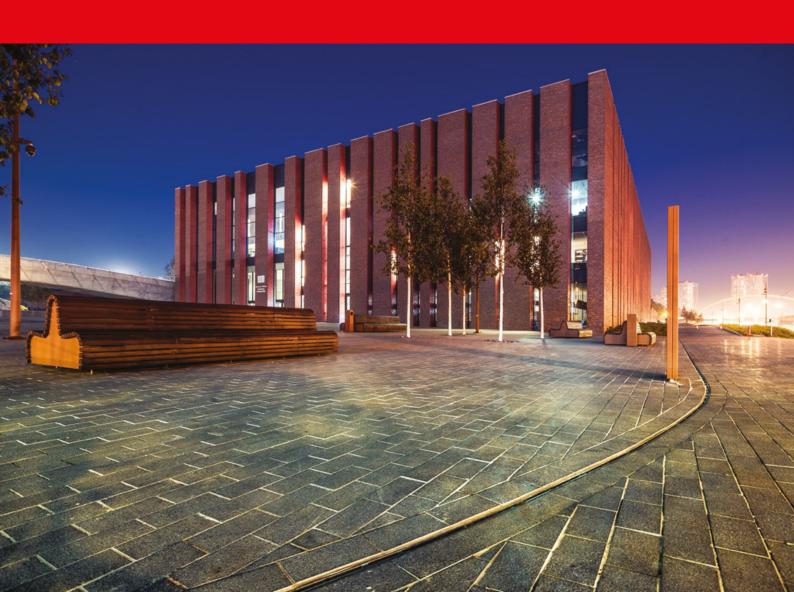
AQUA



PRODUCT SELECTOR

PUBLIC REALM & SHARED SPACE

Linear drainage systems for environments that require aesthetic design and safe, durable solutions.





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.

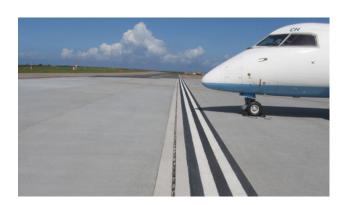
Each Product Selector include's project applications with similar needs regarding loading and system performance:

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









Public Realm & Shared Space

Linear drainage systems for environments that require aesthetic design and safe, durable solutions.

System Requirements

'Public Realm & Shared Space' environments typically include the following characteristics:

- Light to medium loads; A15kN D400kN (wheel, static, impact and dynamic). Channels subject to occasional traffic by service vehicles; D400 load often specified for these locations.
- Low to medium traffic flow (braking, turning and angled approach at low speed). Pedestrian use is often intensive.
- Varied wheel type and configuration (solid/smallwheeled, pnuematic, service vehicles with single-tyre/ multi-tyre/single-axle/double-axle).
- Systems required to be aesthetic, safe, durable and easy to maintain. HeelSafe grating designs often selected.
- 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 installation to follow hard and soft landscape features.
- Shallow channel options for raised walkways and mezzanine floors.
- Corrosive environments dependent on location. Systems available with stainless steel gratings and edge-rails.

HAURATON systems included in this Product Selector meet and exceed the requirements for 'Public Realm & Shared Space' project applications.

Typical Applications

Projects where 'Public Realm & Shared Space' environments exist include:

- Parks
- Animal Housing
- Sports & Leisure
- Railway Platforms
- Entrances & Facades
- Government Buildings
- Footpaths & Cycle Paths Town Squares & Public Places
- Educational Facilities

*HAURATON 'Public Realm & Shared Space' systems are not suitable for use on highways in locations that are subjected to fast moving traffic.



HAURATON systems with HeelSafe gratings are typically selected for use in public places.





RECYFIX®STANDARD

Lightweight, cost-effective and versatile, **RECYFIX**®STANDARD is perfect for areas subject to heavy pedestrian use and occasional traffic by medium load vehicles.

RECYFIX®STANDARD includes a visible edge detail for enhanced rigidity at the surface.

Available in nominal widths from 100mm to 300mm, and with a variety of 'lay-on' grating designs and materials, **RECYFIX**®STANDARD provides a practical and economic option for linear drainage. Refer to product brochure.

