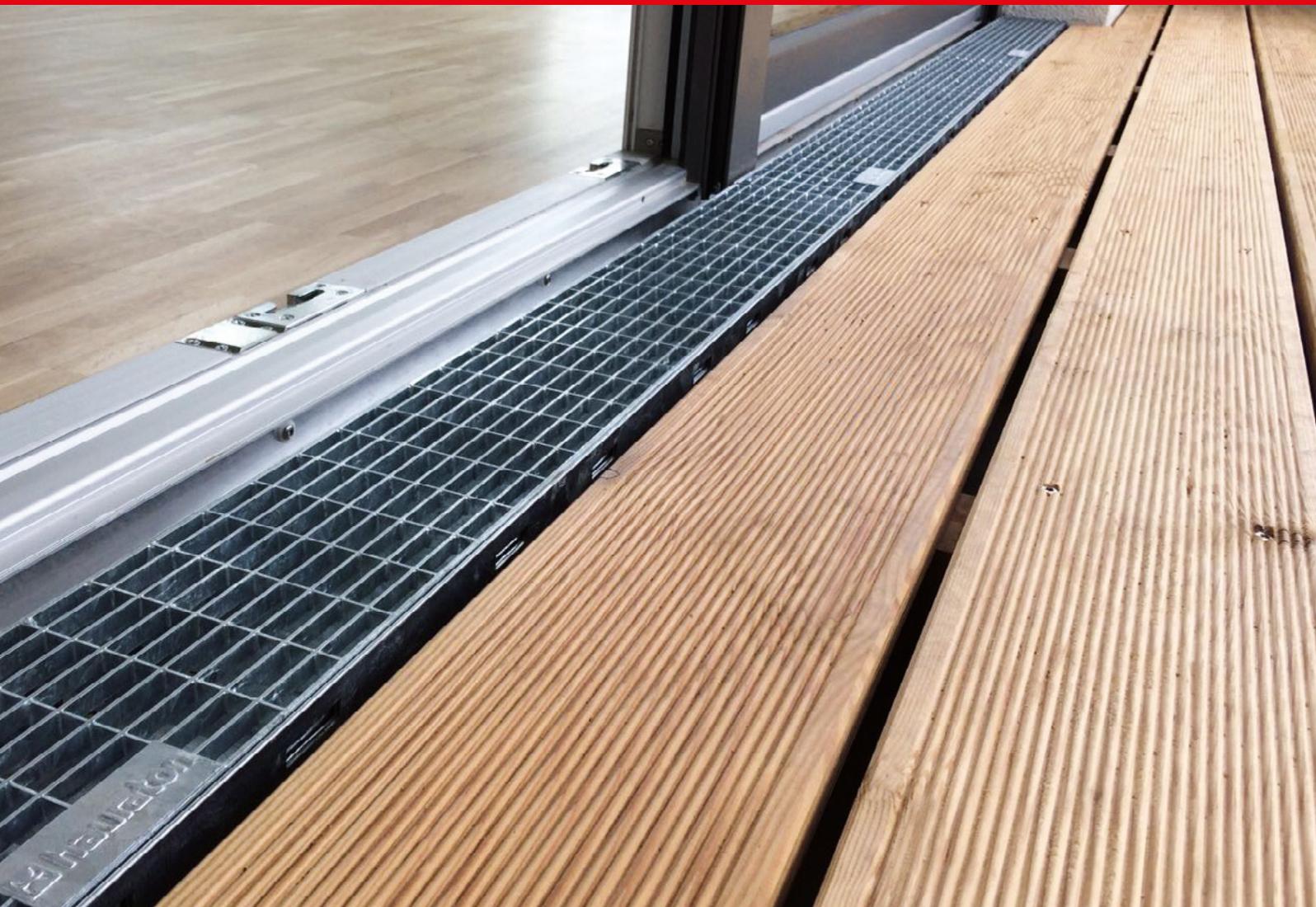


**PRODUCT SELECTOR**

# ROOF TERRACES, BALCONIES & FACADES

Linear drainage systems for environments that require aesthetic design and effective drainage in shallow conditions.

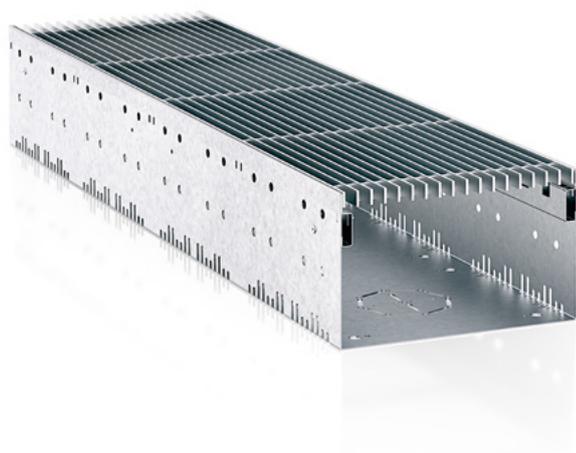


# World Leader

## Reliable Performance

A world leader in the manufacture of modular surface drainage systems, HAURATON drainage products have been supplied onto major projects within international markets for over sixty years.

