hauraton

Rainwater Management in Sports Facility Construction

Application Areas and Systems

Table of Contents

Rainwater management in sports facility construction — **page 4**

Application Overview — **page 6**

Car parks and traffic routes
Stadium buildings and stands
Pitch and running track

Product Overview — **page 14**

Athletics — **page 18**

SPORTFIX SLOTTED Channel
SPORTFIX Channel with Blind Cover for same surface level each side
SPORTFIX Channel with Blind Cover for different surface level each side
SPORTFIX PRO with FIBRETEC Design Gratings
SPORTFIX PRO with GUGI Composite Gratings
SPORTFIX STANDARD with galvanised slotted grating
SPORTFIX CLEAN
SPORTFIX Sand Trap Channels and **SPORTFIX Soft Kerbs**
SPORTFIX Water Jumps and **Hurdles**

Football — **page 44**

SPORTFIX CLEAN
SPORTFIX PRO

Hockey — **page 48**

SPORTFIX CLEAN
SPORTFIX ROM

Play and Multipurpose areas — **page 52**

Other Sports — **page 54**

Cable Management — **page 46**

Service and Certificates — **page 58**

Sustainability — **page 60**

Installation Examples — **page 62**

To all sports facility designers:

Get ready for your next project.

Sport inspires, moves and brings people together – in the sun as well as in the rain. To ensure that sports fields, stadiums and leisure facilities remain usable at all times, our solutions ensure safe and sustainable rainwater management.

With **HAURATON**, associations, designers and municipalities rely on innovation, quality and experience. In this way, we provide the basis for sport to take place at any time – today and in the future.

„The SPORTFIX SLOTTED Channel is a perfect system for the sports sector – discreet and highly efficient. The result is a really super precise finish."

Katherine Haddock, GRAF Australia

Sports facilities place the highest demands on functionality, durability and safety – both for athletes, operators and spectators. Whether artificial turf pitch, athletics facility or stadium environment: Each area brings with it individual challenges for the planning and implementation of sustainable rainwater management.

Robust, low-maintenance surfaces, increasing surface-sealing and more frequent heavy rainfall events make it necessary not only to drain water quickly, but also to treat it in a specified manner, allow it to seep away locally or retain it for further use, for example, for green irrigation (watering).

This brochure provides you with a basis for decision-making regarding your sports project. Be inspired and be prepared for your next project.

Rainwater Management in Sports Facility Construction

The planning and construction of sports facilities requires special solutions for rainwater management.

What should be considered?

New construction projects or refurbishments that include drainage systems are often required to comply with local standards and regulations regarding how water is managed and treated. The responsible water authority is obliged to check whether the rainwater drainage complies with the local regulations. In the past, rainwater was simply discharged into the sewer system, but today ideally this should be avoided if possible.

Local legal requirements must be taken into account in the design. In Germany, connections to the combined sewer system are not acceptable under the Water Resources Act (Section 60 WHG 2009, in force since 1 March 2010). State water laws established by the Federal States, and wastewater statutes issued by local municipalities have been compiled accordingly.

If a product is used for rainwater treatment, this must be at least equivalent to an overgrown soil zone (DWA-A 138-1 or DWA-A 102). As with all wastewater, WHG requires state-of-the-art technology for the discharge of rainwater.

Comprehensive rainwater management involves consideration of all functions: Quick, efficient and safe drainage Cleansing and purification of contaminated surface water Targeted retention to control and relieve discharge to the sewer system Infiltration on site; for example in combination with infiltration swales or underground storage elements. For modern sports facilities, this results in flexible requirements concerning the systems used – depending on the type of application, use and load.

Rainwater management at sports facilities – a special discipline

What makes rainwater management in the sports sector so unique compared with other applications? In addition to the general challenges posed by rainwater, other important factors must be taken into account in sport facilities:

1. Risk of injury
Minimising risk of injury means that playing surfaces must be made dry and safe as quickly as possible, with no surface obstacles that may hinder events taking place.

2. A fair playing field
In order for athletes to compete under the same conditions at different times of the day, drainage systems must function reliably and consistently.

3. Time availability of the playing field and track
Time is a decisive factor: match schedules, athletes' recovery phases, TV broadcasts and spectator expectations require events to resume quickly following rainfall.

4. Marking
Surface drainage systems should be either discreet or serve as line markings with an appropriate cover.

5. Design
In the case of new buildings or renovations, aesthetically pleasing solutions are required that blend harmoniously with modern sports facility design. Gratings and covers play a central role here – more about this on page 9.

6. Hydraulic complexity
Building façades, stands, sloping surfaces and typical sports obstacles such as water jumps make surface drainage a challenge within this complex environment. In addition, surfaces must be able to accommodate a range of vehicles, including mowers, cars, vans, trucks and other emergency vehicles.

HAURATON offers solutions for all load classes:

7. Sensitive surfaces
The sports surface is often sensitive and expensive and must be protected. An efficient drainage system extends the life of the pitch or surface covering and reduces maintenance costs.

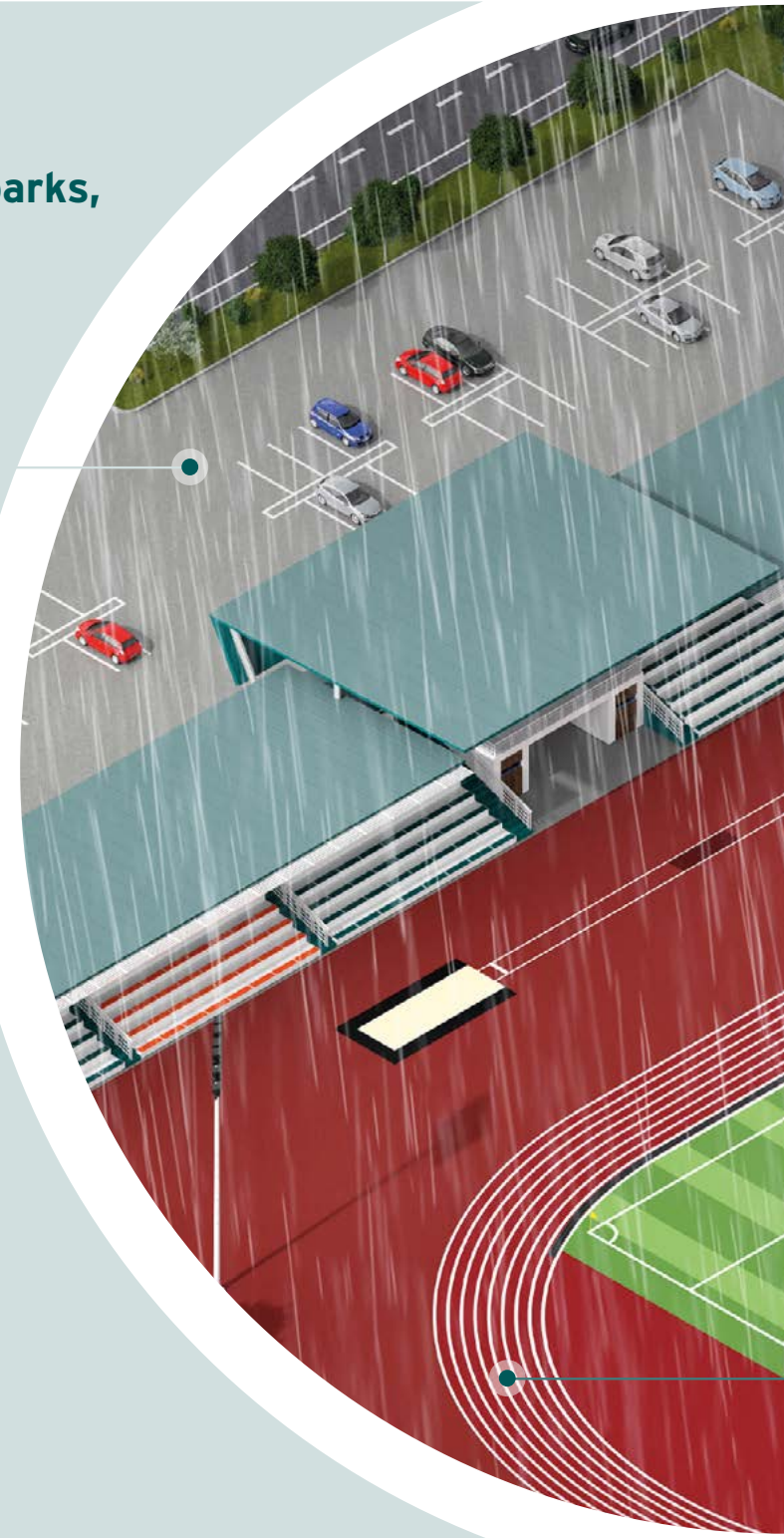
8. Water consumption
Watering natural turf and green areas, or irrigating hockey pitches consumes a large volume of water. If rainwater is collected as a resource and made available for reuse, large quantities of drinking water can be saved.

Safely draining surface water with innovative drainage solutions from **HAURATON**

Rainwater Management in Sports Facilities

Car parks, underground car parks, and traffic routes

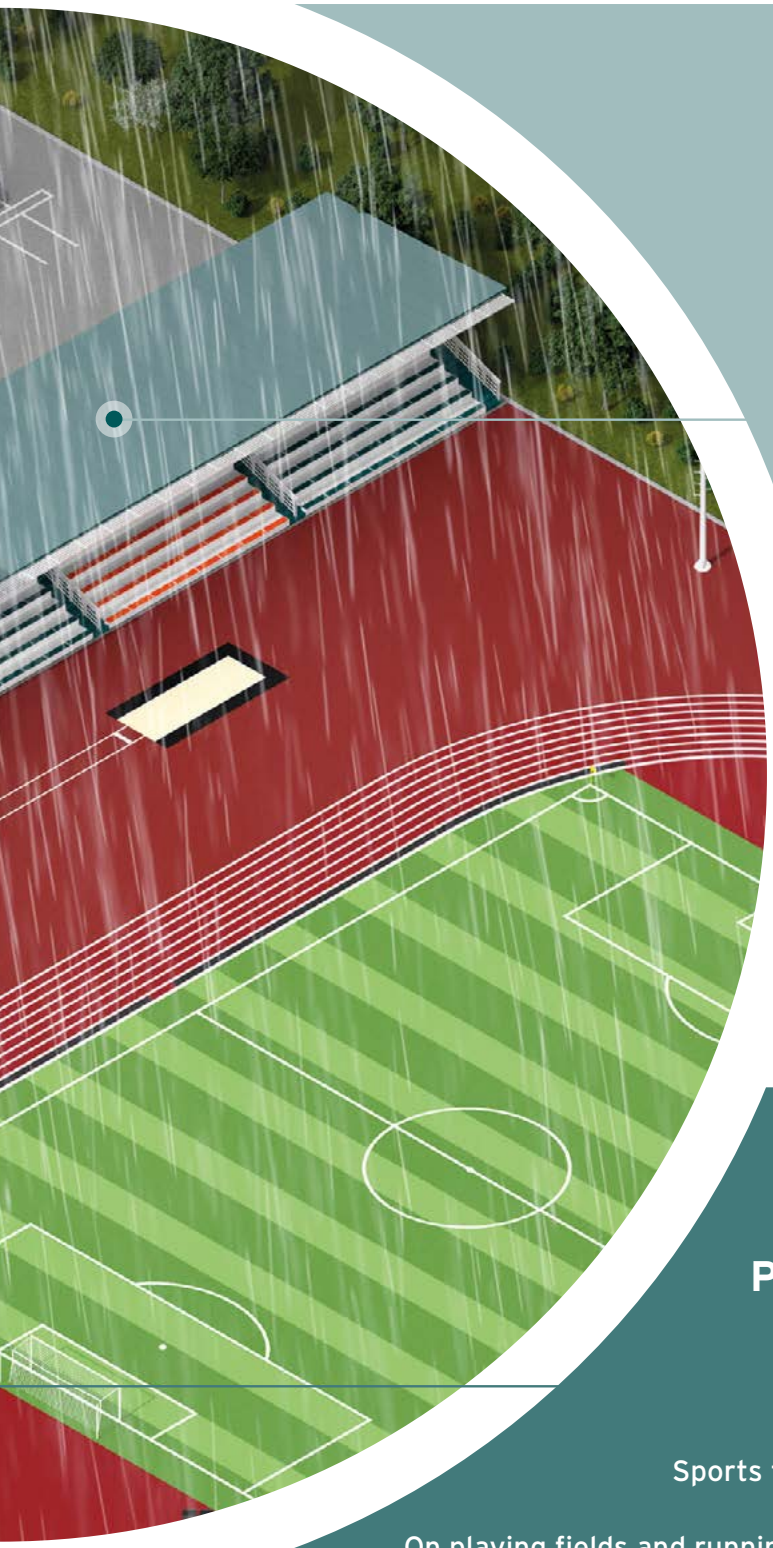
Car parks, underground car parks and traffic routes place complex demands on drainage and construction methods. Weather, moisture, corrosive substances and restricted installation depth require innovative, practical and robust systems.The aim is protection, functionality and sustainability – especially in extreme weather conditions.



Challenges:

- Large sealed areas
- High surface loads and forces
- Impurities
- Steep gradients
- Accessibility

Rainwater management includes all measures for the controlled drainage, storage, infiltration, purification and re-use of rainwater. The aim is to return water to the natural cycle and to reduce negative impact on the environment and infrastructure.



Stadium building and stands

The drainage of facades and stands has special requirements. Low installation heights and standards must be observed. Barrier-free solutions require threshold-free, corrosion-resistant, durable systems with careful planning.

Accessibility

DIN 18040
(Germany)

Flat Roof Directive

DIN 18531–18533
(Germany)

Playing field and running track

Sports field construction **DIN 18035**
(Germany)

On playing fields and running tracks, rainwater must be drained quickly, safely from across a large area. Systems should retain microplastics and sand particles, protect elastic coverings and be sustainably resilient. Accessibility, surefootedness and compliance with World Athletics standards are mandatory.

Car parks, Underground Car Parks, and Traffic Routes

Arrive safely, no matter what the weather.

Car parks and parking decks

Exposed parking spaces are not only continuously exposed to the weather but are often heavily trafficked. In the case of parking surface drainage, a distinction must be made between external parking decks that are continually exposed to the weather, and those located internally, which are protected from the weather.
In both cases, frequently occurring moisture and heavy use play a major role.

Special requirements are:

- High loads and dynamic forces
- Contaminated surface water
- Exposure to corrosive substances

DRAINFIX CLEAN

Filter substrate channel
for rainwater treatment

DRAINFIX BLOC

Infiltration storage unit
for heavily trafficked areas

Find out more on our application page.

hauraton.com/en-int/application-areas/parking/

Underground car parks

Water in underground car parks usually originates from vehicles carrying this in after being exposed to adverse weather conditions outside (rain, snow, ice). Testing of sprinkler systems and car washing services also generate surface water that must be drained effectively.
The volume of water produced depends on a variety of factors which need to be considered. Without a correctly planned and safely installed drainage system, there's a risk of damage to the buildings infrastructure leading to loss of structural integrity.

Special requirements are:

- Exposure to corrosive substances
- Restricted depth for installation
- Steep gradients of entrance / exit ramps

Transport routes

In heavily trafficked areas, effective rainwater management is essential. Drainage channels and systems should be correctly sized and with an appropriate design for the specific load requirement.

Special requirements are:

- **Infrastructure protection:** Buildings and outdoor facilities are reliably protected against flooding and consequential damage – for safe operation even in extreme weather.
- **Sustainable cleaning:** Combined drainage and treatment channels (with filter substrate) allow for onward infiltration or reuse.
- **Barrier-free design:** Systems are installed to enable unrestricted access and use by all people – without trip hazards, height differences or functional restrictions.

FASERFIX PARK

Low-profile drainage and evaporation channel for multi-storey and underground car parks

RECYFIX NC

Robust composite linear surface drainage system for heavily trafficked areas

Stadium Building and Stands

The excitement is rising for athletes and spectators.

Façade and spectator stand drainage

There are often technical and structural requirements regarding the drainage of façades and spectator stands. These may differ depending on the country in which the project is constructed.