Key Features

Material

■ Modified Polypropylene (PP) composite

Loading

System load rated to C250 (EN 1433: 2002)

Channel Widths

■ 100, 150, 200 & 300 mm

Channel Lengths

■ 1.0m & 500mm (in some sizes)

Grating Options

- Lay-on design
- Load options ranging from A15 C250 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

Channel Configuration

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

Edge Detail

■ Integral polypropylene edge (visible on the surface)













RECYFIX®PRO

A medium-duty system with practical design suitable for a variety of applications up to D400 loading. When fitted with a composite grating, **RECYFIX®PRO** is fully corrosion resistant, non-conductive and anti-static; reducing long-term maintenance costs and avoiding expensive earthing works.

RECYFIX®PRO incorporates a discreet polypropylene edge-frame formed as part of the channel body structure, for improved rigidity and enhanced aesthetic appearance. The system is pre-assembled, lightweight and compact for quick and easy installation on site. Refer to product brochure for detailed information.

Key Features

Material

■ Modified Polypropylene (PP) composite

Loading

System load rated to D400 (EN 1433: 2002)

Channel Widths

■ 100, 150, 200 & 300 mm

Channel Lengths

■ 1.0m & 500mm (selected depths)

Grating Options

- Inlay design
- Load options ranging from A15 D400 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

Channel Configuration

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

Edge Detail

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













RECYFIX®PLUS

A medium-duty system selected for use when durability and aesthetics are important project requirements.

RECYFIX®PLUS incorporates a neat and discreet steel edge-rail that accommodates all surface finishes and complements contemporary features in modern buildings and landscape design. This design feature also provides improved rigidity and protection at the channel edge.

RECYFIX®PLUS is fitted with a range of 'lay-on' gratings in a variety of materials, designs and loading options up to D400kN. Refer to product brochure for detailed information.

Key Features

Material

■ Modified Polypropylene (PP) composite

Loading

System load rated to D400 (EN 1433: 2002)

Channel Widths

■ 100, 150, 200 & 300 mm

Channel Lengths

■ 1.0m & 500mm (selected depths)

Grating Options

- Lay-on design
- Load options ranging from A15 D400 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

Channel Configuration

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

Edge Detail

Steel edge-rail fitted

Two options:

- Galvanised steel (DX51D+Z275-MA-C)
- Austenitic stainless steel (AISI Grade 304; EN CNS 1.4301)
- Neat, discreet, rigid 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.

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 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

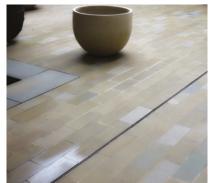
- Slot width options in 10mm (UK)
- Slot width options 12.5mm & 18mm (international)
- Neat, discreet, rigid and aesthetic













SLOTTED CHANNEL

Further information regarding intake capacity is available on request.

Slot Width: 10.0mm
Intake Area: 100 cm²/m
Max intake: 6.7 l/s/m
Area Drained/ Lin. Mtr: 482 m²

(with rainfall intensity at 50 mm/hr)



A 'TWIN SLOT' slotted cover is also available to provide an alternative surface detail with aesthetic appeal and efficient intake performance.









RECYFIX® MONOTEC

Designed and installed as a single monolithic unit, **RECYFIX**®MONOTEC is quick and easy to install and provides a stable, safe and secure surface environment for users. **RECYFIX**®MONOTEC is lighter and has higher drainage capacity compared with alternative mineral-based systems (for equivalent channel sizes and installed dimensions).

Manufactured from reinforced Polypropylene (PP) composite, channel units are strong, durable and UV-stable, with high impact, chemical and corrosion resistance for low-cost maintenance during life-time use. Refer to product brochure for detailed information.

Key Features

Material

■ Reinforced Polypropylene (PP) composite

Loading

System load rated to D400 (EN 1433: 2002)

Channel Widths

■ 100 & 200 mm

Channel Lengths

1.0m

Grating Options

- Monolithic channel with integral grating
- **D**400 (EN 1433: 2002)
- Slotted grating design (FIBRETEC® style)
- Reinforced Polypropylene (PP) composite

Channel Configuration

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

Edge Detail

■ Monolithic design; channel edge and grating combined

*Not suitable for E600kN and F900kN load applications subject to traffic by forklift trucks and HGV's.