We developed our first linear drainage system in 1956. Since that time the HAURATON brand has become known around the world as a benchmark for quality, reliability, durability and service.



## Environmentally Aware

HAURATON has environmentally sound production facilities, processes and procedures.

RECYFIX® systems are manufactured from recycled Polypropylene (PP), which is 100% recyclable following life-time use.

HAURATON drainage systems can assist in the assignment of credits based on the BREEAM and LEED rating systems. HAURATON maintains an Environmental Management System according to DIN EN ISO 14001:2015.

Refer to HAURATON for further information.



# Surface Drainage

## Product Range

HAURATON offers a wide range of external surface drainage systems suitable for a variety of project applications, including residential, commercial, municipal, industrial, military, transport and major infrastructure projects.

**FASERFIX®** - Strong and durable drainage channels in Fibre-Reinforced Concrete (FRC).

**RECYFIX®** - A robust, high-performance range in corrosion-resistant composite materials (PP, PA-GF). HAURATON is the innovator and market-leader in this field and provides the widest range of commercial-grade composite channel systems available.

**SPORTFIX®**, **DACHFIX®**, **DRAINFIX®CLEAN** and **RECYFIX®TRAM** are specialist ranges available for unique applications.

Systems can be supplied with a variety of functional, decorative and HeelSafe gratings or with discreet 'longitudinal' slot channel designs, for load-class applications from A15kN up to F900kN, offering significant choice and flexibility.

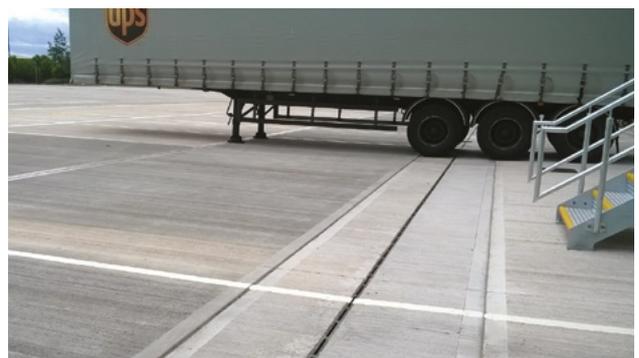
With superior design and engineering, HAURATON sets the industry standard with high-quality, visually aesthetic and technically innovative products that meet project requirements and complement modern building and landscape design.

## Product Selectors

Our Product Selector's have been designed to provide industry professionals with a quick, simple and clear guide to choosing the appropriate HAURATON system to suit their project requirements.

Each Product Selector include's project applications with similar needs regarding loading and system performance:

- Roof Terraces, Balconies & Facades
- Public Realm & Shared Space
- Car Parks & Commercial
- Industrial
- Ultra-Heavy-Duty



# Roof Terraces, Balconies & Facades

Linear drainage systems for environments that require aesthetic design and effective drainage in shallow conditions.

## System Requirements

'Roof Terraces, Balconies & Facades' environments typically include the following characteristics:

- Light loads; A15kN - C250kN. Channels could be subject to occasional traffic by hand-guided trolleys/trucks (refuse, street cleaning, office etc). If pedestrian use is intensive, or heavy point-loads anticipated, C250 loading is recommended for gratings/covers. Higher load classes can be accommodated with standard channel systems or customised designs.
- Low to medium traffic flow (mainly pedestrian use). Channel systems often installed in locations that are not subject to any major traffic flow (eg façade installation, raised areas etc).
- Systems required to be aesthetic, safe, durable and easy to maintain. Variety of grating designs are available; including HeelSafe options.
- Decorative and general surfaces (block paving, stone sets, granite, tiles, timber decking, resin surfaces, printed concrete, coloured asphalt etc).
- Systems with neat and discreet surface detail to complement contemporary design and accommodate a variety of finishes. Linear drainage often incorporated within landscape design. Radius installations follow hard and soft landscape features. Unique system designs often required to meet special project needs.
- Channel inverts often shallow to accommodate depth restrictions and/or installation above damp-proof membranes (DPM) within raised structures.
- Watertightness of system installation an important requirement. Special channel designs may be required to allow drainage/discharge of sub-surface water (sheet flow over damp-proof membrane).
- Corrosive environments dependent on location. Systems available in recycled polypropylene and stainless steel (various grades).
- Barrier-free entrances may be designed by specifiers to meet regulations, requiring systems to be height adjusted to suit finished floor levels (access for prams, wheel chairs, mobility equipment for the disabled etc). **DACHFIX®** systems can be fully adapted to suit project needs.

