

Parking



Parking

Parking areas are an integral part of any hotel or public building and a crucial factor for the overall functionality of the building, including daily operations of the staff and visitor's comfort. Whether the parking area is open and therefore exposed to different weather conditions, underground area or multi-story parking decks, where construction heights and other building systems need to be observed – our comprehensive range and dedicated design support will provide you with the optimal solution.



Effective drainage

The impermeable surface of public parking areas creates a significant volume of surface water runoff that needs to be addressed. Underground parking spaces often require drainage solutions with restricted installation space and special attention in the area of the access ramps, where slopes and intensive traffic imply special requirements to the drainage system.



Aesthetics

Drainage systems are integral part of landscaping in public parking areas. Therefore, their finish and design are required to complement and enhance the aesthetic qualities of the property. Modern surface water management solutions are designed to provide further architectural and aesthetic value to the project with variety of design options, discrete slot openings and integrated LED lights.



Surface water treatment

At any site, such as car parks, where there is risk of surface water being contaminated by hydrocarbons are required steps to prevent pollution. Sustainable drainage systems require control of surface water runoff and, as part of this approach, oil separators treat water before being discharged.



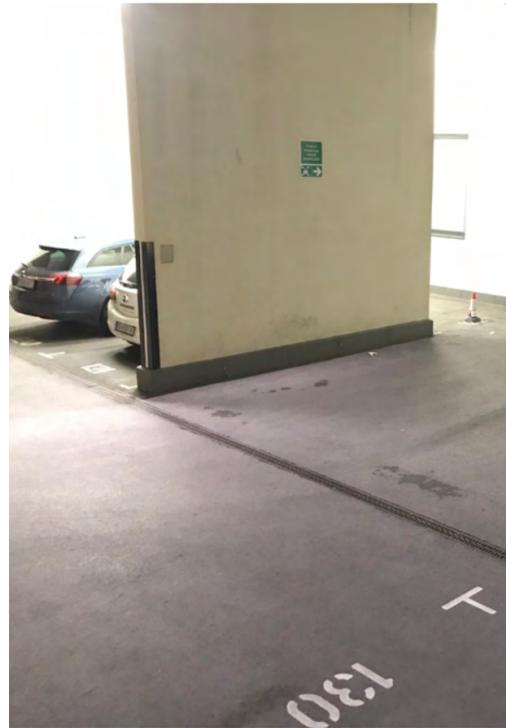
European norms and regulations

- EN 1433 - Drainage channels for vehicular and pedestrian areas
- EN 858:2003 - Separator systems for light liquids
- EN 124 - Gully tops and manhole tops for vehicular and pedestrian areas
- EN 13564:2003 - Anti-flooding devices for buildings
- EN1253 - Gullies for buildings





Complete surface water treatment solutions for indoor or outdoor parking



As the world leader in surface water management and water protection, ACO offers a comprehensive range of line drainage solutions. Whether the parking area of your hotel is external, underground or you have a parking deck you can freely choose between a variety of products, designs and materials.

ACO Drain® range offers a variety of channels with design gratings, slotted or monolithic channels as well as kerbs with integrated drainage.

In the design of components and structural elements, the choice of suitable materials determine the aesthetic and functional qualities of the product. The materials used by ACO are characterized by their strength, ageing resistance and their resistance to aggressive media, frost, heat and sunlight. Thanks to their long life and recyclability, they are equally sustainable and environmentally compatible and are used in an application-orientated way.

Surface water that runs in parking areas contain significantly more contamination than most

people are aware of. Traffic areas are contaminated with harmful materials from tyres (abraded material), brake dust and exhaust gases and traces of petrol and oil. Therefore it is essential that the collected water is treated and cleaned before discharged into the sewage systems or in nature. ACO offers a complete system solution for surface water management, including oil and heavy metal separators, retention and infiltration systems to fit your project requirements.

Surface water management of underground or indoor parking can often be a complex task. The limited installation space in parking decks is a major challenge for drainage systems. At the same time, a special focus is required to providing watertight connection between the channel, the slab and the pipe system. The ACO Design Team is able to work closely with you through the entire design process. Our unique Hydraulic design software enables the efficient and accurate hydraulic design of surface water management schemes using channels as means of conveyance.