FASERFIX®KS

Cast from fibre-reinforced concrete, FASERFIX®KS is a strong and durable 'general-purpose' channel system designed for use in a variety of applications (usually C250 - E600).

FASERFIX®KS has thicker sidewalls (30mm) compared with alternatives. A metal edge-frame (galvanised or stainless steel) cast deep within the channel body achieves a rigid and discreet edge-detail for extra strength and enhanced aesthetics. Gratings are fixed into position with a 10-point locking system (SIDELOCK plus central bolt and bar arrangement) for added safety, stability and security. Refer to product brochure for detailed information.

Key Features

Material

■ Fibre-reinforced concrete

Loading

- Channel body load rated to F900 (EN 1433: 2002)
- System typically installed in E600 load environments
- Suitable for F900 environments (light traffic only)
- Refer to FASERFIX®SUPER for F900 environments (heavily trafficked)

Channel Widths

■ 100, 150, 200 & 300 mm

Channel Lengths

■ 1.0m & 500 mm (selected depths)

Grating Options

- Inlay design
- Load options ranging from A15 F900 (EN 1433: 2002)
- Variety of grating designs and material's available (over 20)
- Refer to product brochure

Channel Configuration

- Constant-depth (same channel depth)
- Built-in fall (150, 200, 300)
- Stepped-fall

Edge Detail

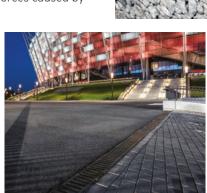
Two options:

- Galvanised steel S275J263+Z
- Stainless steel CNS 1.4301
- Neat, discreet, rigid and aesthetic

*When gratings are fixed with locking bolts/bars, this system is especially resilient to dynamic forces caused by the turning/twisting action of wheels.













AQUA

RECYFIX®HICAP®F SLOT CHANNEL

Manufactured from high-grade modified Polypropylene (PP) composite, RECYFIX®HICAP®F SLOT CHANNEL is a highcapacity linear drainage system used to provide efficient and cost-effective drainage and attenuation within extensive hard surface areas. Refer to product brochure for detailed information.

CIVILS

Key Features

Material

- Modified Polypropylene (PP) Composite
- Some components in Polyamide (PA-GF)

Loading

System load rated to F900 (EN 1433: 2002)

Channel Sizes

■ HICAP®F 1000, 2000, 3000, 5000, 8000 & 10000

Channel Lengths

■ 1.0m & 1.145m (RECYFIX®HICAP®F 10000)

Grating Options

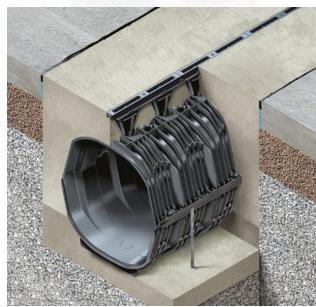
- Retained grating design (non-removable)
- D400 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563' (KTL 'Cathodic Dip' Coated)
- Slot 14mm
- Slot 28mm
- Mesh 13/28mm
- Slot 6mm

Channel Configuration

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

*This system is especially resilient to dynamic forces caused by the turning/twisting action of wheels.













DRAINFIX®CLEAN

DRAINFIX®CLEAN linear drainage 'water treatment' system is a cost-effective, ecological, efficient and immediate solution for the draining, collection and treatment at source of storm water run-off.

The system contains CARBOTEC®60, a carbonate-rich filter substrate through which the cleansing of stormwater occurs, for safe and hygienic use as sanitary water (toilet flushing) and irrigation of soft-landscaping. **DRAINFIX®CLEAN** is very effective when used in densely populated areas (streets, parking areas, service yards, landscape projects).