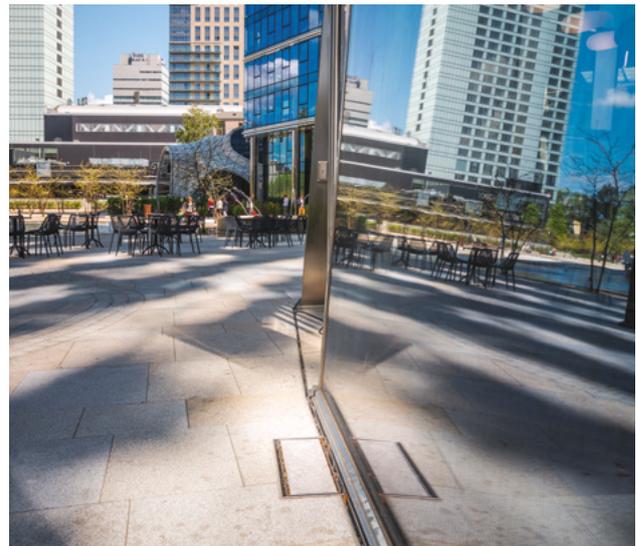
HURATON systems included in this Product Selector meet and exceed the requirements for 'Roof Terraces, Balconies & Facades' project applications.

## Typical Applications

Projects where 'Roof Terraces, Balconies & Facades' environments exist include:

- Facades
- Multi-Storey Car Parks
- Balconies
- Raised Concrete Structures
- Entrances
- Restricted Depth Applications
- Courtyards
- Landscape Features (None-Trafficked)
- Roof Terraces
- Mezzanine Floors
- Barrier-Free Entrance Installations (Raised Structures)

\*HAURATON 'Roof Terraces, Balconies & Facades' systems are generally suitable for light to medium loading/traffic flow and pedestrian use.



# DACHFIX®RESIST

Lightweight, corrosion resistant and cost-effective, **DACHFIX®RESIST** is designed to provide positive surface drainage in raised structures (roof terraces, balconies) where there may be depth-restrictions for installation (shallow pavement heights) and light pedestrian use.

**DACHFIX®RESIST** is available in two channel depths (45mm or 75mm overall height) with an overall width of 115mm.

The system includes a channel body in modified Polypropylene (PP) composite with a discreet integral edge-frame for enhanced aesthetics at the surface. Slots within the channel body structure allow sub-surface water to enter the system for fast and efficient drainage. **DACHFIX®RESIST** is available with a range of composite or steel gratings with a load rating equivalent to A15kN. Refer to product brochure for detailed information.

## Key Features

### Material

- Modified Polypropylene (PP) composite

### Loading

- Pedestrian
- EN 1433: 2002 not relevant for this application

### Channel Widths

- 115 mm (90mm internal width)

### Channel Heights

- 45 & 75 mm (overall)

### Channel Lengths

- 1.0m

### Grating Options

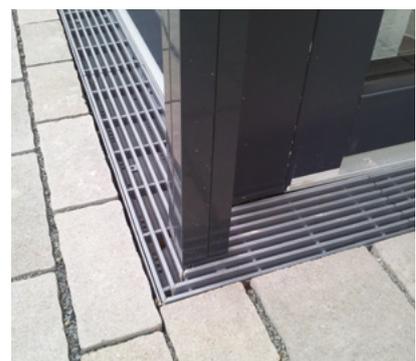
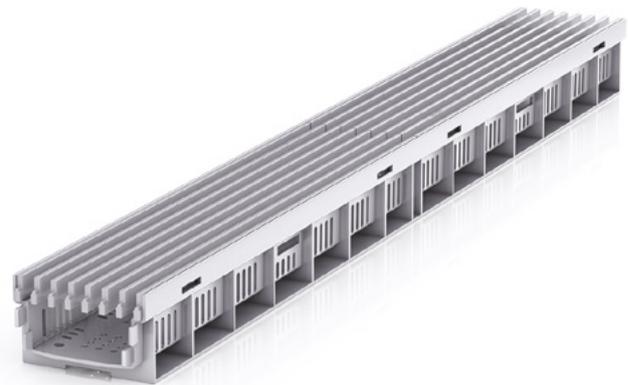
- Inlay design
- Load equivalent to A15 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

### Channel Configuration

- Constant-depth (same channel depth)

### Edge Detail

- Polypropylene edge-frame
- Integral part of channel body structure



# DACHFIX®STEEL

Lightweight and versatile, **DACHFIX®STEEL** has been designed to meet European regulations regarding installation of linear drainage systems across door thresholds to achieve barrier-free entry for a variety of project applications, including raised structures (terraces, balconies etc) and facades.