Specifiers should refer to local regulations regarding design of façades and public buildings.
Example: Flat Roof Directive (Germany)

A surface drainage system installed adjacent to a building façade must have an overall width more than 15 cm, unless the exposure to splash water is reduced by a roof covering. Construction depth restrictions often influence product selection and installation requirements. In addition, façade channels should ideally be corrosion-resistant, as they often come into contact with cleaning solutions.

STEELFIX SLOT D

SLOTTED CHANNEL in steel with neat, discreet inlet design

STEELFIX REGULAR

Channel with aesthetic grating designs for standard and regular façade drainage

Find out more on our application page.

hauraton.com/en-int/application-areas/flat-roofs-and-facades/

Drainage of glass façades

Glass facades are often designed as mullion-transom systems and should be drained by a positive drainage system. In many cases, an upstand height of 15 cm to achieve effective damp-proofing cannot be maintained. As with wooden façades, glass façades require special treatment regarding design of associated drainage, which needs to be considered during the early design stage of the project.

Specifiers should refer to local regulations regarding design of drainage associated with glass façades. Example: DIN 18531 – 18533; Standards relating to waterproofing of buildings / FLL guidelines

FLL guidelines provide advice regarding the transition area between the open space and the building. Guidelines inform that 50 % of the façade total surface area (square metres) should be included within hydraulic calculations used to accurately size façade drainage channels.

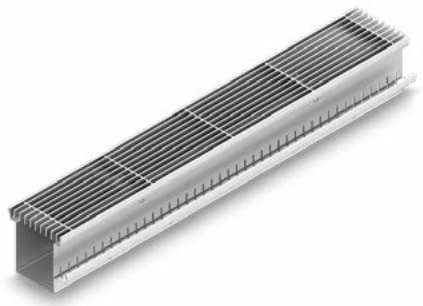
Barrier-free drainage

Barrier-free design of entrances to buildings is becoming increasingly important.

Specifiers should refer to local regulations regarding design of entranceways to public and private buildings. Example: DIN 18040 (Germany)

This standard requires that buildings should be accessible without restricting use by people of all ages and with any physical limitations. These principles of accessibility must be implemented in all new public buildings. Barrier-free solutions are also being included within private buildings to make these more accessible. Although a threshold height of no more than 2 cm is considered as barrier-free, professional design and the requirement for effective waterproofing requires installation details in accordance with the Flat Roof Directive (for Germany). In practice, this means that various factors must be taken into account when designing and installing barrier-free façade channels.

STEELFIX FLEX



Façade channel
for low-lying glass facades

RECYFIX PRO with FIBRETEC design grating

A versatile 'general-purpose' drainage channel
for sports fields and stadiums

Playing Field and Running Track

For exciting and safe competitions.

Grass pitches

Natural turf surfaces are living eco-systems with special requirements for drainage and water retention. To ensure that the lawn remains resilient and ready for play in the long term, excess rainwater must be drained away quickly – without drying out the vegetation layer. Uniform drainage prevents waterlogging, protects the roots and ensures a stable lawn base layer. At the same time, retained rainwater can be used for irrigation in order to conserve water resources and reduce maintenance costs. The drainage system must be hydraulically efficient, easy to maintain and perfectly coordinated with the lawn care system – for a natural playing surface in top shape.

Flat Tank NEO

Versatile solution
for sustainable retention of rainwater

DRAINFIX BLOC

High-volume infiltration and retention
of rainwater

Find out more on our application page.

hauraton.com/en-int/application-areas/sport-drainage/

Artificial turf pitches

Football, hockey or multi-purpose fields with synthetic surfaces have special requirements. The surface structure is permeable to water, but microplastics from granules, blade abrasion or fine particles from tartan running-track surfaces can be washed out with rainwater. An integrated system for drainage and rainwater treatment helps to retain these particles and transfers cleaned water back into the environment. At the same time, the rainwater management system installed must be permanently efficient and mechanically resilient – especially with intensive sporting use and frequent cleaning of the playing surfaces.

Track and field facilities

Whether running tracks, long-jump pits or field-event areas, rainwater management must work quickly and safely across the whole facility to prevent surface water from accumulating and causing risk to competitors, events staff and spectators. Surface drainage and associated components of the rainwater management system must be integrated discreetly and seamlessly within specialist sports surfaces, providing safe and barrier-free movement across these surfaces.
For athletics events held under World Athletics; WA (formerly IAAF), additional special requirements apply, such as the installation height, layout and performance of drainage channels and covers installed around a 200 / 400 metre running track.

SPORTFIX CLEAN

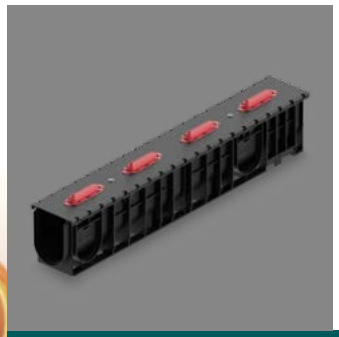
To protect our environment:
Combined surface drainage and microplastic filtration system

SPORTFIX SLOTTED CHANNEL

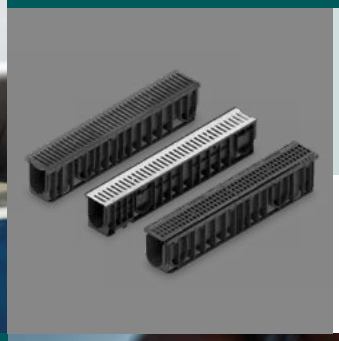
Lightweight, corrosion-free, safe and discreet running track drainage system

Products for a Wide Range of Sports Applications

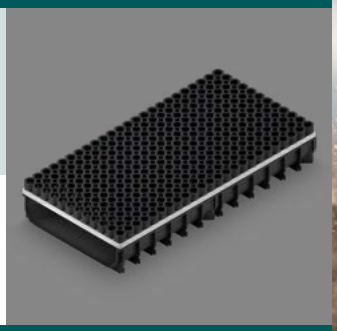
Consistent high-performance on sports projects around the globe.



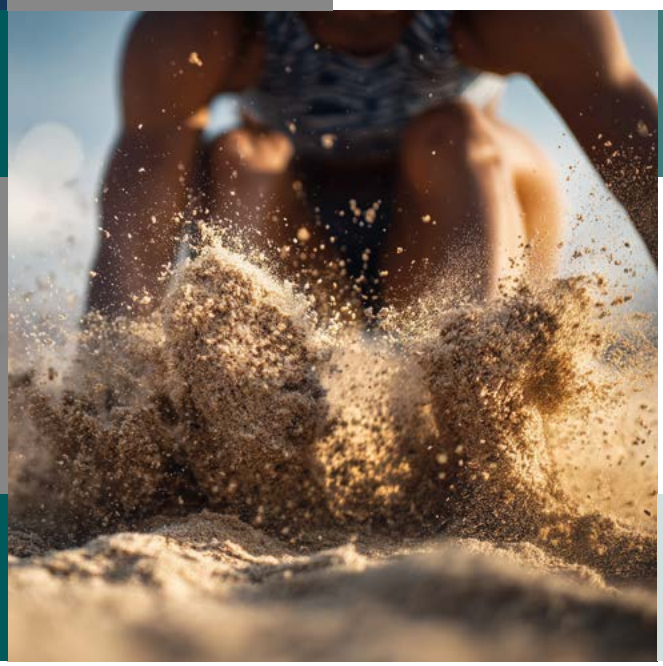
SPORTFIX SLOTTED Channel – Safe, efficient and discreet surface drainage for running tracks



SPORTFIX Channels – Surface drainage system with raised cover for accurate marking of competition running tracks.



SPORTFIX Sand Trap prevent contamination of adjacent sports surfaces.



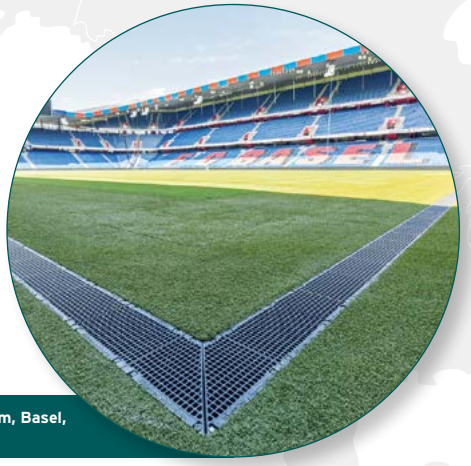
HAURATON provides safe and reliable surface drainage systems along with ancillary products specifically designed for sports facility projects, such as **Sand Traps** and **Soft Kerbs**. This portfolio of sports products are collectively presented within the **SPORTFIX** range.

SPORTFIX PRO – A versatile surface drainage system for sports fields and stadiums.

SPORTFIX CLEAN – Combined surface drainage and microplastic filtration system.

When sports facilities demand maximum performance

From iconic world-class international sports stadiums to frequently used local training facilities – our rainwater management solutions form part of successful sports projects all over the world. **HAURATON** systems ensure safe, reliable and perfect playing field conditions in a wide variety of sports facilities. With extensive international experience and a large number of successfully implemented projects, HAURATON products are the first choice for industry professionals world-wide regarding safe and functional drainage of sports surfaces.



St.-Jakob-Stadium, Basel, Switzerland

Sports Stadium Highlights

2022 FIFA World Cup Stadiums in Qatar

- Khalifa International Stadium, Education City, Al Rayyan
- Ahmad Bin Ali Stadium, Al Rayyan
- Education City Stadium, Al Rayyan
- Al Bayt Stadium, Al Khor

2018 FIFA World Cup Stadiums in Russia

- Luzhniki Stadium, Moscow
- Volgograd Stadium, Volgograd
- Nizhny Novgorod Stadium, Nizhny Novgorod

2014 FIFA World Cup Stadiums in Brazil

- Maracanã Stadium, Rio de Janeiro
- Amazonas Stadium, Manaus

Football Stadiums for the 2012 UEFA European Football Championship in Poland and Ukraine

- Dziadosz (National) Stadium, Warsaw, Poland
- City Stadium, Wrocław, Poland
- City Stadium, Poznań, Poland
- PGE Stadium, Gdańsk, Poland

Maracanã Stadium, Rio de Janeiro, Brazil

Zhukovsky Stadium, Moscow, Russia

Russia

Mongolia

Athletics Stadium, Gorzów, Poland

Abu Dhabi

Dubai

Qatar

United Arab Emirates

Saudi Arabia

Oman

Dubai

Uganda

Seychelles

Malaysia

Brunei

Indonesia

Saint Kitts and Nevis

Tahiti

Mauritius

Australia

Athletics Stadium, San Isidria, Lima

Track and Field

Safety, comfort and reassurance for athletes.

Standards and seamless integration within the sports facility

It's important that drainage channels are integrated seamlessly within the running track surface, avoiding trip hazards and allowing safe and barrier-free movement across these surfaces.

Linear drainage channels are usually installed along the inner edge of the track. Channel units can be supplied with a raised-edge profile to support an adjacent grass (natural / synthetic) surface.

The track surface is installed with a slight gradient (0.5 % - 1 %) sloping from the outer edge towards the drainage channel.

*In some markets its common for the track surface to slope towards the outer edge of the track.

In addition to surface drainage, rainwater management is becoming increasingly important. Designers are integrating systems for water retention, infiltration or reuse, for example for watering of natural grass surfaces. Innovative channel systems such as **SPORTFIX** or **RECYFIX PRO** combine functionality with sustainability and bring durable, safe and environmentally friendly solutions for modern athletics stadiums.

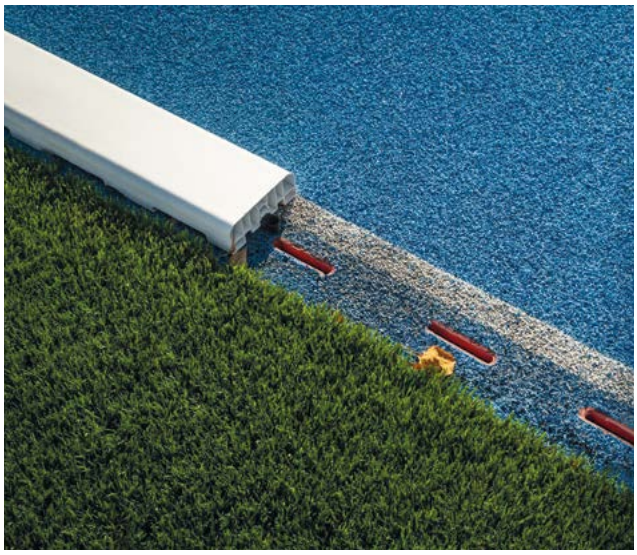
Requirements for channels and covers

Effective drainage is vital to maintain the quality and long-term performance of the sports facility infrastructure. Channel drainage systems must achieve high-capacity hydraulic performance, as large volumes of water may be generated from heavy rainfall across extensive surfaces. Gratings and covers should be safe (anti-slip), durable, low-maintenance and designed for high intake capacity.

SPORTSFIX Channels with raised covers can be used to mark the running line around a 200 / 400 metre track. In some locations systems should be discreet and practical to allow safe, simple passage of athletes during events, and avoid injury or damage to surfaces and equipment. **SPORTFIX SLOTTED Channel** should be used here. In other locations, channel systems with HeelSafe coloured gratings (Polyamide composite) provide practical surface markings or design features.

Checklist for designers

- Follow recognised standards; EN 1433 & DIN 18035 (Germany)
- Consider the running track gradient at early design stage
- Select appropriate, robust and safe channel systems
- Provide accurate hydraulic design; based on worse-case storm events (refer to **HAURATON**)
- Include sustainable rainwater management systems



SPORTFIX SLOTTED Channel with raised cover for accurate marking of competition running tracks.

Athletics Case Studies Around the World

HAURATON SPORTFIX systems have been used on major stadiums and local sports facilities around the globe. We have a long history of successful projects and close partnerships with sports industry professionals involved in sports project design.

Zell am Harmersbach Sports Facility, Germany

This sports facility includes a modern athletics stadium, an artificial turf pitch and additional sports and leisure areas. Drainage is provided via a combined system of surface drainage channels along the perimeter of the pitch, with underground drainage and infiltration / retention elements.

Products used:

- **SPORTFIX Sand Trap Channel**
- **SPORTFIX SLOTTED Channel**
- **FASERFIX KS 100**

City Stadium, Katowice, Poland

Multifunctional facility with artificial turf, running track and training areas. Efficient drainage system ensures safe use of the pitch during rainfall. Sustainable rainwater management avoids heavy discharge into the sewer system.

Products used:

- **SPORTFIX SLOTTED Channel**
- **SPORTFIX Water Jump**
- **SPORTFIX Sand Trap Channel**
- **SPORTFIX Soft Kerbs**

Bentinckspark Sport Complex Hoogeveen, Netherlands

This sports complex consists of a sports hall, athletics track and football complex.

Products used:

- RECYFIX PRO
- RECYFIX STANDARD
- SPORTFIX Channels

Wembley Stadium, London, United Kingdom

Wembley is one of the most famous stadiums in the world and is regarded as the 'Home of Football'. With a capacity of 90,000, it is the largest stadium in the UK and a key venue for international sporting and music events.

Products used:

- FASERFIX SUPER 300
- SERVICE CHANNEL FASERFIX SUPER 300

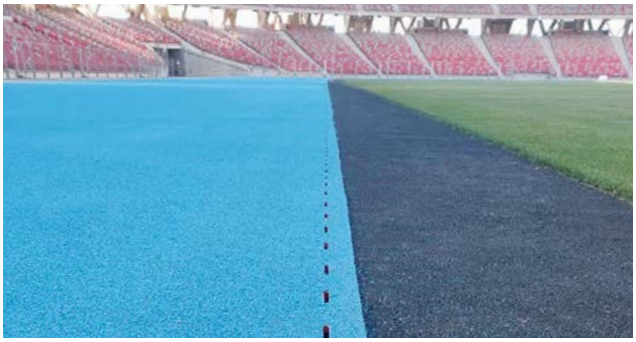
Athletics Case Studies Around the World

Alexander Stadium in Birmingham, United Kingdom

The Alexander Stadium in Birmingham is one of the most important athletics stadiums in the UK. It opened in 1976, was modernised in 2022 and has a capacity of around 18,000. It was the main venue for the 2022 Commonwealth Games.

