



CIVILS

LANDSCAPING

AQUA

SPORT

# CIVILS

THE RANGE FOR CIVIL ENGINEERING

 **hauraton**  
IT'S RUNNING WELL



## THE RANGE FOR CIVIL ENGINEERING APPLICATIONS

RELIABLE SYSTEMS WITH STRONG PERFORMANCE CHARACTERISTICS  
FOR DRAINAGE INSTALLATIONS IN TRAFFIC AREAS - A LONG-TERM  
SAFEGUARD FOR OUR MODERN INFRASTRUCTURE

Mobility is ever more important in our society. To meet that demand, we have built up one of the most modern infrastructure systems, including all modes of transport: road, rail, water and air. Only a well-performing transport infrastructure can guarantee the required mobility now and in the future. As building material suppliers, HAURATON has developed reliable systems with strong performance characteristics in order to contribute to the high quality of our infrastructure and its further development.

In close cooperation with architects, building contractors and building material suppliers we develop individual solutions that meet the most demanding design requirements. HAURATON provides highly qualified professional advice and technical support during the design phase as well as the construction phase. Decades of experience in the field of traffic area drainage and our innovative approach combine to provide the designer with the most reliable solutions.

Drainage concepts can be individually designed for customers, involving a diverse range of materials: fibre-reinforced concrete, ductile iron, steel, stainless steel or PE-PP materials. And of course it is also possible to combine materials for special duties. HAURATON products meet all common standards and regulations. To maintain a high level of quality, HAURATON cooperates with specialist institutes for external monitoring of products and internal processes based on regular quality checks - our customers' guarantee for reliable design and long-lasting solutions.





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## **SPECIAL SOLUTIONS**

SEE THE RESPECTIVE PRODUCT SECTIONS

# THE HAURATON SERVICE PACKAGE

**GOOD TEAMWORK IS THE BASIS** FOR A PERFECT RESULT. HAURATON COOPERATES WITH ARCHITECTS AND ENGINEERS RIGHT FROM THE CONCEPTUAL STAGE AND OFFERS A FREE RANGE OF SERVICES.

## INDIVIDUAL DESIGN SUPPORT

Designing solutions for the many and diverse demands in the field of surface drainage requires detailed knowledge, great expertise and extensive experience. Our experts, both in field sales as well as in the office, are fully trained to answer technical and product-specific questions to be able to provide you with competent and individual advice. We will support your individual building project from project-related tender documents through to production – even where the brief calls for unusual duties and design. We support you, even if a solution for your special drainage requirements cannot be found from our standard range of products – custom-built products to your specification are our strength. We will manufacture almost anything for you. Give us a call or send us an email! We are always available for you and look forward to answering your individual questions regarding drainage solutions.

## LAYOUT PLANS

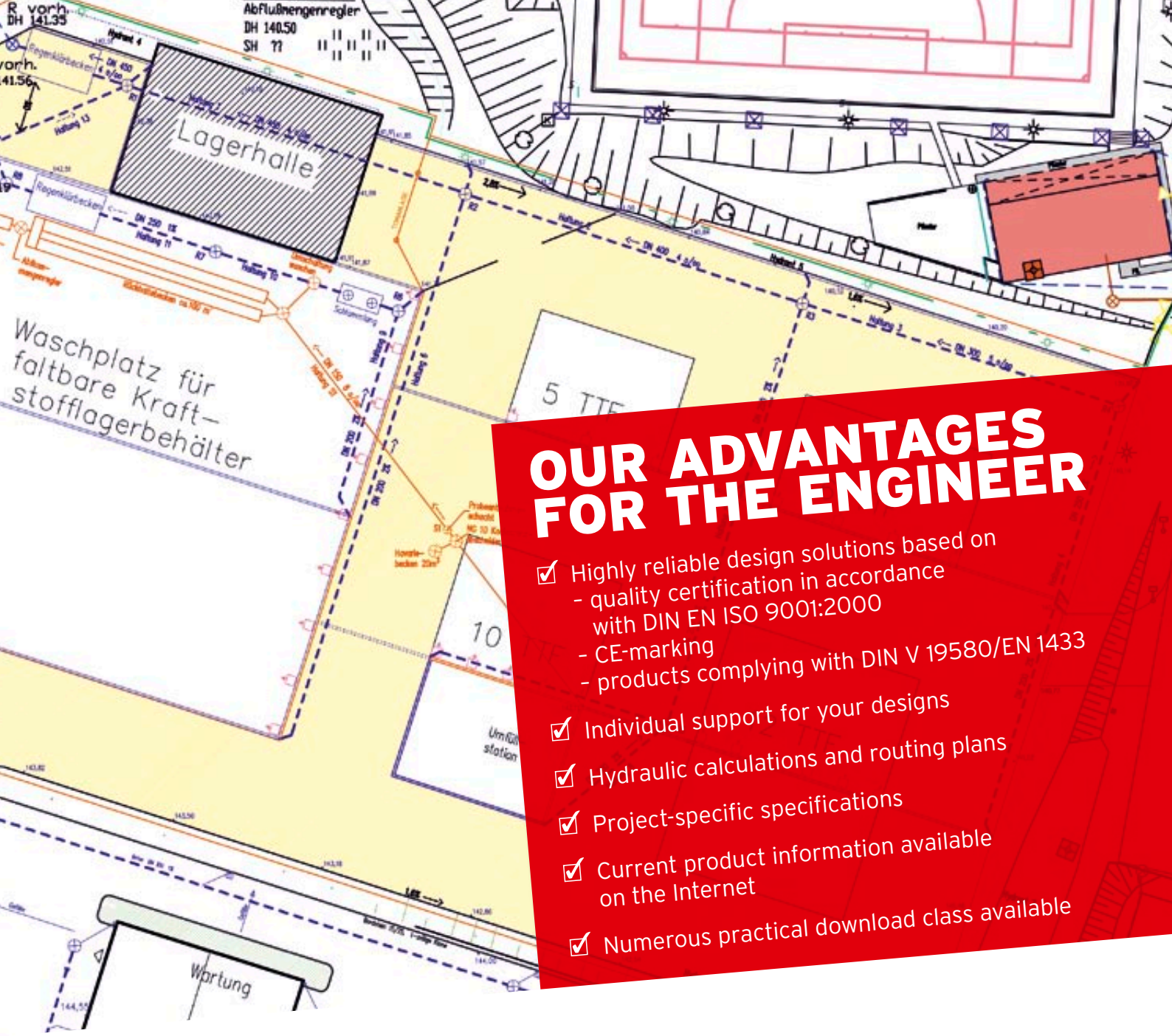
As well as hydraulic performance calculations we also produce site-related layout plans. The CAD-produced drawings show the exact location of drainage channels, including the positions of end caps, trash boxes and other fittings. In addition, we will produce a parts list with the designation and quantity of products required for the job. For the production of the layout plans we will need your site-specific details. We will produce the layout plans for you free of charge – why not make use of our service!

## HYDRAULIC CALCULATIONS

The functionality of a drainage system depends to a large extent on the hydraulic performance of the drainage channels installed. In order to make it easier for you to make an informed decision about the type and route of the drainage channels we produce hydraulic performance calculations for your specific site. The program for determining the hydraulic performance of our drainage channels has been developed at the University of Prague. The staff in our CAD department just needs some site information such as the size of the area to be drained, surface covering, intensity of rainfall, type of channels, etc. Of course, this service is free of charge – just talk to one of our internal or field sales staff!

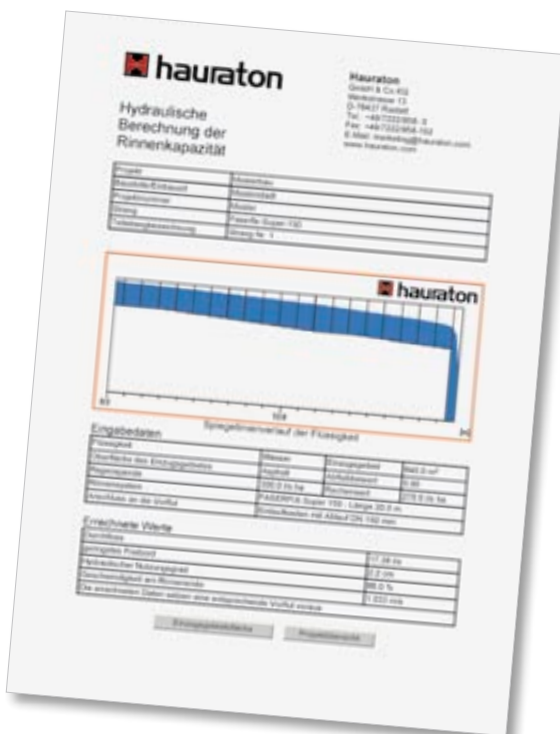






## OUR ADVANTAGES FOR THE ENGINEER

- ✓ Highly reliable design solutions based on
  - quality certification in accordance with DIN EN ISO 9001:2000
  - CE-marking
  - products complying with DIN V 19580/EN 1433
- ✓ Individual support for your designs
- ✓ Hydraulic calculations and routing plans
- ✓ Project-specific specifications
- ✓ Current product information available on the Internet
- ✓ Numerous practical download class available



# SECURITY FOR THE PLANNERS

**HAURATON PROVIDES CUSTOMERS** WITH THE BEST POSSIBLE BASIS FOR RELIABLE DESIGNS. OUR PRODUCTS AND PROCESSES ARE CONTINUALLY MONITORED AND ARE SUBJECT TO STRINGENT QUALITY REQUIREMENTS.