Available in five channel widths; each with four depth options (45, 75, 100 and 150 mm), **DACHFIX®STEEL** provides total design flexibility to suit most project and hydraulic requirements.

With innovative design features and components (removable pipe sections, integral weep holes/slots, height adjusters, quick-fit locking mechanism, unique outlet box design), **DACHFIX®STEEL** is quick and easy to install and accommodates more complex construction requirements for raised structures (insulation board, structural reveals, direct pipe connection, sub-surface drainage etc). Refer to product brochure for detailed information.

## Key Features

### Material

- Galvanised steel
- Stainless steel

### Loading

- Pedestrian
- EN 1433: 2002 not relevant for this application

### Channel Widths

- 115, 135, 155, 205 & 255 mm

### Channel Heights

- 45, 75, 100 & 150 mm (overall)

### Channel Lengths

- 1.0m

### Grating Options

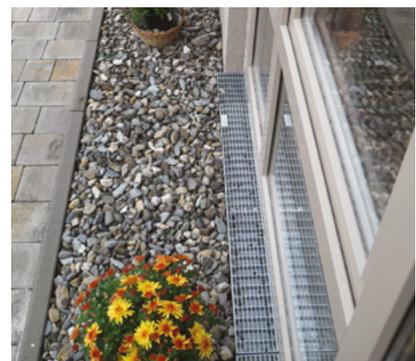
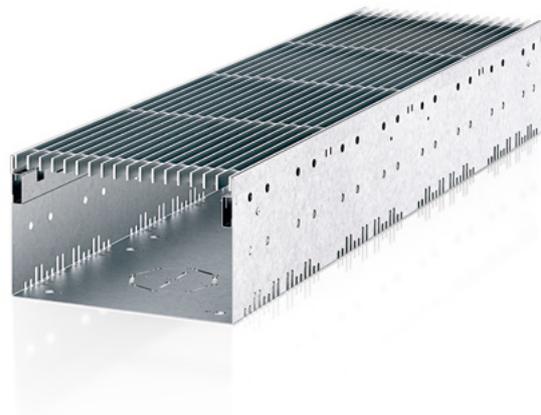
- Inlay design
- Load equivalent to A15 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

### Channel Configuration

- Constant-depth (same channel depth)

### Edge Detail

- Steel edge-frame
- Integral part of channel body structure
- Discreet and aesthetic



# SLOTTED CHANNEL

**SLOTTED CHANNEL** achieves high standards in quality and design, combining both aesthetic appeal and practical performance. The discreet linear surface detail complements modern building architecture and external landscape design, achieving a simple, safe and durable installation.

With high intake capacity through the surface slot opening, **SLOTTED CHANNEL** provides efficient and effective drainage of surface water in locations around the world that experience the highest rainfall intensities. Test data available on request. The **SLOTTED CHANNEL** system includes an access cover accessory for quick, simple cleaning and maintenance. Refer to product brochure for detailed information.

## Key Features

### Material

- Modified Polypropylene (PP) composite
- Fibre-reinforced concrete

### Loading

- Channel body load rated to D400 (EN 1433: 2002)

### Channel Widths

- 100, 150 & 200 mm

### Channel Heights

- Refer to Slotted Channel brochure
- Slotted channels can also be custom-made to suit most site requirements

### Channel Lengths

- 1.0m & 500mm (selected depths)

### Slotted Cover Options

- Load options ranging from A15 - D400 (EN 1433: 2002)
- A-symmetric or symmetric configuration
- Slot height options of 105mm (UK)
- Slot height options of 100mm, 160mm & 200mm (international)
- Galvanised steel (DX51D+Z275-MA-C)
- Austenitic stainless steel (AISI Grade 304, 316, other)
- Refer to product brochure

### Channel Configuration

- Constant-depth (same channel depth)
- Stepped-fall

### Edge Detail

- Slot width options in 10mm (UK)
- Slot width options 12.5mm & 18mm (international)

\*Choose the A-symmetric slotted cover for use along building facades/walls/landscape features at ground level.

