mesh grating made of PA-GF, MW 15/25, black, for artificial turf securing	500	160	519	-	7871

SPORTFIX® Soft kerbs



Used for edging sand pits, sand traps, shot-putting facilities and other sports areas. Rubber cushioned capping minimises the risk of injury to athletes.

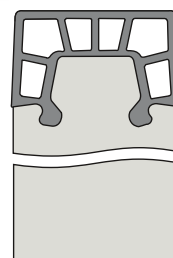
SPORTFIX Soft kerbs for:

- jumping pits
- sand pits
- definition of outside edge of a running track
- permanent delineation of separate areas in sports grounds

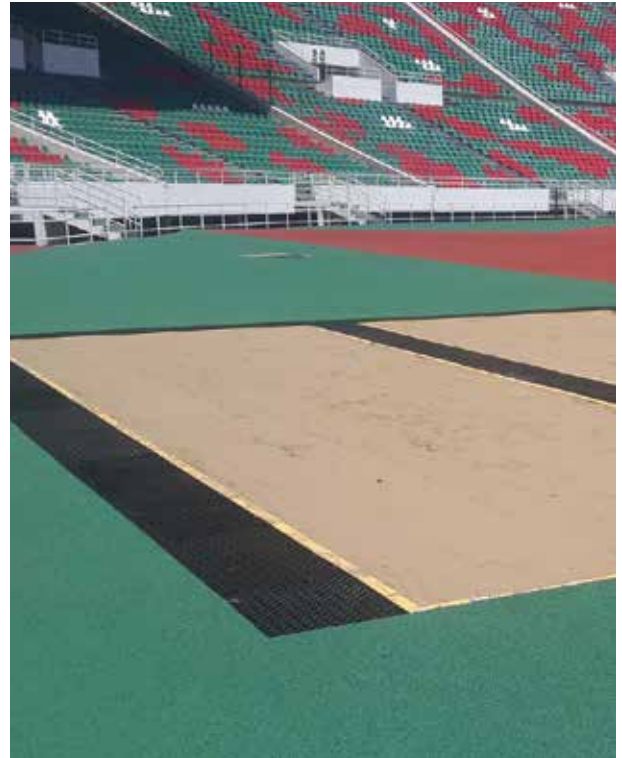


At a glance

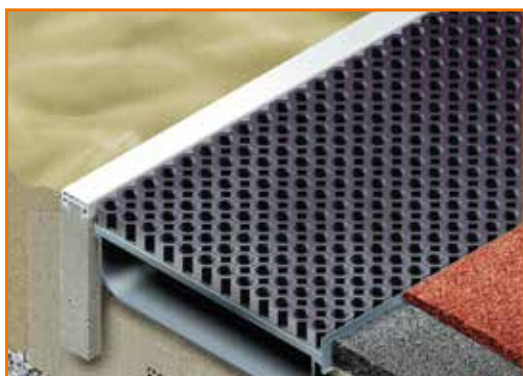
- available in black and white
- different heights and corner elements available
- rubber cushion made of EPDM and air cushions inside to minimise the risk to athletes



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
white	1000	60	200	24,0	7200
white	1000	60	250	30,0	7201
white	1000	60	300	36,0	7202
white	1000	60	400	49,0	7203
white	500	60	400	24,5	7204
Angle pieces, white	250/250	60	300	16,4	7208
Angle pieces, white	250/250	60	400	21,5	7209
black	1000	60	200	24,0	7220
black	1000	60	250	30,0	7221
black	1000	60	300	36,0	7222
black	1000	60	400	49,0	7223
black	500	60	400	24,5	7224
Angle pieces, black	250/250	60	300	16,4	7228
Angle pieces, black	250/250	60	400	21,5	7229



