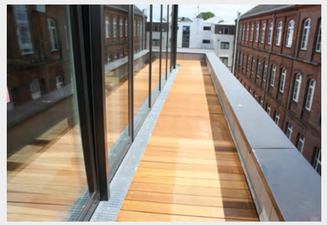
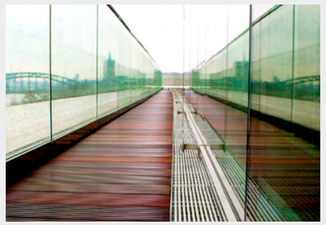
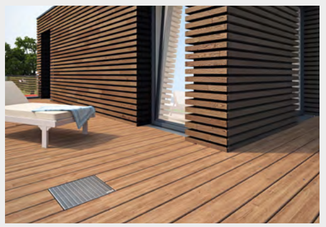
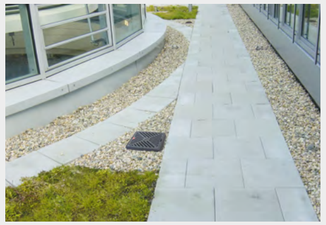
Roof, Terrace & Facade



Roof, Terrace & Facade

Roofs encompass the upper building boundary and their design is an important part of the overall structure of the building. Planning errors in roof drainage can lead to, in extreme cases, the collapse of the roof.
This can be dangerous and lead to the destruction of the entire property or lowering of its value.
There are many aspects to consider when designing the roof drainage system. It's important to take into account the local climate as well as the norms, regulations, architectural and construction requirements.

Heavy rainfall

Flat roofs are sensitive architectural areas. Therefore a professional planning of the drainage system is particularly important. If rain falls on the flat surface, large amounts of water can quickly accumulate. To protect the building, a drainage system is required. Heavy and continuous rainfall must be considered to ensure the structure of the roof.

Barrier free movement

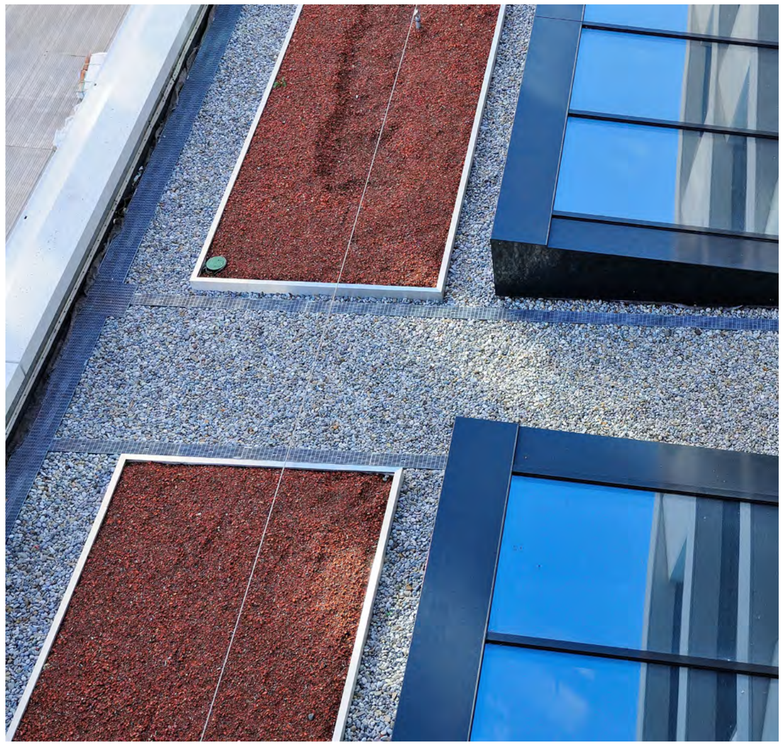
Modern public buildings must provide barrier free movement and accessibility to all internal and external areas of the building. In order to accomodate the high standards of architects and planners, drainage of facades and terraces should be perfectly integrated with the surrounding surface. Consequently, the height of the channels must be adjusted with mm-accuracy to the floor level. They should also prevent any water accumulation or splashing during heavy rainfall.