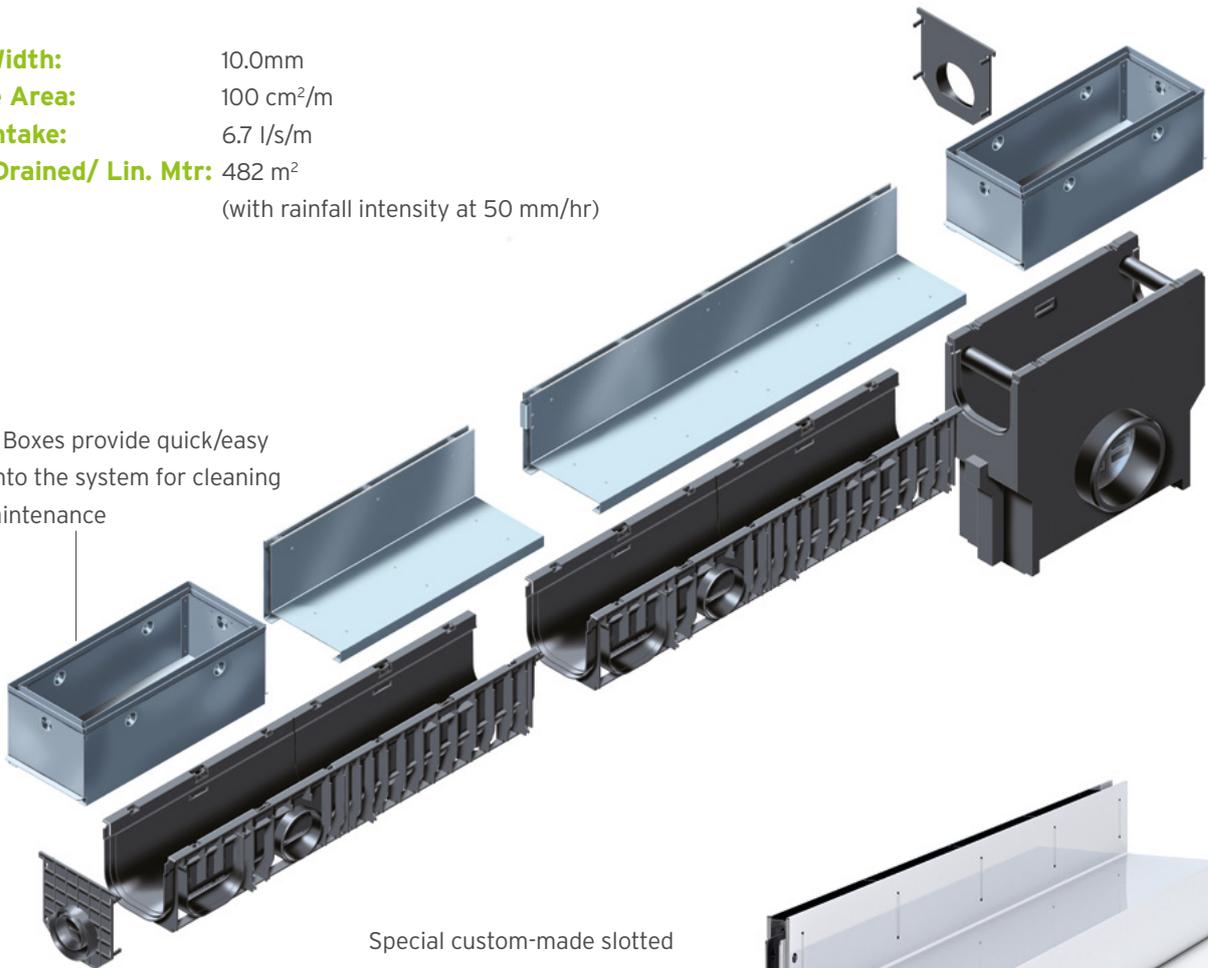


# SLOTTED CHANNEL

Further information regarding intake capacity is available on request.

- Slot Width:** 10.0mm
- Intake Area:** 100 cm<sup>2</sup>/m
- Max intake:** 6.7 l/s/m
- Area Drained/ Lin. Mtr:** 482 m<sup>2</sup>  
(with rainfall intensity at 50 mm/hr)

Access Boxes provide quick/easy entry into the system for cleaning and maintenance



Special custom-made slotted channels can be manufactured in galvanised or stainless steel for unique project applications. Refer to 'Customised Drainage Solutions'.



# SHALLOW CHANNELS

The core range of **RECYFIX**® and **FASERFIX**® grated channel systems (A15 - E600) are available in shallow channel options, with a variety of shallow depth dimensions no greater than 115mm deep (see below).

Shallow channel options are generally 100mm wide (other channel widths are available in reduced height dimensions). Shallow channels can be used in most applications where there is a depth restriction. When used in raised concrete structures, channels should be installed with sealed joints and above a Damp Proof Membrane (DPM). Refer to product brochure for detailed information.