ACO System solutions for parking



ACO MultiDrain Seal in



ACO KerbDrain



ACO Qmax



ACO Monoblock



ACO Deckline



ACO Oil separators



Roof Terrace & Facade
 Kitchen
 Bathroom
 Entrance & Lobby
 Spa & Pool
 Basement
 Parking
 Garden & Landscaping

ACO MultiDrain Seal in

Drainage channels with design gratings

Product overview

The ACO MultiDrain range is designed to provide advantages for all – from the design phase to the installation and maintenance. The Seal in technology consists of the waterproof, frost-resistant polymer concrete channel body and a standard integrated 2-component EPDM seal on the gutter joint. It offers a variety of load class options, sizes, edge rails and the widest choice of standard, design or customized gratings. In addition to all that you can benefit from professional design tools to visualize the surface design and calculate the optimal drainage performance.



reddot design award



DESIGN AWARD 2015

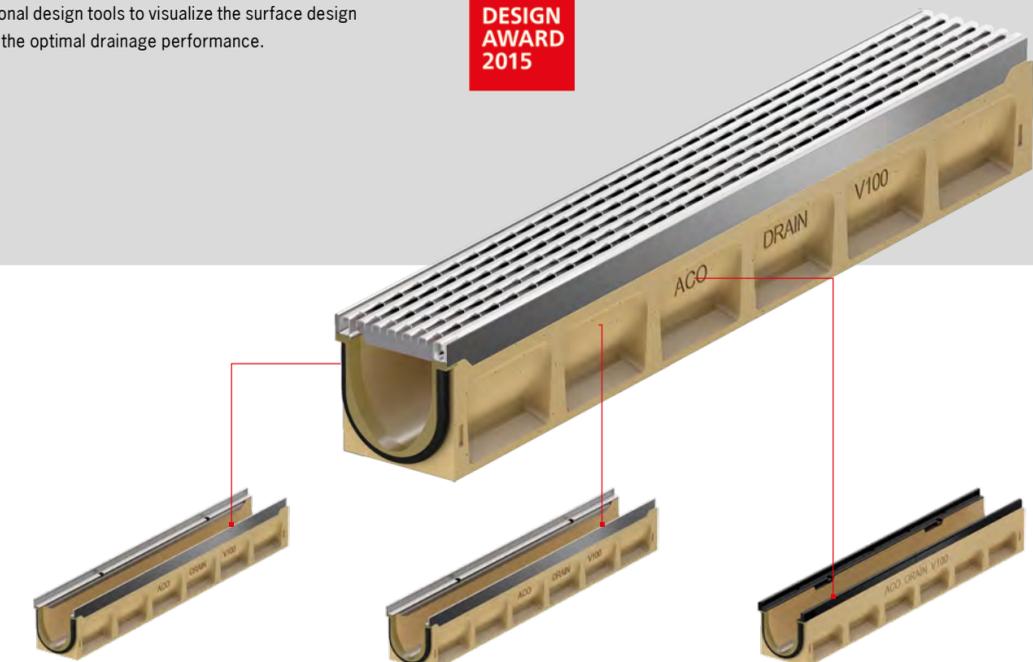


German Design Award

NOMINEE 2015



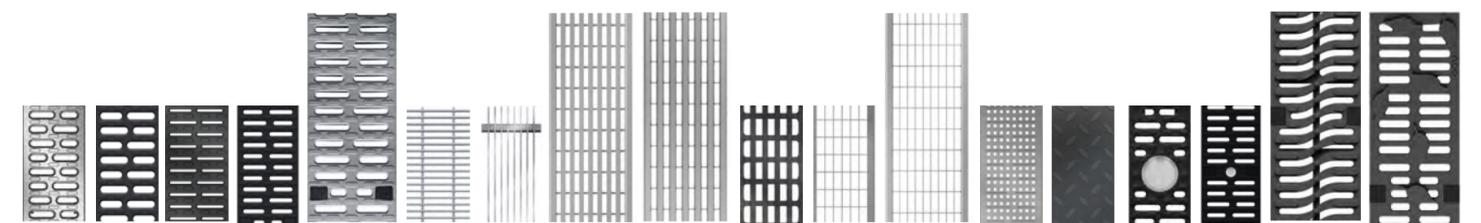
- Choice of design gratings: Cast iron, stainless steel, galvanized steel or plastic
- Freedom to create individual designs, as well as option for integrated LED lights
- Polymer concrete channel for optimal stability, hydraulic performance and resistance
- Flexible design options, due to variety of sizes, including low-profile solution



Frame: steel, galvanised

Frame: stainless steel

Frame: Cast iron





Roof Terrace & Facade
 Kitchen
 Bathroom
 Entrance & Lobby
 Spa & Pool
 Basement
 Parking
 Garden & Landscaping