## DIN EN 1433/CE-MARK HAURATON CHANNELS COMPLY WITH DIN V 19580/EN 1433

- high lateral strength without supporting grating, during transport and for the installation - including adjusting piece
- U-profiles for highly efficient drainage with self-cleaning effect
- simple and safe sealing via safety joint
- tongue and groove connection for precise installation
- FASERFIX SUPER KS 100 channels are fitted with 4 mm housing profiles and provide maximum safety
- maximum resistance to the effects of salt and weather, including frost
- different models for long drainage runs with different degrees of built-in fall
- built-in fall of 0.6 % for improved hydraulics and fast drainage speed
- large back-pressure volume through construction depths of up to 280 mm
- large selection of gratings for all types of applications and visual requirements

HAURATON offers the largest range of EN-compliant drainage channels.

## QUALITY CERTIFICATION IN ACCORDANCE WITH DIN EN ISO 9001:2000

As one of the first companies in the building industry, HAURATON achieved quality certification in accordance with DIN EN ISO 9001 back in 1993. Since then, quality standards have been driven up continuously, including regular certification.

The quality requirements of DIN EN ISO 9001:2000 cover not only the products but the whole company, including development, design, production, assembly and customer service. HAURATON's quality management in accordance with DIN EN ISO 9001:2000 provides the highest degree of liability and safety to our customers.



## STANDARDS, APPROVALS AND WARRANTY

HAURATON channels are not only certified in accordance with DIN EN 1433 but also with the considerably more stringent German DIN V 19580. CE mark, external monitoring and conformity statement are guarantees for the engineer that ensure the highest technical standard. The channels' resistance to frost and salt, their robust construction and ability to be sealed ensure that they will provide many years of service. HAURATON was one of the first manufacturers in the building industry to voluntarily offer a guarantee period of 5 years.

We also hold a General Building Control Approval by the DIBt (German Institute for Building Technology) for special applications in industrial locations where liquids that are hazardous to water as per § 19 WHG (Water Resources Act) are handled, stored or decanted, such as tank installations.

### Channel systems covered by the approval:

FASERFIX SUPER channels, approval no. Z-74.4-68  
FASERFIX BIG SL channels, approval no. Z-74.4-67  
FASERFIX BIG BL channels, approval no. Z-74.4-66



# GUGI-DUCTILE IRON MESH GRATINGS

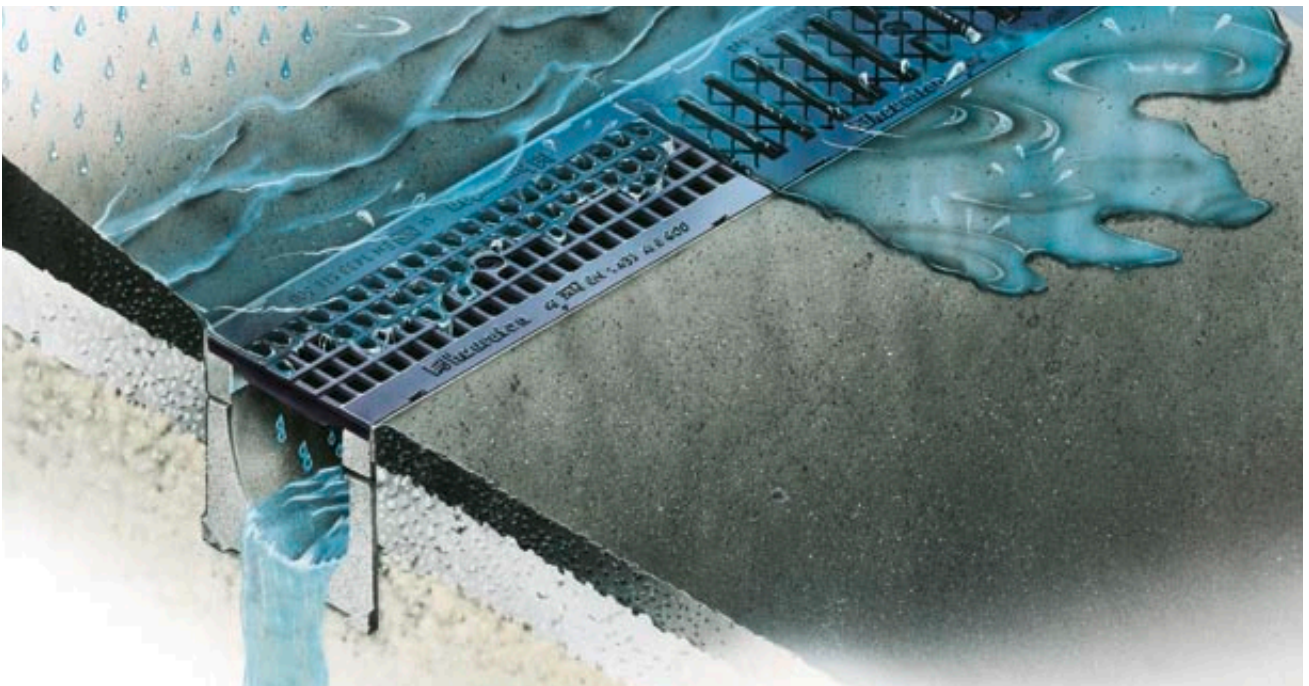
**HAURATON WAS THE FIRST** COMPANY TO INTRODUCE THE GUGI-DUCTILE IRON MESH GRATINGS TO THE MARKET AND HAS CREATED A PERFECT SYMBIOSIS OF HIGH-VOLUME DRAINAGE CAPACITY WITH ROBUST CONSTRUCTION.

## THE BEST IN STRUCTURAL STRENGTH AND DRAINING PERFORMANCE

The GUGI-Ductile iron mesh grating is the ideal combination of large-volume drainage and high structural strength. HAURATON offers the GUGI-Ductile iron mesh grating with its FASERFIX and RECYFIX channels.

The geometry of the GUGI-Ductile iron mesh grating prevents water from flowing right across the grating. At the same time, the grating offers all the high qualities associated with ductile iron. In the GUGI grating, the web in both directions is more solid than that of other gratings, resulting in a significant improvement in stability.

GUGI-Ductile iron mesh gratings are available up to category F 900.



# BOLTLESS LOCKING SYSTEM **SIDE-LOCK**

**THE POWER OF INNOVATION AT THE HIGHEST TECHNICAL LEVEL.**

## THE TIME-SAVING REVOLUTION OF BOLTLESS LOCKING

SIDE-LOCK is a unique locking system that is fitted completely without accessory parts. Simply lay the grating into its housing on the channel and engage it by stepping on it. When you hear a 'click', the grating is in place, providing full road safety. In order to clean the channels, the grating can be levered up extremely fast using a simple tool (a pry bar or robust screwdriver). SIDE-LOCK thus saves 90 % of the time it takes to fix and release the gratings. SIDE-LOCK has been developed by HAURATON and is protected by patents.

## CONVINCING TECHNOLOGY

The cross-section of the channels remains free allowing the surface water to flow away without restriction. SIDE-LOCK will also lock the gratings in longitudinal direction. This ensures that the gratings cannot 'travel' along the channels and remain reliably in position.

## INTELLIGENT MULTI-FUNCTIONAL STEEL ANGLE HOUSING PROVIDES FLEXIBLE FIXING OPTIONS

SIDE-LOCK will lock the gratings to the channels providing full road safety. In the case of increased loads, particularly in areas of heavy traffic or where additionally safety is required, the gratings can also be bolted to the multi-functional steel angle housing or fixed with a locking handle, giving a degree of flexibility no other channel system can provide.

## REMOVING A SIDE-LOCK GRATING



To unlock the grating, insert a flat-headed screwdriver at the marked point.

## INSTALLATION



1. PUT SIDE-LOCK IN PLACE



2. STEP ON IT - 'CLICK' - READY!



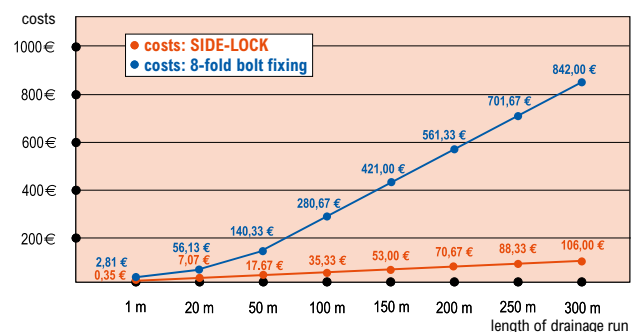
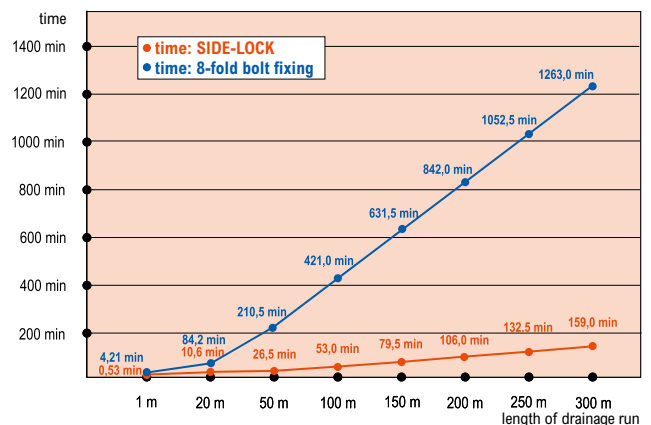
Ductile iron gratings can also be lifted with a pry bar.