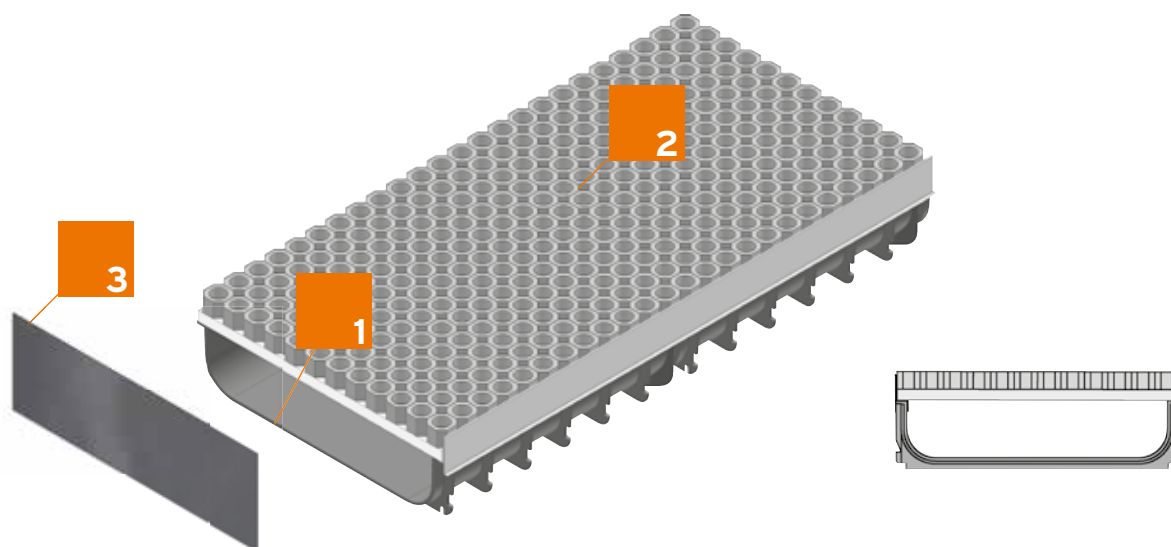
SPORTFIX® Sand traps



Prevents sand spreading on to the running track.

Trap channels allow different sand pit sizes to be achieved.

For IAAF guidelines see page 39.



1 Lower section made from polypropylene (2 x 500 mm) with prefabricated DN 100 connection facility

3 End cap for sand trap (has to be installed on one side to the surface layers)

2 Mesh grating with firmly attached rubber mat and single-sided metal profile (1000 mm) for a neat joint with running track surfaces

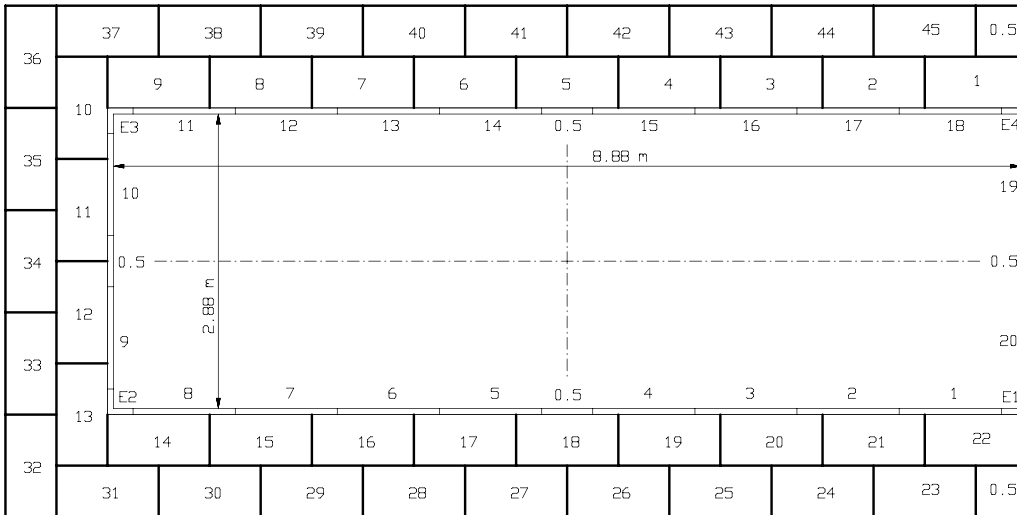
Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
Sand trap 2 x 500 mm	1000	500	163	16,8	7740
Sand trap	500	500	163	8,8	7745
End cap	-	500	175	0,5	7248

