

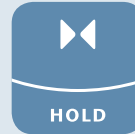


Robust drainage  
for all surfaces

ACO DRAIN® Qmax Neo



# ACO. we care for water



Your question – our answer:

## ACO WaterCycle

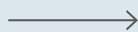
The ACO WaterCycle supports you at every stage of drainage, rainwater management and treatment planning and creates the solutions for tomorrow's environmental conditions.

Where surface water management and water protection begins



### ACO surface drainage

- Drainage channels
- Road and yard drains
- Gully tops
- Manhole covers



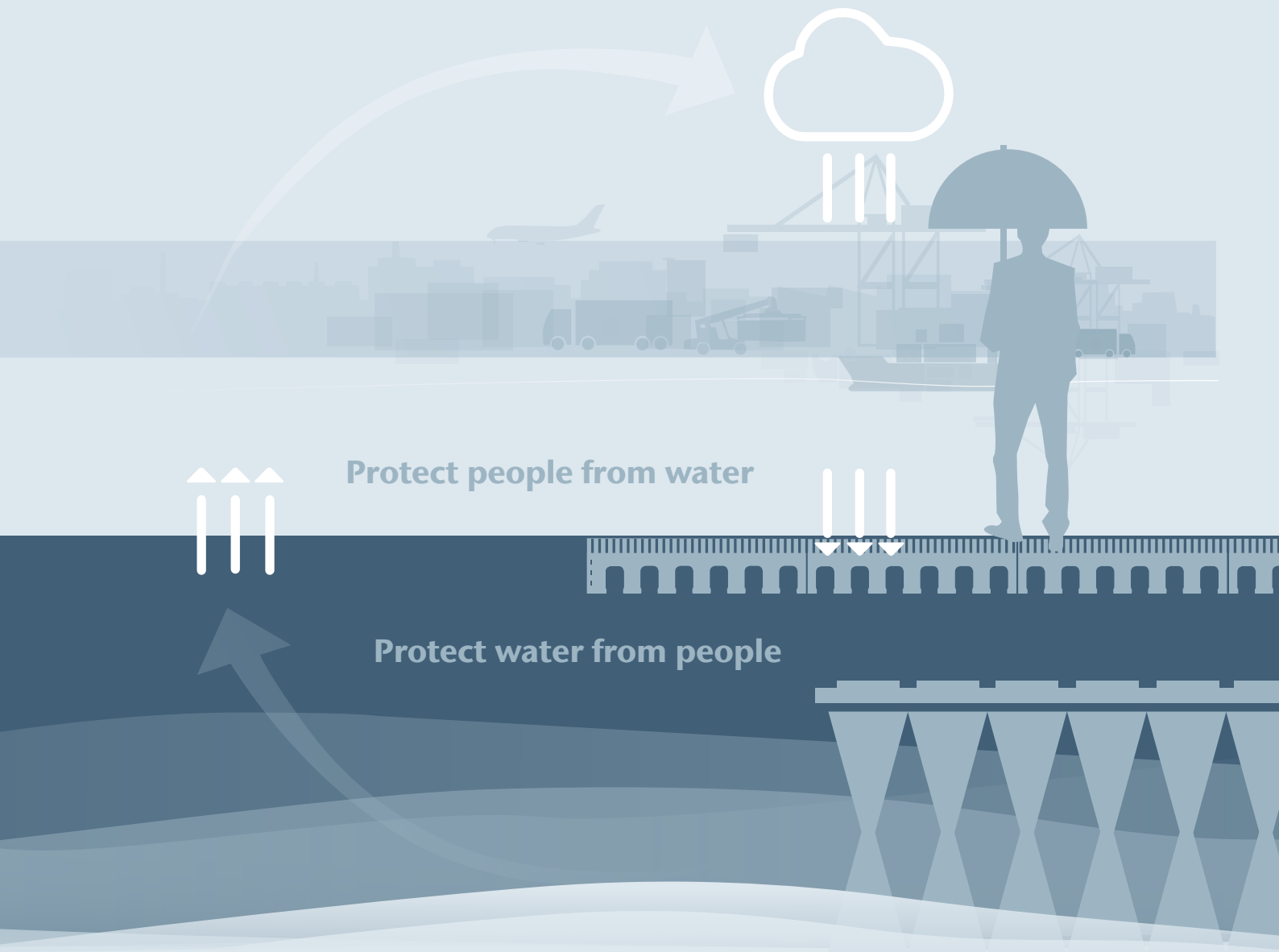
Achieving the right water quality



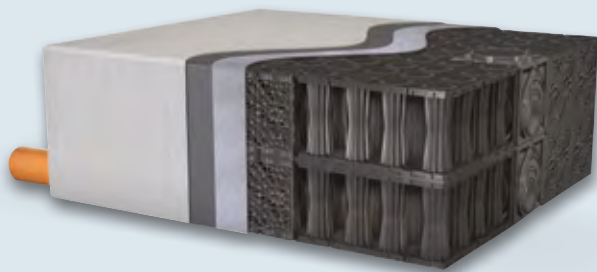
### ACO cleaning systems

- Separators
- Sedimentation and filter systems





Reducing surface runoff to a natural level



Control discharge rate to the required level



#### ACO retention and storage systems

- Emergency systems
- Infiltration and attenuation systems
- Surface water retention basin



#### ACO control systems

- Flow control systems
- Pump shafts

## High hydraulic capacity of the sealed slotted channel

The Qmax portfolio belongs to the group of slotted channels that are also offered with integrated seals and have a large hydraulic capacity. Different types of installation recommendations allow the channel to be installed in areas with different types of loads.

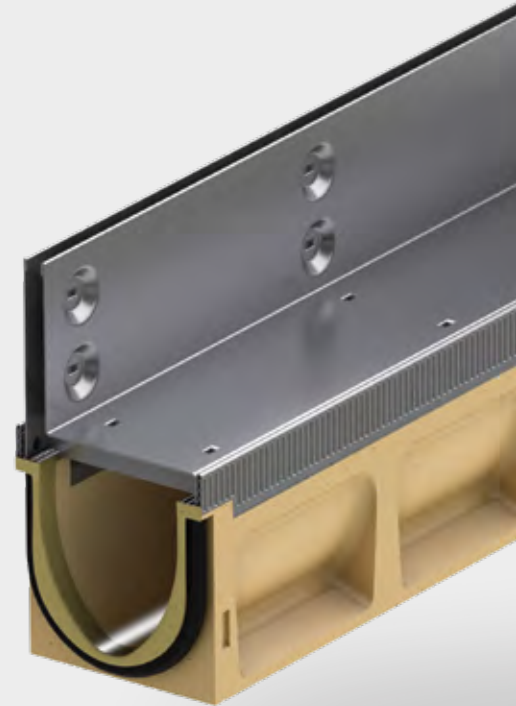
### ACO Qmax®

High-capacity slot drainage made of plastic with integrated seal and option for water retention or attenuation



### ACO Multiline

Polymer concrete channel body with integrated seal offered with large variety of gratings made of cast iron, stainless, galvanized steel or plastic



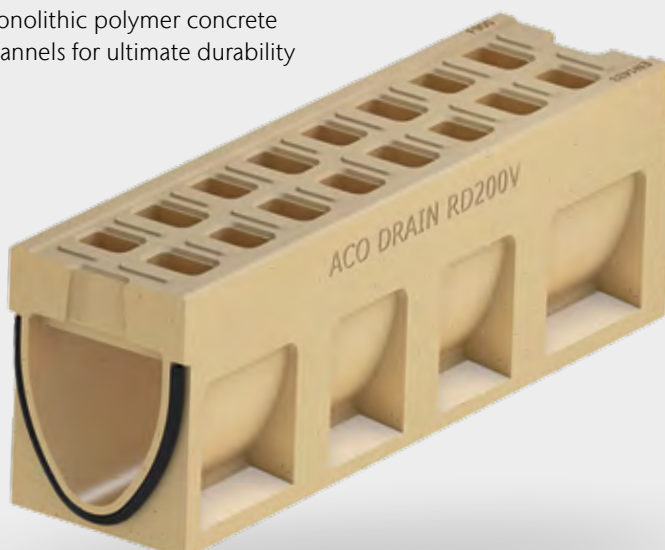
### ACO PowerDrain

Polymer concrete channel body with integrated seal and cast iron frame for heavy duty applications



### ACO Monoblock

Monolithic polymer concrete channels for ultimate durability







#### Note

Any more questions?  
askACO – your local  
ACO team is proud to offer  
experience and service

**[www.aco.com/en/  
products-and-services/askaco](http://www.aco.com/en/products-and-services/askaco)**

### **ACO. we care for water**

|                |    |
|----------------|----|
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| ACO Group      | 06 |

### **ACO DRAIN® Qmax Family**

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ACO Qmax Neo  
Online information



# ACO. we care for water

ACO is a Water-Tech company that protects water. Building on our global drainage expertise that protects people from water, we increasingly see our mission as also protecting water from people.