## PRACTICAL TEST: TOP EFFICIENCY IS ACHIEVED WITH THE SIDE-LOCK BOLTLESS LOCKING SYSTEM DEVELOPED BY HAURATON

A test demonstrates the advantage over conventional locking systems. In the test a maintenance routine of a channel run was simulated as it would be in practice and investigated to see how long it takes to lift a grating, lay it down beside the channel, pick it up and lock it again. The SIDE-LOCK boltless locking system was tested against a conventional system with 8-fold bolt fixing per linear metre. The results speak for themselves: with the SIDE-LOCK boltless locking system the described process took 31.8 seconds (= 0.53 minutes). The time recorded for the equivalent process, but using gratings with 8-fold bolt fixings, was 4 minutes and 12.6 seconds (= 4.21 minutes). That results in a time saving of 3 minutes and 40.8 seconds per linear metre when using SIDE-LOCK. The diagram shows this huge difference, which becomes even more obvious when you multiply the time factor with an hourly rate of EUR 40.00. Conclusion: users save time and money with SIDE-LOCK!





# FASERFIX®

## EXTREMELY ROBUST – IN ANY APPLICATION.

FIBRE-REINFORCED CONCRETE FOR THE MOST HEAVY-DUTY SERVICE.

### A MATERIAL FOR ALL SITUATIONS

For a long time, drainage channels have been manufactured from conventional concrete. From the beginning of the seventies, HAURATON has been using fibre-reinforced concrete for channel production. By adding exactly dosed quantities of fibres, the strength of the concrete was increased significantly while at the same time reducing its weight. That made it possible to have significantly reduced wall thicknesses. Today, this fibre-reinforced concrete is the material used in all FASERFIX products.

### LEARNING FROM NATURE

Even before the term 'bionics' became popularly known, HAURATON made use of this science in order to take a decisive step forwards in the development of its products. Bionics applies biological principles in technology, following nature's example. Plants and trees are compound fibre materials with cellulose fibres. Likewise, human and animal bones are formed from interlaced fibre bundles, which is how they achieve their great strength

### BIOLOGY AND TECHNOLOGY

The fibre-reinforced concrete used in FASERFIX products follows the example of nature. Just as with trees, plants or bones, the fibres form a densely interwoven network that makes the reinforced concrete extremely strong at the same time, the fibres reduce the density of the material - which is therefore much lighter than traditional concrete.

### PREPARED FOR ANY APPLICATION

Owing to its unique properties, FASERFIX is used for all kinds of applications. For example in heavy-load areas such as airports, industrial plants and filling stations. But also in areas with a high traffic volume such as motorways or trunk roads. And likewise, in various versions, in private and commercial applications.





## HAURATON



## COMPETITOR PRODUCT



Don't be fooled into believing that a V is the same as a U! Channels with V-profiles have been about for a long time; they are not an innovation. Many years ago, FASERFIX SUPER channels have already been manufactured in this profile in different nominal sizes.

### FLOW RATE

Tests and hydraulic calculations have confirmed that channels with a U-shaped cross section have a draining capacity that is up to 30% greater than that of channels with a V-shaped cross section, assuming the same nominal width and construction height. Conversely that means that channels with a V-shape reach the limit of their capacity much sooner whilst the U-shaped channels will still have reserve capacity. The measured flow rate is the same for both shapes at each point within the channel; likewise the mean flow rate. So it is clear that the U shape has clear advantages over the V shape.

### BETTER CLEANING EFFECT

Imagine that a certain amount of dirt has accumulated at the base of the channel. In the U-shaped channel the surface area for silt to build up is much greater than in the V-shaped channel. This is a clear indicator for the cleaning performance: whilst both types of channels feature equal flow rates, the U shape offers a greater surface of dirt to the water which carries the dirt away. The channel will clean itself quicker. An additional factor is that due to the increasing restriction of space towards the bottom of the V channel the layer of dirt can only grow upwards, which reduces the cross section available for the draining function.



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# LANDSCAPING

THE RANGE FOR DOMESTIC AND LANDSCAPING

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## THE RANGE FOR DOMESTIC AND LANDSCAPING

INNOVATIVE PRODUCTS FOR GARDENING AND LANDSCAPING FOR  
IMAGINATIVE DESIGNS AND RELIABLE SURFACE DRAINAGE.

Garden and landscape design makes a significant contribution to the healthy and attractive qualities of our environment and helps bridge the gap between the built environment and nature. To preserve and sustain this balance, we need to think and act with the environment in mind - including the use of ecologically orientated building materials and careful use of resources.

With its innovative range of surface drainage products, HAURATON makes an important contribution. For example, the material RECYFIX consists of 100% recycled PE-PP. All products are easy to transport and install and yet are extremely rugged. With its RECYFIX range, HAURATON is the leading supplier of drainage channels made of PE-PP - a range that meets all aesthetic and functional criteria.

HAURATON will cooperate with landscape architects and designers and will support the construction process with initial measuring up through to installation and completion. We provide detailed installation instructions as well as on-site service to make sure the LANDSCAPING solution achieves the perfect result. HAURATON plans and prepares the installation process in-house before going on site. An effective and sophisticated logistics concept ensures that we can deliver anywhere within a short time frame - just in time for the products to be installed on site without delay, giving contractors the assurance that their project schedules will not be interrupted.

Our LANDSCAPING products always reflect the latest state of technology and comply with all standards and regulations. In addition, HAURATON involves external monitoring of products and internal processes - our customers' guarantee for reliable design and long-lasting solutions.



## PERFECT SUPPORT FOR YOUR DESIGNS



### RECYFIX®PLUS STABLE DRAINAGE



### RECYFIX®STANDARD ENVIRONMENTALLY FRIENDLY DRAINAGE



### SLOTTED CHANNELS UNOBTRUSIVE DESIGN - LARGE DRAINAGE CAPACITY



### FASERFIX®STANDARD RELIABLE DRAINAGE



### RECYFIX®POINT FASERFIX®POINT POINT DRAINAGE



### DACHFIX® PERFECT DRAINAGE FOR FAÇADES AND FLAT ROOFS



### RECYFIX®GREEN SUPER VERY STRONG AND ENVIRONMENTALLY FRIENDLY



### RECYFIX®GREEN STANDARD ENVIRONMENTALLY FRIENDLY, LIGHT AND ROBUST



### RECYFIX®STREIF FOR CLEANER ENTRANCES



### LINEFIX® FOR FLEXIBLE BORDER EDGING



### SPECIAL SOLUTIONS SEE THE RESPECTIVE PRODUCT SECTIONS



# PERFECT SUPPORT FOR YOUR DESIGNS

**A SUPERIOR DRAINAGE SYSTEM** STARTS AT THE DESIGN PHASE. WE PROVIDE COMPETENT SUPPORT, INCLUDING CALCULATIONS FOR THE HYDRAULIC SPECIFICATION, LAY OUT PLANS FOR DRAINAGE CHANNELS OR CUSTOM-DESIGNED SOLUTIONS.

## USE OUR EXPERTISE TO YOUR BEST ADVANTAGE

Our internal and external sales staff are truly experts in the design of drainage systems. Their extensive technical and product knowledge is your guarantee for expert consultations – and hence the best possible solution for all requirements. We will support your individual building project from project-related tender documents through to production and in-time delivery on site – even where the brief calls for unusual duties and design.

## NON-STANDARD PARTS - CUSTOM- DESIGNED TO YOUR REQUIREMENTS

Not all drainage situations can be resolved with the standard production range of products. For this reason we produce non-standard parts in accordance with customers' specifications. In that way a perfect solution can be found for all situations.

