



## ACO Multi-Flex for faecal-free and faecal-containing wastewater

ACO lifting plants

For underfloor installation or free-standing installation



# For installation in commercial and residential buildings



The ACO Multi-Flex lifting plant is available in mono or duo version, which features a second pump to increase operational reliability. The lifting plant can therefore be used in multi-dwelling or commercial units if, for example, a large number of drainage objects have to be discharged below the backflow level. The optional use of submersible grinder pumps also ensures the safe lifting of black water from toilets. Depending on the version, the standard "Voronoi" covers meet the requirements of load class K3 for areas without vehicular traffic or load class A15. They can therefore be used in single and multi-dwelling units as well as in commercial areas.

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The discharge of the wastewater is ensured for all building types via the inlets which are distributed generously around the tank in the outer diameters of 110 and 160 mm. All lifting plants of the Multi-Flex series comply with the European product standards EN 12050-1 or EN 12050-2, depending on the version selected. The corresponding declaration of performance for each version can be found in the product download section on our homepage.

Under certain local conditions it may be absolutely necessary to have a free-standing lifting plant inside the room or to install it in an appropriately sized on-site shaft. The above-ground version of the Multi-Flex lifting plant is the perfect solution for these requirements. The pump unit can be accessed for inspection and maintenance from above via a sealed odour-proof cover. The included fastening set allows the tank to be securely fixed to the installation surface to prevent it from rotating or floating upwards.

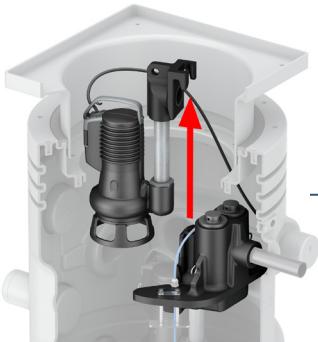


# Modular system for a wide range of applications

The top systems for installation in the floor slab are rotatable and can be adapted to the specific alignment of the tiles. Depending on the floor structure, the height can be easily adjusted using the height-adjustable top section.



A sealing flange is also available to protect against groundwater; this can be easily mounted at three different heights depending on the thickness of the concrete slab. The sealing flange is held in position by special tensioning straps with turnbuckles.



The pump units have a combined coupling system for easy assembly and disassembly. This means that the pumps in both the mono and duo versions can be mounted in the tank quickly and without the need for tools. The traverse with check valve unit installed in the tank assumes the role of the required backflow safety in accordance with the relevant standard for these products.



A suitable sealing membrane or vapour barrier on the floor slab can be easily connected to the base unit via the optionally available adhesive flange.