Jumping pit with sand trap 2.88 m x 8.88 m in accordance with IAAF specifications

Soft kerbs: 20 x 1 m + 4 x 0.5 m + 4 corner pieces 0.25 m x 0.25 m

SPORTFIX sand trap: "Single" 22 x 1 m

SPORTFIX sand trap: "Double" 45 x 1 m + 2 x 0.5 m

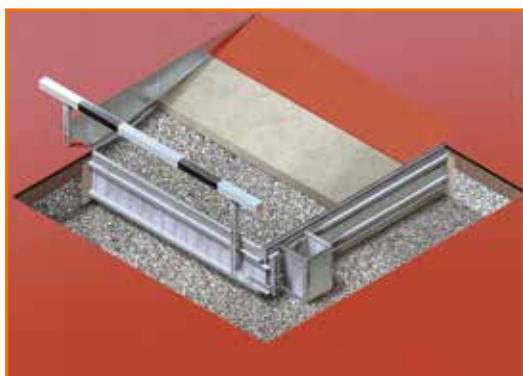


At a glance

- ✓ base section made of PP
- ✓ expanded metal grating and rigidly mounted rubber mat on top
- ✓ single and double width installation possible



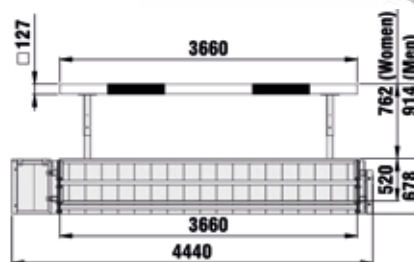
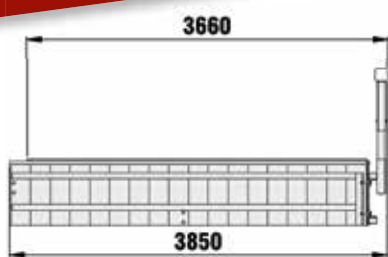
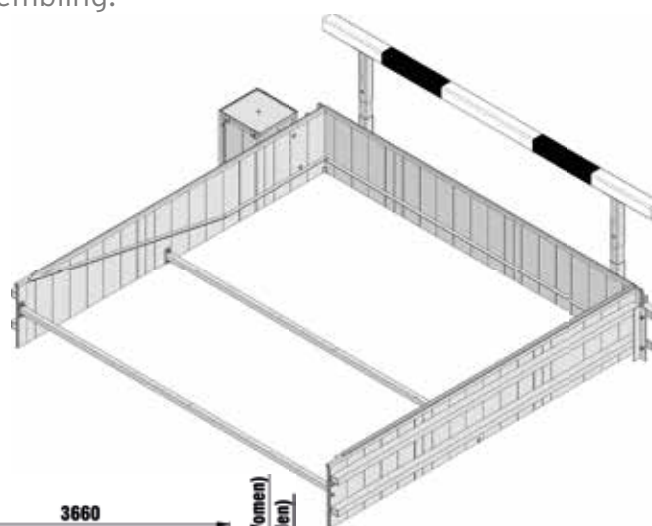
SPORTFIX® Water jump Aluminium



Water jump for steeplechases in accordance with IAAF requirements.
Modular construction for quick and easy assembling.

At a glance

- ✓ prefabricated wall panels made of aluminium double hollow profiles
- ✓ additional shaft for water fittings
- ✓ including hurdles



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
SPORTFIX Water jump aluminium	3850	4440	678	271,8	7150
Cover with underframe for water jump	3656	3417	-	319	7152