Key Features

Material

- RECYFIX® channels in modified Polypropylene (PP)
- FASERFIX® channels in fibre-reinforced concrete
- CARBOTEC®60 filter substrate (high carbonate content)

Loading

- Polypropylene (PP) channels load rated to D400
- Fibre-reinforced concrete channels load rated to F900 (EN 1433: 2002)

Channel Widths

■ 300, 400 & 500 mm

Channel Lengths

1.0m

Grating Options

- Inlay design
- Slotted grating
- D400, E600 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- KTL 'cathodic dip' coating (optional)

Channel Configuration

Constant-depth (same channel depth)

Edge Detail

Three options:

- Polypropylene (PP)
- Galvanised steel S275J263+Z
- Spheroidal ductile iron GJS 500-7 'EN1563'













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

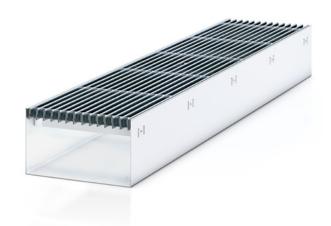
- Designed to meet performance and load requirements (EN 1433:2002)
- Variety of designs, materials, colours and finishes available
- Refer to product brochure

Channel Configuration

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

Edge Detail

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













HAURATON GRATINGS

HAURATON offers a variety of grating designs supplied as standard with the range of linear drainage systems, including mesh, slotted, longitudinal, perforated and HeelSafe. HAURATON also provides unique, innovative 'award-winning' designs such as GUGI-MESH and FIBRETEC gratings.

Grating materials include spheroidal ductile iron, galvanised steel, stainless steel and specialist composites such as 'glass-reinforced polyamide' (PA-GF). DECORATIVE and COLOURED gratings provide an extra dimension to the project design.

Durability

HAURATON gratings are designed for long-term durability and low maintenance.

Channel systems are often installed in corrosive environments.

FIBRETEC® and GUGI®MESH gratings are supplied in glass-reinforced polyamide (PA-GF), a high-performance composite that is highly corrosion resistant. Once in place, gratings will not corrode (no oxidation) and will maintain their aesthetic appearance for the projects life.

For extra durability and design flexibility, selected ductile iron gratings can be supplied with a galvanised coating.

Powder coatings can also be arranged on request to provide additional colour options and enhanced resistance (min. order quantity/extended lead time may apply).







FIBRETEC GRATINGS

Bring colour, bring life to projects.

HAURATON's range of FIBRETEC gratings in Glass-Reinforced Polyamide composite combines superior performance with enhanced aesthetics, bringing longevity and life to projects.

Benefits

FIBRETEC gratings have the following benefits:

- UV stable
- HeelSafe (9mm opening)
- Corrosion resistant; no oxidation
- Anti-static and none conducting
- High resistance to chemicals, fuels, salts etc

 $\begin{tabular}{ll} *Compatible with $\tt RECYFIX@PRO$ and $\tt FASERFIX@KS$ systems \end{tabular}$

Readily available in standard colours:

- Fern
- Sand
- Stone
- Black

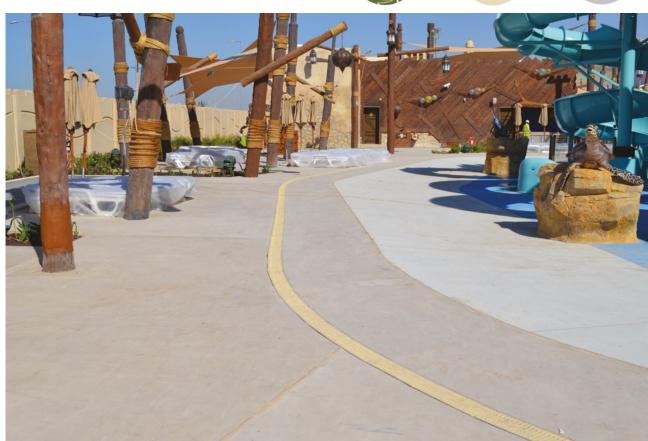












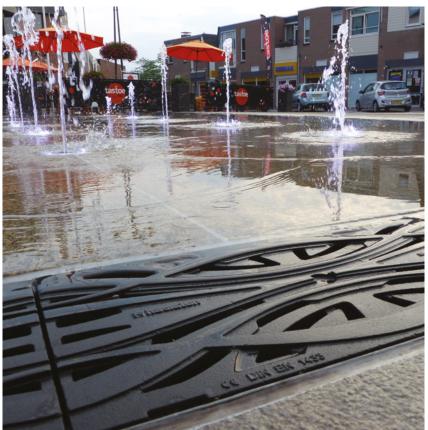


METROPOLIS GRATINGS

Inspired by Art Deco design for use on modern projects.