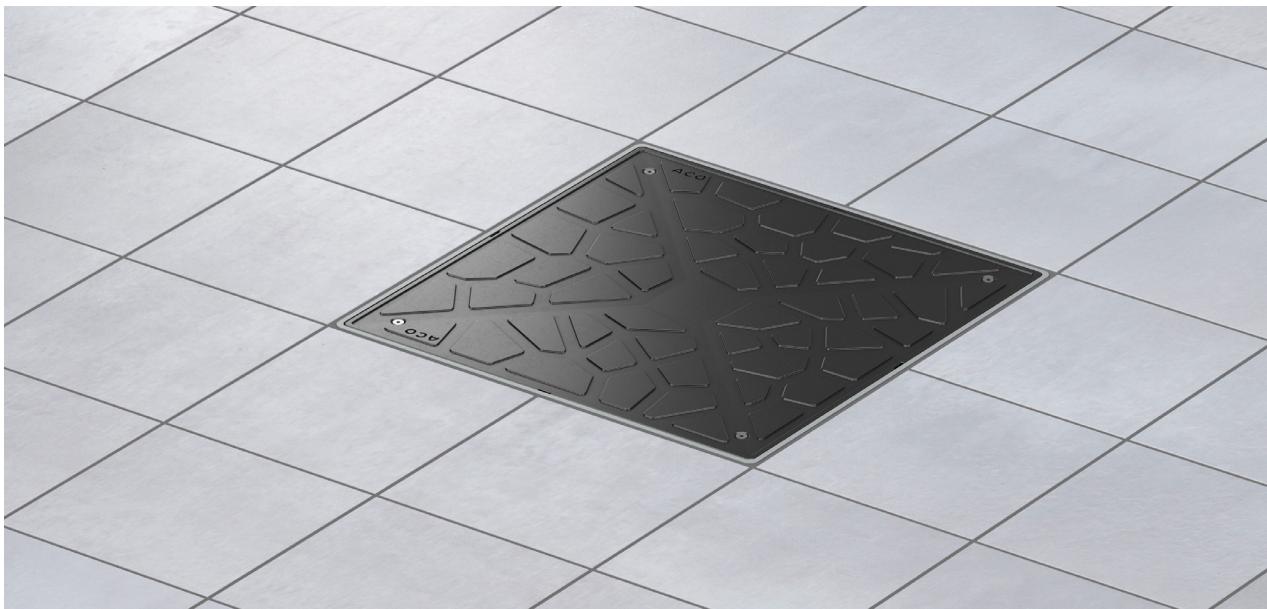


The ACO MultiControl switchgear is responsible for level measurement and control of the pump equipment. It features an optional Modbus RTU interface, which allows messages and configuration information to be forwarded via the building management system.



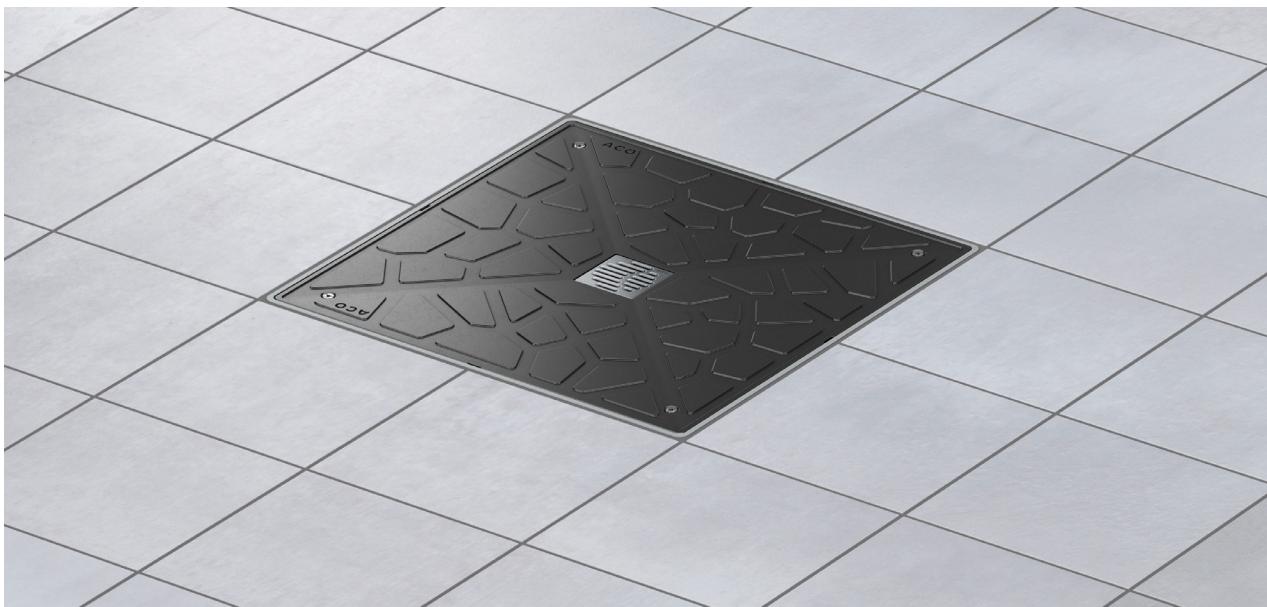
The base unit is made of robust polyethylene and has a total of seven inlets for the connection of plastic pipes with an outer diameter of 110 or 160 mm. These inlets are distributed at different heights around the base tank to facilitate the connection of drainage fixtures located in the basement.