Products used:

- **SPORTFIX SLOTTED Channel**
- **SPORTFIX Hurdles**
- **SPORTFIX Water Jump**
- **SPORTFIX Plastic Running Track Cover**



Oran Olympic Stadium, Miloud Hadefi Stadium, Algeria

The former Olympic Stadium in Oran is one of the most modern sports stadiums in North Africa. With a capacity of over 40,000 spectators, a hybrid field and a very striking steel mesh façade, it forms part of a large sports complex.

Products used:

- **RECYFIX PRO**
- **SPORTFIX SLOTTED Channel**
- **SPORTFIX Distribution Shaft**
- **SPORTFIX Water Jump**
- **SPORTFIX Aluminium Kerb**

IYU Recreation Reserve, Melbourne, Australia

At the IYU Recreation Reserve in south-east Melbourne, the award-winning **SPORTFIX CLEAN** carbon filter system from **HAURATON** ensures safe drainage and rainwater treatment. The large-scale sports complex relies on a system with innovative and pragmatic technology to filter and remove microplastics and pollutants from stormwater runoff – a benchmark for greater responsibility in modern sports facility design and construction.

Products used:

- **SPORTFIX CLEAN**

Wibawa Mukti Stadium, Indonesia

A modern multi-purpose stadium with the following: Artificial turf football field, athletics track, high jump track with run-up hill, shot-put facility, pole vault track with run-up hill, sandpit with long jump track, baseball field with natural and sand surface, beach volleyball courts and multi-purpose field.

Products used:

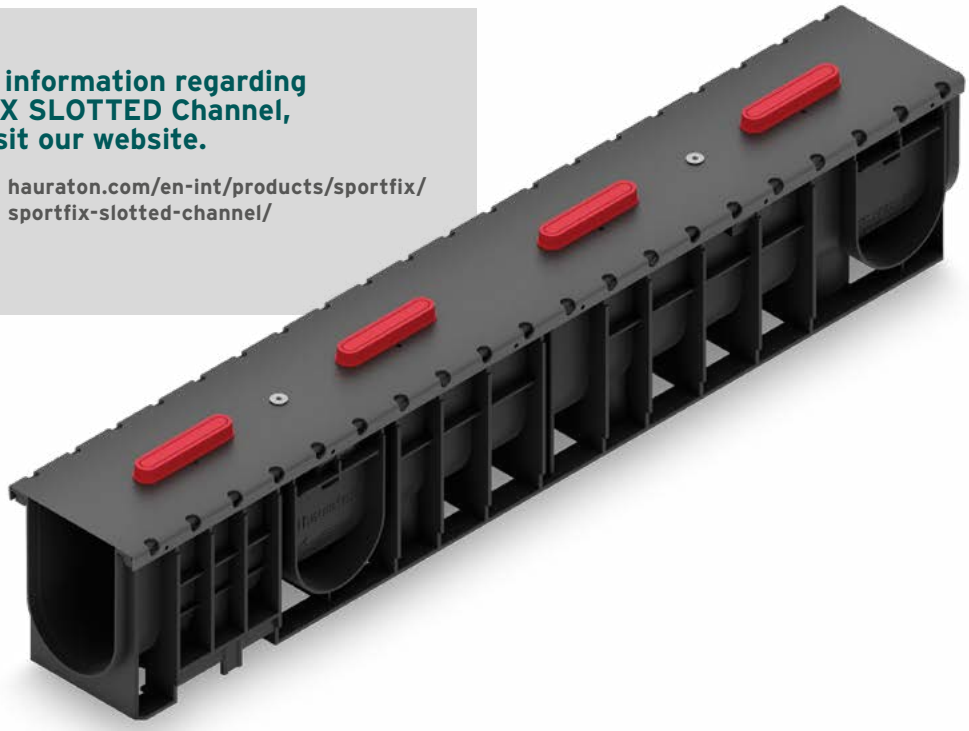
- **SPORTFIX SLOTTED Channel**

SPORTFIX SLOTTED Channel

The professional solution for stadiums and sports facilities in a class of their own.

For more information regarding SPORTFIX SLOTTED Channel, please visit our website.

hauraton.com/en-int/products/sportfix/sportfix-slotted-channel/



Your benefits with SPORTFIX SLOTTED Channels

SPORTFIX SLOTTED Channels ensure discreet and reliable surface drainage for running tracks. The drainage system can be installed adjacent to turf (with upstand) or with continuous running track surfacing either side (without upstand). The system material is recycled polypropylene, which guarantees excellent durability, smooth hydraulic flow and corrosion resistance.

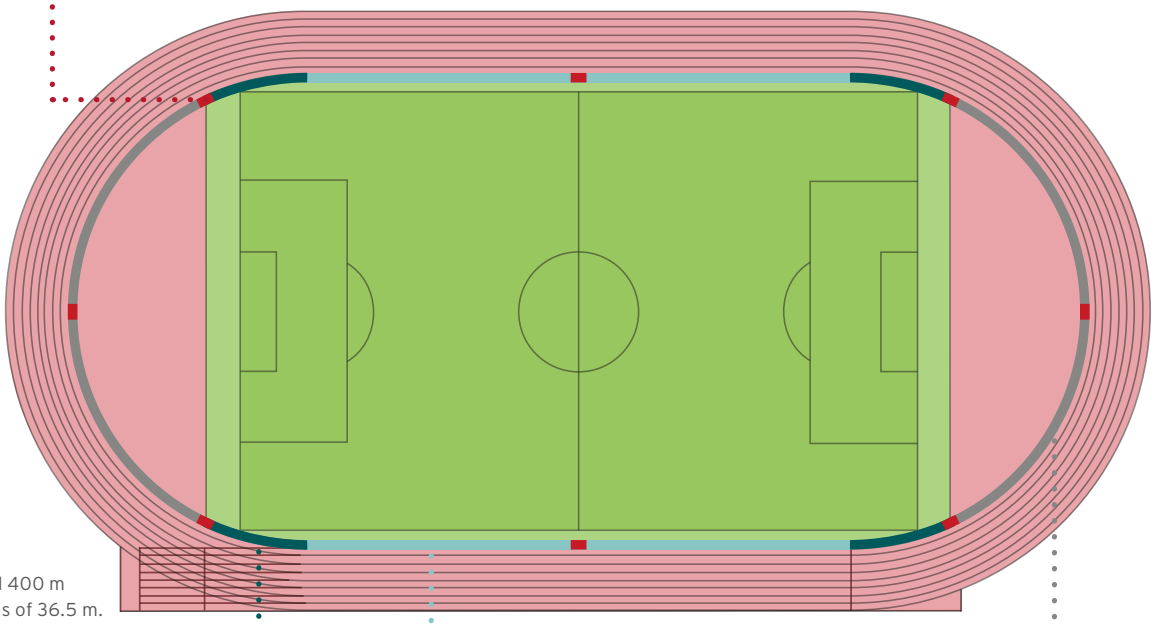
- Can be combined with **SPORTFIX PRO** or **SPORTFIX STANDARD**
- EPDM slotted inserts: Once the track surface has been laid, the slots are exposed by simply pulling off the cover (pull tab).
- Optional side openings on one or both sides for the connection of a second drainage level
- Additional access points (inlet boxes) for easy maintenance
- KTL coating: this ensures optimal adhesion with the running track surface
- Can be combined with white plastic covers or aluminium kerb for track markings

SPORTFIX SLOTTED CHANNEL Safe, efficient and discreet

Sump Unit

White **SPORTFIX** plastic Track Cover

A **SPORTFIX** aluminium Track Kerb (**Item No. 7085**) is also available as an optional extra in the set for 400 m tracks.



Note:
This is a standard 400 m track with a radius of 36.5 m. Other track configurations should be designed on a case-by-case basis.

Segment	A			B			C		
Product	**Channel**	**Sump Unit**	**Track Cover**	**Channel**	**Sump Unit**	**Track Cover**	**Channel**	**Sump Unit**	**Track Cover**
Quantity in pcs.	50	4	52	168	2	169	178	2	179
Item No.	10807	10825	10812	10807	10825	10802	10806	10825	10812
Length	1000 mm	500 mm	1000 mm	1000 mm	500 mm	1000 mm	1000 mm	500 mm	1000 mm
Height	199 mm	500 mm	94 mm	199 mm	500 mm	94 mm	184 mm	500 mm	94 mm
Weight	5.79 kg	6.19 kg	1.40 kg	5.79 kg	6.19 kg	1.40 kg	5.80 kg	6.19 kg	1.40 kg

Channels for the segment area with adjacent playing field

Channels for the segment area with adjacent playing field

Channels for the segment area (running track surface on both sides)

The lengths of the individual channel sections must be selected on a project-specific basis.

SPORTFIX Channel with raised track cover

The ideal combination of a drainage channel with a removable raised boundary for **level** tracks.

For more information regarding SPORTFIX Channel, please visit our website.

hauraton.com/en-int/products/sportfix/sportfix-channel-with-running-track-boundaries/

How SPORTFIX channels with raised track covers benefit you

The **SPORTFIX channel** is the classic choice among sports ground drainage systems. As an open channel combined with a raised white track cover, the channel is universally usable. The channel body, made from recycled polypropylene, has a long service life, is frost-resistant and very light.

- Integrated edge-frame made of KTL-coated steel for greater security
- Complies with World Athletics guidelines
- White PVC track covers are attached to the channel using four clips
- Track covers are available as straight and curved units so that they can be laid precisely along the track
- **SPORTFIX channels** with track covers provide the running boundary so are set out to exact dimensions to form the official 400 m athletics track

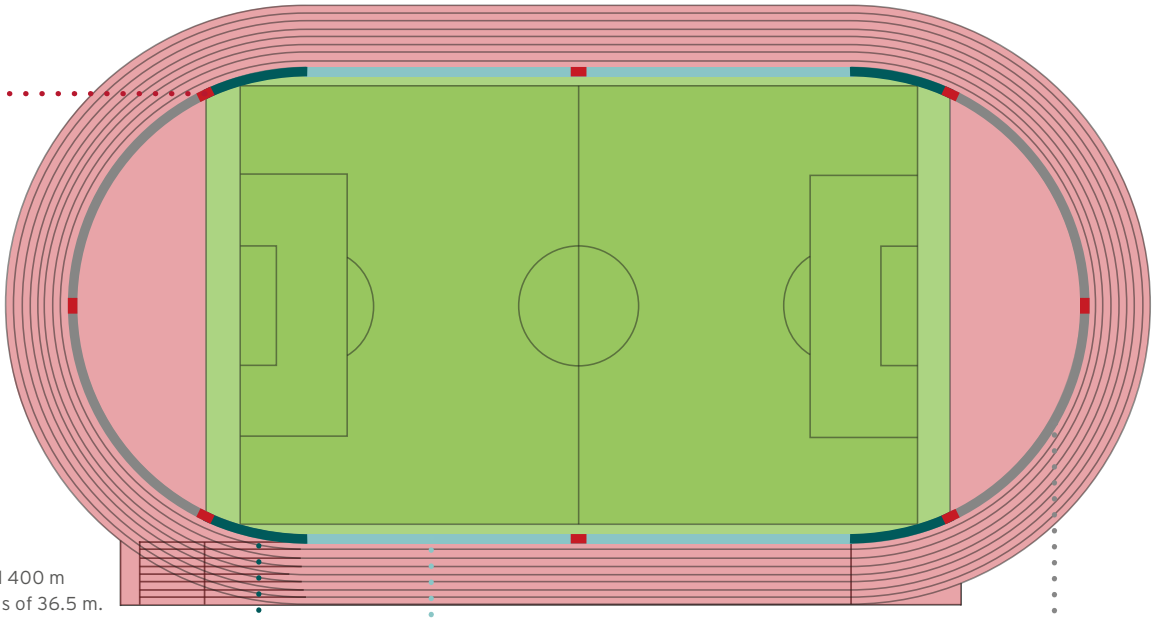
SPORTFIX channel in use

Sump Unit

The grass field and the track are on the same level.

Same Level

White **SPORTFIX** plastic Track Cover



Note:
This is a standard 400 m track with a radius of 36.5 m. Other track configurations should be designed on a case-by-case basis.

Segment	A			B			C		
Product	Channel	Sump Unit	Track Cover	Channel	Sump Unit	Track Cover	Channel	Sump Unit	Track Cover
Quantity in pcs.	50	4	52	168	2	169	178	2	179
Item No.	10803	10815	10811	10803	10815	10801	10803	10815	10811
Length	1000 mm	500 mm	1000 mm	1000 mm	500 mm	1000 mm	1000 mm	500 mm	1000 mm
Height	182 mm	485 mm	94 mm	182 mm	485 mm	94 mm	182 mm	485 mm	94 mm
Weight	3.10 kg	4.36 kg	1.44 kg	3.10 kg	4.36 kg	1.44 kg	3.10 kg	4.36 kg	1.44 kg

Channels for the segment area with adjacent playing field

Channels for the segment area with adjacent playing field

Channels for the segment area (running track surface on both sides)

The lengths of the individual channel sections must be selected on a project-specific basis.

SPORTFIX channel with raised track cover

The ideal combination of a drainage channel with a removable raised boundary for **elevated/sunken** tracks.

For more information regarding SPORTFIX Channel, please visit our website.

hauraton.com/en-int/products/sportfix/sportfix-channel-with-running-track-boundaries/

SPORTFIX channel in use

How SPORTFIX channels with raised track covers benefit you

The **SPORTFIX channel** is the classic choice among sports ground drainage systems. As an open channel combined with a raised white track cover, the channel is universally usable. The channel body, made from recycled polypropylene, has a long service life, is frost-resistant and very light.

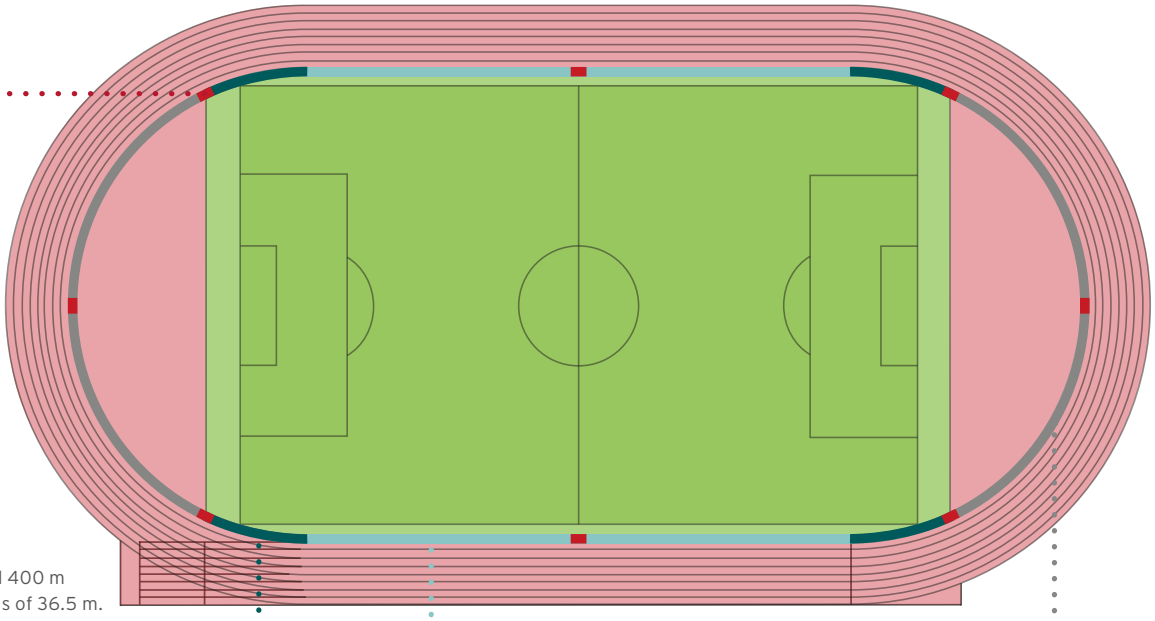
- Integrated edge-frame made of KTL-coated steel for greater security
- Complies with World Athletics guidelines
- White PVC track covers are attached to the channel using 12 pins
- Track covers are available as straight and curved units so that they can be laid precisely along the track
- **SPORTFIX channels** with track covers provide the running boundary so are set out to exact dimensions to form the official 400 m athletics track

Sump Unit

Different Level

The grass field and track are at different levels.
The turf is higher than the track.