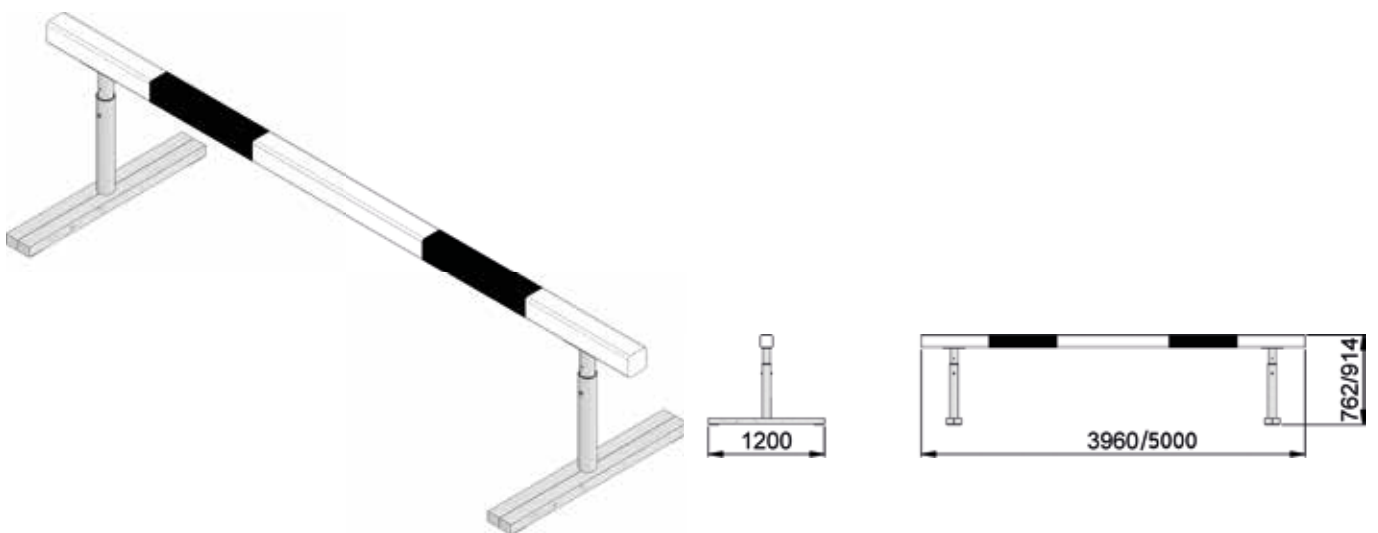


SPORTFIX®Hurdles

SPORTFIX®Hurdles

The SPORTFIX Hurdle is made of aluminium and has a wooden cross bar. The hurdles are easily and quickly adjustable to international competition heights for both women (0.762 m) and men (0.914 m). This article is delivered in a set of four pieces. The fifth hurdle needed for the decathlon is already part of the SPORTFIX water jump made of aluminium. The black and white upper crossbars are made from timber wood.

Product complies with IAAF guidelines



Type	Length mm	Width mm	Height mm	Weight kg	Item- no.
SPORTFIX Hurdles for steeplechase, set of 4 pieces (3x 3960 mm, 1x 5000 mm), high adjustable for women (762 mm) and men (914 mm)	1200	3960/5000	762 /914	90	7154