## Top systems for different installation conditions



ACO has introduced a newly designed top section specifically for the Muli-Flex lifting plant, which when combined with the base unit of the lifting plant can be height adjusted via a lip seal ring. There are two covers available for this purpose:

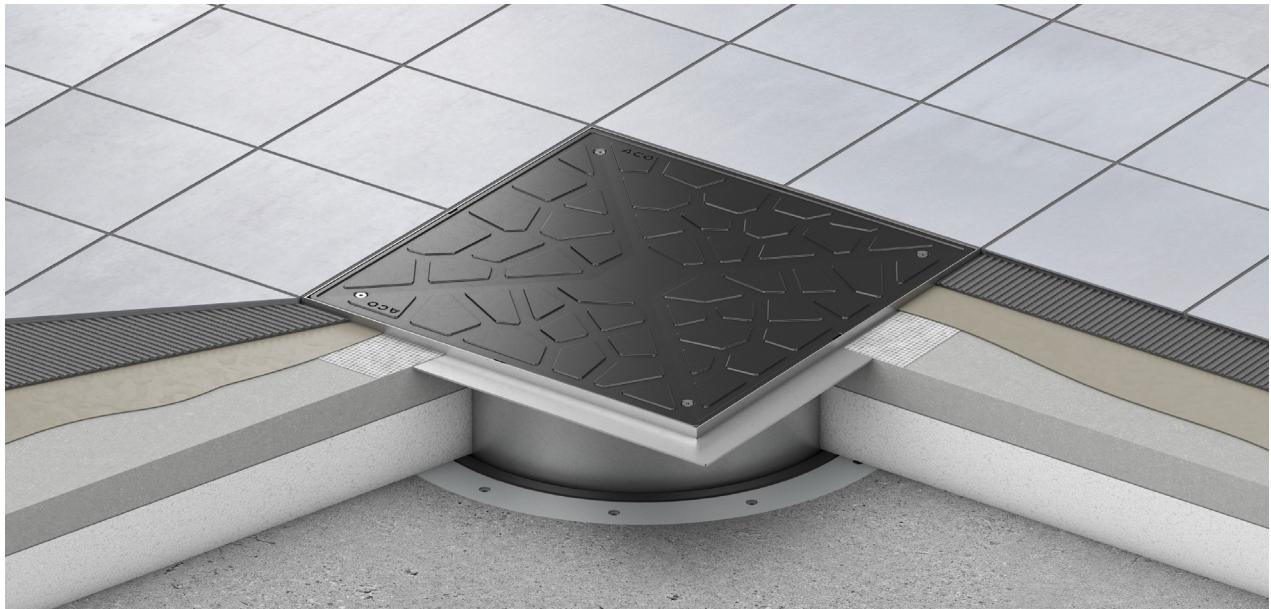
One is a solid cover that completely seals the lifting plant to ensure the surface is watertight. The other is a combined cover with an integrated floor drain and odour trap that drains wastewater directly into the collection tank via the grating on top of the cover.



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Both covers are made of robust polyurethane material (PUR) and meet the specifications of load class A15 (for light traffic) or K3 (areas without traffic). In addition, the surfaces each feature the attractive "Voronoi" pattern produced by the ACO Group and include a seal to ensure

that they are impermeable to rainwater. Each of these covers is fastened to the top section with four stainless steel screws and the screw fitting can be opened with commercially available tools.



ACO Building Drainage has also developed a top section suitable for use in floor constructions with composite seals below tiled flooring:  
The top section for thin-bed sealing is made of stainless steel, material grade 304, and features a fixed flange with a width of 50 mm.