White **SPORTFIX** plastic Track Cover



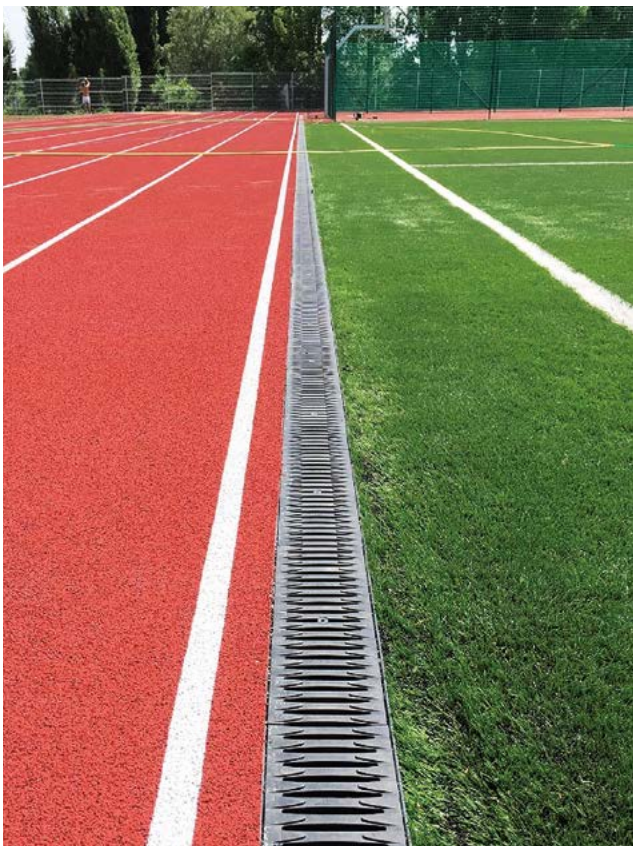
Note:
This is a standard 400 m track with a radius of 36.5 m. Other track configurations should be designed on a case-by-case basis.

Segment	A			B			C		
Product	Channel	Sump Unit	Track Cover	Channel	Sump Unit	Track Cover	Channel	Sump Unit	Track Cover
Quantity in pcs.	50	4	52	168	2	169	178	2	179
Item No.	10814	10805	10811	10804	10805	10801	10803	10815	10811
Length	1000 mm	500 mm	1000 mm	1000 mm	500 mm	1000 mm	1000 mm	500 mm	1000 mm
Height	220 mm	524 mm	94 mm	220 mm	524 mm	94 mm	182 mm	485 mm	94 mm
Weight	3.57 kg	5.13 kg	1.44 kg	3.57 kg	5.13 kg	1.44 kg	3.10 kg	4.36 kg	1.44 kg
	Channels with a raised edge for the track area with adjacent sports field			Channels with a raised edge for the track area with adjacent sports field			Channels for the segment area (running track surface on both sides)		

The lengths of the individual channel sections must be selected on a project-specific basis.

SPORTFIX PRO with FIBRETEC composite gratings

The versatile solution for drainage of sports fields and stadiums.



FIBRETEC slotted grating is also available in a wide range of colours

How SPORTFIX PRO with FIBRETEC gratings benefits you

The **SPORTFIX PRO** linear drainage system provides reliable rainwater management for a wide range of applications. The lightweight channel body, made from recycled polypropylene, is extremely robust, easy to transport, and quick to install.

- The material is resistant to frost, de-icing salt, UV radiation and corrosion
- Integrated edge-rail for greater resilience and safety
- Installation along straight and radius sections of running tracks is possible without cutting the channels, thanks to the innovative tongue-and-groove channel joint design
- Cutting to length or angle can be easily achieved on site.

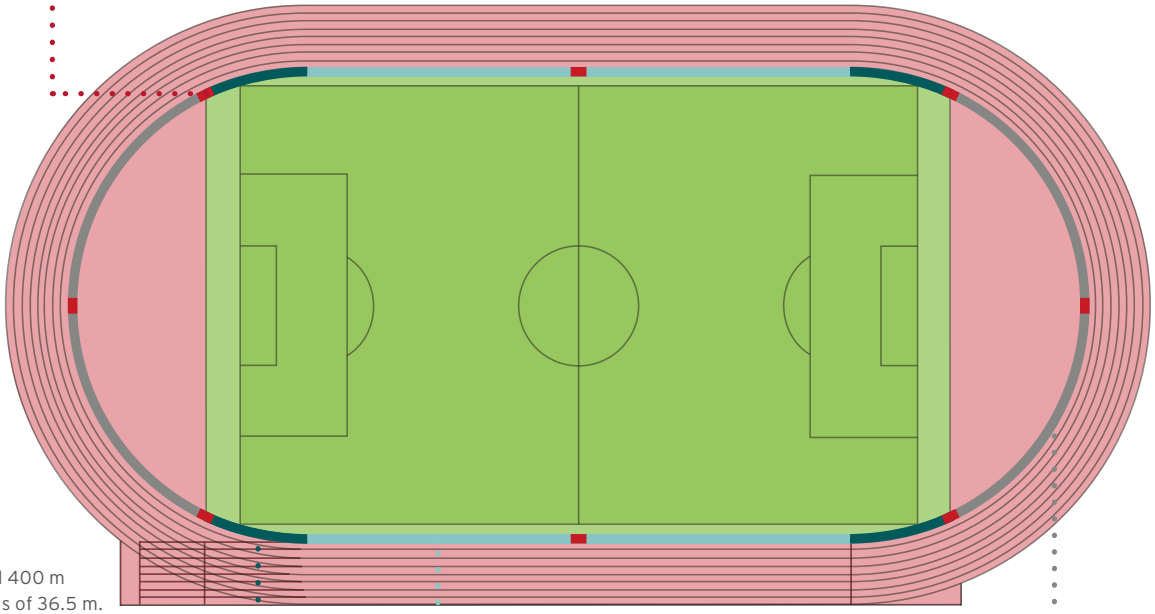
For more information regarding SPORTFIX PRO, please visit our website.

hauraton.com/en-int/products/sportfix/sportfix-pro/

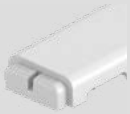
Sump Unit

White **SPORTFIX** plastic Track Cover

A **SPORTFIX** aluminium Track Kerb (**Item No. 7085**) is also available as an optional extra in the set for 400 m tracks.



Note:
This is a standard 400 m track with a radius of 36.5 m. Other track configurations should be designed on a case-by-case basis.

Segment	A		B		C		C (Alternative)		
Product	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**White Track Cover**
Quantity in pcs.	50	4	168	2	178	2	178	2	179
Item No.	7520	7525	7520	7525	7520	7525	10806	10825	10812
Length	1000 mm	500 mm	1000 mm	500 mm	1000 mm	500 mm	1000 mm	500 mm	1000 mm
Height	200 mm	504 mm	200 mm	504 mm	200 mm	504 mm	184 mm	500 mm	94 mm
Weight	4.89 kg	5.89 kg	4.89 kg	5.89 kg	4.89 kg	5.89 kg	5.80 kg	6.19 kg	1.39 kg
	Channels for the segment area with adjacent playing field		Channels for the segment area with adjacent playing field		Channels for the segment area (running track surface on both sides)		Channels for the segment area (running track surface on both sides)		

The lengths of the individual channel sections must be selected on a project-specific basis.

SPORTIFX PRO with GUGI composite grating

The versatile solution for drainage of sports fields and stadiums.

GUGI composite grating

How SPORTFIX PRO with GUGI gratings benefits you

The **SPORTFIX PRO** linear drainage system provides reliable rainwater management for a wide range of applications. The lightweight channel body, made from recycled polypropylene, is extremely robust, easy to transport, and quick to install.

- The material is resistant to frost, de-icing salt, UV radiation and corrosion
- Integrated edge-rail for greater resilience and safety
- Installation along straight and radius sections of running tracks is possible without cutting the channels, thanks to the innovative tongue-and-groove channel joint design
- Cutting to length or angle can be easily achieved on site.

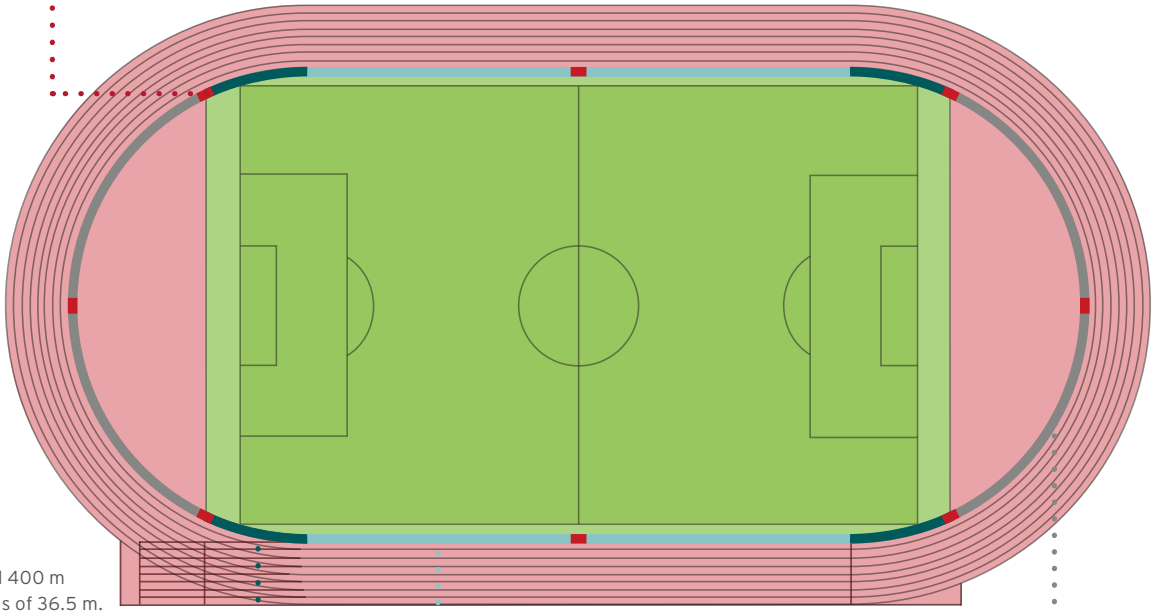
For more information regarding SPORTFIX PRO, please visit our website.

hauraton.com/en-int/products/sportfix/sportfix-pro/

Sump Unit

White **SPORTFIX** plastic Track Cover

A **SPORTFIX** aluminium Track Kerb (**Item No. 7085**) is also available as an optional extra in the set for 400 m tracks.



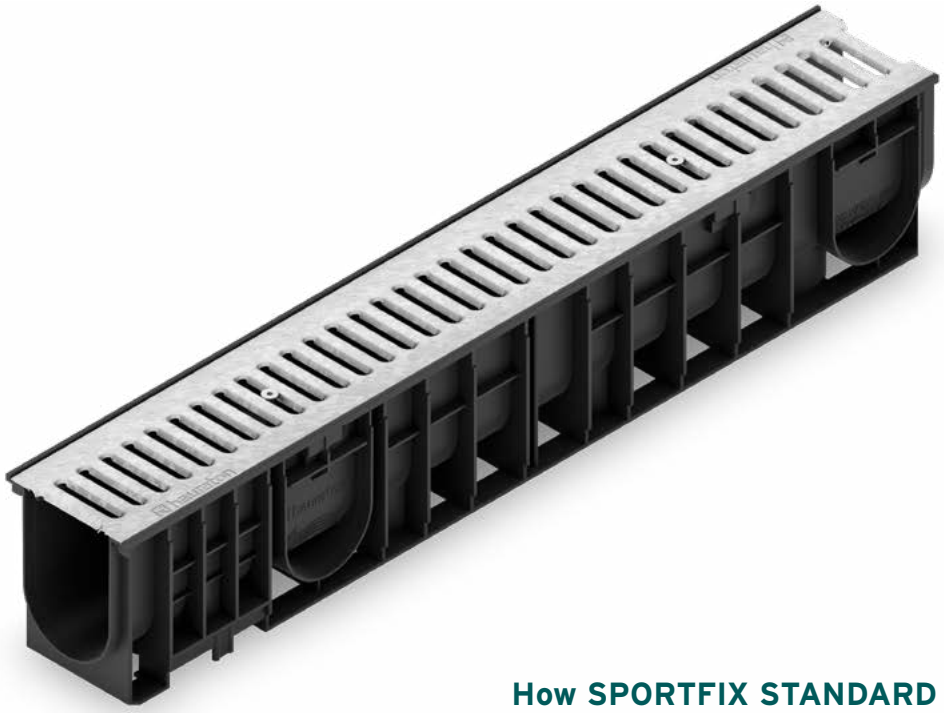
Note:
This is a standard 400 m track with a radius of 36.5 m. Other track configurations should be designed on a case-by-case basis.

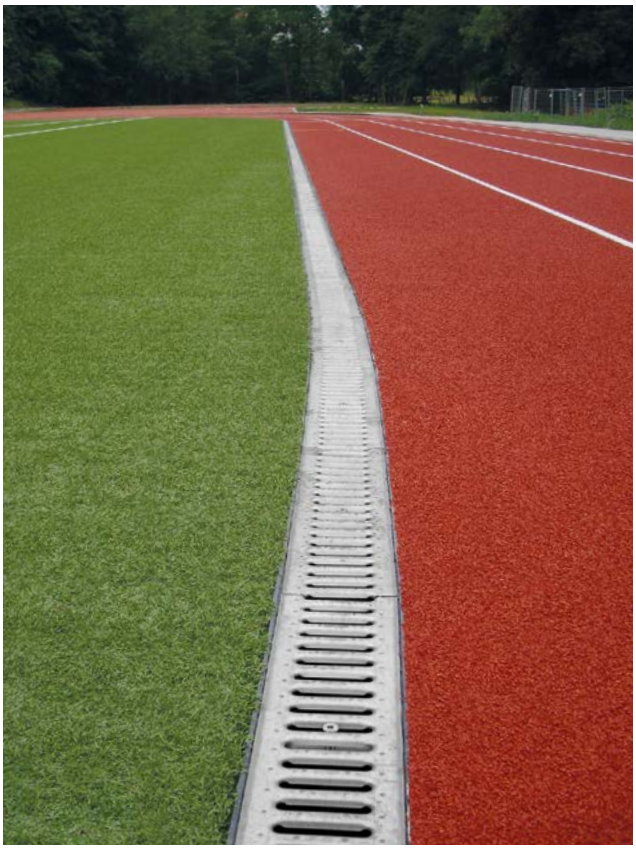
Segment	A		B		C		C (Alternative)		
Product	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**White Track Cover**
Quantity in pcs.	50	4	168	2	178	2	178	2	179
Item No.	7510	7515	7510	7515	7510	7515	10806	10825	10812
Length	1000 mm	500 mm	1000 mm	500 mm	1000 mm	500 mm	1000 mm	500 mm	1000 mm
Height	200 mm	504 mm	200 mm	504 mm	200 mm	504 mm	184 mm	500 mm	94 mm
Weight	4.66 kg	5.85 kg	4.66 kg	5.85 kg	4.66 kg	5.85 kg	5.80 kg	6.19 kg	1.39 kg
	Channels for the segment area with adjacent playing field		Channels for the segment area with adjacent playing field		Channels for the segment area (running track surface on both sides)		Channels for the segment area (running track surface on both sides)		

The lengths of the individual channel sections must be selected on a project-specific basis.

SPORTFIX STANDARD with galvanised slotted grating

Lightweight and durable track drainage.





Galvanised slotted grating

How SPORTFIX STANDARD with galvanised slotted grating benefits you

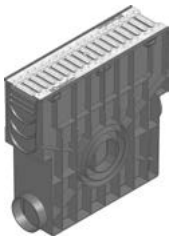
The **SPORTFIX STANDARD** drainage system provides reliable surface drainage for a wide range of applications. The lightweight channel body, made from recycled polypropylene, is extremely robust, easy to transport and quick to install.