ACO KerbDrain

Kerbs with integrated drainage

Product overview

ACO KerbDrain is an award winning combined kerb and drainage system specifically designed and developed to form an integral part of any modern, sustainable surface water management solution. The system provides versatile solutions for traffic and parking spaces, curves and access areas. It guarantees optimal lateral drainage while leaving the surface uninterrupted.



- Combination of surface drainage and curbstone: "2 in 1"
- Monolithic system with no loose parts
- Manufactured from polymer concrete for optimal stability and resistance
- Variety of elements for form curves and access areas

Choice of depths
 Available in 255mm,
 280mm, 305mm,
 380mm, 405mm and
 480mm depths

Drainage inlets
 designed to
 resist debris
 blockage

50% higher impact
 resistance than
 traditional kerbs

DF hole for draining porous
 asphalt or providing temporary
 drainage of subsurface during
 installation

Sealant groove for
 simple watertight
 installations

Made from
 sustainable materials
 Thermally stable,
 chemically resistant,
 environmentally friendly
 polymer concrete.



Load Class D 400
 ACO KerbDrain® is fully
 certified to Load Class D 400
 EN 1433:2002 and CE marked

Installation benefits
 Kerb units available in
 1000mm and 500mm
 lengths

External surfaces
 anchor channel securely
 into concrete surround
 to prevent displacement

Suitable for
 highway drainage in
 compliance with EN
 1433:2002



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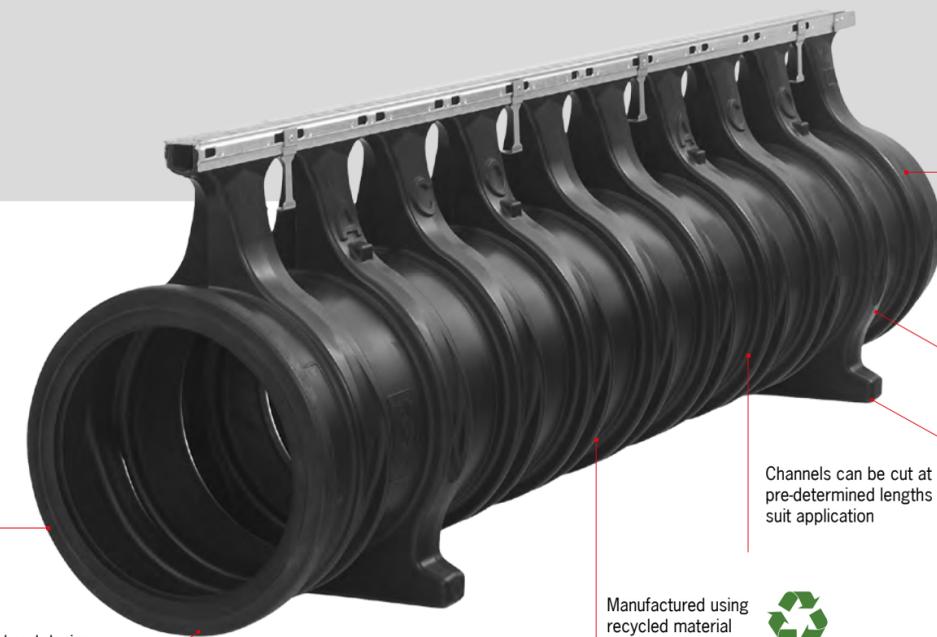
ACO Qmax® High capacity slot drainage system