Fire Protection

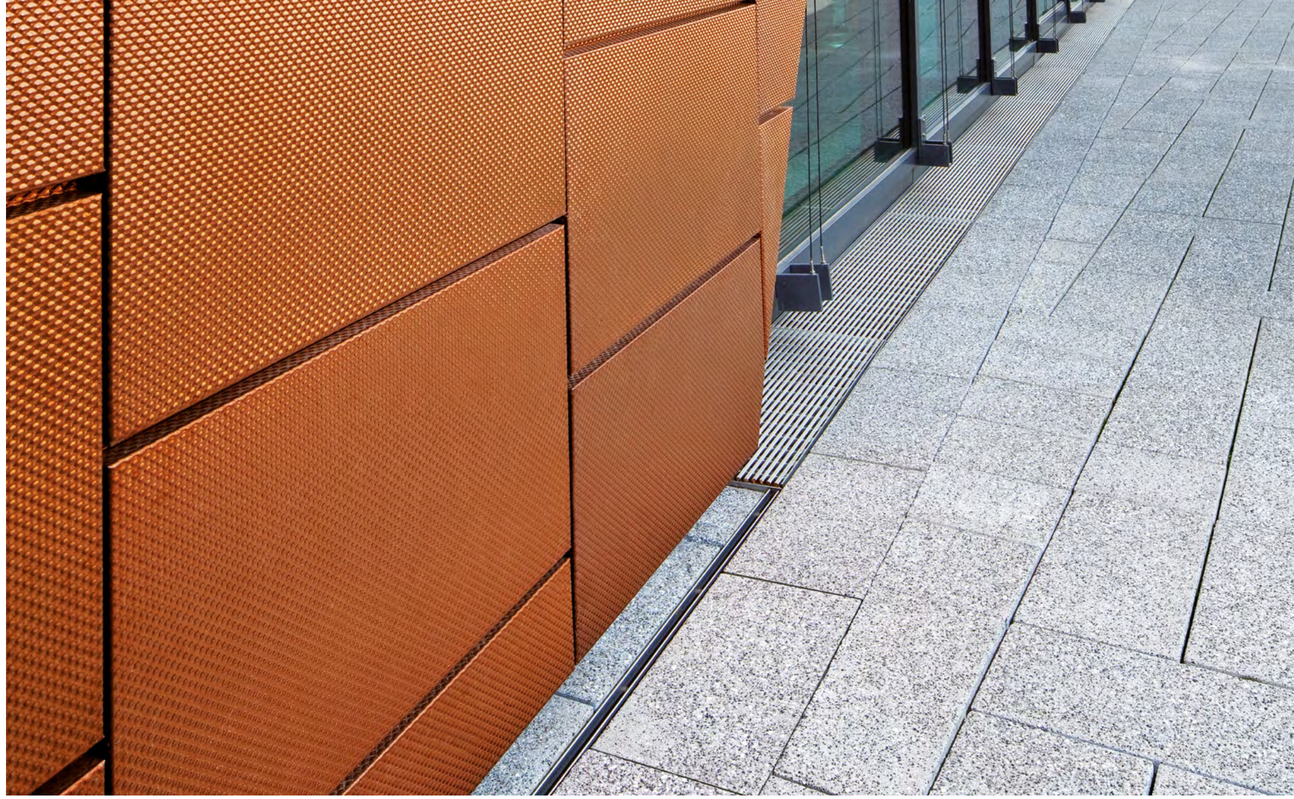
All countries set general requirement about fire safety and protection. Therefore roof installation must be set up, modified and maintained in such a way that public safety and order are not jeopardized.
Roof constructions must be arranged, erected, modified and maintained in such a way as to prevent the occurrence of a fire and the spread of fire and smoke.