- The material is resistant to frost, de-icing salt, UV radiation and corrosion
- The material is recyclable at the end of the product's life
- Trafficable
- Optional pre-formed openings on one or both sides for channel or pipe connection

For more information regarding SPORTFIX STANDARD, please visit our website.

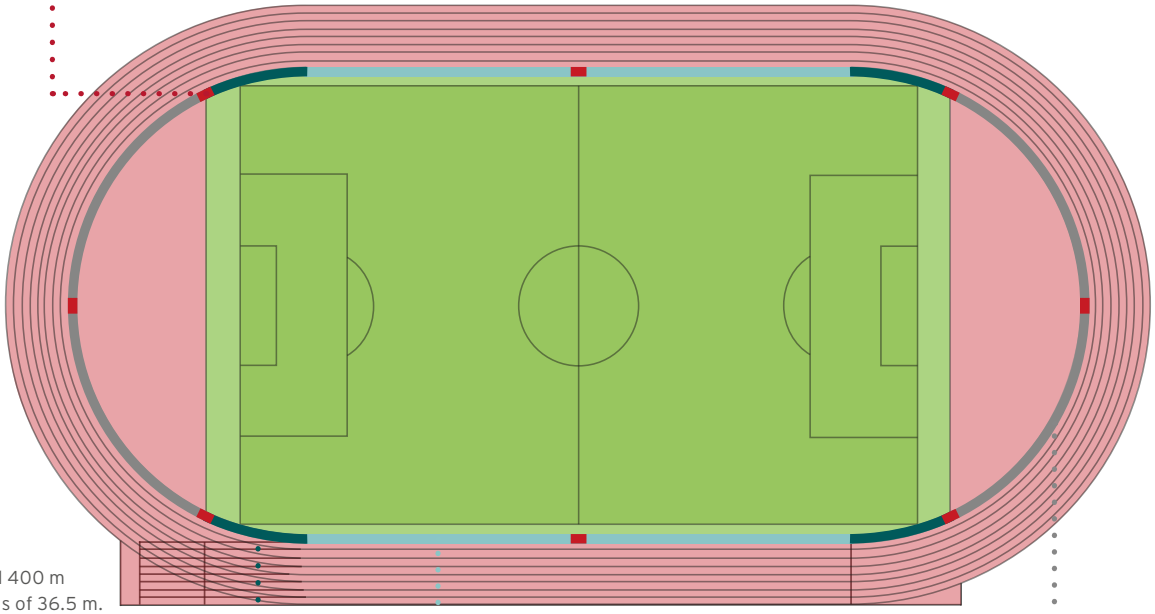
hauraton.com/en-int/products/sportfix/sportfix-standard

Sump Unit



White **SPORTFIX** plastic Track Cover

A **SPORTFIX** aluminium Track Kerb (**Item No. 7085**) is also available as an optional extra in the set for 400 m tracks.



Note:
This is a standard 400 m track with a radius of 36.5 m. Other track configurations should be designed on a case-by-case basis.

Segment	A		B		C		C (Alternative)		
Product	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**Channel**	**Sump Unit**	**White Track Cover**
Quantity in pcs.	50	4	168	2	178	2	178	2	179
Item No.	7530	7535	7530	7535	7530	7535	10806	10825	10812
Length	1000 mm	500 mm	1000 mm	500 mm	1000 mm	500 mm	1000 mm	500 mm	1000 mm
Height	185 mm	488 mm	200 mm	504 mm	200 mm	504 mm	184 mm	500 mm	94 mm
Weight	4.58 kg	4.90 kg	4.58 kg	4.90 kg	4.58 kg	4.90 kg	5.80 kg	6.19 kg	1.39 kg
	Channels for the segment area with adjacent playing field		Channels for the segment area with adjacent playing field		Channels for the segment area (running track surface on both sides)		Channels for the segment area (running track surface on both sides)		

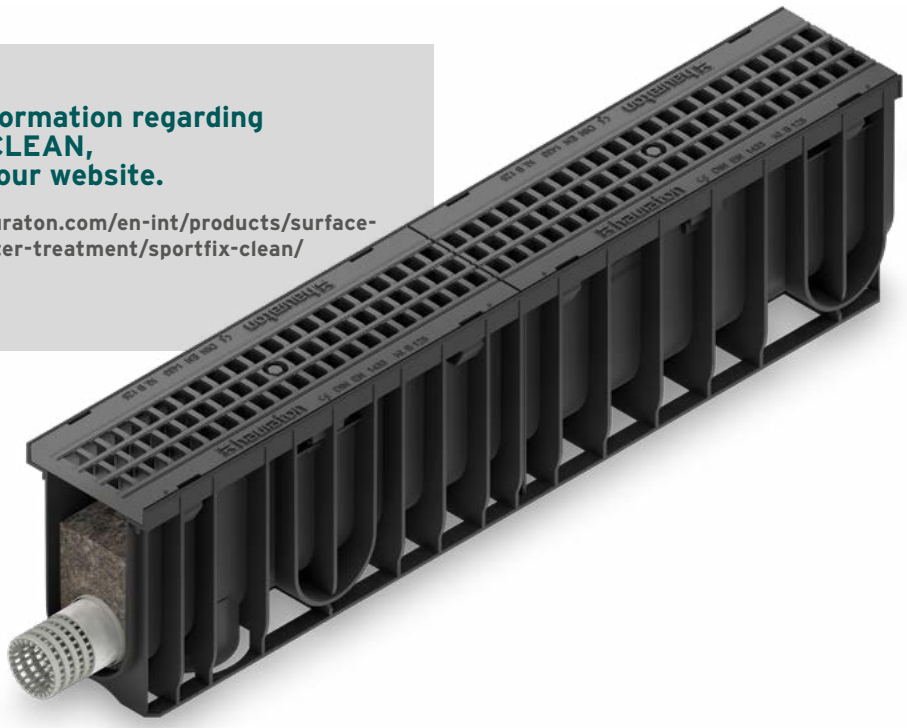
The lengths of the individual channel sections must be selected on a project-specific basis.

SPORTFIX CLEAN

Combined drainage and rainwater treatment channel (with carbon filter substrate) – Safely retains microplastics from artificial turf pitches.

For more information regarding SPORTFIX CLEAN, please visit our website.

hauraton.com/en-int/products/surface-water-treatment/sportfix-clean/



Our solution – Your benefits with SPORTFIX CLEAN

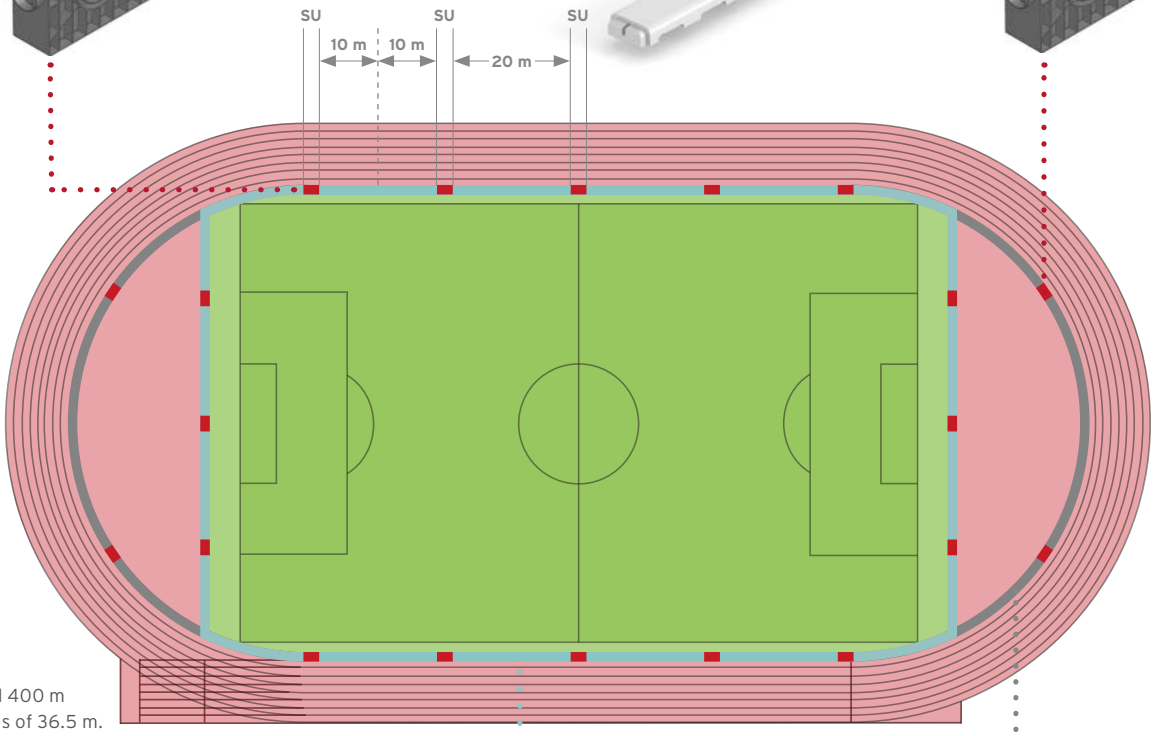
Drainage systems for artificial turf pitches must provide reliable drainage and infiltration. The infill material and broken blades of grass (= microplastics) must be collected before the water enters a sewer system or groundwater (in the event of infiltration).
SPORTFIX CLEAN drainage and filter system is the effective solution for retaining microplastics and infill material on artificial turf pitches. The **CARBOTEC** filter substrate reliably filters out particles with the smallest grain sizes of up to 0.45 µm (0.00045 mm). The filter substrate consists of natural, inorganic components and reliably cleans rainwater from artificial turf pitches.

- Safe linear drainage all around the artificial turf surface
- Large filter area for absorbing particle loads (10 m² per 100 metres of channel run, depending on the construction of the sports field, the filter area adds up to 30 - 40 m²)
- With correct dimensioning, 95 % of all rain events are fully captured
- Proven cleaning performance of over 97 %
- System also available with integral surface clamp for synthetic hockey turf
- Permanent retention and filtering of particulate pollutants, e.g. track abrasion as microplastics
- Low long-term maintenance requirements and low costs – Every 3 - 5 years the collected particles must be removed from the top of the filter substrate (which remains intact).
- Particles are trapped and permanently retained to prevent environmental pollution
- Awarded the Environmental Technology Award Baden-Württemberg 2019 (Germany)

Sump Unit

White **SPORTFIX** plastic Track Cover

SPORTFIX SLOTTED Channel Sump Unit

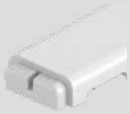


Note:
This is a standard 400 m track with a radius of 36.5 m. Other track configurations should be designed on a case-by-case basis.

Segment	A					B		
Product	Channel starting unit	Channel middle unit	Sump Unit	Blind Cover	PVC-U pipe outlet	Channel	Sump Unit	White Track Cover
Quantity in pcs.	8	344	16	8	12	178	2	179
Item No.	7701	7702	7700	7711	901	10806	10825	10812
Length	1000 mm	1000 mm	500 mm	-	-	1000 mm	500 mm	1000 mm
Height	250 mm	250 mm	500 mm	-	-	184 mm	500 mm	94 mm
Weight	5.89 kg	5.89 kg	5.28 kg	-	-	5.80 kg	6.19 kg	1.39 kg

SPORTFIX CLEAN with turf on one side

SPORTFIX SLOTTED Channel with a synthetic surface on both sides



The lengths of the individual channel sections must be selected on a project-specific basis.

The Cleaning Principle SPORTFIX CLEAN

Every year, several tons of microplastics are washed into the ocean from artificial turf pitches. **SPORTFIX CLEAN** retains artificial turf microplastics.

Important contribution to a clean environment

The demand for artificial turf sports pitches is very high: around 3,000 new pitches are built worldwide every year, 1,000 of them in Europe. Many of these pitches are filled with plastic granules, which, together with breakage and abrasion of artificial turf fibres, can enter the environment via various routes.

Microplastics in artificial turf

"Compared with natural turf pitches, artificial turf pitches offer significantly more extensive possibilities of use. Without artificial turf pitches, it would not be possible to guarantee anywhere near an adequate range of football pitches, especially in larger cities and municipalities," said the German Football Association (DFB) in a statement.

The benefits of artificial turf are numerous:

- According to the DFB, approx. 2,500 hours of use/ year on artificial turf, compared to 800 hours on natural turf
- Constant training conditions all year round (easy to clear snow in winter)
- Hardly any pitch closures due to unplayability, easy to clean and low maintenance

The problem: Plastic granules and synthetic blades of grass pollute the environment

Despite the many advantages of artificial turf pitches mentioned above, the main difference to natural turf is that different granules are added as infill materials in order to achieve the most natural playing feeling possible. These fillers and also the grass fibres themselves are distributed in the immediate vicinity of the turf pitch over the course of their useful life. In contrast to natural grass surfaces, they do not decompose there, but accumulate in the upper soil layers, can be carried into bodies of water and reach the groundwater.

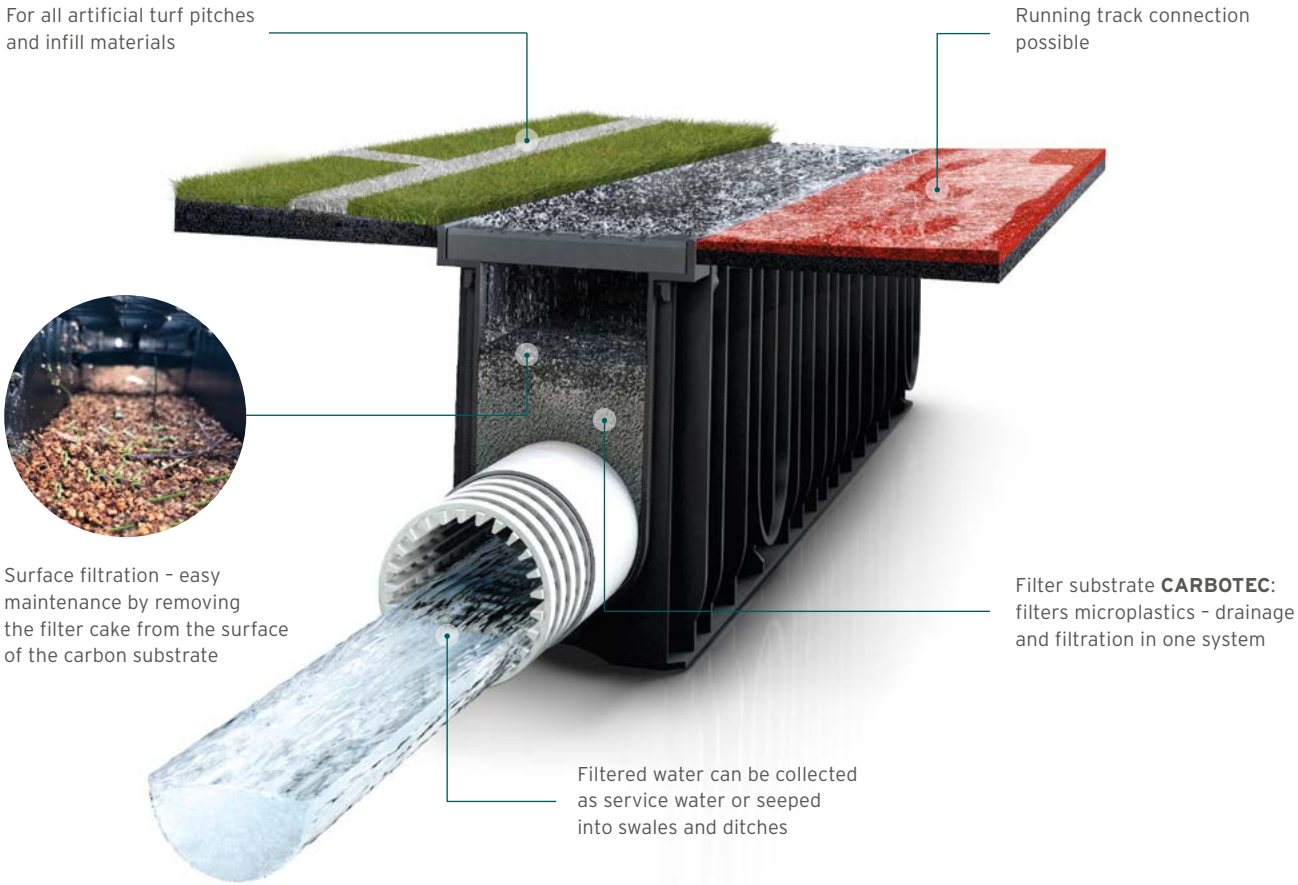
In order to prevent most of the environmentally harmful effects of microplastic particles from artificial turf surfaces, the emissions ...