Product overview

ACO Qmax® satisfies the demand for a versatile, high capacity slot drainage system for applications involving small to large catchment areas. It is specifically designed to form an integral part of any modern, sustainable surface water management solution. The system maximizes the hydraulic capacity available providing effective storage, attenuation, and eliminating carry over in stormwater conditions.



- Hydraulic capacity slot channels
- All advantages of slot and heavy duty channels in one system
- Highest hydraulic capacity and attenuation
- Variety of sizes and edge rails to suit your project requirements



One piece design provides minimal connection joints and simple installation

Ultra stiff rib design provides high strength during handling and installation

Levelling feet for ease of installation and stability

Channels can be cut at pre-determined lengths to suit application

Manufactured using recycled material 

Integrated channel seal for quick and easy watertight connections*

Lightweight material and design for easy manual handling and fast installation



Q-guard cast iron edge rail



Q-flow galvanized steel edge rail



Q-flow cast iron edge rail



Q-guard galvanized steel edge rail



Q-slot galvanized steel edge rail



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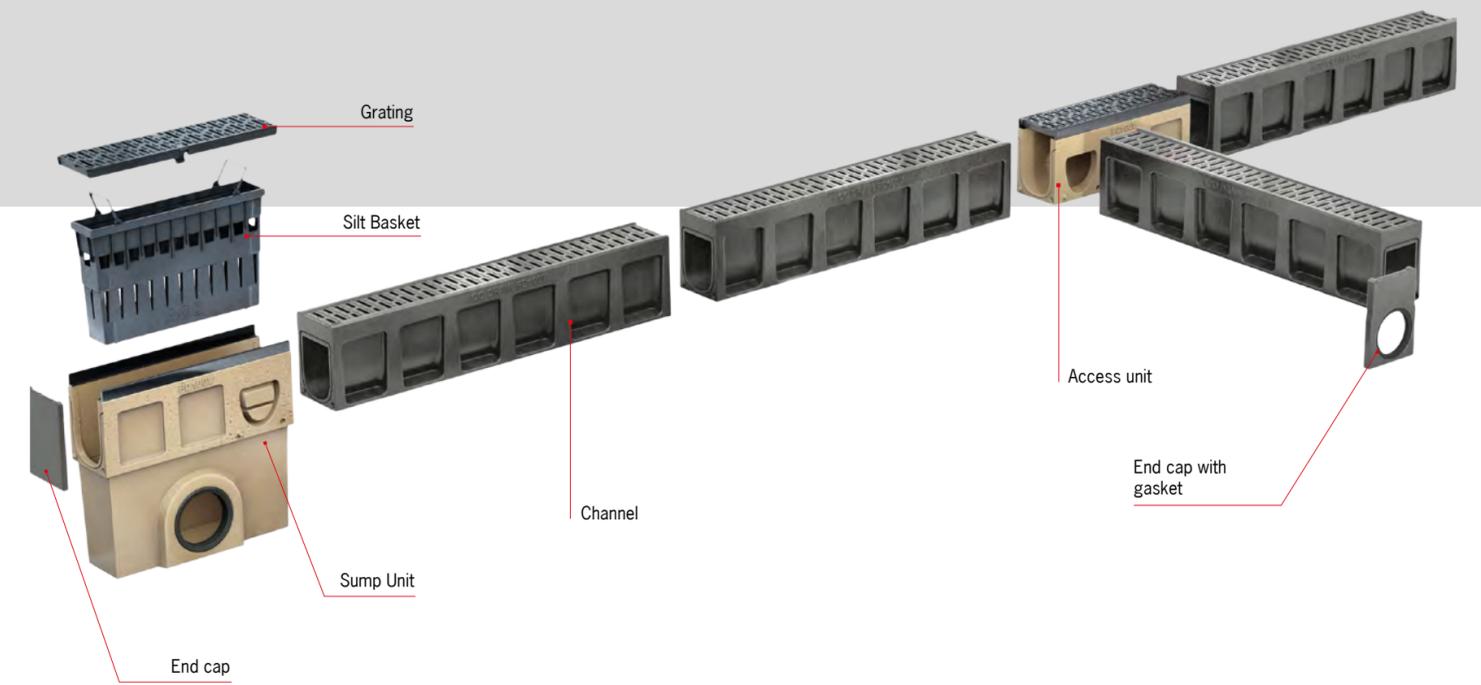
ACO Monoblock