SPORTFIX® Distribution shaft PE

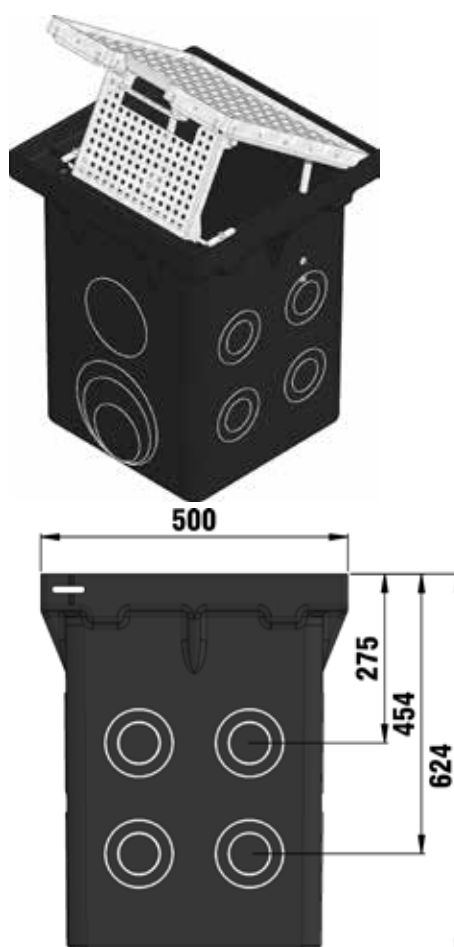
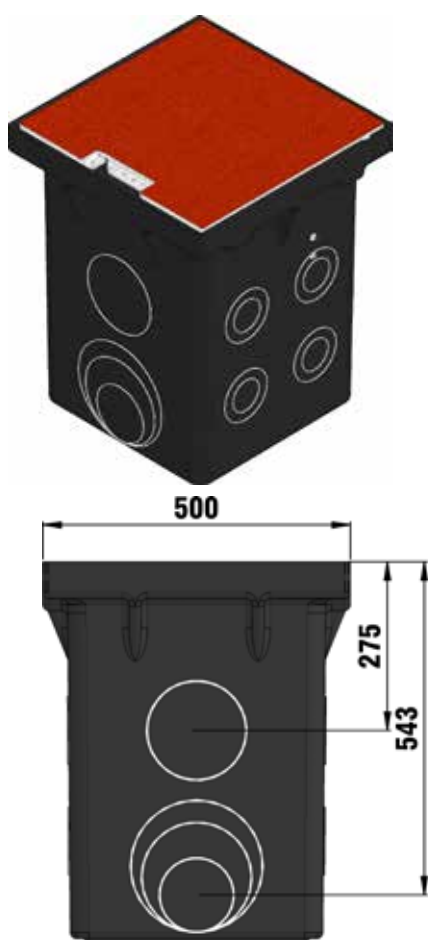


NEW

Distribution pits made of PE for electrical cables.
For major sports or concert venues with a lot of news transmission.

SPORTFIX Type E distribution shaft PE

- easy handling on site due to low weight
- openings can be opened easy and quick
- efficient installation
- durable material
- grating is made from galvanised tread plate, can support the weight of a vehicle



Type	Length mm	Width mm	Height mm	Weight kg	Product code
Distribution shaft PE	500	500	620	37,5	7403

SERVICE Channels

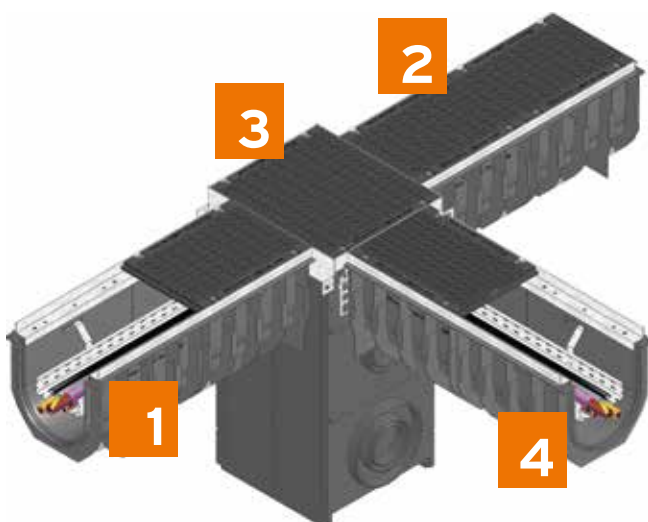


Cable management system.

For the safe management of power and telecommunication cables at stadiums and race tracks. Suitable for industrial applications.

RECYFIX®SERVICE Channels

- nominal size 100 and 300
- with solid ductile iron covers in class E 600
- robust, non-slip grating



- 1 ■ RECYFIX SERVICE Channel made of Polypropylene with galvanised ductile iron angle housing.
- 2 ■ Solid ductile iron cover, black, class E 600
- 3 ■ Trash box for the preparation of corner and T-junctions.
- 4 ■ Cable duct to lay cables inside.