## RELIABLE DESIGN DATA BASED ON HYDRAULIC CALCULATIONS

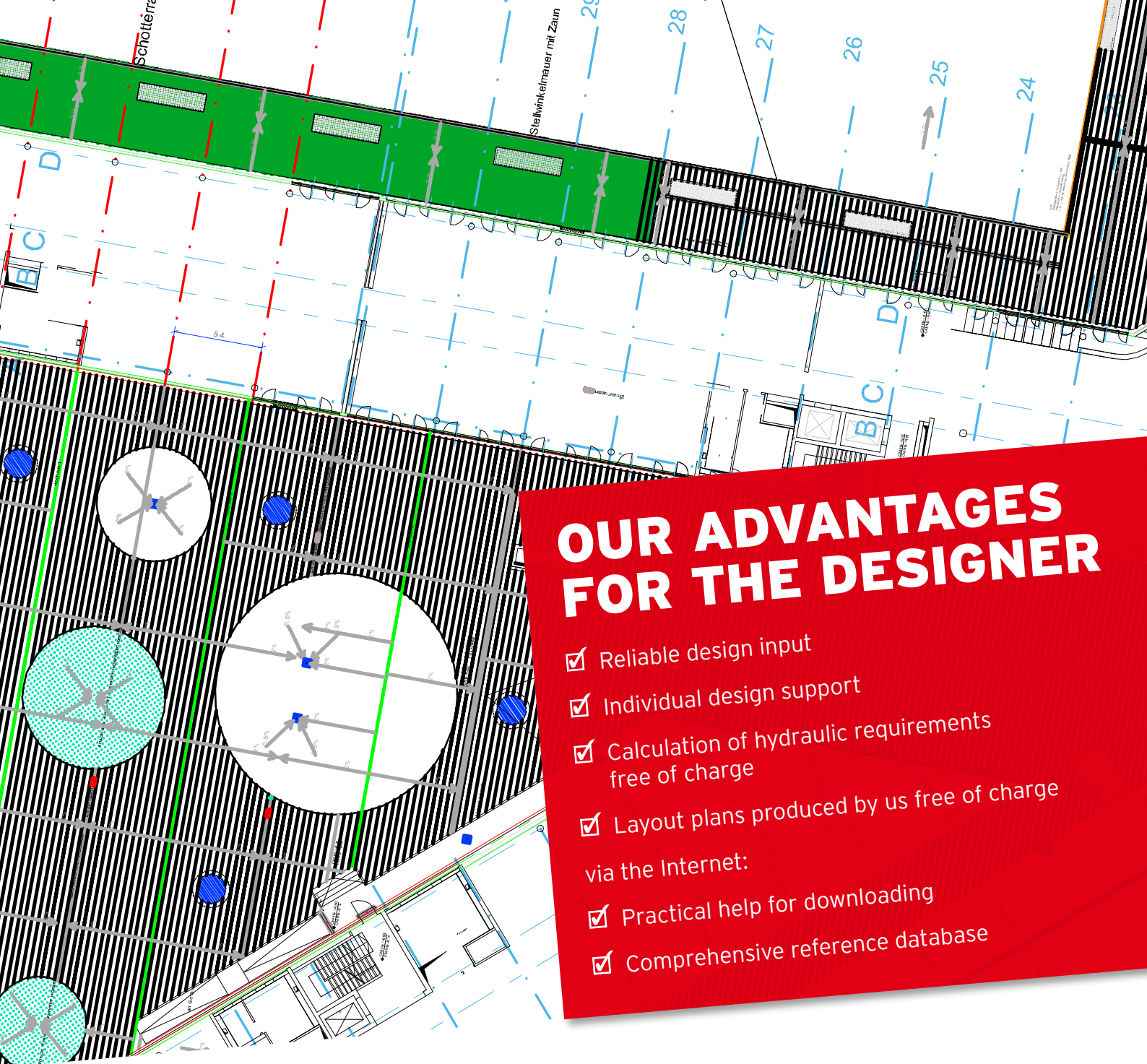
All projects have their own specific requirements which need to be matched by individual drainage systems. In order to be able to assess your project professionally regarding type and scope, we will calculate the hydraulic requirements for you free of charge. The staff at our CAD department just need a few data such as the size of the area to be drained, surface covering, intensity of rainfall, type of channels, etc. – just talk to one of our internal or field sales staff!

## DETAILED INSTALLATION PLANS WITH COMPLETE PARTS LIST

In addition, we will produce a detailed installation plan for your project. The CAD-produced drawings show the exact location of drainage channels, including the positions of end caps, TRASH BOXes and other fittings. They will also include a complete parts list including the quantity and designation of the required products. These installation plans are provided by us also free of charge.



We will produce free-of-charge hydraulic calculations to determine the channel capacity for.

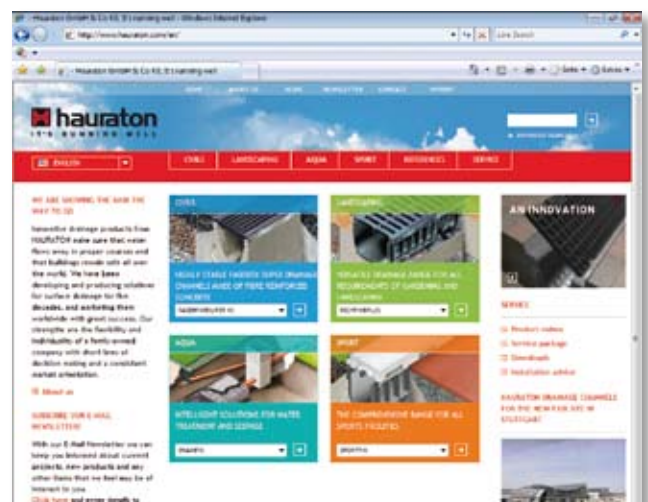


## OUR ADVANTAGES FOR THE DESIGNER

- ✓ Reliable design input
- ✓ Individual design support
- ✓ Calculation of hydraulic requirements free of charge
- ✓ Layout plans produced by us free of charge via the Internet:
- ✓ Practical help for downloading
- ✓ Comprehensive reference database

### HAURATON IN THE INTERNET

Visit [www.hauraton.com](http://www.hauraton.com) where you can find all required information: product information with picture documentation, always up to date, tender proposals for downloading, a comprehensive reference database with numerous projects throughout Europe and a tool for you to compile and print out or save your individual catalogue. There is a fast and competent online service to respond to your enquiries at any time.





# RELIABLE PRODUCTS FOR YOUR DESIGNS

**ALL HAURATON PROCESSES AND PRODUCTS** ARE STRICTLY MONITORED. THAT IS HAURATON'S GUARANTEE TO ITS CUSTOMERS TO ENSURE A HIGHLY RELIABLE PRODUCT.

## DIN EN 1433 / CE-MARK HAURATON CHANNELS COMPLY WITH DIN EN 1433

- ☐ U-profiles for highly efficient drainage with self-cleaning effect
- ☐ long-life seals easy to apply
- ☐ tongue and groove connection for precise installation
- ☐ maximum resistance to the effects of salt and weather, including frost
- ☐ different depths for long drainage runs with varying degrees of fall
- ☐ built-in fall of 0.6 % for improved hydraulics and fast drainage speed
- ☐ large back-pressure volume through construction depths of up to 280 mm
- ☐ large selection of gratings for all types of applications and visual requirements

HAURATON one of the largest ranges of DIN-compliant drainage channels.

## QUALITY CERTIFICATION IN ACCORDANCE WITH DIN EN ISO 9001:2000

As one of the first companies in the building industry, HAURATON achieved quality certification in accordance with DIN EN ISO 9001 back in 1993. Since then, quality standards have been driven up continuously, including regular certification.

The quality requirements of DIN EN ISO 9001:2000 cover not only the products but the whole company, including development, design, production, assembly and customer service. HAURATON's quality management in accordance with DIN EN ISO 9001:2000 provides the highest degree of reliability and safety to our customers.



# RECYFIX®CHANNELS



## STANDARDS, APPROVALS AND WARRANTY

HAURATON channels are not only certified in accordance with DIN EN 1433 but also with the considerably more stringent German DIN V 19580. CE-mark, external monitoring and conformity statement are guarantees for the designer that ensure the highest technical standard. The channels are frost and salt resistant and completely watertight, this combined with their robust construction ensures that they will provide many years of service. HAURATON was one of the first manufacturers in the building industry to voluntarily offer a guarantee period of 5 years.

For a number of FASERFIX SUPER channels and FASERFIX BIG channels we also hold a General Building Control Approval by the DIBt (German Institute for Building Technology) for special applications in industrial locations where liquids that are hazardous to water as per §19 WHG (Water Resources Act) are handled, stored or decanted, such as tank installations. For further details please consult the [CIVILS catalogue](#).

## AT A GLANCE

- ✓ Easy to handle due to low weight
- ✓ 100% recyclable
- ✓ Made of pure recycled PE-PP
- ✓ Highly chemical-resistant
- ✓ Leakproof and UV-stabilised



RECYFIX PE-PP is the basis for many rugged and durable products for many areas of application.