European norms and regulations

- **EN 1253** - Roof gullies for buildings.
- **EN 12056-3:2000** - Gravity drainage systems inside buildings. Roof drainage, layout and calculation
- **EN 13501** - Fire classification of construction products and building elements. Classification using test data from reaction to fire tests



Barrier free surface and optimal protection for the building boundaries



Flat roofs have many advantages, but they have to master a huge static challenge. When it comes to planning and execution, safety, fire protection and effective roof drainage are top priorities. ACO offers functional solutions that are specially adapted to the flat roof area of use and ensure optimum drainage of rainwater. For smaller areas, systems for gravity drainage are suitable. On large roofs over 150 m² per gully, drainage systems with negative pressure are preferred. ACO offers products in the materials cast iron and stainless steel- A1 class fire protection materials. There are also special solutions for green roof, attic and emergency drainage. When planning the correct flat roof drainage and the hydraulic calculation of the pressure flow systems, ACO supports you with the latest standard-compliant design software and a high level of practical knowledge.
The planning and execution of façade drainage, balcony drainage or terrace drainage in residential construction demands the highest degree of individual adaptation and design from architects and engineers. The areas must be sustainably protected from the weather influences, including rainwater, wind, snow piling and heat protection. In addition to that ACO has developed a comprehensive range of solutions in compliance to functional and design requirements, including contemporary trends for barrier free surfaces and secondary drainage. Our professional services and flexible production process enable the creation of individual solution to face any project challenges.

ACO Fire protection

According to the European regulations for fire protection for flat drain roof flat roof gullies with fire protection insert are needed to prevent the transfer of smoke and fire in the building area. In case of fire the special developed material in the function device of the Jet gully blocks the opening in the roof gully to prevent the breakdown of fire and smoke.

ACO System solutions for roof, terrace & facade

ACO Profiline

ACO Jet

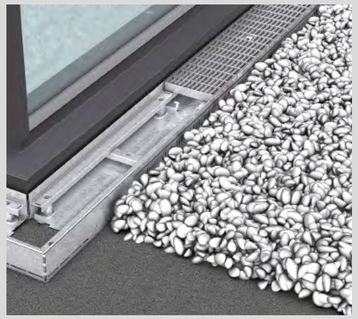
ACO Spin

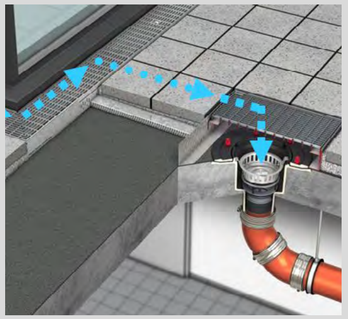
ACO GM-X

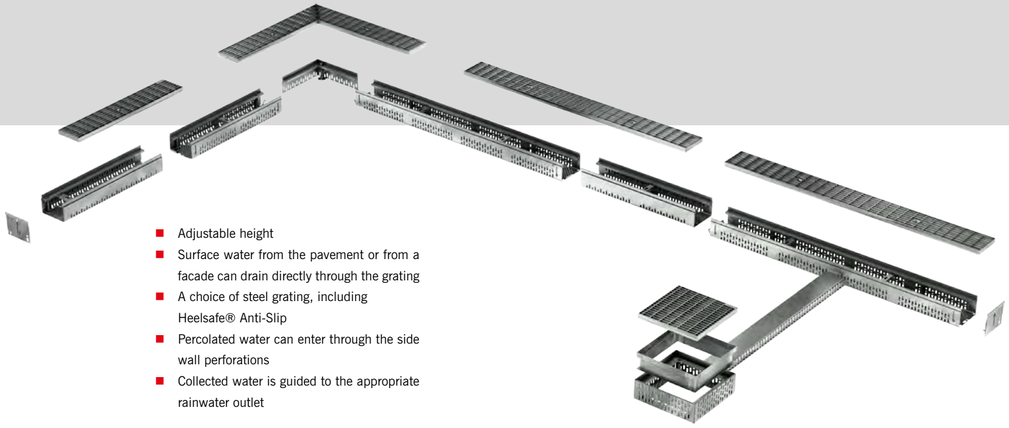
ACO Profiline
Line drainage

Product overview

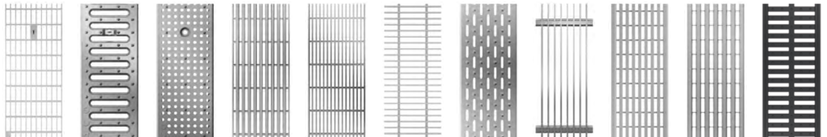
The Profline system is designed to be positioned above the roof or balcony membrane. It drains water directly from the pavement surface or down a façade via the grate.
Perforations in the side walls of the channel allow water that has percolated through the pavement or green roof materials, to drain. It then guides this water to the roof or balcony drain.
If the roof or balcony drain cannot be ideally situated, drainage ducts can be used to discretely direct the water to the required location.
The access grate can be used over the rainwater outlet to provide access for maintenance.