RECYFIX®SERVICE Channels

Type	Length mm	Width mm	Height mm	Weight kg	Product code
Type 01, RECYFIX STANDARD 100	1000	158	135	2,5	48000
Type 010, RECYFIX STANDARD 100	1000	150	185	3,0	40242
Type 010, RECYFIX SUPER 300	1000	390	185	3,0	40900

RECYFIX®SERVICE Gratings

Type	Length mm	Width mm	Height mm	Weight kg	Product code
Checked plate, galvanised for type 01, type 010 RECYFIX STANDARD 100, class A 15	1000	136	22	3,1	40271
Solide ductile iron grating, black, for type 010, RECYFIX SUPER 300, class E 600	500	377	40	21,5	4262

Installation

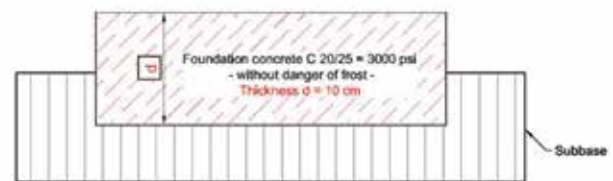
General installation instructions

Designers, engineers and contractors can request digital or hardcopy installation instructions at any time. Hardcopy installation instructions are always provided with every delivery. Specific advice is always available from Hauraton sales support.

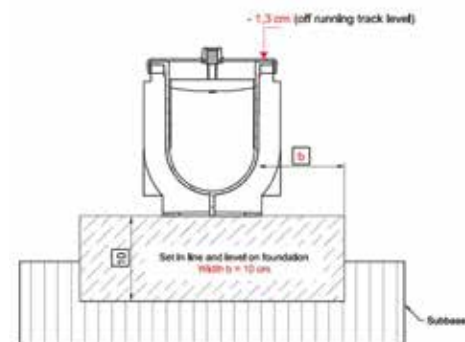
Installation procedure

To get an idea of the correct installation procedure of SPORTFIX Channels please see below.