- **of the plastic/rubber granules used for infill** (also known as infill material) must be minimised by means of a retention system.
- **of synthetic grass fibres**, that break off due to wear and tear during play must also be retained.

Even though rubber granules are now banned as infill materials, substitute materials bring their own issues. For example, sand and olive pits increase the abrasion of turf fibres (= more discharge) and cork should not move into the groundwater. Therefore, it makes sense to retain turf fibres and infill material in all cases.

Microplastics due to abrasion of running tracks

Microplastics are not only produced on artificial turf pitches, but also on tartan tracks in athletics. As a wear layer, EPDM granules are interspersed in a polyurethane layer.
These granules dissolve during use, especially in the first 1 - 2 years of use, and are carried by rain into the adjacent areas. It is therefore important to create appropriate retention options here as well to retain microplastics from water bodies and the environment.

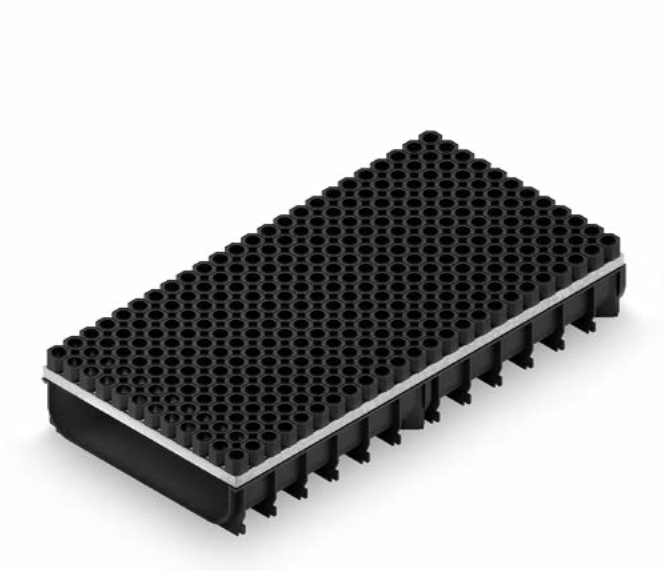


SPORTFIX
Sand Trap Channels & Soft Kerbs

HAURATON supply reliable surface drainage systems as well as products specifically designed for special applications within sports facility construction, such as **Sand Trap Channels** and **Soft Kerbs**.

SPORTFIX Sand Trap Channels & SPORTFIX Soft Kerbs

SPORTFIX Sand Traps for long jump and triple jump pits require appropriate separation from other surface coverings. **SPORTFIX Soft Kerbs** are fitted with rubber padding to reliably protect athletes from injury. At the same time, Sand Trap Channels retain thrown sand to avoid contamination of the adjacent sports surfaces. Both products can be adapted to suit the respective layout of the facility.

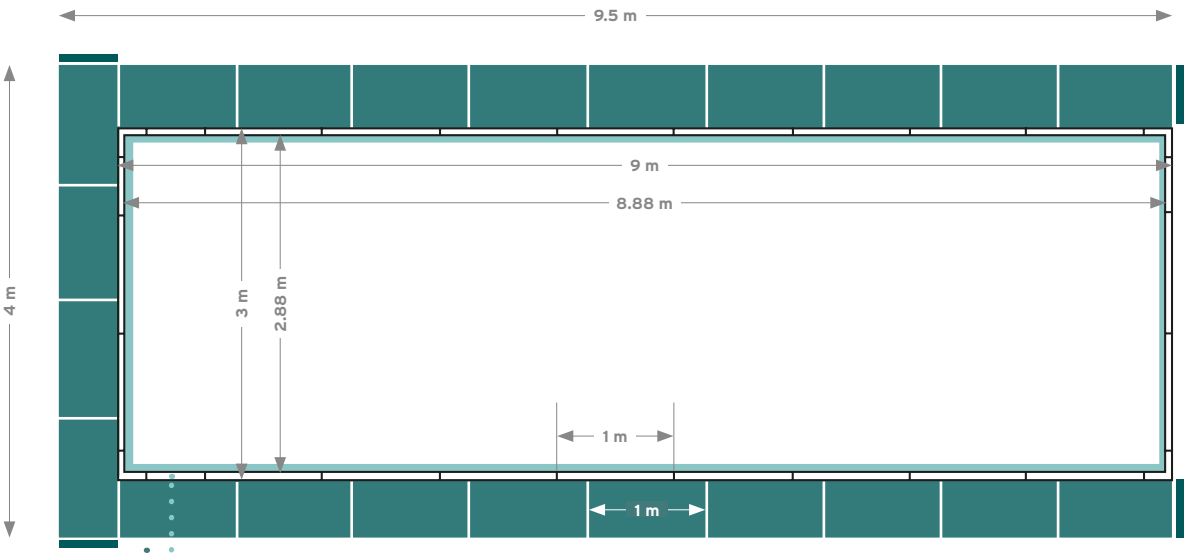


SPORTFIX Sand Trap Channels provide a secure barrier to prevent sand contamination of adjacent surfaces

SPORTFIX Soft Kerbs border the runway tracks and sand pits to protect athletes from injuries during competition

Find out about other products in the SPORTFIX range.

hauraton.com/en-int/products/sportfix/



Product	Quantity	Item No.	Weight kg/Unit
SPORTFIX Soft Kerb, white, height 400 mm, 1 m	20	7203	53.00 kg
SPORTFIX Soft Kerb, white, height 400 mm, 0.5 m	4	7204	25.60 kg
SPORTFIX Soft Kerb corner piece, white, height 400 mm, 0,25 x 0,25 m	4	7209	23.00 kg
SPORTFIX Sand Trap Channel, 1 m	22	7740	19.81 kg
End cap **SPORTFIX Sand Trap Channel**	4	7248	1.33 kg

System quantities can be individually adapted to suit the exact layout of the area under design.

SPORTFIX Water Jump and Hurdles

Equipment for stadiums from a single source.

HAURATON – Your Expert for Sports Construction

Sports stadiums require special equipment to provide the appropriate infrastructure to host a wide variety of events. Whether it's a **Water Jump** and **Hurdles** for obstacle courses or distribution chambers to bring power where it's needed, **HAURATON** products and systems can be combined as needed to suit the specific layout and requirements of each stadium.

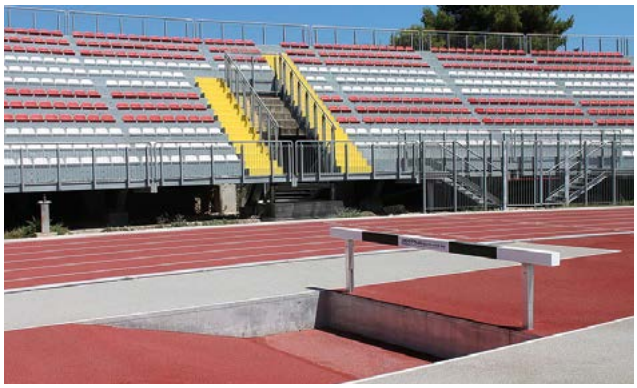
HAURATON sports building products have been used in many iconic sports stadiums around the world, which feature in major international sporting events such as the FIFA World Cup finals in Brazil, Russia and Qatar, and the European Football Championship in Poland and Ukraine.

As a member of the 'International Association of Sports and Leisure Facilities' (IAKs), the **HAURATON** drainage experts are familiar with all applicable standards and guidelines, practical requirements and current trends.

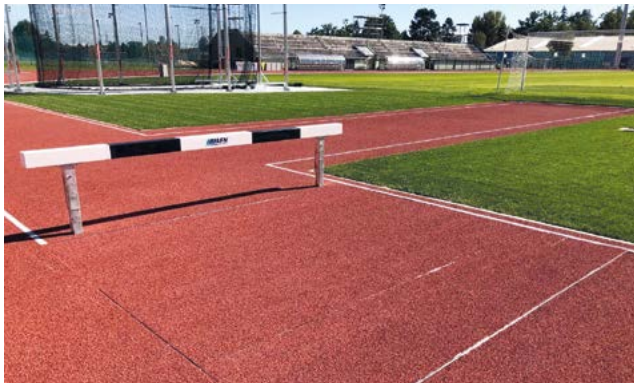
The benefits:

- All products and systems from a single source
- Planned construction process
- World Athletics certified products

Water Jump with height-adjustable Hurdle, Ostrava, Czech Republic



Water Jump with height-adjustable Hurdle, Bartetta Stadium, Italy



Water Jump with inlaid cover, Kranj Stadium, Slovenia

Find out about other products in the SPORTFIX range.

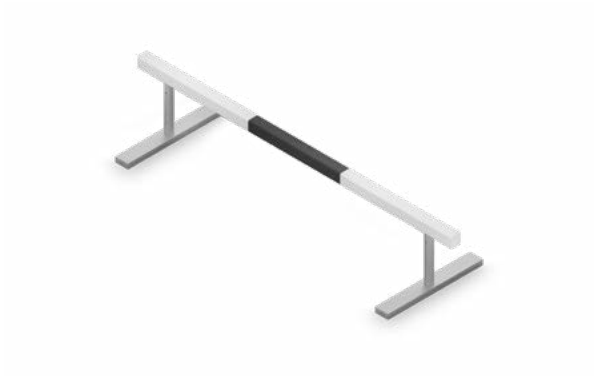
hauraton.com/en-int/products/sportfix/

Your benefits with SPORTFIX Water Jump

The **SPORTFIX Water Jump** provides a complete kit for the water jump basin, including the hurdle. Dimensions correspond to guidelines provided by World Athletics.

- Aluminium kit (including hurdle) for quick installation and easy transport
- With supply shaft for water inlet and drain
- Hurdle included: Hurdle is suitable for all relevant competitions (height-adjustable to three heights)

Product	Item No.	Weight
SPORTFIX Water Jump Kit 3850 x 4440 x 678 mm (L x W x H)	7150	271.80 kg



Your benefits with SPORTFIX Hurdles

SPORTFIX Hurdles are barriers designed for use in the track hurdles and steeplechase events. With adjustable height, SPORTFIX Hurdles can be used for local athletics events and also at competition level, e.g. sports facilities for World Athletics Championships, European Championships etc.

- Set of four Hurdles for training and events
- Height adjustable for use in a range of competitions
- Complies with World Athletics guidelines
- Can also be used in conjunction with the **SPORTFIX Water Jump** kit

Product	Item No.	Weight
SPORTFIX Hurdles 1200 x 3960 x 914 mm (L x W x H)	7154	125.80 kg

Drainage Solutions for Football Pitches

Perfectly playable football pitches thanks to reliable drainage.

Rainwater management for sports fields – safety, functionality, sustainability

A modern football pitch must not only enable top sporting performances but must also function reliably in the rain. Permanent playability, safety for the players and the protection of the adjacent infrastructure depends to a large extent on efficient rainwater management.

- Rapid drainage of the playing surfaces to avoid surface ponding and the risk of injury.
- Efficient hydraulic performance during heavy rainfall events considering local rainfall data and municipal specifications.
- Environmental aspects such as seepage, retention and storage of particles, microplastics or fillers from artificial turf surfaces.
- Durability and ease of maintenance of the drainage systems, even under high loads due to match operations, maintenance equipment and spectator attendance.

This makes rainwater management an essential consideration for the sustainability and profitability of a viable sports facility.

Natural grass

Football pitches with natural grass usually do not need a separate drainage system, as rainfall can seep through the turf. Depending on the facility design, however, there may be a slope of the surrounding pavement surfaces towards the turf, so requiring a drainage channel in these locations.

Artificial turf systems and infill materials

Artificial turf pitches are always used when the intensity of use of a natural turf can no longer be sustained. Longer periods of use in all weather conditions are easily feasible with a modern artificial turf field. To hold down, stabilise and straighten the turf fibres, infill granules are used. EPDM granules can be on existing pitches, but on new fields cork, olive stones or sand are more likely to be used. Regardless of the filling, artificial turf is exposed to permanent abrasion, which manifests itself in a maximum service life of 10 - 15 years. Then the turf fibres are too short to maintain the quality of play.

Cork

The renewable raw material cork is currently very popular as an infill material. However, the use of cork on artificial turf pitches also has disadvantages. In addition to the higher cost price, cork granules have to be replaced more frequently, which further drives up running costs.
Cork is also lighter, which increases the risk of large-scale washout in the event of heavy rainfall events. This makes more regular maintenance of the pitches necessary.
The playing properties of rubber infill material come very close to cork and the basic artificial turf structure can be retained.

Sand

Another approach is to replace the granules with sand filling. This option is relatively inexpensive for operators to implement. The lower impact absorption effect of the sand can increase the risk of injury to the players and change the ball rolling behaviour and performance. Furthermore, the abrasive sand increases the abrasion of the artificial turf fibres and thus leads to larger quantities of microplastics released from artificial turf surfaces.

Cork

Sand

SPORTFIX CLEAN – Combined drainage and rainwater treatment channel (with carbon filter substrate) safely retains microplastics from artificial turf pitches

Drainage systems for artificial turf pitches must provide reliable drainage and infiltration. The infill material and broken blades of synthetic grass (= microplastics) must be contained before water is discharged into a sewer system. The **SPORTFIX CLEAN** drainage and filter system is the effective solution for the retention of microplastics and infill material on artificial turf pitches.

SPORTFIX PRO – A versatile system for draining sports fields and stadiums

Even with natural grass pitches, the adjacent spectator areas must be reliably drained. With the **SPORTFIX PRO** system and a wide range of gratings, this can be achieved for every project.

Drainage with microplastic retention: **SPORTFIX CLEAN**

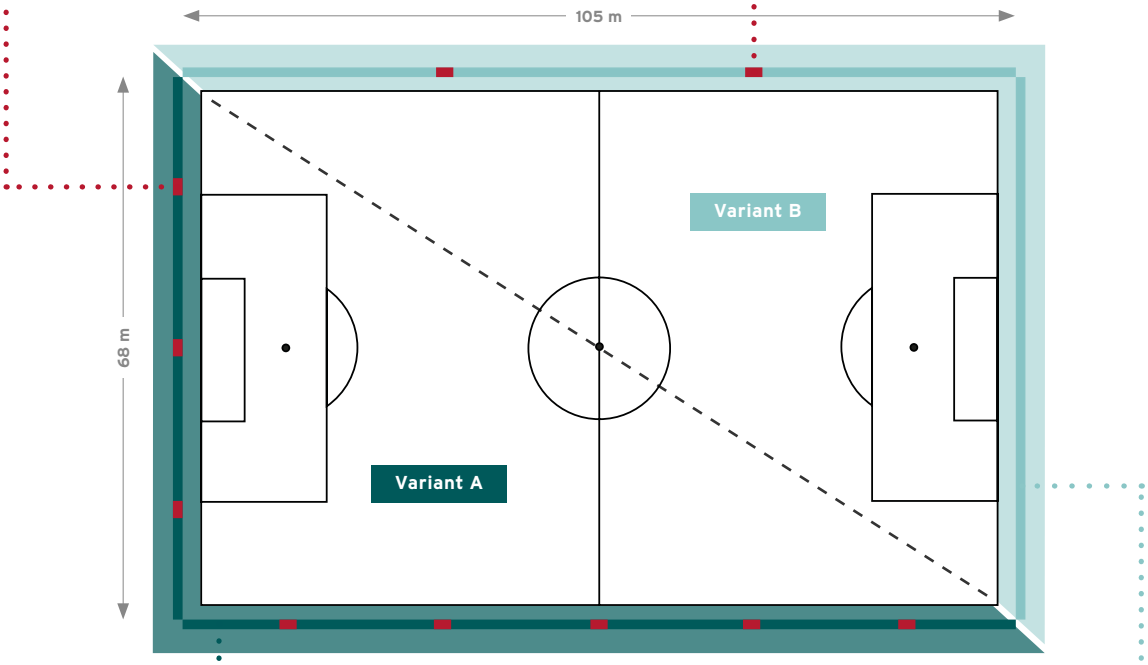
Drainage with **SPORTFIX PRO**

Effective drainage for every football pitch

A safe and sustainable playing field for every football club

Sump Units

Sump Units



Segment	Variant A SPORTFIX CLEAN	
Product	Channel	Sump Units
Quantity in pcs.	338	16
Item No.	7701 / 7702	7700
Length	1000 mm	500 mm
Height	250 mm	504 mm
Weight	5.89 kg	5.28 kg

SPORTFIX CLEAN
with one side of the pitch

Variant B SPORTFIX PRO	
Channel	Sump Units
344	4
7520	7525
1000 mm	500 mm
200 mm	504 mm
4.89 kg	5.89 kg

SPORTFIX PRO
with one side of the pitch

Drainage Solutions for the Hockey Field

Optimal playing conditions for top-class hockey.