CIVILS

LANDSCAPING

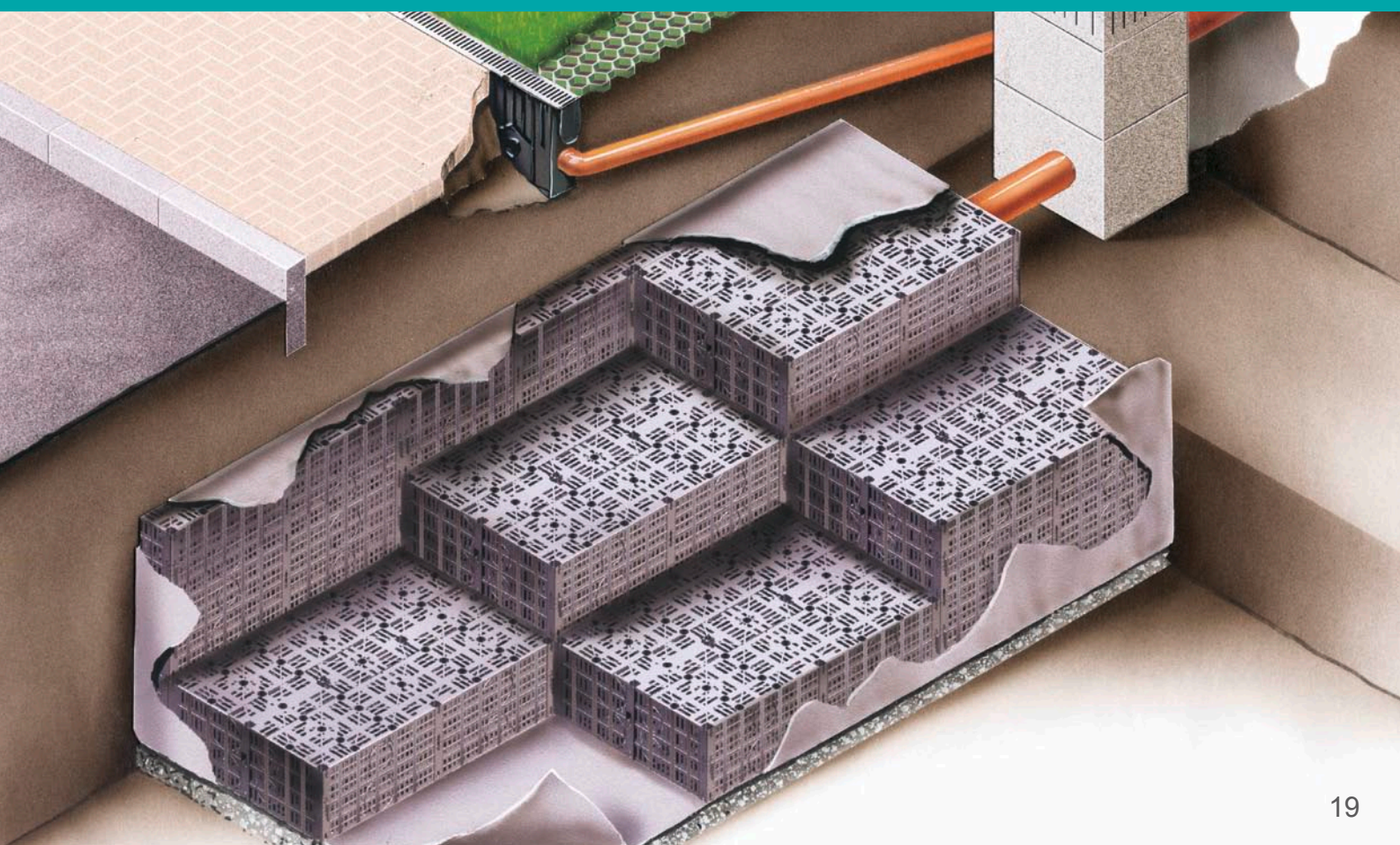
AQUA

SPORT

# AQUA

THE RANGE FOR INFILTRATION SOLUTION

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## THE RANGE FOR INFILTRATION SOLUTION

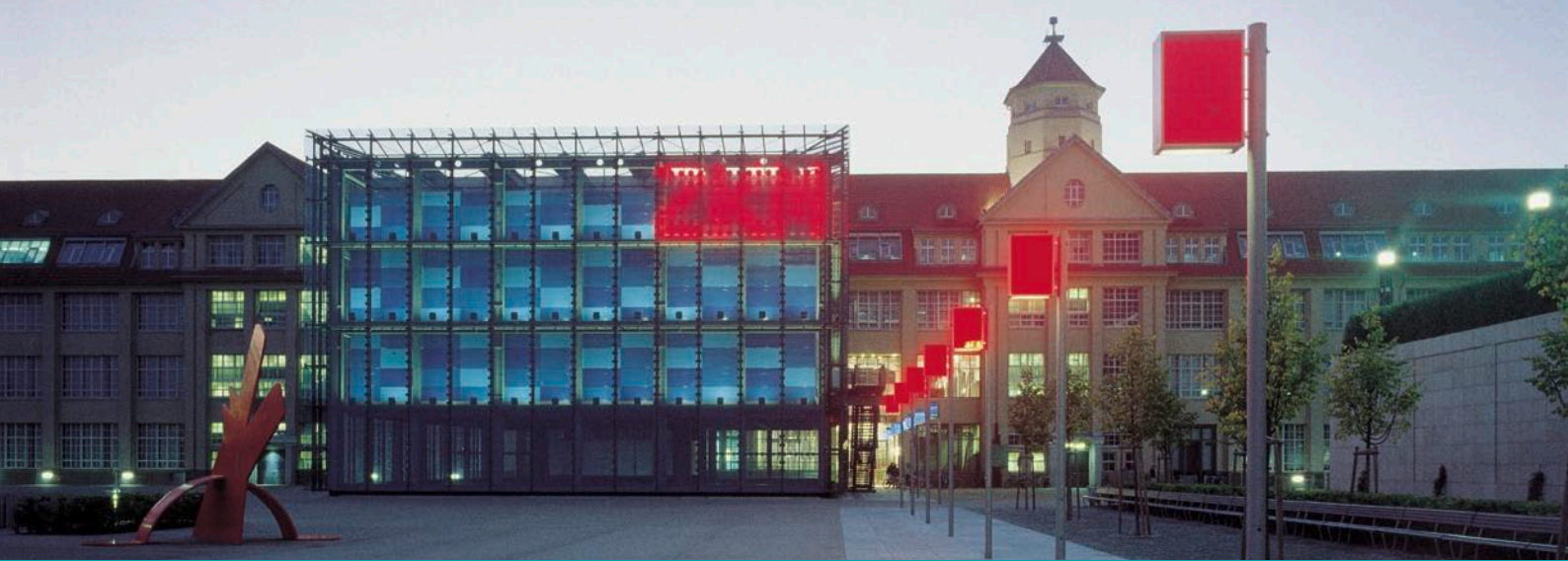
EFFECTIVE INFILTRATION SYSTEMS SUPPORT THE NATURAL WATER CYCLE AND PROVIDE SUSTAINABLE SUPPORT FOR VITAL RESOURCES.

Water is one of the most valuable resources on earth. Water means life. However, in densely populated countries the natural water cycle is significantly affected by ground surfaces being sealed off. Natural infiltration of rainwater is reduced more and more, resulting in the ground-water level sinking and ground drying out.

In order to counteract these developments we require systems that store rainwater at the place of precipitation and then release it gradually back into the natural cycle. With our infiltration products we offer an intelligent way of achieving this. The HAURATON storage elements are suitable for installation underneath traffic areas in trading and housing estates as well as under drives with passenger car usage in private residential areas. The areas above the system remain usable.

HAURATON supports the design team by providing calculations for the sizing of the infiltration system and construction details, ensuring long-term functionality of the installation. With the help of our expert knowledge and advice for installation and servicing, contractors find it easy to deliver perfect results.

HAURATON works in accordance with the regulations for infiltration systems and offers customers a service based on the latest state of technology.



## THE HAURATON DESIGNER PACKAGE



**DRAINFIX®BLOC**  
STABLE, SAFE AND EXTREMELY STRONG



**DRAINFIX®TWIN**  
HIGH VOLUME IN THE SMALLEST SPACE



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# SPORT

The Product Range for Sports Venues

Version 4.2



## The product range for stadiums and sports venues

Modern construction products designed specifically for use in sports venues

The modern German sports arenas have an excellent reputation all over the world. Top-level international competitions such as the Football World Cup or the 2009 World Athletic Championships were held in Germany and showed that our stadiums provide ideal conditions for competitors and fans alike.

HAURATON has been involved with events outside Germany too: at other international sporting events including the Euro Football Championship in Poland and the Ukraine and the 2009 World Handball Championship in Croatia it has been Hauraton's responsibility to install products that will drain playing surfaces reliably. Our specially designed product range for sports facilities is evidence of our extensive competence in this field and has not failed to impress designers, engineers, clients and contractors alike.

## HAURATON is member of IAKS







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# SPORTFIX®

## Perfect drainage - safe past the post.

The comprehensive product range for all sports facilities

### Requirements

Water has to be quickly and reliably removed 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 sports persons if falls or accidents occur.



### Solution

The SPORTFIX range offers products that meet these requirements, e.g. drainage channels made from 100 % recycled PE-PP, soft kerbs with elastic rubber padding, sand traps, water jump kit kits and distribution shafts.

### Application areas

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



Side drainage for running tracks



Slotted channel in the middle of the pitch





SPORTFIX slotted channel in the Estádio da Luz



Temporary cable duct in Arsenal FC's Emirates Stadium in London

## Bespoke solutions

**Estádio da Luz, Lisbon, Portugal: slotted channel with raised turf edge for unimpeded transition to the pitch.**

In the stadium which is home to the famous Lisbon football club Benfica the whole interior area was drained using HAURATON SPORTFIX channels. All transitions to the pitch had to be visually unobtrusive and unimpeded – that was the briefing to the team designing the stadium for the final of the Euro Championship. The solution was provided by a SPORTFIX slotted channel designed and manufactured with a turf edge at exactly the same height as the green drainage mats. This product provides a neat separation of the pitch from the surrounding areas and yet is virtually invisible. It goes without saying that surface water is reliably drained away.

**Temporary cable duct running the length of the pitch.**

FASERFIX SUPER channels with the boltless locking system SIDE-LOCK enable TV cables to be installed very quickly. This guarantees technical reliability while at the same time minimising the risk of tripping over loose cables.