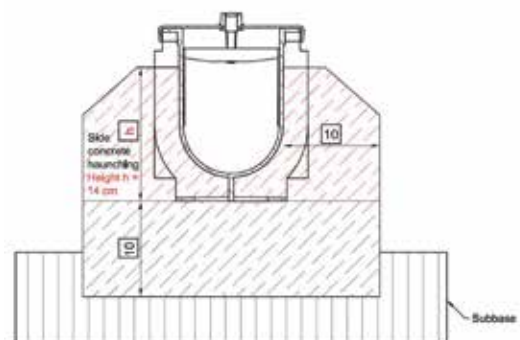
Step 1: Foundation on subbase



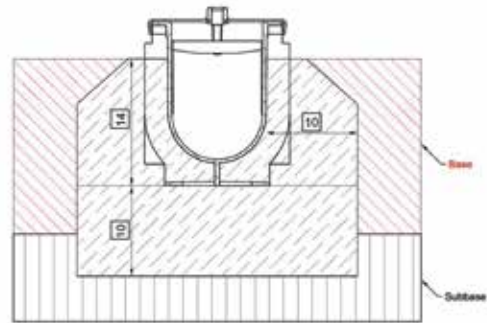
Step 2: Lining and levelling



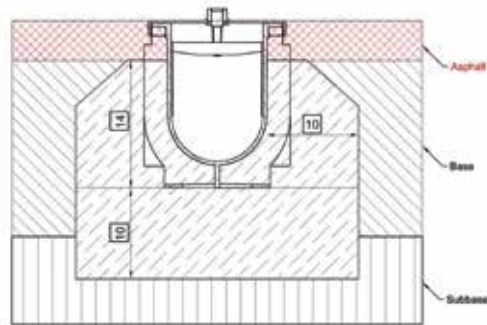
Step 3: Concrete haunching



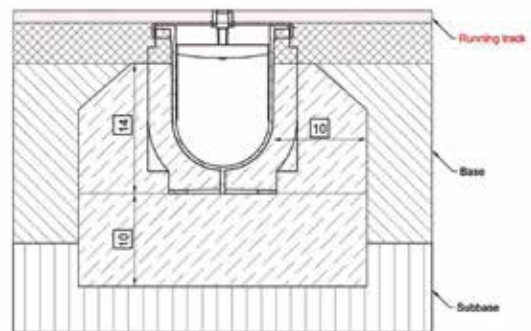
Step 4: Base for surfacing



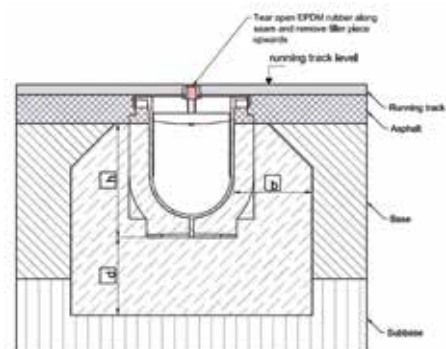
Step 5: Asphalt



Step 6: Running track surface



Step 7: Open drainage slots



Drainage solutions for grandstands



RECYFIX®PRO

- ✓ channel made of PP and grating made of high-quality PA-GF (Polyamide)
- ✓ corrosion-free gratings:
 - FIBRETEC slotted grating: anti-slippery surface, hydraulically optimized with elegant inlet slots
 - GUGI-Mesh grating
 - ductile iron longitudinal grating, KTL coated

Additional drainage solutions

Example:

Drainage of periphery of sports facilities (e.g. parking lots)



RECYFIX®HICAP®

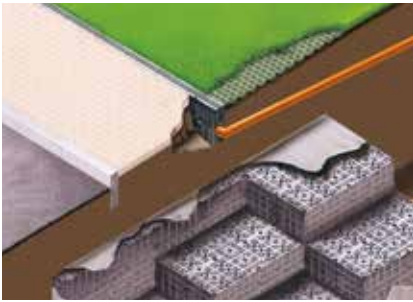
- ✓ high capacity drainage channel
- ✓ suitable for heavy load areas
- ✓ no expensive crane or machine hours for installation required



RECYFIX®NC

- ✓ extremely stable and lightweight - channels made of PP for civil engineering
- ✓ high stability with durable ductile iron grating (8-fold bolted)
- ✓ low weight ensures easy handling on site
- ✓ prefabricated ready to install

Example:
Seepage of surface water



DRAINFIX®BLOC

- ✓ extremely functional
 - load-bearing up to SLW 30
 - huge storage capacity
 - no reduction in useable space
- ✓ easy to install



DRAINFIX®CLEAN

- ✓ three components - one system:
 - different channel bodies according to their load and hydraulic requirements, drainage pipe and filter substrate CARBOTEC 60 through which the cleansing of the storm water runoff occurs; pollutants such as zinc, copper, lead and fuel hydrocarbons as well as fine particles are trapped
- ✓ large retention volume
- ✓ fast and simple installation
- ✓ cost-saving maintenance schedule