With the ACO WaterCycle, ACO provides systems that collect and channel, clean, retain and ultimately reuse water. In this way, ACO contributes to the preservation of clean groundwater as a vital resource, and makes a contribution to tomorrow's world. In its Agenda 2030, the UN global community set the improvement of water quality as one of 17 sustainable development goals.

Intelligent drainage systems from ACO increasingly use smart technology to ensure that rainwater and wastewater are drained, or temporarily stored. With innovative separation and filter technology, we prevent water contamination by pollutants such as fat and grease, fuels, heavy metals and microplastics.

Today, ACO goes one step further: we accept the challenge of reusing water, and thus establishing a resource-saving cycle. For all products and systems, ACO attaches great importance to durability, reusability and a low carbon footprint. The pursuit of sustainability is an ongoing process that we strive to meet every day.

The ACO Group is a global family business that is one of the world market leaders in the Water-Tech segment. Founded in Schleswig-Holstein in 1946, it operates as a transnational network in over 50 countries. Worldwide, ACO is characterised by a high level of decentralised ownership, and explicit regional market proximity.

**[www.aco.com](http://www.aco.com)**



**Holder**  
Iver and Hans-Julius Ahlmann



**Headquarters of the ACO Group**  
in Rendsburg/Büdeltsdorf



**5,400**

employees in more than  
50 countries (Europe, North  
and South America, Asia,  
Australia, Africa)

**1.14 Billion**

Euro Sales in 2023

**41**

production sites  
in 20 countries



ACO Academy  
for practical training



ACO DRAIN®

## Qmax Family

ACO Qmax is the combination of drainage and retention.

There are no limits related to the application field – everything is possible with ACO Qmax, from utilising it as a slotted channel in pedestrian areas to the drainage of large surface areas with heavy traffic.

The plastic channels are easy and quick to assemble due to their low weight.

The system is available in different nominal widths from 150 to 900 and can therefore be adapted to the hydraulic requirements. In particular, the channel bodies of the larger nominal widths have an enormous retention volume: The collected rainwater can be temporarily stored and then discharged into the sewer system in a controlled manner during heavy rainfall incidents. The handling of these large volumes of water and the defusing of heavy rainfall peaks is a critically important subject for the future.

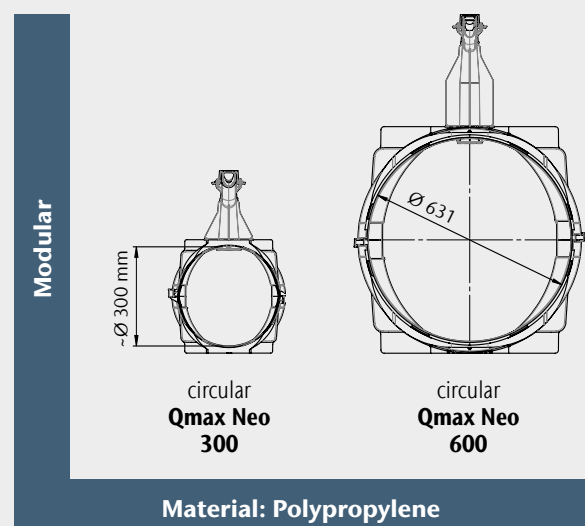
Qmax Neo 300



### Qmax Family product advantages

- Application variety
  - All surface finishes possible
  - Traffic loads from A 15 to F 900 certified
  - Large choice of materials for edge rail
- Design
  - Professional surface appearance due to discreet and narrow edge rail
  - Uniform and straight surface appearance even with different nominal widths underground
  - Drainage for the surface area and simultaneous retention with large storage volumes without additional sewer work
- Operating state
  - Sealed channel run
- Installation
  - High lay rates and performances without heavy lifting devices

### Qmax Neo



## Accessories

1

### Levelling feet

allows the channel to be aligned and fixed in the desired position. All the available accessories described on the page 33.

2

### Inspection Shaft

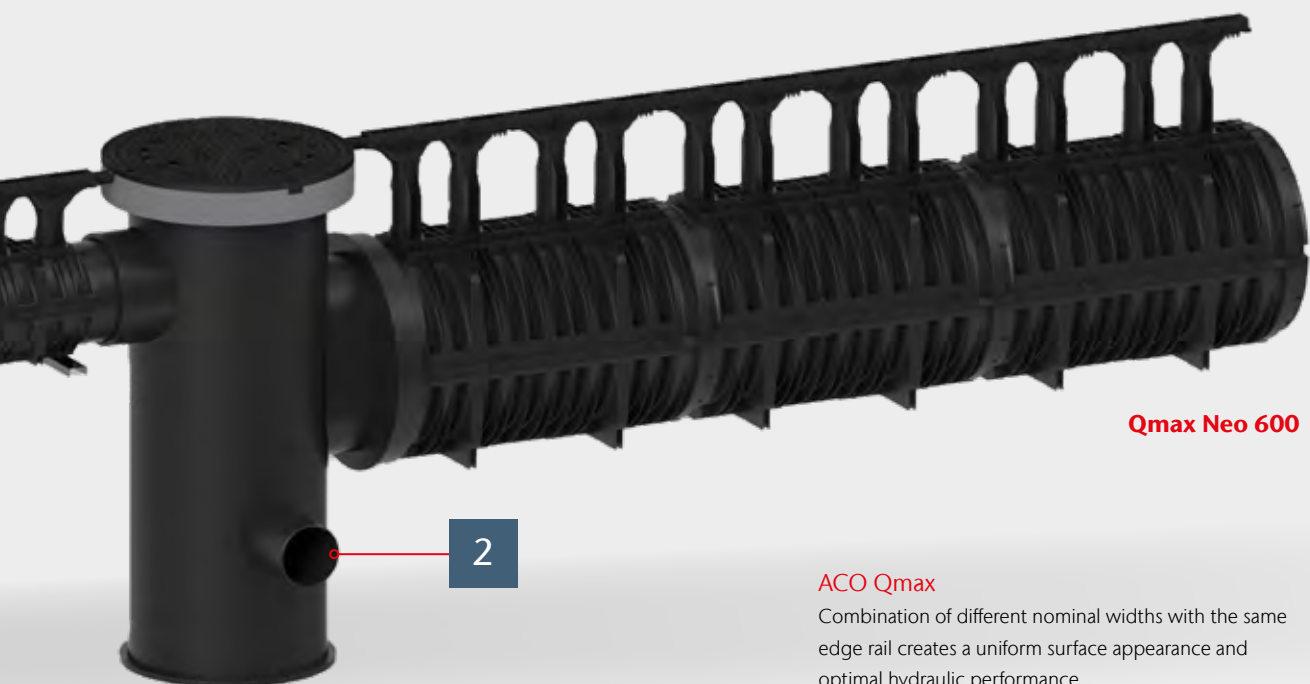
Individually tailored shaft according to the specifications of the respective building project. Transition for different nominal widths.

## Surface

3

### Edge Rail

Available in all material options and designs for high flow rate and also with heelsafe feature.