Compatible with **RECYFIX®**PRO and **FASERFIX®**KS systems









KTL COATING

HAURATON provides selected ductile iron gratings with a 'KTL' coating.

The coating is applied to the grating using a 'cathodic dip' process.

Benefits

- High durability and weather resistance
- Protects against corrosion and oxidation
- High resistance to chemicals, acids, fuels and salts
- Complies with environmental standards
- No risk to users when applied (non-hazardous)
- Paintable

**If ductile iron gratings are preferred, specifiers are advised to select HAURATON gratings with a 'KTL' coating as standard, to maintain the aesthetic appeal of the installation.



York Station - 2007



York Station - 2017

York Railway Station, United Kingdom

RECYFIX®STANDARD system with Ductile Iron Slotted Gratings with 'KTL' coating applied.

The installation looks as good today as it did ten years ago.

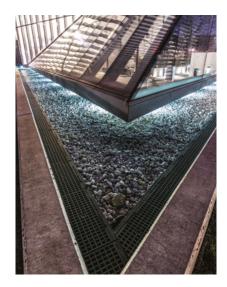
Rusty Gratings!

Ductile iron gratings may be subject to oxidation (a natural process) when channels are installed in locations that may not be trafficked (or trafficked infrequently).

Water-based coatings provide only superficial and cosmetic protection, so oxidation may occur at some point in the future.





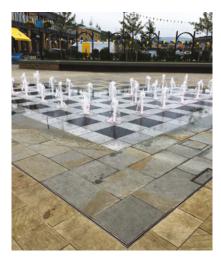






















Total Support

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.co.uk).

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

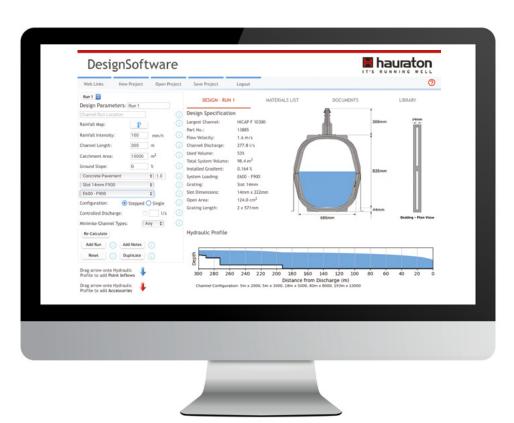
Hydraulic design software is also available free of charge to industry professionals. Intuitive and user friendly, 'HAURATON DesignSoftware' allows engineers to create drainage schemes for HAURATON's range of civil engineering systems on tablets, desk-top computers or through the internet (web-based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

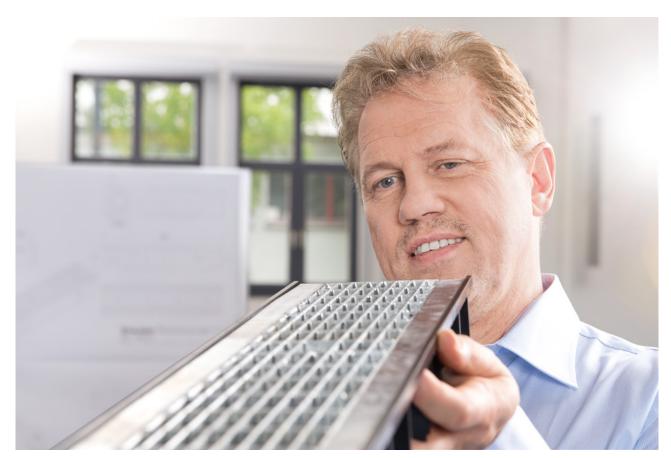
Proven Performance

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.







AQUA



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