Comprehensive rainwater management with HAURATON

Hockey pitches – whether in the club or professional sector – place the highest demands on functionality, safety and sustainability. In addition to the playing surface itself, reliable rainwater management is crucial for the long-term value retention of the facility as well as for environmental and resource protection.

Water-based hockey pitches have densely packed artificial fibres that need to be watered / irrigated frequently, mostly before and during matches. Consequently, these have a high-water requirement; tens of thousands of litres can be required during events.

Challenges in hockey field construction

- **High load:** Through intensive training and games, the drainage system is permanently exposed to high mechanical stresses.
- **Fine particles & microplastics:** In artificial turf surfaces, long-term use and hockey stick abrasion generates fine particles which can be washed out by rain.
- **Heavy rainfall events:** Increasingly extreme weather conditions require systems that drain sports surfaces quickly but also enable retention and infiltration.
- **Sustainability:** Operators are increasingly relying on solutions that store water locally for reuse to irrigate green spaces.

Artificial turf pitches without irrigation

In addition to irrigated artificial turf pitches, many clubs and municipalities rely on dry artificial turf surfaces. These systems do not require constant irrigation, so are resource-saving therefore economical to operate.

Properties

- **Playability without water:** The surface structure is designed in such a way that the ball runs precisely (without a film of water as used on irrigated surfaces) and surfaces have optimal adhesion for safe play.
- **Surface structure:** Usually multi-layered with an elastic base layer, smooth and dense artificial turf fibres with quartz sand or elastic filling for a stable, high-quality playing surface.
- **Areas of application:** Particularly popular for general sports, municipal facilities and multi-purpose use, as no elaborate irrigation technology is required.

Hockey pitches and their different challenges

Hockey pitches differ significantly regarding their structure – especially concerning water requirements. These differences have a direct impact on drainage and rainwater management requirements.

Artificial turf without irrigation

- **Requirements:** Rainwater usually seeps away directly through the turf. A retention system for particles (from hockey stick abrasion) is recommended due to the extremely densely woven turf structure.

Artificial turf with irrigation

- **Requirements:** These playing surfaces are particularly common in the professional sector. In addition to retaining microplastics from blade abrasion, a filter system within the drainage system enables cleaning with subsequent storage for reuse of irrigation water.

Hockey Pitch, Gimje, South Korea

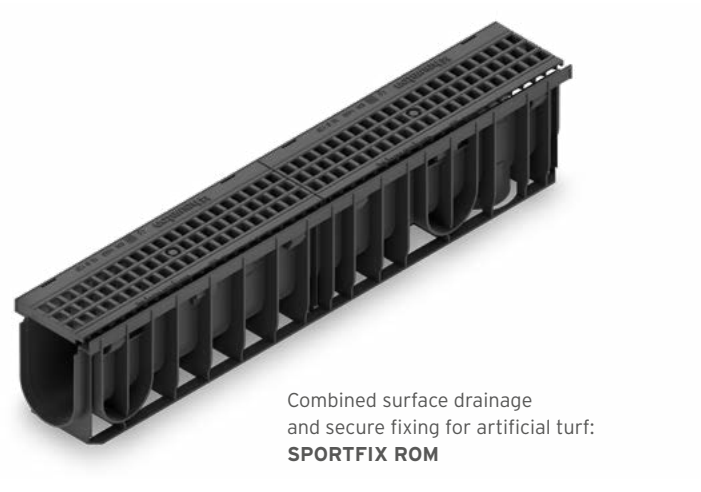
SPORTFIX CLEAN – Combined drainage and rainwater treatment channel (with carbon filter substrate) retains microplastics from artificial turf pitches

Drainage systems for artificial turf pitches must provide reliable drainage and infiltration. The infill material and broken blades of synthetic grass (= microplastics) must be contained before water is discharged into a sewer system. The **SPORTFIX CLEAN** drainage and filter system is the effective solution for the retention of microplastics and infill material on artificial grass pitches.

SPORTFIX ROM – The drainage solution for artificial turf on hockey fields

SPORTFIX ROM channels are especially suitable for the surface drainage of hockey fields. The system can be adapted to all sizes of un-tensioned artificial turf. The artificial turf edge is simply placed within the channel and securely clamped within the system when fixing the GUGI grating in place.

Drainage with microplastic retention: **SPORTFIX CLEAN**

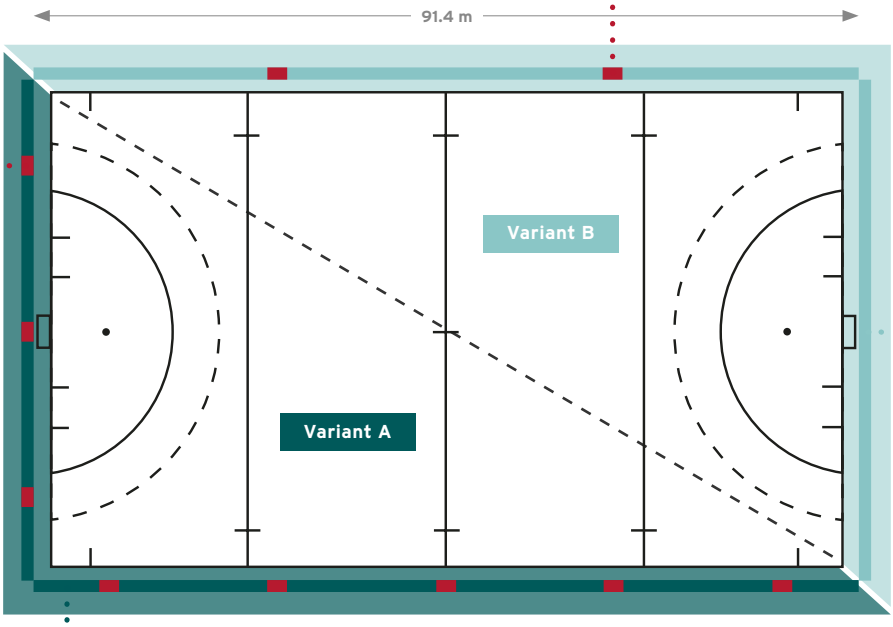


Combined surface drainage and secure fixing for artificial turf: **SPORTFIX ROM**

Hockey field at the National Stadium, Santiago, Chile

Sump Units

Sump Units



Segment	Variant A SPORTFIX CLEAN	
Product	Channel	Sump Unit
Quantity in pcs.	286	14
Item No.	7701 / 7702	7700
Length	1000 mm	500 mm
Height	250 mm	504 mm
Weight	5.89 kg	5.28 kg

SPORTFIX CLEAN
with one side of the pitch

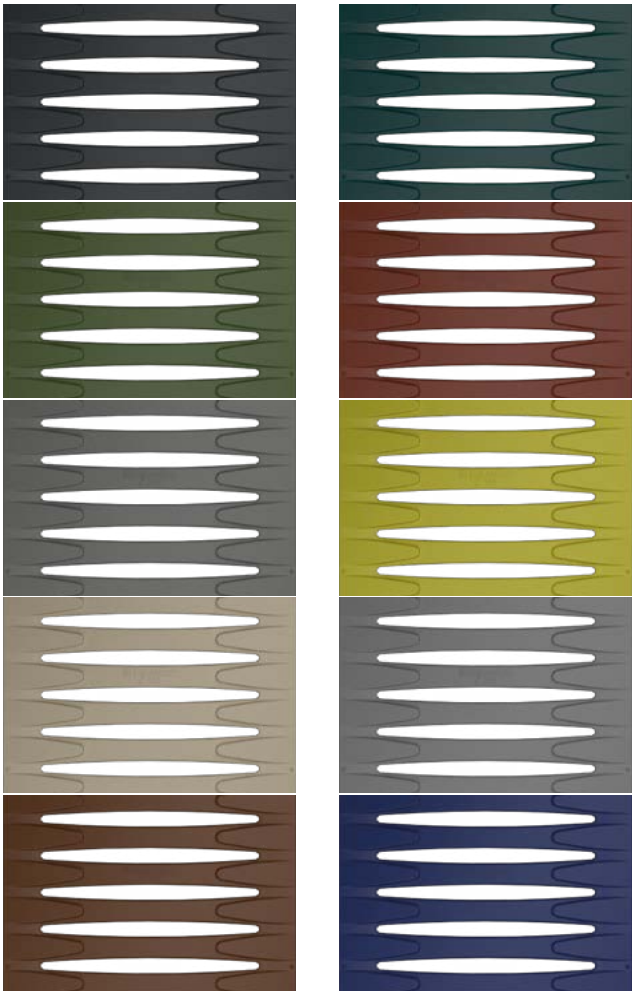
Variant B SPORTFIX ROM	
Channel	Sump Unit
291	4
7862	7870
1000 mm	500 mm
200 mm	504 mm
4.53 kg	5.40 kg

SPORTFIX ROM
for clamping unfilled artificial turf

Playgrounds and Multifunctional Fields

Exercise and fun for young and old.

Flexible use of space and unique design are important requirements for play areas and multifunctional fields, as well as standards compliance and safe installation.



Award-winning **FIBRETEC** Design slotted grating

SPORTFIX PRO scores highly here, with **FIBRETEC** Design slotted grating available in eleven colours

SPORTFIX Soft Kerbs provide a safe border for play areas and sports facilities

Case Study

Jedlik Anyos Gymnasium in Budapest

Drainage for Every Sport - in use Worldwide

HAURATON systems ensure perfect playing field conditions, safety and sustainability on a wide variety of sports facilities.

Swimming pool in Holland

Whether swimming pools, tennis courts, skate parks or padel halls, rainwater management plays a decisive role wherever sports are played. With our wide range of products, we offer the right solution for every requirement: robust, durable and compliant with relevant standards. With extensive international experience and a large number of successfully implemented projects, **HAURATON** products are the first choice for industry professionals world-wide regarding safe and functional drainage of sports surfaces.

Beach volleyball court in Ireland

Tennis court in Switzerland

Skating track in France

Skatepark in Slovenia

Aquapark in Croatia

Padel Hall in Holland

Handball Hall in Hungary

Cable Management in Sports Facility Construction

Revisionable, floor-laid systems for temporary or permanent organisation and routing of supply and information cables.

Cable Management in Sports Facility Construction

When staging events at major stadiums a large quantity of cabling is required for television broadcasting, operations equipment, sound, lighting and other essential services. The infrastructure of smaller stadiums should ideally allow for this when required. These cables and services are best accommodated below ground level to achieve a safe, clean and discreet surface environment for operations personnel, athletes and spectators. A flexible in-ground utility ducting system is required for both temporary and permanent management and routing of underground services and cables.

HAURATON offers various cable management systems for this purpose:

Our solution – Your benefits with SERVICE Channels

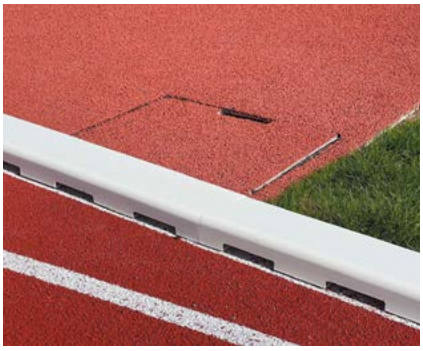
HAURATON SERVICE Channels provide a safe, practical and durable solution for the management and routing of underground cables, utilities and services, for both internal and external applications. Installed within the ground, these systems provide discreet and barrier-free cable routing, with no trip hazards and quick, easy access when handling cables and wires. **SERVICE Channels** are suitable for a variety of load classes (A 15 - E 600) and applications, including environments subjected to extreme loads and forces. The system is supplied with a range of modular accessories including cable trays and junction boxes for easy access and flexible 'space-efficient' design.

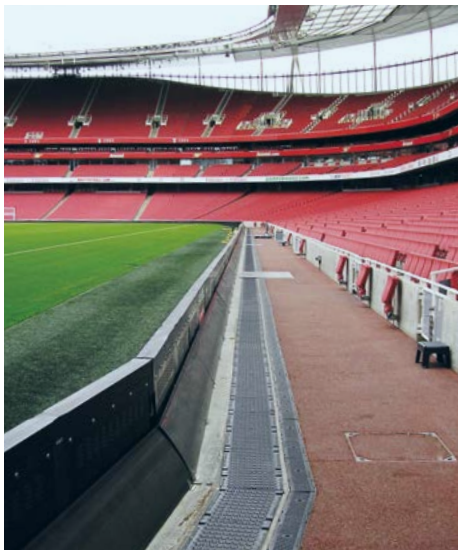
- Temporary or permanent installations
- Safe management and protection of underground services
- Easily accessible

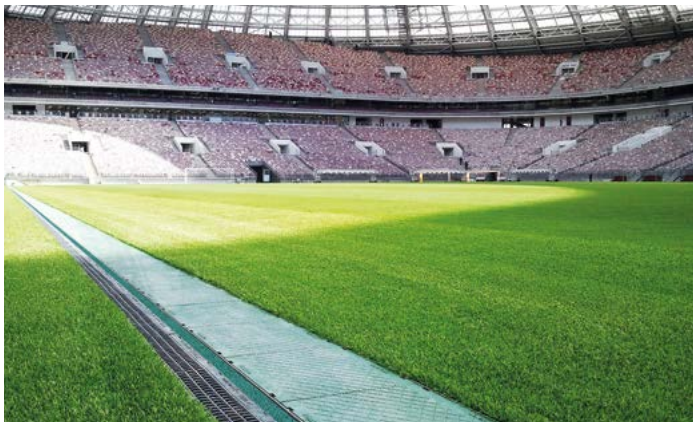
Your benefits with SPORTFIX Distribution Chambers

SPORTFIX Distribution Chambers are ideal for management of cables within sports arenas or concert venues. Units are quick and easy to access and designed to withstand heavy loads.

- Varied options for cable access and connection
- Recessed cover for track surface / artificial turf infill, for discreet installation within the surrounding surface.
- Durable material (PE) resistant to moisture, frost, de-icing salt, UV radiation and corrosive chemicals
- Perforated plate for individual configuration of sockets
- Lightweight units for easy handling and installation
- Permanently installed underground







HAURATON Service Channels have proven performance in major stadiums around the world. Refer to project lists from **HAURATON.**

Services

Comprehensive rainwater management is only possible with the right technical support.

Partner for all project phases

Our Technical Services & Support team of drainage experts are happy to provide specialist advice for your specific project. We aim to offer the best possible support in every phase of your project.

Our services at a glance:

- Support with general and project-specific questions
- System hydraulic calculations
- Advice regarding product selection
- Preparation of installation schemes and drawings
- On-site installation advice
- Continual project support

Hydraulic calculations

Accurate hydraulic calculations are vital to achieve an effective and functioning drainage system. Calculations take account of local rainfall data, system dimensions and layout, and the design of adjacent surfaces. **HAURATON Technical Services & Support** team can assist with your projects hydraulic design (free-of-charge) to ensure quick and efficient drainage even during periods of heavy rainfall.