DRAINFIX®TWIN

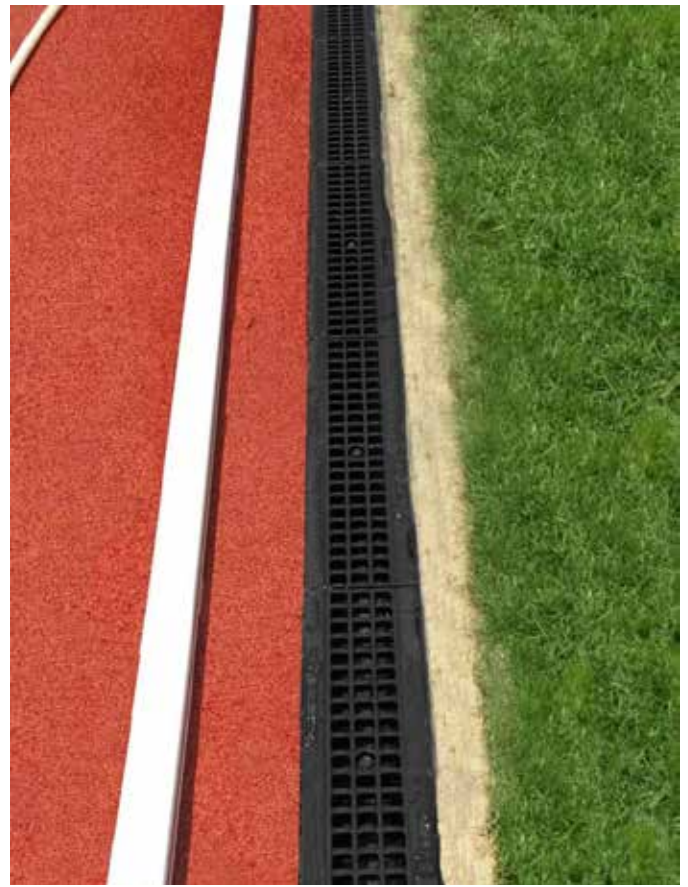
- ✓ very large storage volume
- ✓ flexible installation alignment due to variable combinations
- ✓ fast and simple installation
- ✓ combination of seepage and retention possible



References



Stadium Gelora Bung Karno, Jakarta



Stadium Gelora Bung Karno, Jakarta



Palanga city stadium, Palanga



Sport facility, Morbach



National stadium, Rabat



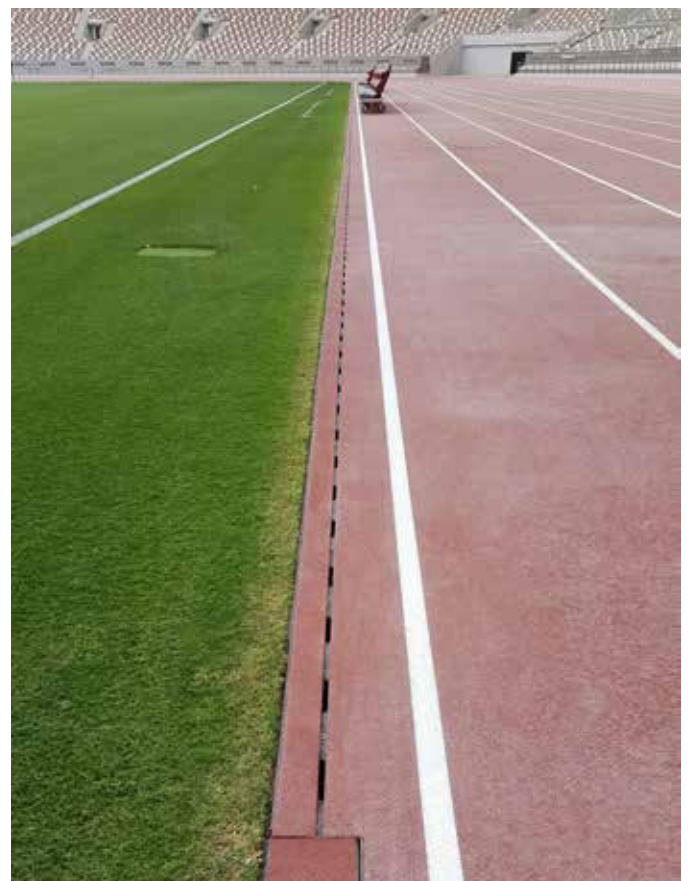
National stadium, Rabat



Stadium Gelora Bung Karno, Jakarta

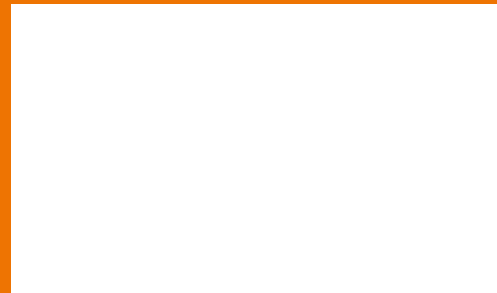


Stadium Gelora Bung Karno, Jakarta



Stadium Gelora Bung Karno, Jakarta

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