Monolithic drainage channels

Product overview

ACO Monoblock is a one-piece channel drainage system that delivers multiple benefits including safety and sustainability, economical and efficient installation and aesthetic choices across various applications. Designed to meet extreme requirements, such as intensive traffic and weather conditions, the system provides also optimal comfort for pedestrians and easy maintenance.

- Monolithic structure for superior stability even in extreme conditions
- No loose parts, traffic and vandalism safe
- Suitable both for pedestrian and traffic zones
- Colour options to suite aesthetic requirements





ACO Decline

Line drainage for parking decks

Product overview

ACO Decline channels are made from only highly resistant materials such as polymer concrete or stainless steel. Suitable gratings are made from composite plastics, stainless steel or cast iron. For a lengthy lifetime of building and drainage channels, ACO strongly recommends to use exclusively run-off drainage systems in combination with grated channels for easy maintenance and cleaning in parking facilities.

ACO Decline S without coating-flange

ACO Decline S with coating-flange

ACO Decline P



- Compatible with penetration element to connect sealing layer underneath the channels.
- Watertight connection system with 3M sealing tape. No welding. No screwing.
- Quick and easy installation process through simple connector system. Optional "hanging" installation.
- Material: Stainless steel V2A.
- High load class performance up to C250.
- Flexible: Recommended solution for concrete or screed flooring. Others equally possible.

- Integrated flange for firm and durable connection with resin coating layers.
- Watertight connection system with 3M sealing tape. No welding. No screwing.
- Quick and easy installation process through simple connector system.
- Material: Stainless steel V2A.
- High load class performance up to C250.
- Recommended solution for resin coated surfaces. Others equally possible.

- Designed for asphalt surface, others equally possible
- Watertight connection system with 3M sealing tape. No welding. No screwing.
- Material: Polymer concrete
- Installation - Quick and easy
- High load class performance up to C250.
- Robust type-I tested channel in three colour options (natural, grey, anthracite).



ACO Oil Separators

Surface water treatment for light liquids

When do light liquid separators have to be used?

The use of light liquid separators is stipulated by the regulations in DIN 1986-100, Section 6.2.3: "If petroleum or light oils, especially those that are combustible or can form explosive atmospheres, enter the sewers, separator systems for light oils must be used downstream of the discharge points." Discharging petroleum and light oils into public sewers can cause groundwater and drinking water contamination, and in serious cases, cause extensive environmental damage to flora and fauna. The solution to this problem is a light oil separator. Any light oil in the wastewater is collected in a separator tank and prevented from being discharged from the separator. The discharge outlet closes automatically when the maximum storage capacity has been reached. The light oil which collects in the separator is disposed of by certified recycling companies at regular intervals.

ACO Coalisator P

- for free standing installation according to EN 858
- certificate 7310434-01 (NS 3-10)
- inlet and outlet connection according to outside diameter D depending on nominal size of separator
- inlet and outlet parts of polyethylene
- with integrated removable coalescing filter
- automatic closure device with float switch, density of float switch: 0.9 g/cm³



ACO Oleopator P

- for ground installed installation according to EN 858
- certificate 7310434-01 (NS 3-10)
- inlet and outlet connection according to outside diameter D depending on nominal size of separator
- inlet and outlet parts of polyethylene
- with integrated removable coalescing filter
- automatic closure device with float switch, density of float switch: 0.9 g/cm³