Feel free to contact us to discuss your project and benefit from our experience.

Precise and reliable calculations

Provide your projects design criteria and receive a quick response with precise and reliable hydraulic calculations.

Free professional support for your project

HAURATON provides you with this service and expert knowledge totally free of charge.

Designed to suit HAURATON products

With correct system selection and sizing, the design process can quickly progress

Quality assurance and standards compliance

This information is available on request; feel free to contact us.

Quality Assurance with Standards Certification and Compliance

Design reassurance with **HAURATON** quality.

The design and construction of sports facilities are subject to defined specifications and strict regulations. Compliance with applicable standards and certificates, will guarantee safe and long-lasting high-performance.

Products from **HAURATON** meet international standards and specifications established by recognised sporting bodies such as World Athletics (formerly IAAF).

HAURATON brings reassurance:
All products and systems comply with the relevant standards – tested, documented and internationally recognised.

Relevant standards and guidelines for sports areas

DIN 18035 – Sports fields
Part 1: Basics and Dimensions
Part 2: Irrigation
Part 3: Drainage
Part 7: Artificial turf systems

DIN EN 1433 – Drainage channels for traffic areas

DIN EN 15330-1 – Synthetic turf for sports surfaces

DWA-A/M-102 – Regulations for rainwater management

FIFA Quality Programme / World Rugby / FIH (Hockey) – International Requirements for Pitches and System Components

Sustainability at HAURATON.

For 70 years **HAURATON** has been recognised as a world leader and specialist in surface drainage and rainwater management. The topic of sustainability is close to our hearts.

Our commitment to the environment – We are CSC certified.

At **HAURATON** we rely on natural and recycled materials, produce with renewable energies and reduce CO_2 through short transport routes. From the selection of raw materials to the manufacturing process and disposal, we pay attention to the lowest possible energy consumption and careful use of all resources. We're delighted that our holistic approach to rainwater management has now been awarded gold certification by the CONCRETE SUSTAINABILITY COUNCIL (CSC).

FASERFIX SUPER, FASERFIX KS, FASERFIX POINT KS

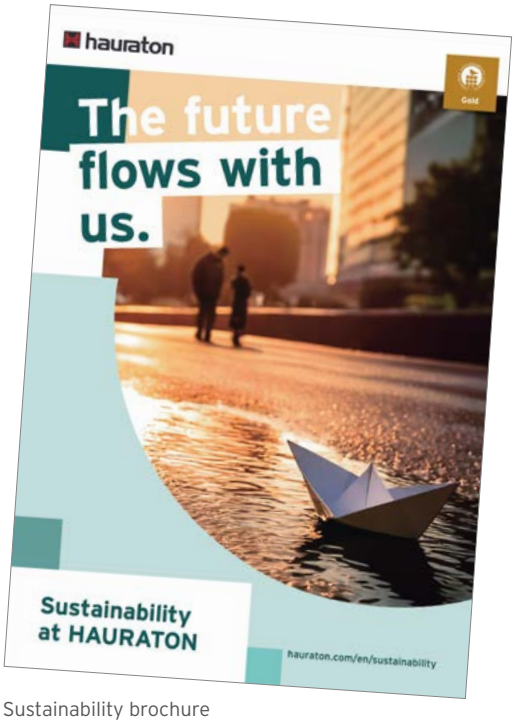
Gold for our **FASERFIX** concrete with natural fibres from basalt

Sustainability at HAURATON

Sustainability, environmental awareness and responsibility for the future are fundamental issues of our time and are particularly relevant for large-scale construction projects and concrete processing. At **HAURATON,** we've firmly integrated this into our corporate values and have made significant progress. Our gold award from CSC is proof of this.

Learn more about sustainability at HAURATON and download our sustainability brochure here:

hauraton.com/en-int/about-us/sustainability-at-hauraton/



Sustainability brochure at **HAURATON**

Short distances and efficient logistics

Our concrete raw materials are procured exclusively from local and regional producers. Nearly half of all orders placed by HAURATON are issued to local suppliers, which has an extremely positive effect on the CO_2 balance.

HAURATON maintains an Environmental Management System according to DIN EN ISO 14001:2015. The careful use of environmental resources is the focus of all our economic activities.

Use of recycled materials

Our range of composite channel bodies are almost exclusively manufactured from recycled polypropylene, which can also be recycled after use.
Our **RECYFIX** channel bodies carry the 'Blue Angel' eco-certificate, for resource-efficient use of materials.

RECYFIX – One material, many supporters.

Facts and figures

Separate collection ensures clean material cycles
In our factory, 98.96 % of the waste generated during production is collected separately and sent for recycling. In this way, we help to ensure that valuable materials remain in the cycle and that natural resources are conserved.

Electricity from our the roof provides energy for the machines
The entire roof area at our factory in Ötigheim is equipped with photovoltaic modules. Generating electricity using photovoltaics can save around 280 tonnes of CO_2 * per year.

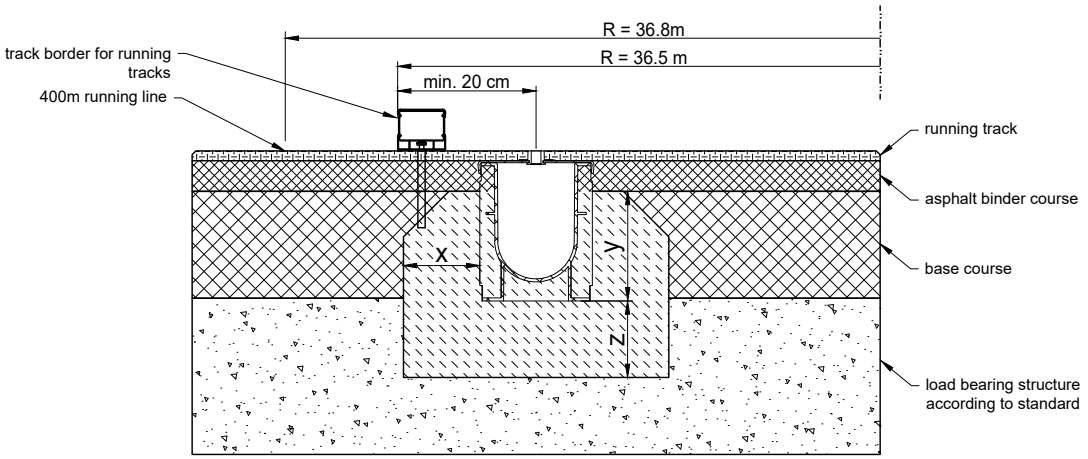
Water savings in concrete production
The production process of **FASERFIX** channels is based on hydration-optimised formulations. This ensures that only water that is necessary is used in the production process, therefore preserving natural water resources.

* Basis of calculation: Emission factor electricity mix Germany with upstream chains 445 g/kWh
Source: Federal Environment Agency, estimated value for 2023

SPORTFIX Installation examples

SPORTFIX SLOTTED Channel with aluminium Track Kerb in the radius area, Class A 15

Installation Example
Running track A 15



* y ≥ Component height - 14 cm

according to World Athletics

Category according to EN 1433 / DIN 19580		A 15	B 125	C 250	D 400**	E 600**	F 900**
Foundation: width x / height y / thickness z (in cm)		10 / * / 10					
EN 206-1 / DIN 1045-2	quality of concrete stretcher						
The named concrete quality is a minimum quality	without danger of frost on the lateral support	C25/30 X0					
	with danger of frost on the lateral support	C25/30 XF3					

Applying to following systems:

SPORTFIX Slotted channel + track border for running tracks

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.

The installation example represents a proven recommendation of the HAURATON company. The final responsibility for the design of e.g. expansion joints or the suitable load transfer is with the responsible planner, the resporisibility for the execution is with the contractor.

Date: 07.01.2026

Our general installation instructions apply.

Format DIN A4
scale 1:5

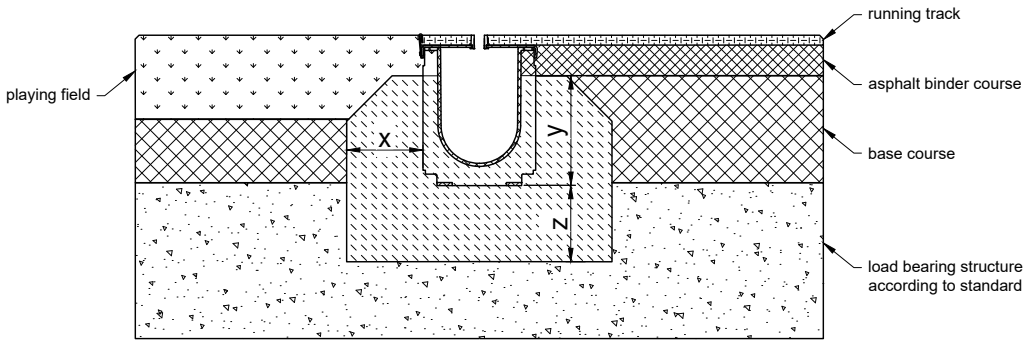
0000122805_ENGLISH.dwg 18 EBBw

SF SzRi 100 RiMSzAbd Typ 010

hauraton
Werkstr. 13
76437 Rastatt
Germany
Tel. +49 (0) 72 22 9 58-0
info@hauraton.com

SPORTFIX SLOTTED Channel with raised edge, Class B 125

Installation Example
Running track / Playing field Class B 125



* y ≥ Component height - 14 cm

Category according to EN 1433 / DIN 19580		A 15	B 125	C 250	D 400**	E 600**	F 900**
Foundation: width x / height y / thickness z (in cm)			10 / * / 10				
EN 206-1 / DIN 1045-2	quality of concrete stretcher						
The named concrete quality is a minimum quality	without danger of frost on the lateral support		C25/30 X0				
	with danger of frost on the lateral support		C25/30 XF3				

Applying to following systems:

SPORTFIX Slotted channel with turf edge

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.

The installation example represents a proven recommendation from HAURATON. The final responsibility for the execution lies with the planner in charge. Specific conditions of the project must be taken into account.

Date: 31.07.2026

Our general installation instructions apply.

Format DIN A4
scale 1:5

0000167410_ENGLISH.dwg 3 EBBw

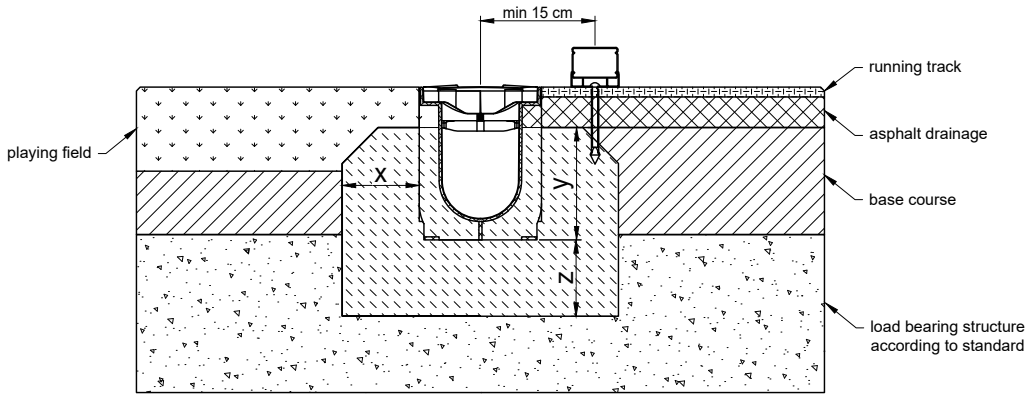
EBBw SF SzRi 100 RiMSzAbd Typ 010 Kl. B125 in Kunstrasen;in Laufbahnbelag

hauraton
Werkstr. 13
76437 Rastatt
Germany
Tel. +49 (0) 72 22 9 58-0
info@hauraton.com

You can always find the latest version of our installation instructions and examples under the 'Installation Details' tab for each product.

SPORTFIX PRO with FIBRETEC composite grating / GUGI composite grating, Class A 15

Installation Example
Running track / Playing field Class A 15



Category according to EN 1433 / DIN 19580		A 15	B 125	C 250	D 400**	E 600**	F 900**
Foundation: width x / height y / thickness z (in cm)		10 / 14 / 10	10 / 14 / 10				
EN 206-1 / DIN 1045-2	quality of concrete stretcher						
The named concrete quality is a minimum quality	without danger of frost on the lateral support	C25/30 X0	C25/30 X0				
	with danger of frost on the lateral support	C25/30 XF3	C25/30 XF3				

Applying to following systems:

SPORTFIX Channel with FIBRETEC and aluminium curbing

SPORTFIX Channel with GUGI-PA-GF and aluminium curbing

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.

The installation example represents a proven recommendation of the HAURATON company. The final responsibility for the design of e.g. expansion joints or the suitable load transfer is with the responsible planner, the responsibility for the execution is with the contractor.

Date: 06.08.2025 | Our general installation instructions apply. | Format DIN A4 | scale 1:1

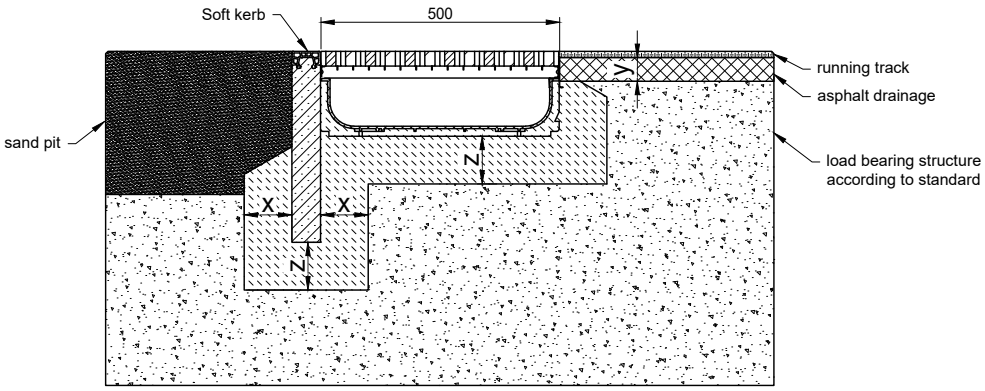
0000061616_ENGLISH.dwg 10 | EBBw

SF PRO 100 AbdMAbau Typ 010 Kl. B125

hauraton
Werkstr. 13
76437 Rastatt
Germany
Tel. +49 (0) 72 22 9 58-0
info@hauraton.com

SPORTFIX Soft Kerb and SPORTFIX Sand Trap Channels, Class A 15

Installation Example
in running track / sand pit Class A 15



Category according to EN 1433 / DIN 19580		A 15	B 125	C 250	D 400**	E 600**	F 900**
Foundation: width x / height y / thickness z (in cm)		10 / 5 / 10					
EN 206-1 / DIN 1045-2	quality of concrete stretcher						
The named concrete quality is a minimum quality	without danger of frost on the lateral support	C25/30 X0					
	with danger of frost on the lateral support	C25/30 XF3					

Applying to following systems:

SPORTFIX Softkerbs
SPORTFIX Sandtraps

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.

The installation example represents a proven recommendation of the HAURATON company. The final responsibility for the design of e.g. expansion joints or the suitable load transfer is with the responsible planner, the responsibility for the execution is with the contractor.

Date: 06.08.2025 | Our general installation instructions apply. | Format DIN A4 | scale 1:8

0000059802_ENGLISH.dwg 8 | EBBw

SF SP 460 RiAbd Kl. A15

hauraton
Werkstr. 13
76437 Rastatt
Germany
Tel. +49 (0) 72 22 9 58-0
info@hauraton.com

HAURATON GmbH & Co. KG
Werkstraβe 13
76437 Rastatt
Germany
Tel. +49 7222 958 0
info@hauraton.com
www.hauraton.com

09/2026 | Printed in Germany

Illustrations, dimensions, and weights are not binding! We reserve the right to make technical changes in the interest of progress.

Item No. 99776

Some of the visual content in this publication was created with the support of Artificial Intelligence (AI). Editorial work, concept development and final editing were carried out by HAURATON.