## Some HAURATON SPORT references out of thousands:

- Easy Credit Stadium in Nuremberg, Germany
- Ceahlăul Stadion in Piatra Neamț, Romania
- Stadium Zvezdinskij in Moscow, Russia
- Red Star Stadium in Belgrade, Serbia
- PGE Arena in Gdansk, Poland
- National Stadium in Warsaw, Poland
- Stadium in Wrocław, Poland
- Multi-function Arena in Poznań, 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
- ...





# Designers' service package

**HAURATON develops innovative products** and supports designers of sports venues in the planning and realisation of their projects.

## Individual design support

You can contact our field sales staff at any time for expert and qualified advice. On request we will produce CAD-based installation plans for you. We are happy to work out solution proposals for your specific drainage requirements. We also have experience of designing solutions for renovation projects.

## Specifications

We are happy to work out project-specific tender proposals for your building project. We need detailed information on the on-site situation for this purpose. Why not give us a call?

## Installation advices

General installation advices are available for all products in the HAURATON sport range. These instructions are always included when we ship our products, but we are also happy to send them out in advance.

## FASERFIX SUPER channels, RECYFIX channels

FASERFIX SUPER and RECYFIX channels are the perfect solution for draining grandstands and external facilities! FASERFIX SUPER channels are available in nominal widths from 100 to 500 mm and RECYFIX channels from 100 to 300 mm. Gratings are available in different designs and load classes in accordance with EN 1433.

For more information please refer to our catalogues **CIVILS** and **LANDSCAPING**.

## Advantages 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
- ✓ Latest product information and reference database available online



Members of our team will be pleased to pay you a visit at your office or on site to provide expert advice.

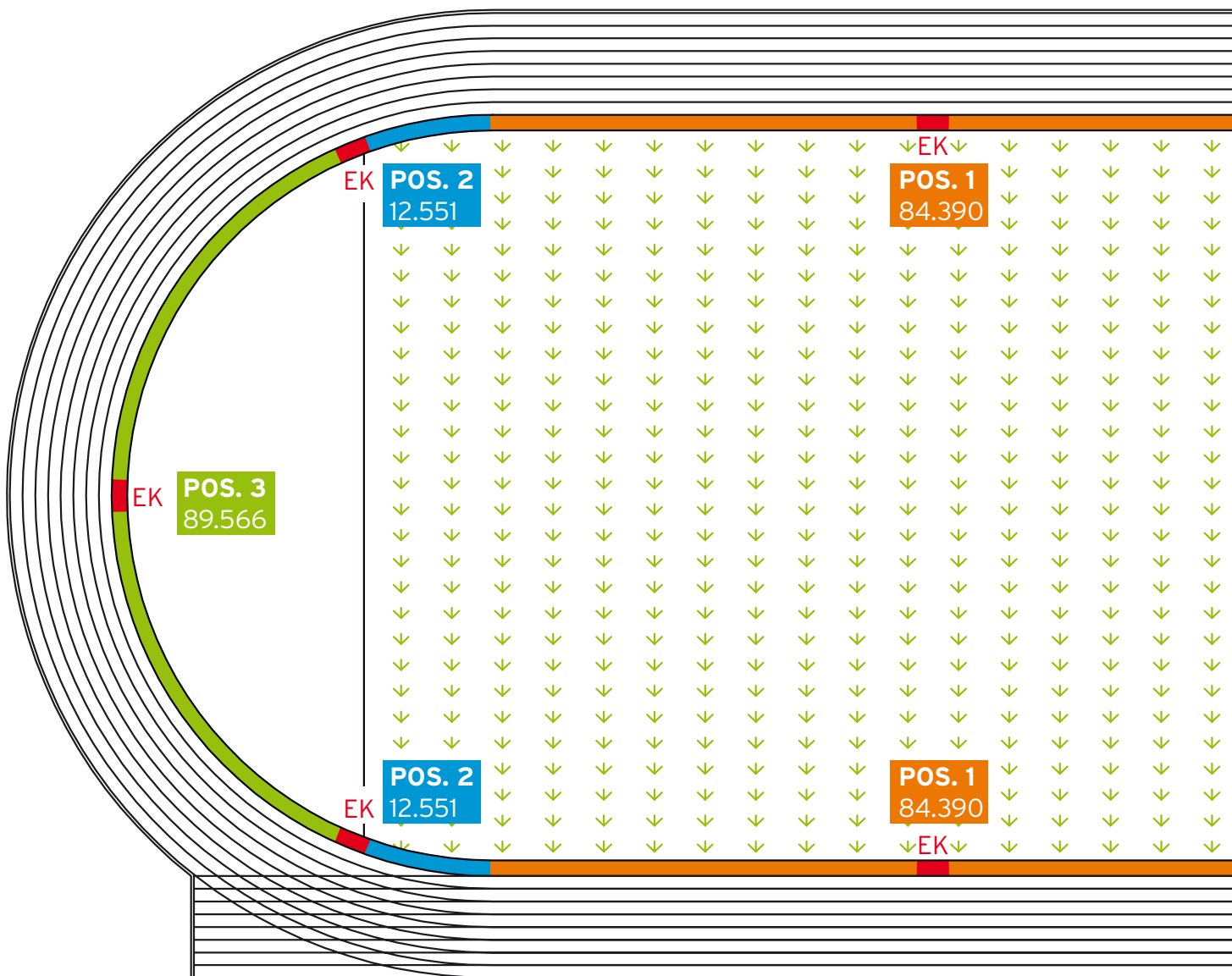
# Drainage channels, layout plan

## IAAF accredited facilities

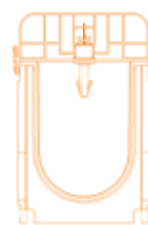
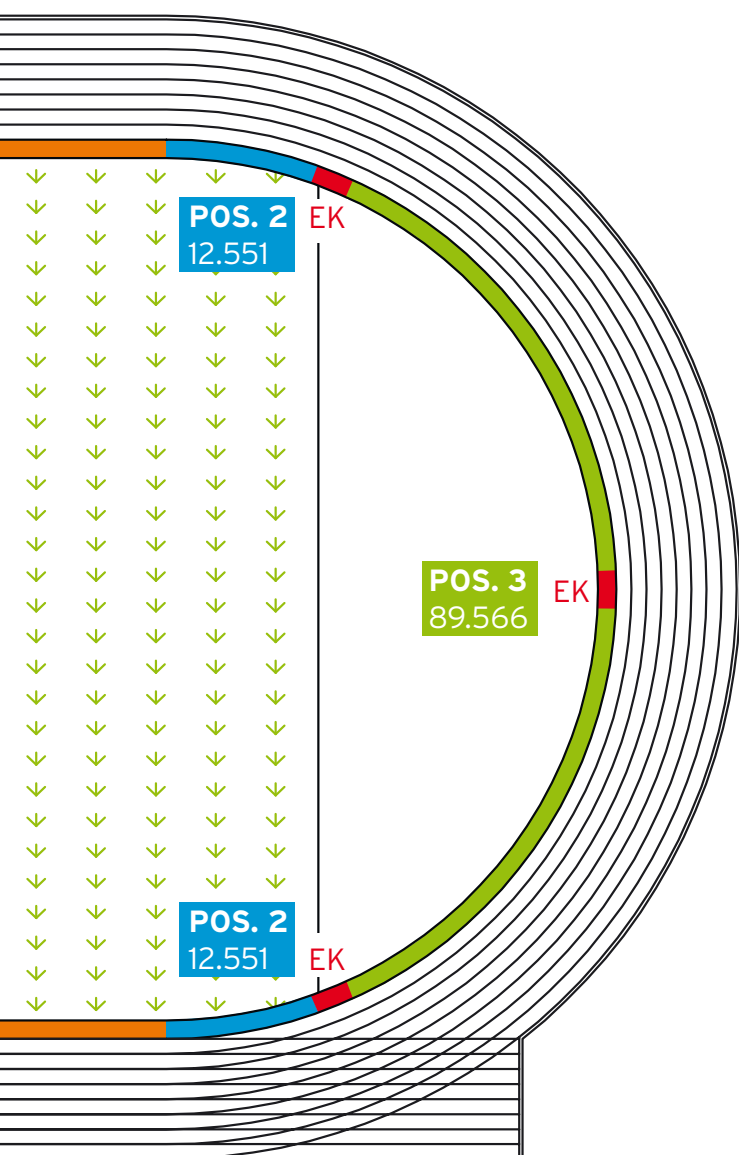
Sports facilities for international competitions have to be according the strict guidelines of IAAF to be accepted for the Olympics and all other official championships.

HAURATON provides products for running track drainage which fulfill all demands of IAAF and which allow to create exactly a 400 m running track. That means the SPORTFIX Channels can be used as track limitation. On these sports facilities all achieved records will be acknowledged.