Qmax Neo 600

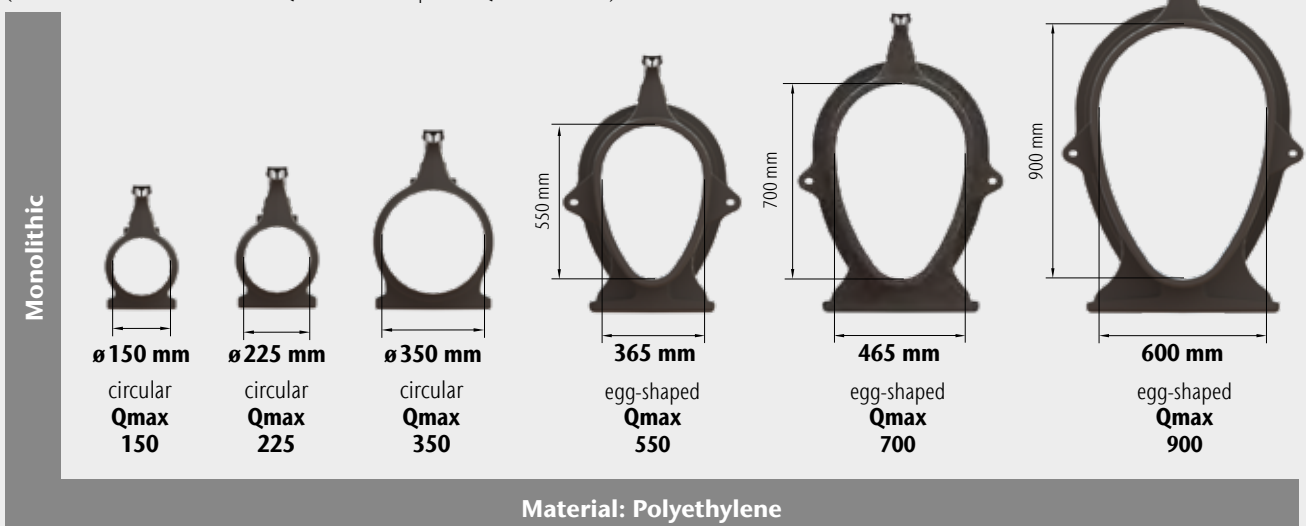
### ACO Qmax

Combination of different nominal widths with the same edge rail creates a uniform surface appearance and optimal hydraulic performance.

9

## Qmax

(more details for the monolithic Qmax see the separate Qmax Brochure)



# Qmax Neo Channel Range

Part of the subgroup "Neo" in the Qmax Family.



The pavement beam feature permits continuous reinforcement positioning and flow of concrete through the product



Light weight product made from Polypropylene enables easy handling



Plug-in installation for a simple connection



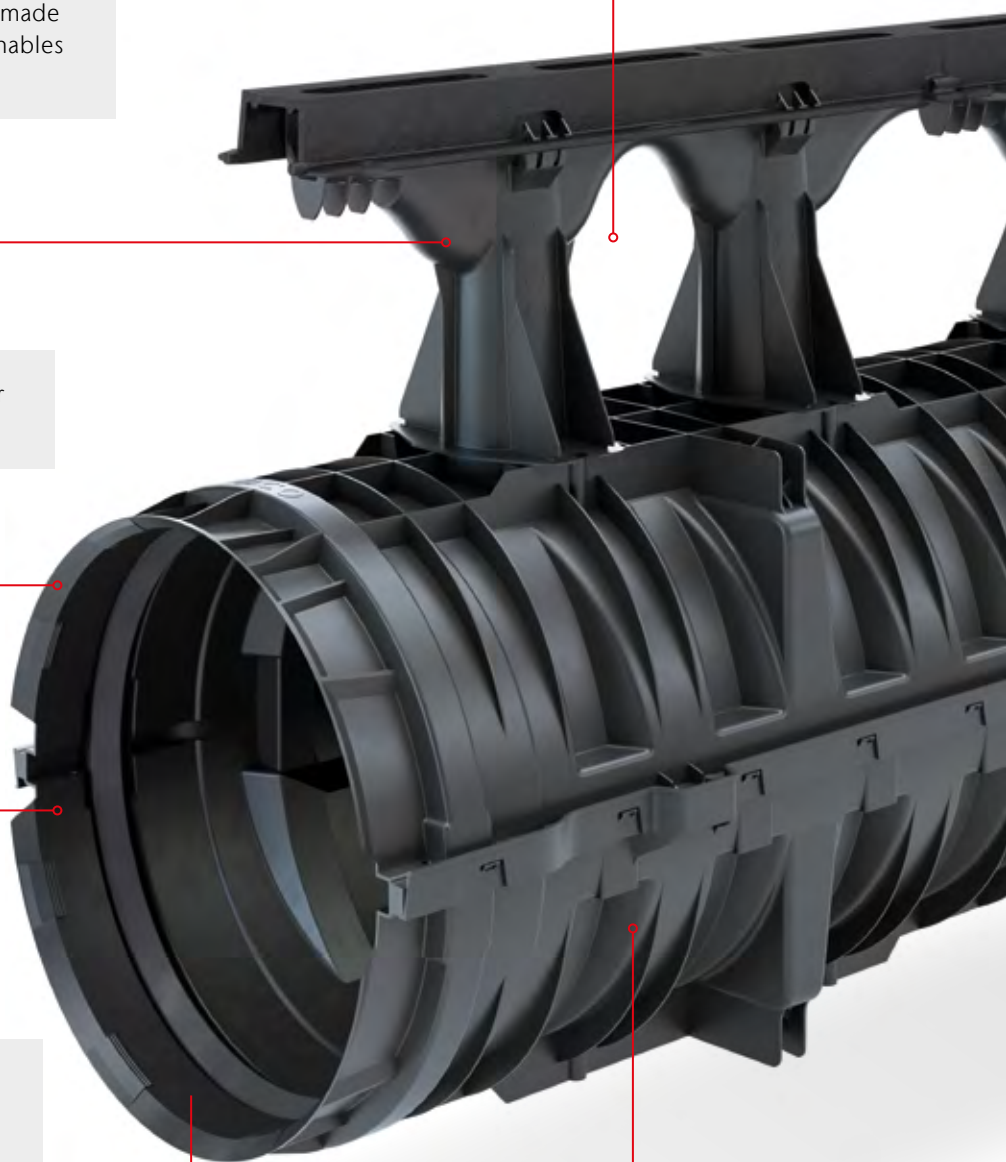
Integrated gaskets for a sealed channel run



Smooth wash for a self cleaning surface



Plastic material for resistancy to chemicals and corrosion



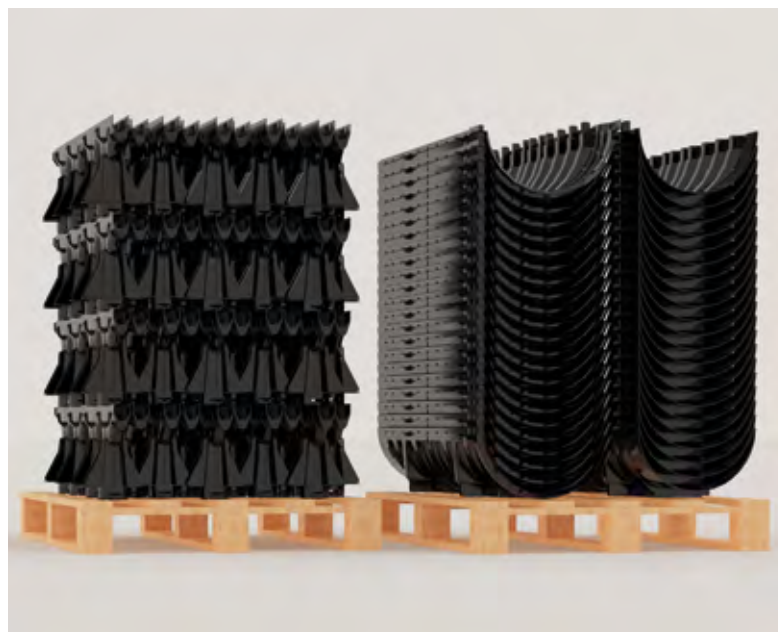




Qmax Neo Rail (ductile iron)  
For applications up to F 900



Ultra stiff rib design  
provides high  
strength during  
installation



For large projects: Transport optimised delivery and space saving on construction sites.