## Key Features

### Material

- Modified Polypropylene (PP) composite
- Fibre-reinforced concrete

### Loading

- Depends on system selected
- A15 - E600 (EN 1433: 2002)

### Channel Widths

- 100 mm
- Shallow channels also available in wider sizes

### Channel Heights

- **RECYFIX**®STANDARD: 60, 80 & 100 mm
- **RECYFIX**®PRO: 75, 95 & 115 mm
- **RECYFIX**®PLUS: 60, 80 & 100 mm
- **RECYFIX**®NC: 75 mm
- **FASERFIX**®KS: 80, 100 & 110 mm

\*Overall height dimension provided

### Channel Lengths

- 1.0m

### Grating Options

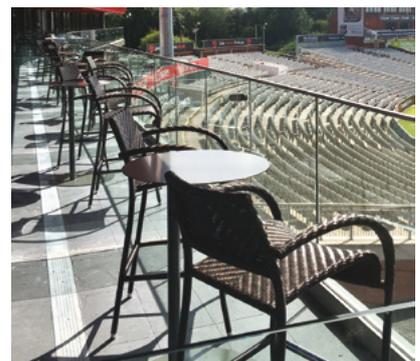
- Lay-on or inlay design
- Load options ranging from A15 - E600 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

### Channel Configuration

- Constant-depth (same channel depth)

### Edge Detail

- Integral polypropylene edge (visible on the surface)
- Galvanised steel S275J263+Z
- Stainless steel CNS 1.4301
- Neat, discreet, rigid and aesthetic



# HAURATON CHANNELS

Appropriate channels from HAURATON's standard range of **RECYFIX®** and **FASERFIX®** linear drainage systems can be used for façade drainage at ground level if there are no depth restrictions on site.

Refer to the 'Public Realm & Shared Space' Product Selector for details of suitable systems.



# CUSTOMISED DRAINAGE SOLUTIONS

HAURATON provides **CUSTOMISED DRAINAGE SOLUTIONS** to meet very specific requirements for unique and innovative applications. A bespoke approach offers total flexibility regarding channel width, depth, configuration, edge-detail, materials, inlet/grating design, type/location of outlets and other special system characteristics.

**CUSTOMISED DRAINAGE SOLUTIONS** provide the perfect design when project needs require high-quality aesthetics with superior and precise performance. Designs include specialist grated and slotted channel systems. Refer to product brochure for detailed information.

## Key Features

### Material

- Corten steel
- Galvanised steel
- Stainless steel (various grades)
- Other specialist materials to suit project needs

### Loading

- Generally A15 - D400 (EN 1433: 2002)
- System designed to meet load requirements

### Channel Widths

- Sized to meet hydraulic requirements

### Channel Lengths

- Variable
- Modular sections fabricated to meet specific configurations
- Polygon or radial designs available

### Grating/Cover Options

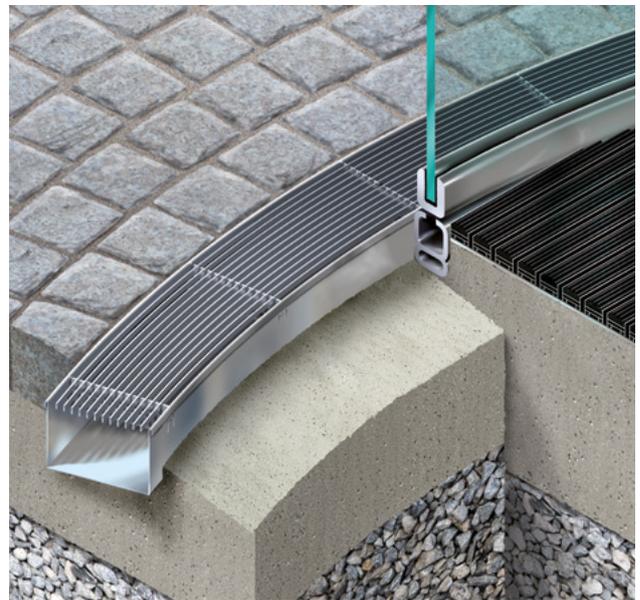
- Designed to meet performance and load requirements (EN 1433:2002)
- Variety of designs, materials, colours and finishes available
- Refer to product brochure

### Channel Configuration

- Constant-depth (same channel depth)
- Built-in fall

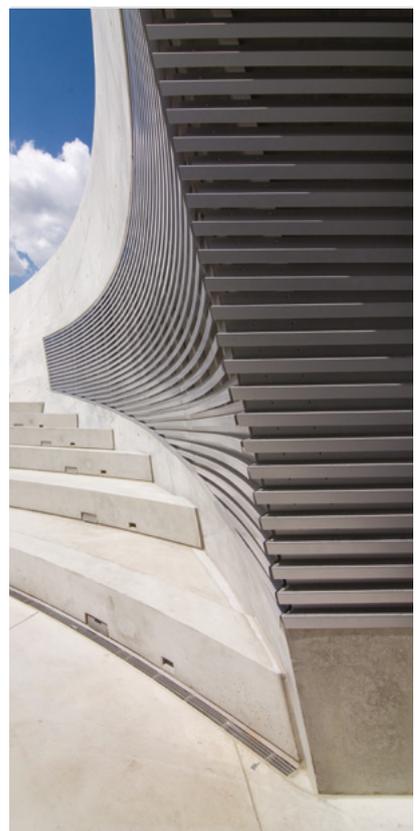
### Edge Detail

- Designed to meet project requirements
- Neat, discreet, rigid and aesthetic



# UNIQUE DESIGNS

Customised channel designs for special applications (roof terraces, balconies, facades, other).