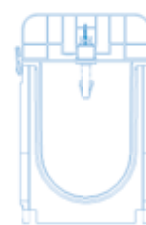
## Sample running track which is according the IAAF guidelines







Pos 1



Pos 2



Pos 3

## Parts list

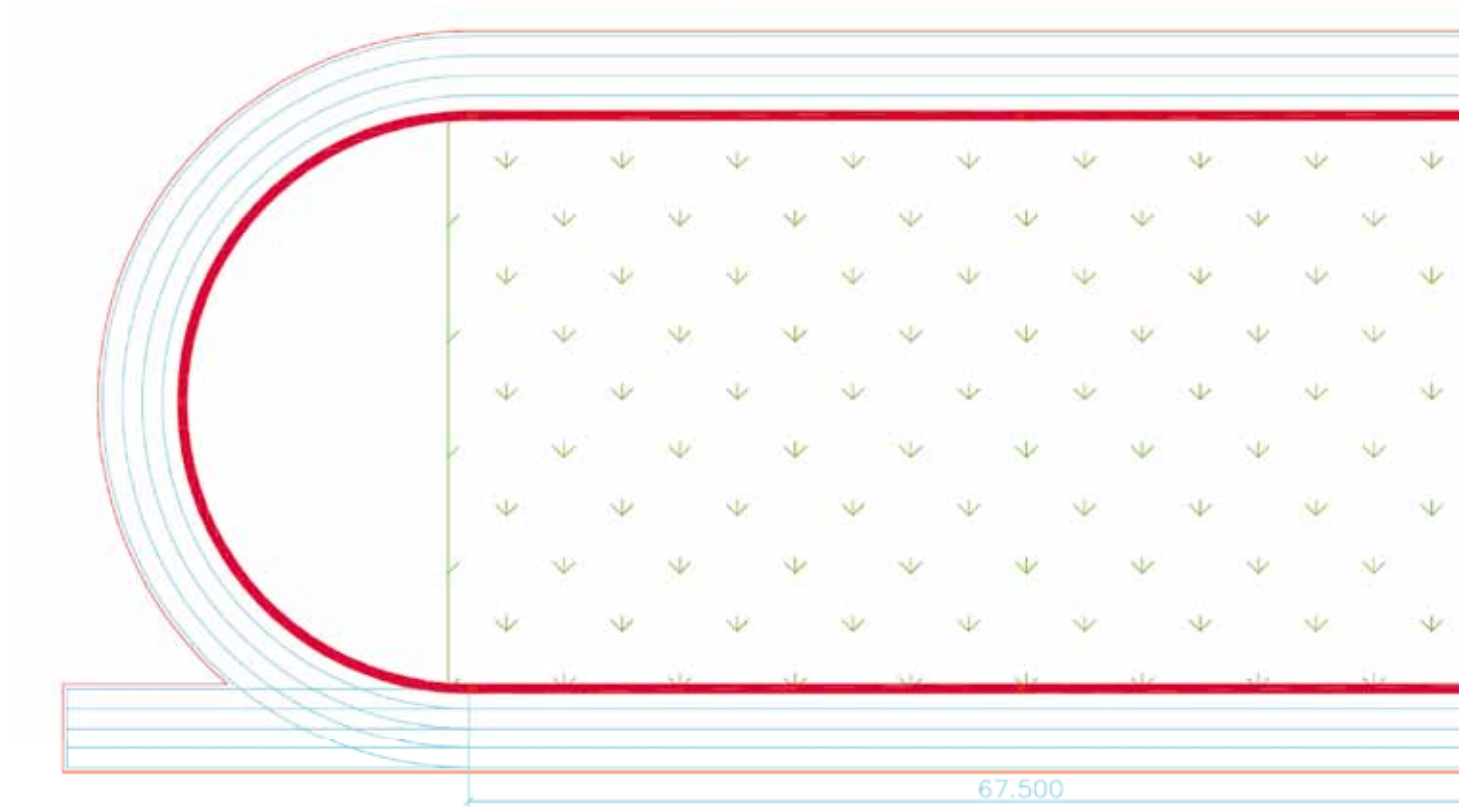
Number	Designation	Product code
<b>Pos 1</b>		
168	SPORTFIX SUPER Slotted Channel with upstand	7820
169	SPORTFIX plastic blank cover, straight	7563
2	SPORTFIX type O trash box	7830
2	SPORTFIX access cover	7785
<b>Pos 2</b>		
50	SPORTFIX SUPER Slotted Channel with upstand	7820
52	SPORTFIX plastic blank cover, curved	7564
4	SPORTFIX type O trash box	7830
4	SPORTFIX access cover	7785
<b>Pos 3</b>		
178	SPORTFIX SUPER slotted channel	7810
179	SPORTFIX blank cover, curved	7564
2	SPORTFIX type O trash box	7830
2	SPORTFIX access cover	7785

# Drainage channels, layout plan

## School sport and public facilities

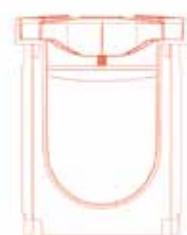
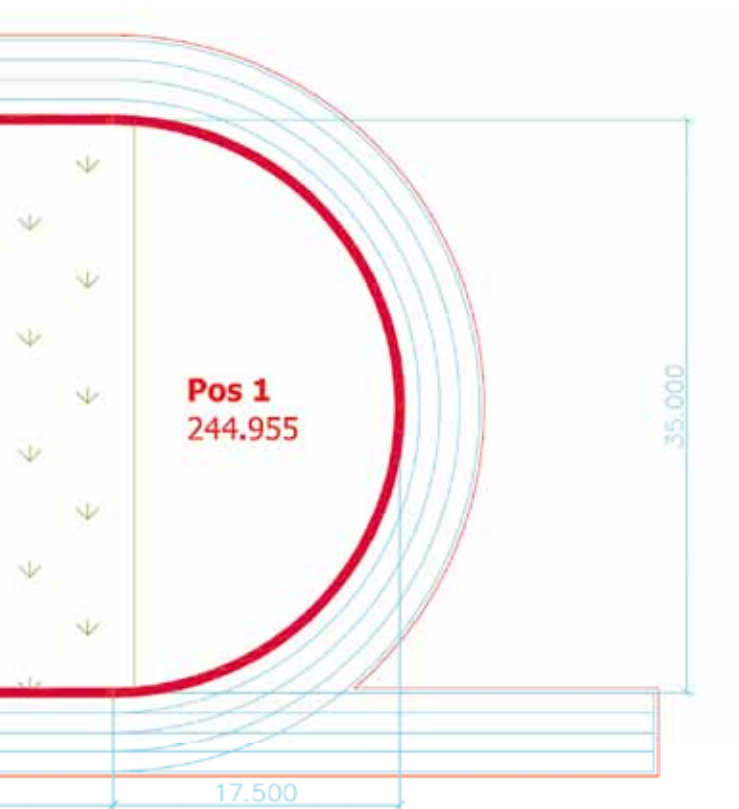
School sport and public sports facilities need not fulfill the IAAF guidelines. Therefore HAURATON can provide alternative products for the track drainage. These products have also top quality but less technical features.

## Sample running track for school sport and public facilities



In this sample layout a school sports facility with a running track length of 250 m is shown.

There are hardly limitations in the length of the running track. Just get in touch with us to find out which and how many channels are requested for your sports facility.



Pos 1

## Parts list

Number	Designation	Product code
<b>Pos 1</b>		
244	RECYFIX PRO 100 Type 010 with FIBRETEC Slotted grating SW 9, black	47060
8	RECYFIX PRO 100 Trash box with mud bucket and FIBRETEC Slotted grating SW 9, black	7560