## Neo Family

ACO DRAIN® Qmax Neo is a subgroup of the existing Qmax family. This “Efficient Option” differs in terms of material, manufacturing and transport process.



### Easy Installation

Due to the low component weight and the simple assembly of several channel bodys, a quick installation without additional lifting devices is possible.



### Operating State

The design enables a reliable and robust solution even in areas with highest load classes.



### Surface Design

The narrow rail allows a discreet drainage up to the highest load classes including F 900.

## Solution for any easy installation

### Qmax Neo

is a plastic channel with narrow durable rail designed for concreting. The method of concreting and reinforcement of the concreted part determines the load class of the installation.

The channel is installed according to the installation recommendations, which are specified according to the EN433 load classes. Load bearing forces should always be considered and engineering advice should be taken into account.

### Simple Installation

To simplify installation, the channels are supplied with levelling foot which can be fixed to the underlying concrete layer.

The levelling foot is installed to the inlet part of the channel. The reason is that the foot attached to the inlet part of the channel better prevents the channel from rising during concrete pouring. If you were to install the footing on the female part of the channel, you would need to prevent the channel from rising during concreting in another way, for example by loading the rail from above. Always check the flatness of the top edge before concreting, preferably with a laser. During concreting, check the movement of the channel in the concrete so that corrections can be made if necessary.

### Installation jigs

are also offered to ensure that the channel is anchored even more firmly in position.







### Installation advantages of the channel

- Lightweight channel for handling
- Installation without heavy machinery
- Fixing with the levelling foot allows the channel to be anchored in position
- The builder is in control of the quality of the concreting and reinforcement



# Applications

Due to its versatility, ACO Qmax is used in various applications. The small narrow edge rail offers only a small contact area for loads, this ensures low abrasion and therefore a long, reliable product life. Additionally, the surface does not contain any screwed or loose components which could adversely affect traffic safety.

The wide range of rails allows installation not only in high load areas, but now also in areas where safety is required when crossing people and also in areas where aesthetic requirements are higher. Due to the high variability of the grids, there is no limitation for the application of Qmax Neo channels and therefore the channel can be installed in airport and industrial areas as well as in urban areas where protection of the soles is required and where there are high demands on the product design.

## A 15 – F 900

All the surfaces and load classes



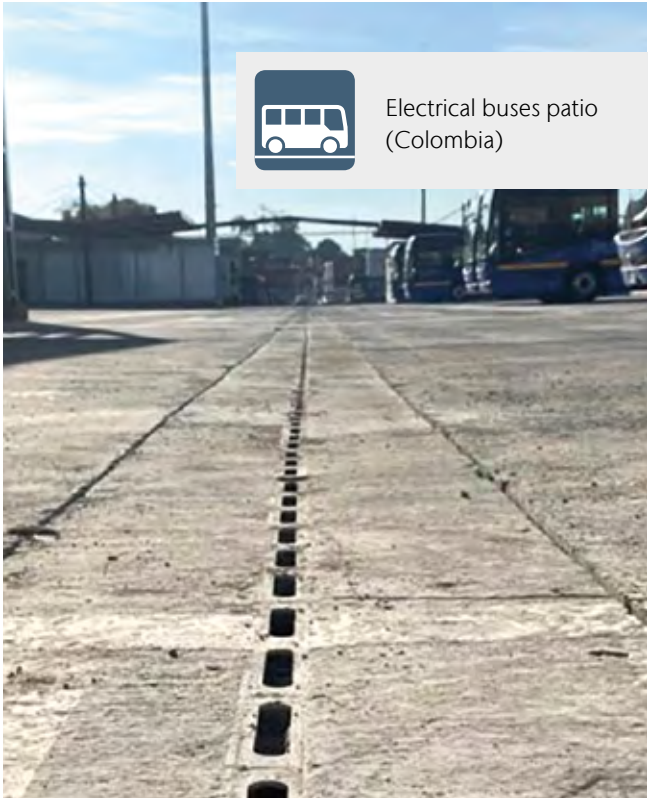
Maersk Logistic Area  
(Croatia)




Travnik City Center  
(Bosnia and Herzegovina)




Red Sea Airport  
(Saudi Arabia)



 Electrical buses patio  
(Colombia)



 Airport Franjo Tudman  
(Croatia)



# Transportation benefits

Qmax Neo is available in two transport variants.  
Assembled (in case of Qmax Neo 300 only) and Modular (flat pack).

The assembled channel is ordered when the product cannot be assembled on site or the transportation costs are at acceptable level. The assembled channel arrives at the site ready for laying in the ground. The installation is then carried out following the installation recommendations.

The delivery of the channel in modular (flat pack) state is suitable for cases where it is possible to ensure the assembly of the channel close to the construction site at a lower cost than the difference in transport price between the assembled and flat pack version of channel.

When deciding which type of channel will be used for the project, the following points need to be considered:

- Distance of the project site from the contractor.
- Total transportation costs
- Requires training of the channel installer or the ability to supervise the ACO worker in the folding of the product at the installation site.
- The product is offered with installation instructions and training is simple and folding the product is intuitive.





## Assembled channel (Qmax Neo 300 size only)

- Product is delivered on site assembled including the horizontal and channel sealing
- Installation with push-fit system

If transporting a folded product by container, 6 pieces are transported on one pallet



## Modular (flat pack)




- The flat pack version helps to achieve the highest efficiency in terms of transport
- There is additional work and supervision on site needed
- Fast and easy assembly on site
- Assembly guides available
- Assembly is foul proof and easy and takes from 2-4 min, depends on the type of the rail and handy of workers
- Both sizes of Neo 300 and Neo 600 fits to the HC container type - PU examples below







# Multi applications with Qmax edge rails

The discreet edge rails of Qmax mask the large drainage underneath and with choice material and colour options Qmax can be further blended into the landscape or used as landscape feature.

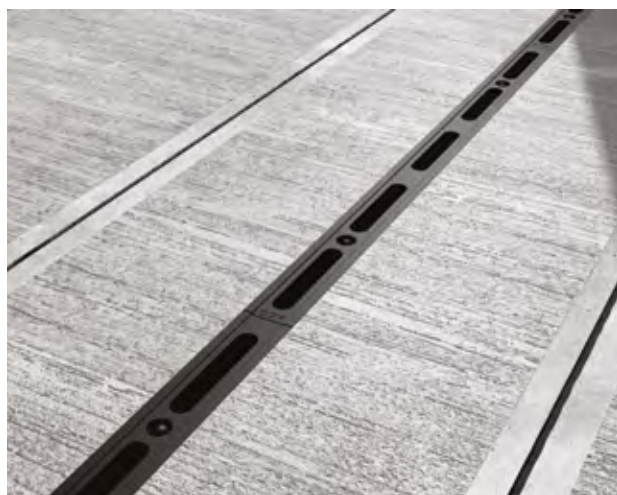
Depending on the application, Designers, Planners and Architects can choose from rails made of ductile iron, galvanised/stainless steel or corten steel.