- Adjustable height
- Surface water from the pavement or from a facade can drain directly through the grating
- A choice of steel grating, including Heelsafe® Anti-Slip
- Percolated water can enter through the side wall perforations
- Collected water is guided to the appropriate rainwater outlet

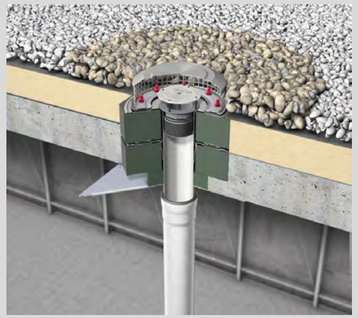


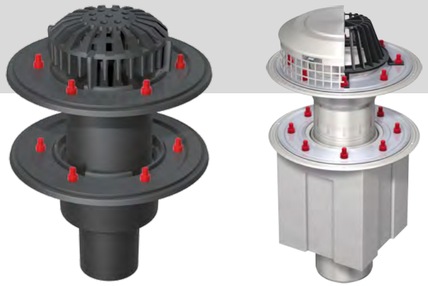
ACO Jet & ACO Spin

Siphonic & Gravity roof drainage

Product overview

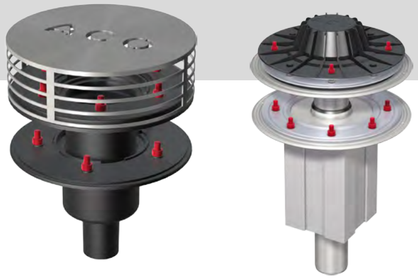
Flat roofs are sensitive architectural areas. That is why it is especially critical to plan their drainage systems professionally. When rain falls onto a flat roof, large volumes of water can collect rapidly. Unless there is an effective way of draining off precipitation, this can lead to excess loads being placed on the building's structure. ACO offers functional solutions which are specially designed for flat roof areas and which ensure the water is drained effectively. For smaller surfaces, gravity drainage systems are the solution. For larger roofs of 150 m^2 per gully or more, siphonic systems can be installed.





ACO gravity roof drainage - Spin

- Material - cast iron and stainless steel
- One-piece or two-piece gullies
- Suitable for main and emergency drainage
- Individual components of the gullies such as gratings, top sections and gully bodies
- With or without insulation
- Vertical angled outlets: 90° / horizontal angled outlets 1,5°
- Various accessories
- Non-flammable A1, according EN 1253-2



ACO siphonic roof drainage- Jet

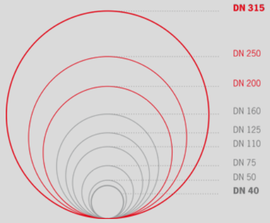
- Material - cast iron and stainless steel
- One-piece or two-piece gullies
- Increased drainage performance level
- Specially designed flat roof drains, configured to work with completely full pipes (degree of fill h/d 1.0).
- Special components used to prevent vortexes forming.
- Vertical angled outlets: 90°
- Non-flammable A1, according EN 1253-2

ACO GM-X
Galvanized steel pipe system

Product overview

ACO GM-X pipes made of galvanized steel are successfully used in the field of flat roof drainage in the Nominal size of DN 32 - DN 300. The extensive range of pipes and fittings allows a fast and economical solution for each installation situation. Due to the proofed socket connection, a quick and easy plug-in installation by turning the pipe and fittings can be executed in the sleeve. The production of the ACO GM-X pipe system complies to all requirements of EN 1123.

Wide range of nominal sizes



- Breakage protected
- Dimentionally stable
- Heat resistant up to 95 ° C
- Non- flammable (A1)
- Frostproof
- Outer sleeve provides enhanced functional security
- Additional internal sound protection coating
- Protection against condensation water prevents the formation of mould