# Total Support

## Projects Team

HAURATON provides close support to ensure drainage design, specification and installation is quick, efficient and cost-effective.

A team of regional, specification and project managers are available to assist industry professionals at every stage of the construction process. Refer to HAURATON for contact details ([www.hauraton.com](http://www.hauraton.com)).

A multinational company, HAURATON has production facilities, subsidiary offices, technical engineers and partners located in many countries and regions of the world.

HAURATON has the knowledge, experience and resources to manage and support all projects successfully, regardless of location.

## Design Service

HAURATON offers a comprehensive design service for all product ranges. This is available free of charge and without obligation.

Our approach is to provide innovative 'value-engineered' designs to achieve the most cost-effective drainage solution for the benefit of all parties.

Design proposals can be provided within 24 - 48 hours, depending on the size of the project. Information offered includes:

- Hydraulic calculations for each channel run
- System configuration drawings
- Parts list schedules
- Product dimension drawings
- System installation drawings
- Product and material technical datasheets
- Other technical and support information

Feel free to contact us should you require assistance.



# Design Software

## Hydraulic Design Software

Our channel drainage configurations are designed and sized using in-house 'hydraulic design software' specifically developed for HAURATON systems.

The formula used within the software is based on that determined by Gauckler-Manning-Strickler. Accuracy has been verified by physical testing of HAURATON systems within a hydraulic discharge test flume, replicating and evaluating hundreds of flow scenarios.

HAURATON 'hydraulic design software' has been used successfully in-house by our technical personnel and partners for over 25 years with total reliability.

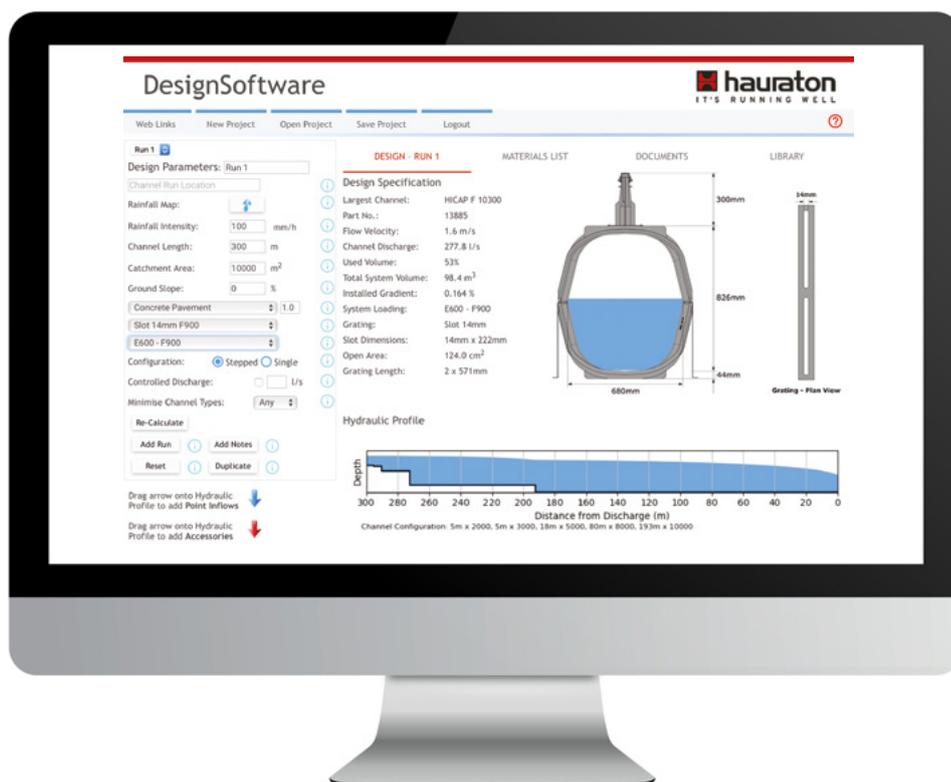
## HAURATON DesignSoftware

Hydraulic design software is also available free of charge to industry professionals. Intuitive and user friendly, 'HAURATON DesignSoftware' allows engineers to create drainage schemes for HAURATON's range of civil engineering systems on tablets, desk-top computers or through the internet (web-based application). Refer to HAURATON for further information.