|   | Finish            | Load class<br>[up to] | Typical applications   | Pavement type        | Slot width<br>[mm] | Intake area<br>[cm <sup>2</sup> /m] |
|---|-------------------|-----------------------|--|----------------------|--------------------|-------------------------------------|
| <b>Ductile iron rail EN-GJS-500-7</b>   |                   |                       |  |                      |                    |                                     |
| <b>Q-Flow 0.5 m</b>   |                   |                       |  |                      |                    |                                     |
|   | water based paint | F 900                 | <ul style="list-style-type: none"> <li>■ Commercial</li> <li>■ Industrial</li> <li>■ Highways</li> <li>■ Docks</li> <li>■ Airports</li> </ul>            | concrete and asphalt | 26                 | 187                                 |
| <b>Q-Flow 1.0 m</b>   |                   |                       |  |                      |                    |                                     |
|  | KTL coating       | F 900                 | <ul style="list-style-type: none"> <li>■ Commercial</li> <li>■ Industrial</li> <li>■ Highways</li> <li>■ Docks</li> <li>■ Airports</li> </ul>            | concrete and asphalt | 26                 | 187                                 |
| <b>Q-Guard 0.5 m</b>  |                   |                       |  |                      |                    |                                     |
|  | water based paint | F 900                 | <ul style="list-style-type: none"> <li>■ Car parking</li> <li>■ Petrol forecourts</li> <li>■ Retail</li> <li>■ Commercial</li> <li>■ Airports</li> </ul> | concrete and asphalt | 2x8                | 109                                 |
| <b>Q-Guard 1.0 m</b>  |                   |                       |  |                      |                    |                                     |
|  | KTL coating       | F 900                 | <ul style="list-style-type: none"> <li>■ Car parking</li> <li>■ Petrol forecourts</li> <li>■ Retail</li> <li>■ Commercial</li> <li>■ Airports</li> </ul> | concrete and asphalt | 2x8                | 109                                 |
| <b>Q-Road 0.5 m</b>   |                   |                       |  |                      |                    |                                     |
|  | water based paint | F 900                 | <ul style="list-style-type: none"> <li>■ Commercial</li> <li>■ Industrial</li> <li>■ Highways</li> <li>■ Docks</li> <li>■ Airports</li> </ul>            | asphalt              | 28                 | 205                                 |

|   | Finish                                   | Load class<br>[up to] | Typical applications   | Pavement type                 | Slot width<br>[mm]  | Intake area<br>[cm2/m] |
|---|--|-----------------------|--|-------------------------------|---------------------|------------------------|
| <b>Galvanised or stainless rail</b>   |  |                       |  |                               |                     |                        |
| <b>Q-Flow 2.0 m</b>   |  |                       |  |                               |                     |                        |
|    | hot dipped galvanised steel              | F 900                 | <ul style="list-style-type: none"> <li>■ Commercial</li> <li>■ Industrial</li> <li>■ Highways</li> <li>■ Airports</li> </ul>                             | concrete                      | 26                  | 181                    |
| <b>Q-Guard 2.0 m</b>  |  |                       |  |                               |                     |                        |
|    | hot dipped galvanised steel              | F 900                 | <ul style="list-style-type: none"> <li>■ Car parking</li> <li>■ Petrol forecourts</li> <li>■ Retail</li> <li>■ Commercial</li> <li>■ Airports</li> </ul> | concrete                      | 10                  | 83                     |
| <b>Q-Slot Single 2.0 m</b>  |  |                       |  |                               |                     |                        |
|   | hot dipped galvanised steel              | D 400                 | <ul style="list-style-type: none"> <li>■ Landscaping</li> <li>■ Town centres</li> <li>■ Car parking</li> <li>■ Retail</li> <li>■ Commercial</li> </ul>   | Block, slab and natural stone | 10<br>discreet slot | 100                    |
| <b>Q-Slot Double 2.0 m</b>  |  |                       |  |                               |                     |                        |
|  | hot dipped galvanised or stainless steel | D 400                 | <ul style="list-style-type: none"> <li>■ Landscaping</li> <li>■ Town centres</li> <li>■ Car parking</li> <li>■ Retail</li> <li>■ Commercial</li> </ul>   | Block, slab and natural stone | 2x9.5               | 190                    |
| <b>Q-Slot Stripe Corten 1.0 m</b>   |  |                       |  |                               |                     |                        |
|  | corten steel                             | D 400                 | <ul style="list-style-type: none"> <li>■ Landscaping</li> <li>■ Town centres</li> <li>■ Car parking</li> <li>■ Retail</li> <li>■ Commercial</li> </ul>   | Block, slab and natural stone | 10                  | 100                    |

# Qmax Neo 300 channel with Q-Flow rail design

The design of the rail, called Q-Flow, is suitable for drainage of those types of surfaces where a greater amount of water needs to be drained without the need to heel protection.



The rail is offered in two basic material options, **ductile iron** and **zinc steel**.

**Neo ductile iron rails** with a length of 0.5 m are supplied painted and other rails with a length of 1 m are supplied with a protective KTL coating.

## Q-Flow Neo 0.5 m CI rail



- Channel Neo 300 with ductile iron EN-GJS-500-7 rail 0.5 m long painted.
- Articles of channels are offered: assembled without the levelling feet, flat pack without levelling feet, assembled with levelling feet and flat pack with levelling feet.

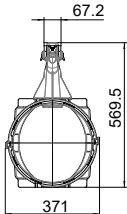
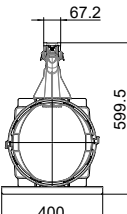
|   | Dimensions |       |        | Channel rail   |        |         |          |
|---|------------|-------|--------|--|--------|---------|----------|
|   | Length     | Width | Height | Material   | Weight | PU      | Item No. |
|   | [mm]       | [mm]  | [mm]   |  | [kg]   | [piece] |          |
|   | 1000       | 371   | 561    | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 0.5 m</li> <li>■ painted</li> </ul> | 9.8    | 6       | 157009   |
| <b>Flat pack without levelling feet</b> |            |       |        |  |        |         | 157006   |
|   | 1000       | 400   | 591    | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 0.5 m</li> <li>■ painted</li> </ul> | 10.5   | 6       | 157012   |
| <b>Flat pack with levelling feet</b>    |            |       |        |  |        |         | 157011   |



## Q-Flow 1 m cast iron rail KTL



- Channel Neo 300 with ductile iron rail 1 m long KTL coated.
- Articles of channels are offered: assembled without the levelling feet, flat pack without levelling feet, assembled with levelling feet and flat pack with levelling feet.

| Dimensions   |       |        | Channel rail                              |        |         |                                  |  |
|--|-------|--------|---|--------|---------|----------------------------------|--|
| Length   | Width | Height | Material                                  | Weight | PU      | Item No.                         |  |
| [mm]   | [mm]  | [mm]   |   | [kg]   | [piece] |                                  |  |
|   | 1000  | 371    | ■ ductile iron<br>■ 1.0 m<br>■ KTL coated | 11.0   | 6       | 157019                           |  |
|  |       |        |   |        |         | Flat pack without levelling feet |  |
|  |       |        |   |        |         | 157016                           |  |
|  | 1000  | 400    | ■ ductile iron<br>■ 1.0 m<br>■ KTL coated | 11.7   | 6       | 157018                           |  |
|  |       |        |   |        |         | Flat pack with levelling feet    |  |
|  |       |        |   |        |         | 157015                           |  |

## Q-Flow 2 m galvanised rail



- Qmax Neo channels with galvanised rail 2 m long.
- Articles of channels are offered: assembled without the levelling feet, flat pack without levelling feet, assembled with levelling feet and flat pack with levelling feet.

|   |      |     |                               |      |   |                                  |  |
|---|------|-----|-------------------------------|------|---|----------------------------------|--|
|  | 2000 | 371 | ■ galvanised steel<br>■ 2.0 m | 16.7 | 4 | 157049                           |  |
|   |      |     |                               |      |   | Flat pack without levelling feet |  |
|   |      |     |                               |      |   | 157046                           |  |
|  | 2000 | 400 | ■ galvanised steel<br>■ 2.0 m | 18.2 | 4 | 157048                           |  |
|   |      |     |                               |      |   | Flat pack with levelling feet    |  |
|   |      |     |                               |      |   | 157045                           |  |

# Qmax Neo 300 channel with Q-Guard rail design

The design of the Q-Guard is suitable for drainage of those types of surfaces where heelsafe protection is needed in addition to drainage of water from the surface.



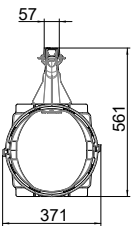
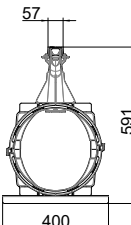
The rail is offered in two basic material options, **ductile iron** and **zinc steel**.

**Neo ductile iron rails** with a length of 0.5 m are supplied painted and other rails with a length of 1 m are supplied with a protective KTL coating.