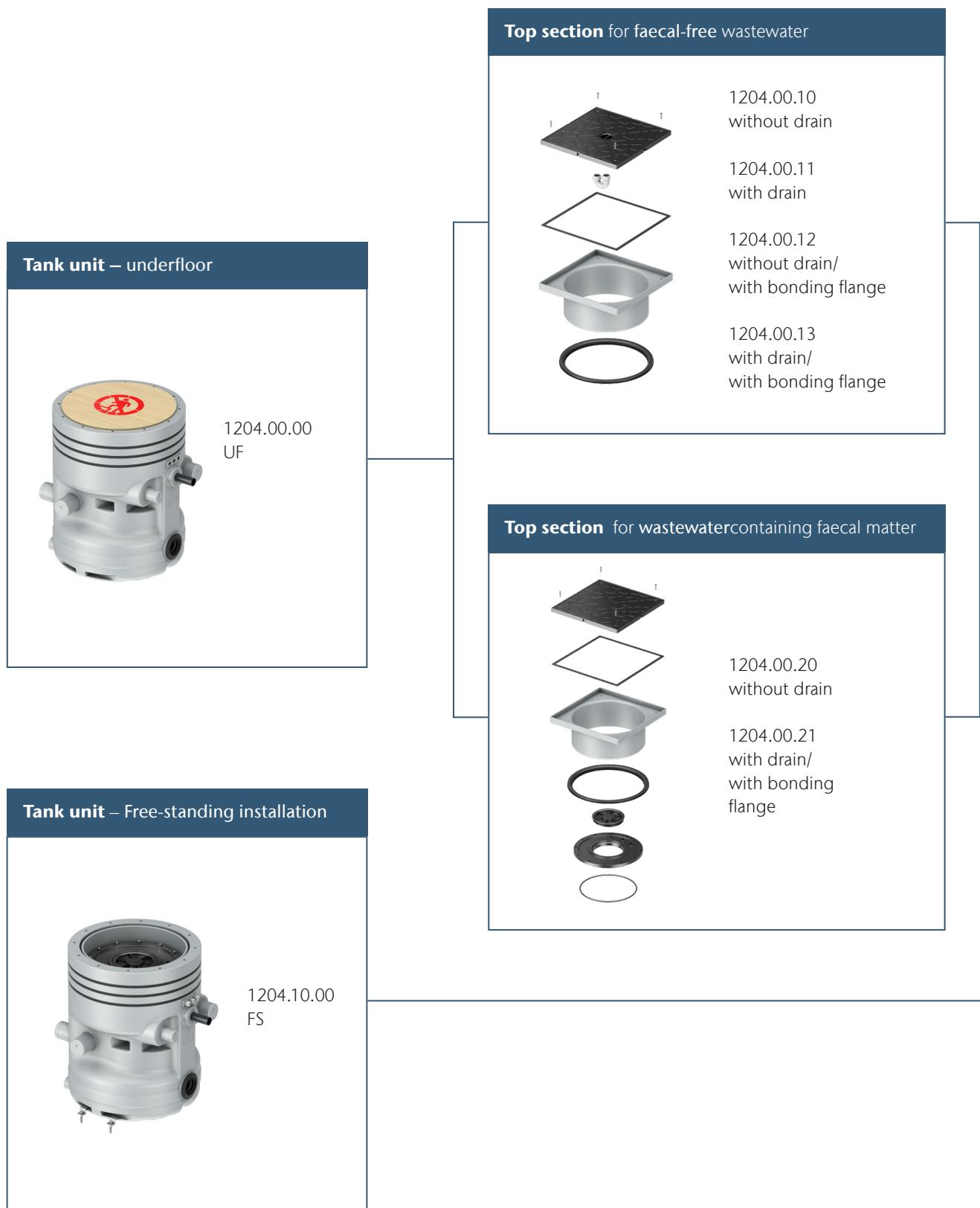
This wide flange allows the perfect bonding of several layers of alternative sealants in accordance with the processing specifications of every current supplier on the market.



The free-standing version of the Multi-Flex series can be used if it is not possible to install the lifting plant in the floor slab or if a free-standing installation of the lifting plant is preferred. The lifting plant can be equipped with the same pumps and switchgear from the modular system;

in addition, the tank can be emptied for maintenance or repair purposes via the bottom outlet. The service cover including sealing ring seals the collection tank against odours and can be easily removed for cleaning purposes.

# Combinable modular system



**Submersible pumps** for faecal-free wastewater



1204.20.00  
SAT-V 75/2/50

1204.20.01  
SAT-V 150/2/50

**Submersible pumps** for wastewater containing faecal matter



1204.20.10  
Sita 200 N-ex-G

**Control unit**

0178.64.38  
MultiControl mono  
Modbus with  
pneumatic bell



0178.64.39  
MultiControl duo  
Modbus with  
pneumatic bell

0178.63.79  
MultiControl mono  
with pneumatic bell

0178.64.21  
MultiControl mono  
without pneumatic bell

0178.63.80  
MultiControl duo  
with pneumatic bell

0178.63.94  
MultiControl duo  
without pneumatic bell

**Accessories**



Sealing flange



Adhesive flange



Pressure line set



Pressure sensor

Each ACO Building Material product  
supports the ACO system chain



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- Floor drainage
  - Bath drainage
  - Roof drainage
  - Multi-storey car park drainage
  - Balcony and terrace drainage
  - Pipe systems
  - Grease separator
  - Starch separators
  - Light liquid separator
  - Process engineering
  - Backflow systems
  - Lifting Plants
  - Pump stations
- 



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the future of drainage**