## Hydraulic Design App

For smaller projects where a quick indication of the appropriate channel size and system is required for a given catchment area, HAURATON can provide a 'Hydraulic Design App'. Refer to HAURATON for details of how to download this software application.

The 'Hydraulic Design App' provides quick sizing of HAURATON channel systems following input of rainfall intensity data, the run-off coefficient (surface type) and catchment area size.



# Quality Assurance

## High Standards

HAURATON products and procedures bring quality assurance.

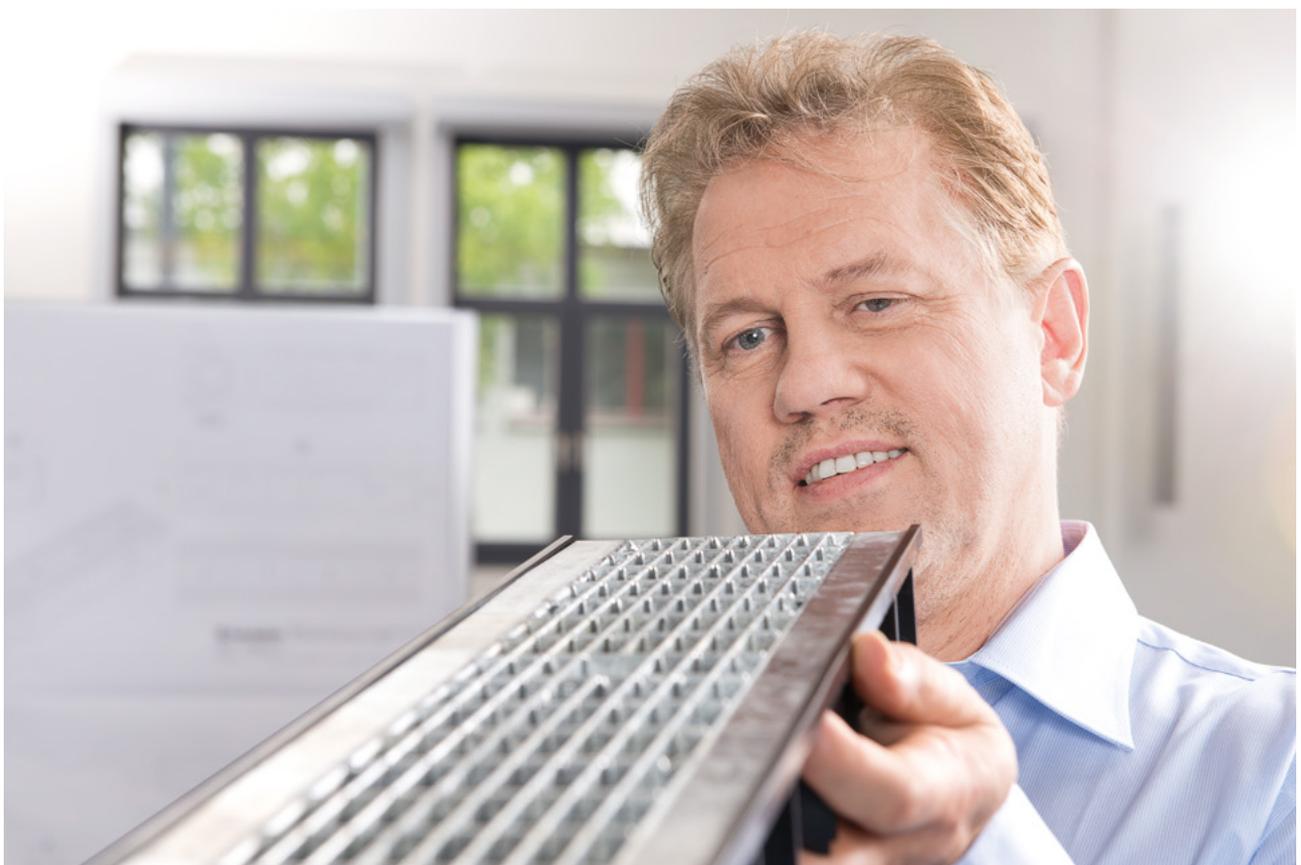
The company operates in accordance with EN ISO 9001: 2015. Production within modern, mechanised facilities in Europe is carefully monitored and controlled to achieve consistent product quality.

HAURATON drainage channels have been independently tested for load capacity and watertightness in accordance with the European Standard EN 1433: 2002. Systems are CE marked for quality assurance.

## Proven Performance

Supplied for over sixty years and twenty-five years respectively, **FASERFIX®** and **RECYFIX®** systems have proven performance, having been used successfully on major projects around the world. Individual project case studies are available from HAURATON.

HAURATON has a reputation for products of the highest quality, durability and reliability.



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