## Q-Guard Neo 0.5 m CI rail



- Channel Neo 300 with ductile iron EN-GJS-500-7 rail 0.5 m long painted.
- Articles of channels are offered: assembled without the levelling feet, flat pack without levelling feet, assembled with levelling feet and flat pack with levelling feet.

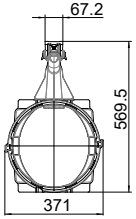
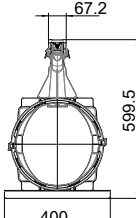
| Dimensions  |        |       |        |              |        |         |          |
|---|--------|-------|--------|--------------|--------|---------|----------|
|   | Length | Width | Height | Material     | Weight | PU      | Item No. |
|   | [mm]   | [mm]  | [mm]   |              | [kg]   | [piece] |          |
| Assembled without levelling feet  |        |       |        |              |        |         |          |
|  | 1000   | 371   | 561    | ductile iron | 9.8    | 6       | 157029   |
| Flat pack without levelling feet  |        |       |        |              |        |         | 157026   |
| Assembled with levelling feet   |        |       |        |              |        |         |          |
|  | 1000   | 400   | 591    | ductile iron | 10.6   | 6       | 157028   |
| Flat pack with levelling feet   |        |       |        |              |        |         | 157025   |

## Q-Guard Neo 1 m CI cast



- Channel Neo 300 with ductile iron rail 1 m long KTL coated.
- Articles of channels are offered: assembled without the levelling feet, flat pack without levelling feet, assembled with levelling feet and flat pack with levelling feet.

### Dimensions

|  | Length | Width | Height | Material     | Weight | PU      | Item No. |
|--|--------|-------|--------|--------------|--------|---------|----------|
|  | [mm]   | [mm]  | [mm]   |              | [kg]   | [piece] |          |
|   | 1000   | 371   | 570    | ductile iron | 11.5   | 6       | 157039   |
| Flat pack without levelling feet   |        |       |        |              |        |         | 157036   |
|  | 1000   | 400   | 600    | ductile iron | 12.2   | 6       | 157038   |
| Flat pack with levelling feet  |        |       |        |              |        |         | 157035   |

## Q-Guard 2 m galvanised rail



- Qmax Neo channels with galvanised rail 2 m long.
- Articles of channels are offered: assembled without the levelling feet, flat pack without levelling feet, assembled with levelling feet and flat pack with levelling feet.

|   |      |     |     |                  |      |   |        |
|---|------|-----|-----|------------------|------|---|--------|
|  | 2000 | 371 | 559 | galvanised steel | 13.9 | 4 | 157059 |
| Flat pack without levelling feet  |      |     |     |                  |      |   | 157056 |
|  | 2000 | 400 | 589 | galvanised steel | 15.3 | 4 | 157058 |
| Flat pack with levelling feet   |      |     |     |                  |      |   | 157055 |

## Q-Slot Single 2 m



- Qmax Neo channels with galvanised rail 2 m long.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

### Dimensions

|  | Length | Width | Height | Material         | Weight | Item No. |
|--|--------|-------|--------|------------------|--------|----------|
|  | [mm]   | [mm]  | [mm]   |                  | [kg]   |          |
| <b>Flat pack without levelling feet*</b> | 2010   | 371   | 661    | galvanised steel | 22.4   | 157066   |
| <b>Flat pack with levelling feet*</b>    | 2010   | 400   | 691    | galvanised steel | 23.7   | 157065   |

## Q-Slot Double 2 m



- Qmax Neo channels with galvanised or stainless steel rail 2m long
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

|  |      |     |     |                  |      |        |
|--|------|-----|-----|------------------|------|--------|
| <b>Flat pack without levelling feet*</b> | 2010 | 371 | 661 | galvanised steel | 24   | 451458 |
| <b>Flat pack with levelling feet*</b>    | 2010 | 400 | 691 | galvanised steel | 25.5 | 451459 |
| <b>Flat pack without levelling feet*</b> | 2010 | 371 | 661 | stainless steel  | 24   | 451460 |
| <b>Flat pack with levelling feet*</b>    | 2010 | 400 | 691 | stainless steel  | 25.5 | 451461 |

## Q-Slot Stripe Corten 1 m



- Qmax Neo channels with corten steel rail 1 m long.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

|  |      |     |     |              |      |        |
|--|------|-----|-----|--------------|------|--------|
| <b>Flat pack without levelling feet*</b> | 1010 | 371 | 661 | corten steel | 13.3 | 451462 |
| <b>Flat pack with levelling feet*</b>    | 1010 | 400 | 691 | corten steel | 13.8 | 451463 |



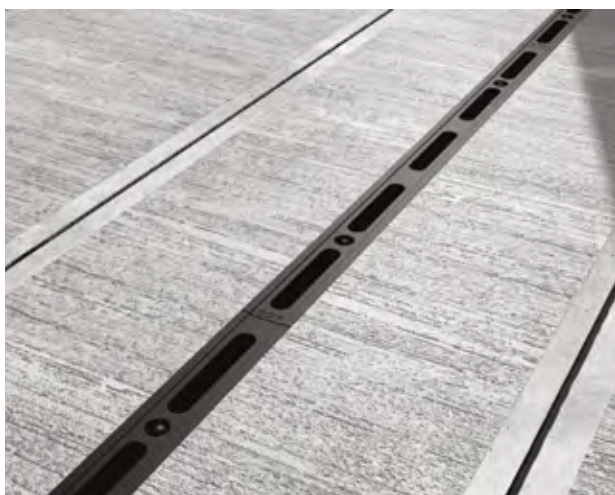
# Qmax Neo 600

## Technical data

Due to the very narrow cast iron top, Qmax is ideal for heavy-duty applications. However, the small drainage slot can also be the perfect solution for visually demanding installations. By combining the existing Qmax family with Qmax Neo, the system can meet hydraulic requirements in the most effective way and provide safe and efficient drainage.

## Qmax Neo 600 channel with Q-Flow rail design

The design of the rail, called Q-Flow, is suitable for drainage of those types of surfaces where a greater amount of water needs to be drained without the need to heel protection.



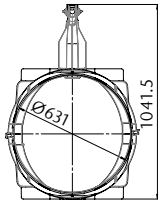
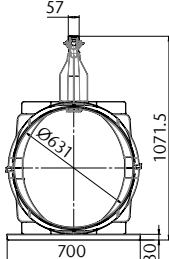
The rail is offered in two basic material options, **ductile iron** and **zinc steel**.

**Neo ductile iron rails** with a length of 0.5 m are supplied painted and other rails with a length of 1 m are supplied with a protective KTL coating.

### Q-Flow Neo 0.5 m CI rail



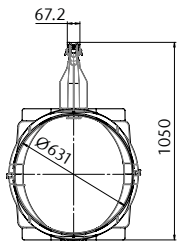
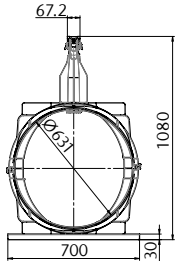
- Channel Neo 600 with ductile iron EN-GJS-500-7 rail 0.5 m long painted.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.
- EN 1433 certified

|   | Dimensions     |               |                | Channel rail   |                |          |
|---|----------------|---------------|----------------|--|----------------|----------|
|   | Length<br>[mm] | Width<br>[mm] | Height<br>[mm] | Material   | Weight<br>[kg] | Item No. |
|  | 1000           | 711           | 1041.5         | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 0.5 m</li> <li>■ painted</li> </ul> | 20.4           | 3021210  |
|  | 1000           | 711           | 1071.5         | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 0.5 m</li> <li>■ painted</li> </ul> | 21.2           | 3021209  |