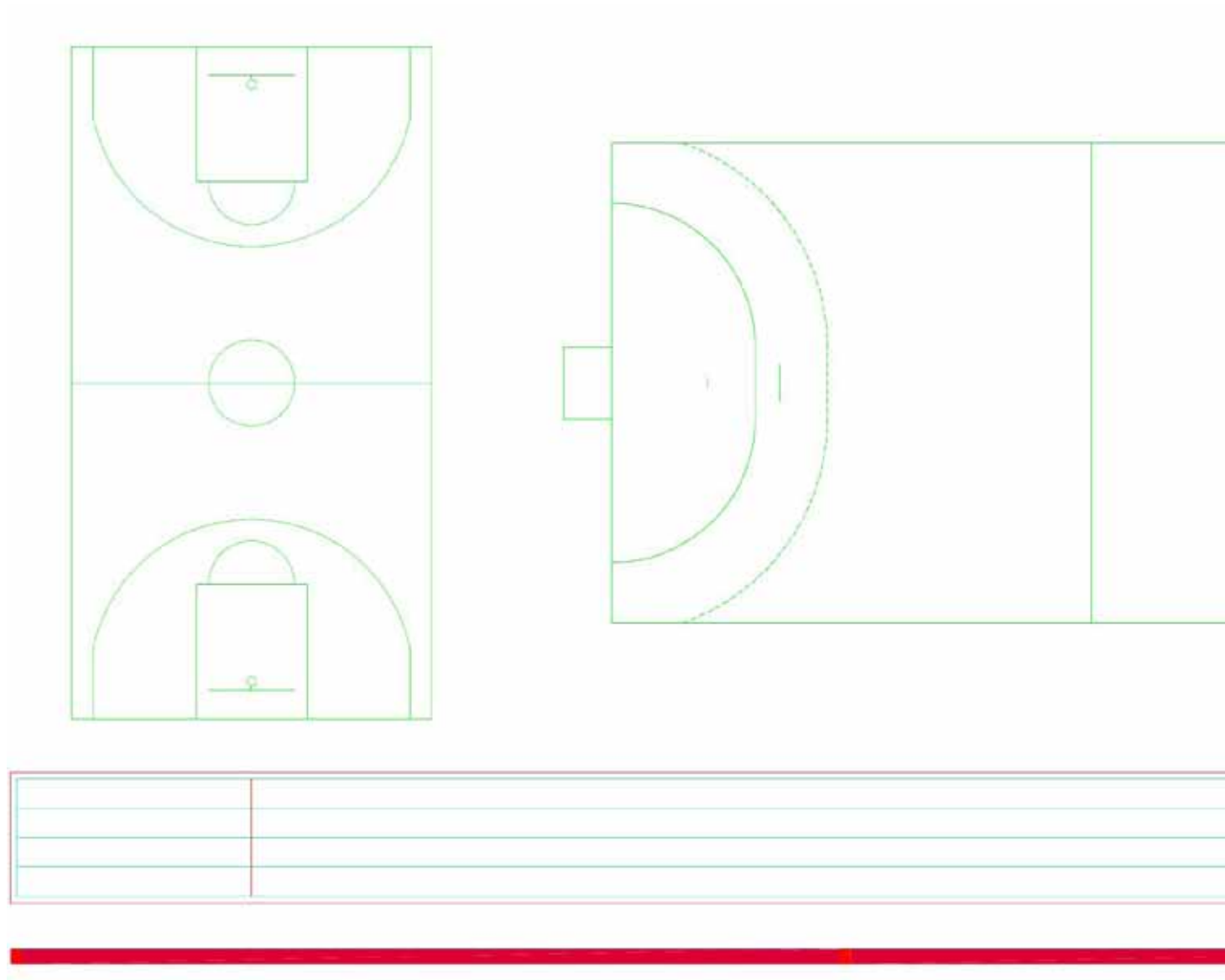


# Drainage channels, layout plan

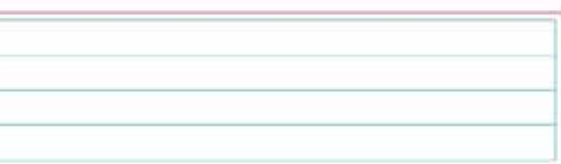
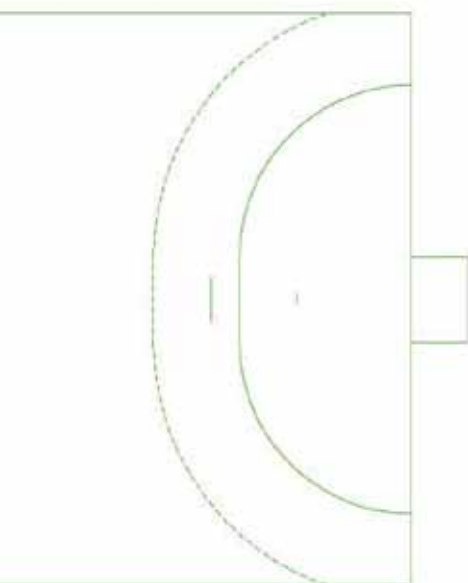
## Small sports facilities

Small sports facilities without a complete running track can be drained with standard drainage channels.

## Sample running track for small sports facilities



In this sample layout a small sports facility with a running track length of 70.5 m is shown.



**Pos 1**  
**70.500**



**Pos 1**

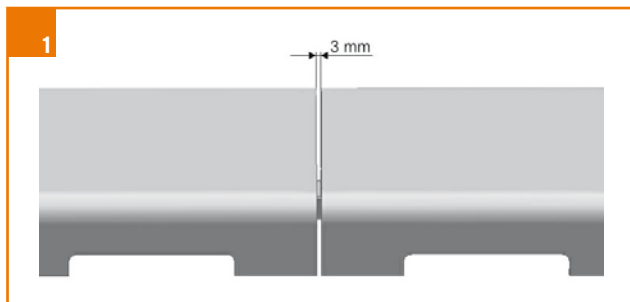
## Parts list

Number	Designation	Product code
<b>Pos 1</b>		
69	RECYFIX STANDARD 100 Channel Type 010 with slotted grating, galvanised, cl. A 15, locked	40296
3	RECYFIX STANDARD 100 Trash box with mud bucket and slotted grating, galvanised, cl. A 15, locked	40256

# Tricks and hints

## Installation

SPORTFIX plastic covers are installed with **3 mm spacing** (= thickness of a folding wooden rule).

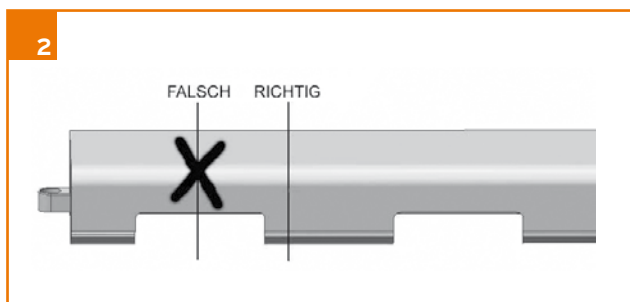


**Figure 1: Spacing**

Covers are installed in a clockwise direction. The gratings centre one another by means of the black connecting springs. SPORTFIX blank covers have four spring-loaded steel clamps on their underside; these are used to clip the grating into the slotted channel.

## Cut to length

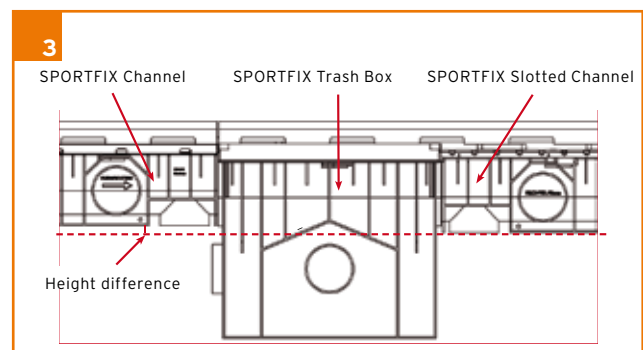
SPORTFIX plastic covers can be shortened easily using a wood saw. The cut **must not be made through the side inlet openings**; if necessary, two gratings should be shortened in such a way as to achieve the required length without any cuts in the inlet area.



**Figure 2: Cutting a plastic cover to length**

## Installing and connecting different channel types

When installing SPORTFIX channels and SPORTFIX slotted channels there is a height difference at the joining point that needs to be evened out. Using the raised slot in the slotted channel, which joins up superbly with the running track surface, this channel must be set deeper by the thickness of the running track surface (approx. 15 mm).



**Figure 3: Evening out a height difference**

Height adjustment is carried out with the help of an inlet box; the two runs of channel are connected to either side of the inlet box and an inspection cover is installed if necessary (see diagram).



## SPORTFIX® drainage solutions



# Installation

## General installation Instructions

For all channels installed in sports facilities our general installation instructions are valid. We will hand out the latest version of installation advices for every order.

## Pictured installation documentation

To get an idea of the correct installation of SPORTFIX Channels you find following a pictured installation documentation.

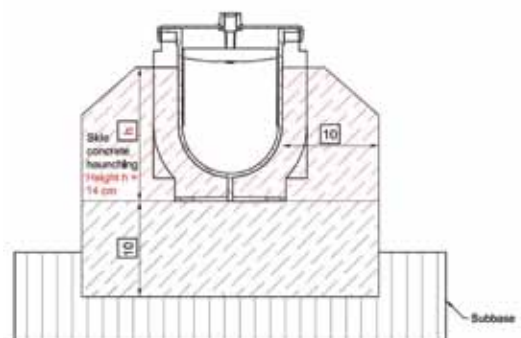
### Step 1: Foundation on subbase



### Step 2: Lining and levelling

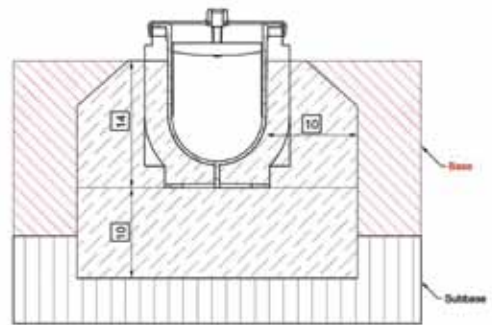


### Step 3: Concrete haunching

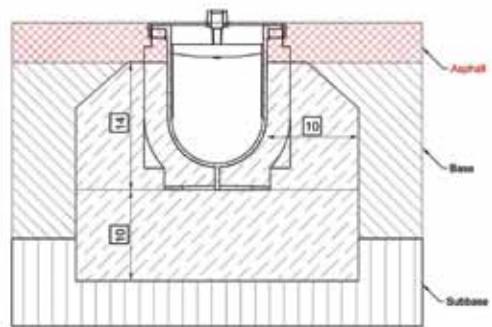




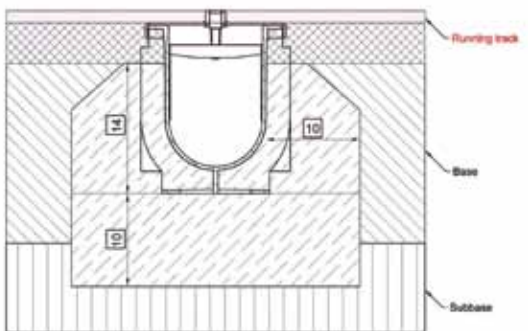
#### Step 4: Base for surfacing



#### Step 5: Asphalt



#### Step 6: Running track surface



#### Step 7: Open drainage slots