## Q-Flow 1 m cast iron rail KTL



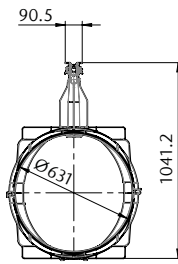
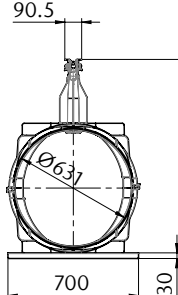
- Channel Neo 600 with ductile iron rail 1 m long KTL coated.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.
- EN 1433 certified

| Dimensions   |        |       | Channel rail |   |        |          |
|--|--------|-------|--------------|---|--------|----------|
|  | Length | Width | Height       | Material  | Weight | Item No. |
|  | [mm]   | [mm]  | [mm]         |   | [kg]   |          |
|   | 1000   | 711   | 1050         | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 1.0 m</li> <li>■ KTL coated</li> </ul> | 21.7   | 3021212  |
|  | 1000   | 711   | 1080         | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 1.0 m</li> <li>■ KTL coated</li> </ul> | 22.4   | 3021211  |

## Q-Flow 2 m galvanised rail



- Qmax Neo channels with galvanised rail 2 m long.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

|   |      |     |        |   |      |         |
|---|------|-----|--------|---|------|---------|
|  | 2000 | 711 | 1041.2 | <ul style="list-style-type: none"> <li>■ galvanised steel</li> <li>■ 2.0 m</li> </ul> | 27.4 | 3021214 |
|  | 2000 | 711 | 1071.2 | <ul style="list-style-type: none"> <li>■ galvanised steel</li> <li>■ 2.0 m</li> </ul> | 28.9 | 3021213 |



# Qmax Neo 600 channel with Q-Guard rail design

The design of the Q-Guard is suitable for drainage of those types of surfaces where heelsafe protection is needed in addition to drainage of water from the surface.



The rail is offered in two basic material options, **ductile iron** and **zinc steel**.

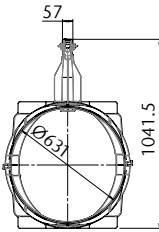
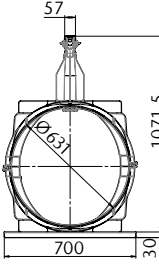
**Neo ductile iron rails** with a length of 0.5 m are supplied painted and other rails with a length of 1 m are supplied with a protective KTL coating.

## Q-Guard Neo 0.5 m CI rail



- Channel Neo 600 with ductile iron EN-GJS-500-7 rail 0.5 m long painted.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.
- EN 1433 certified

### Dimensions

|   | Length | Width | Height | Material                               | Weight | Item No. |
|---|--------|-------|--------|--|--------|----------|
|   | [mm]   | [mm]  | [mm]   |  | [kg]   |          |
|  | 1000   | 711   | 1041.5 | ■ ductile iron<br>■ 0.5 m<br>■ painted | 20.5   | 3021216  |
|  | 1000   | 711   | 1071.5 | ■ ductile iron<br>■ 0.5 m<br>■ painted | 21.3   | 3021215  |

## Q-Guard Neo 1 m CI cast



- Channel Neo 600 with ductile iron rail 1 m long KTL coated.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.
- EN 1433 certified

### Dimensions

|  | Length | Width | Height | Material  | Weight | Item No. |
|--|--------|-------|--------|---|--------|----------|
|  | [mm]   | [mm]  | [mm]   |   | [kg]   |          |
|  | 1000   | 711   | 1050   | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 1.0 m</li> <li>■ KTL coated</li> </ul> | 22.2   | 3021218  |
|  | 1000   | 711   | 1079.8 | <ul style="list-style-type: none"> <li>■ ductile iron</li> <li>■ 1.0 m</li> <li>■ KTL coated</li> </ul> | 22.9   | 3021217  |

## Q-Guard 2 m galvanised rail



- Qmax Neo channels with galvanised rail 2 m long.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

|  |      |     |        |                  |      |         |
|--|------|-----|--------|------------------|------|---------|
|  | 2000 | 711 | 1039.4 | galvanised steel | 24.6 | 3021220 |
|  | 2000 | 711 | 1039.4 | galvanised steel | 26   | 3021219 |

## Q-Slot Single 2 m



- Qmax Neo channels with galvanised rail 2 m long.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

### Dimensions

|  | Length | Width | Height | Material         | Weight | Item No. |
|--|--------|-------|--------|------------------|--------|----------|
|  | [mm]   | [mm]  | [mm]   |                  | [kg]   |          |
| <b>Flat pack without levelling feet*</b> | 2010   | 371   | 661    | galvanised steel | 33.1   | 451464   |
| <b>Flat pack with levelling feet*</b>    | 2010   | 400   | 691    | galvanised steel | 34.4   | 451465   |

## Q-Slot Double 2 m



- Qmax Neo channels with galvanised or stainless steel rail 2m long
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

|  |      |     |     |                  |      |        |
|--|------|-----|-----|------------------|------|--------|
| <b>Flat pack without levelling feet*</b> | 2010 | 371 | 661 | galvanised steel | 34.7 | 451466 |
| <b>Flat pack with levelling feet*</b>    | 2010 | 400 | 691 | galvanised steel | 36.2 | 451467 |
| <b>Flat pack without levelling feet*</b> | 2010 | 371 | 661 | stainless steel  | 34.7 | 451468 |
| <b>Flat pack with levelling feet*</b>    | 2010 | 400 | 691 | stainless steel  | 36.2 | 451469 |

## Q-Slot Stripe Corten 1 m



- Qmax Neo channels with corten steel rail 1 m long.
- Articles of channels are offered: flat pack without levelling feet and flat pack with levelling feet.

|  |      |     |     |              |       |        |
|--|------|-----|-----|--------------|-------|--------|
| <b>Flat pack without levelling feet*</b> | 1010 | 371 | 661 | corten steel | 18.65 | 451470 |
| <b>Flat pack with levelling feet*</b>    | 1010 | 400 | 691 | corten steel | 19.15 | 451471 |



# Access chamber













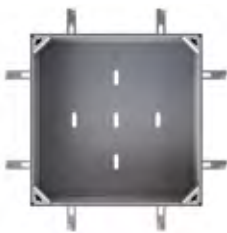
## Inlet shafts and inspection elements



Standard access chamber is ready for 180° connection of the same size of the channel.

| Description                               | Item No. |
|---|----------|
| Qmax 300 NEO access chamber male- female  | 418989   |
| Qmax 300 NEO access chamber female- male  | 418990   |
| Qmax 300 NEO access chamber female-female | 418991   |

Different channel size Q150, Q225, Q300 Neo, Q350 in 180° direction is on request.




|   |   | Description                       | Item No.                   |
|---|---|-----------------------------------|----------------------------|
|    |    | ACO Qmax COVER<br>D400 NW425      | 1000228                    |
|    |    | ACO Qmax GRATING<br>D400 NW425    | 1000229                    |
|    |    | ACO Qmax FRAME<br>D400 NW425 H200 | 1000230                    |
|  |  | ACO Qmax COVER<br>F900 NW425      | 1207548                    |
|  |  | ACO Qmax GRATING<br>F900 NW425    | 1207692                    |
|  |  | ACO Qmax FRAME<br>F900 NW425 H200 | 1207632                    |
|  |  | ACO Qmax Q-Slot COVER             | galvanised steel<br>450918 |
|   |   |                                   | stainless steel<br>450919  |
|   |   |                                   | corten steel<br>450920     |

## Access configurations

Any custom Qmax access chamber solution can be configured in the ACO configurator



### Dimensions

|   | Length | Width | Height | Variant Cover      | Type of channel | Weight | Material         | Item No. |
|---|--------|-------|--------|--------------------|-----------------|--------|------------------|----------|
|   | [mm]   | [mm]  | [mm]   |                    |                 | [kg]   |                  |          |
|  | 785    | 785   | 125    | Multito Plus D 400 | QMax 150-900    | 111    |                  | 210510   |
|  | 785    | 785   | 125    | Multito Plus F 900 | QMax 150-900    | 111    |                  | 210550   |
|  | 770    | 770   | 128.5  | Q-Slot cover       | Qmax 150-900    | 85     | galvanised steel | 450915   |
|   |        |       |        |                    |                 |        | stainless steel  | 450916   |
|   |        |       |        |                    |                 |        | corten steel     | 450917   |

# Accessories

## Qmax Neo 300


1

**End Cap**  
Item No.: 157430




2

**Double Fitting**  
Item No.: 157431




3

**Levelling feet**  
Item No.: 157415



4



**Screws**  
Item No.: 157419



## Qmax Neo 600

on request

## Connectors from Qmax Neo 300 to Q 225 and Q 350

|   | Description  | Item No. |
|---|--|----------|
|  | ACO Qmax Neo 300 step connector from Q225 W450 L248 H450 , PE            | 418567   |
|  | ACO Qmax NEO 300 step connector to Q350 without seal W355 L176 H355 , PE | 418569   |



## Watertight Installation to EN 1433:2002

Where ACO Qmax channels are to be installed with watertight joints, the seal between channel units must be checked for cleanliness and then smeared with lubricant grease such as proprietary pipe joining lubricant. ACO Qmax channels are tested to confirm compliance with the watertightness requirements of EN 1433 when filled with water to the top of the channel bore (below

the inlet arches). Installation must be in accordance with ACO's recommendations and the recommendations of the lubricant manufacturer.

It is envisaged that the channel joints would not be subject to movement, but any movement of the joint might compromise the watertightness.

## Ground Conditions

The long term performance of a channel installation to sustain vertical and lateral loads depends upon A) ground conditions B) stability of the adjacent pavement and C) a durable concrete bed and surround.

The recommended installation detail may require the minimum dimensions to be revised to achieve site specific EN1433 load class requirements.

## Concrete Surround and Reinforcement

Ensure that the channels do not float while pouring the concrete. The reinforcement required in the concrete surround varies with the installation group (load class) and channel size.

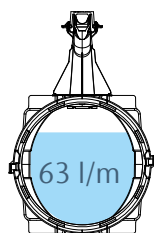
The combined depth of the asphalt pavement must not exceed the required dimensions. Ensure the edge rail anchors -if present- are well embedded into the concrete.

| Load class   | (according to EN 1433)  | D 400    | F900     |
|--|-------------------------|----------|----------|
| Class of compressive strength of foundation concrete | (according to EN 206-1) | ≥ C20/25 | ≥ C30/37 |
| Exposure class *1)                                   |                         | (X0)     | XC3      |
| Dimension of foundation - Type M                     | x (mm)                  | ≥ 650    | ≥ 750    |
|  | y (mm)                  | ≥ 720    | ≥ 770    |
| Reinforcement  |                         | No       | Yes      |

\*1) Exposure class: X0 only for non-reinforced and fully covered foundation concrete. XC3 only exposed to freezing and thawing but not to chlorides. It is mandatory that the planner/engineer is defining individually the relevant exposure class.

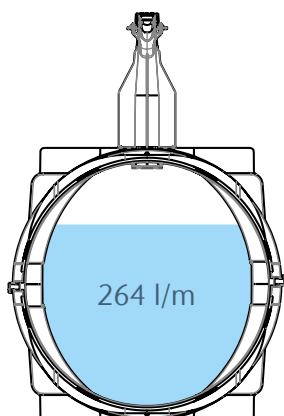
# Hydraulic performance tables

The table below shows the maximum capacity of the unit Qmax Neo 300 and Qmax Neo 600, assuming uniform lateral flow.



**Qmax Neo  
300**

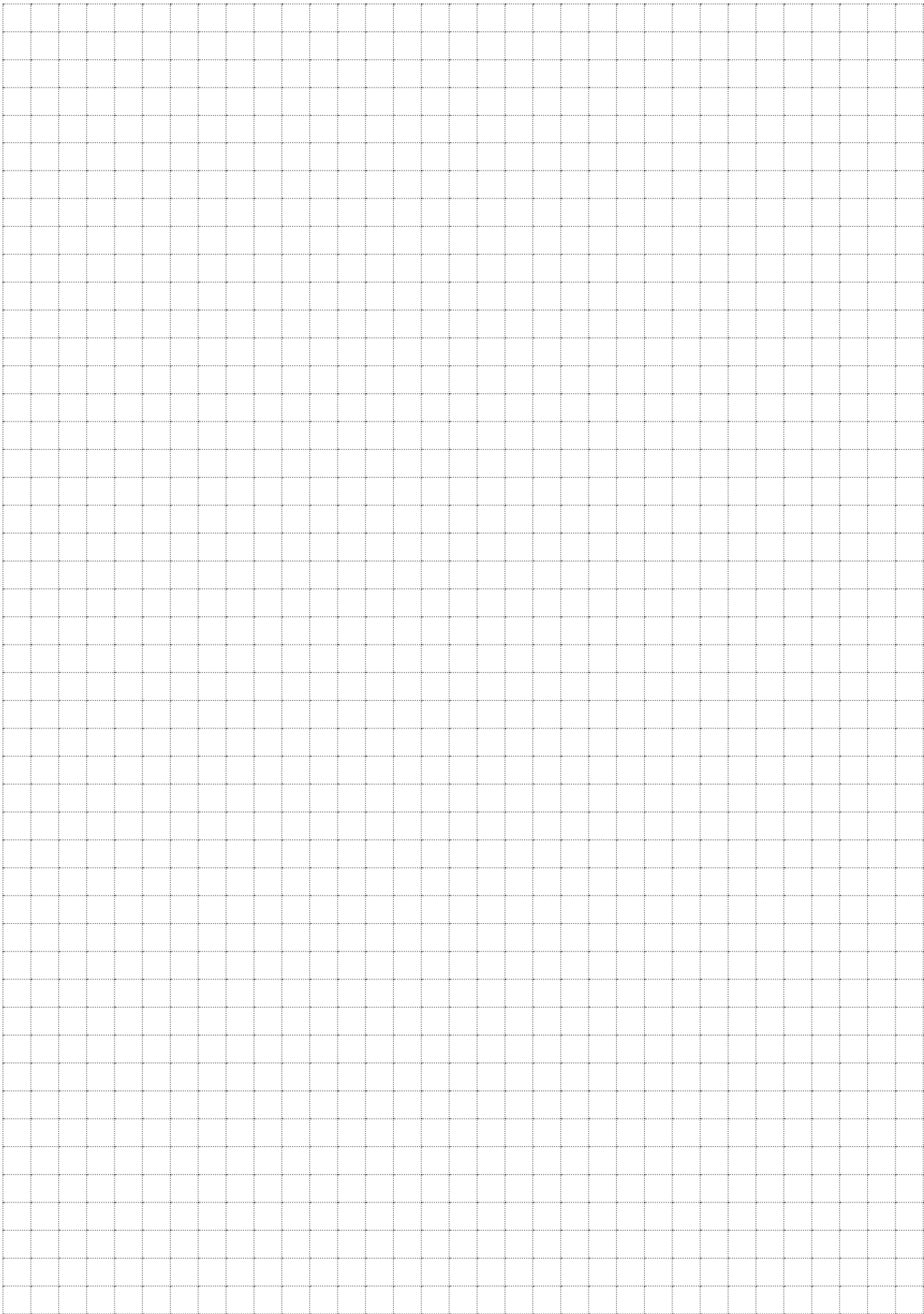
| Length to outlet | Q     |       |
|------------------|-------|-------|
| [m]              | [l/s] |       |
| Slope            | 0 %   | 0,5 % |
| up to 10 m       | 45.0  | 55.8  |
| up to 25 m       | 42.5  | 63.2  |
| up to 50 m       | 39.7  | 71.0  |
| up to 100 m      | 35.8  | 78.1  |
| up to 200 m      | 30.6  | 85.0  |



**Qmax Neo  
600**

| Length to outlet | Q     |       |
|------------------|-------|-------|
| [m]              | [l/s] |       |
| Slope            | 0 %   | 0,5 % |
| up to 10 m       | 254   | 287   |
| up to 25 m       | 240   | 310   |
| up to 50 m       | 230   | 340   |
| up to 100 m      | 218   | 390   |
| up to 200 m      | 200   | 438   |

# Notes



Every ACO product supports  
the ACO WaterCycle



- Drainage channels
  - Road and yard drains
  - Gully tops
  - Manhole covers
  - Rainwater treatment
  - Infiltration and attenuation
  - Pump shafts
  - Flow control systems
  - Tree protection
  - Amphibian protection
- 

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