

3. Installation and assembly

3.1 Recesses/ core boreholes

The floor drain (or the drain body) can already be installed before the floor plate or ceiling is poured, so that the drain is integrated within the mass of concrete. The drain pipes have to be connected to the drain body before the concrete is poured.

The drain is supplied with a protective cover to protect it from contamination during construction of the building. This cover must be removed after pouring the concrete and when the rest of the floor structure is being constructed so that the top section can be installed within the drain body.

The floor drain is set in the existing recesses and positioned. The floor drain is lined and connected to the drain pipe. Concrete is then poured into the rebate ensuring that there is a very good bond between the drain body and the structure of the floor.

In the case of drains with vertical outlets, the recess should include a pouring hole for pouring in the concrete from above.

It can be generally assumed that drains with lateral outlets are first connected to the downstream pipe bend before installing it into the rebate.

If the floor drain is installed in a core borehole, special care must be taken to ensure that it is properly fixed in place and that the cement is expertly poured around the drain body.

The appropriate drain bodies with round housings and vertical outlets are used in this case.

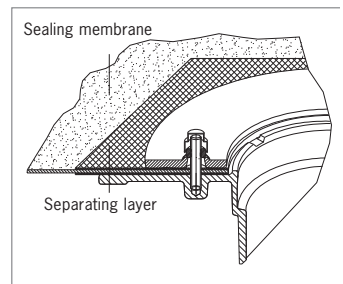
3.2 Sealing

The sealing membrane must be connected in compliance with the relevant standards and regulations, and locked in the loose flange depending on the type of drain.

Pay attention when laying the sealing membrane that the membrane slopes continuously to the drain body. If the overlying floor structure becomes permeable and allows seepage water to collect on the sealing membrane, this can then run down the continuous slope to the drain body. Drains with adhering flanges or compression-sealing flanges therefore have to have seepage openings to allow any seepage water to be safely drained off via the floor drain.

When connecting bitumen-compatible high-polymer sealing membranes to cast iron floor drains with a painted coating, only use adhesives recommended by the sealing membrane manufacturer, and follow all of the installation instructions.

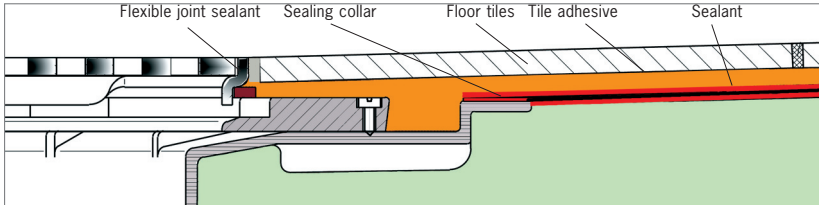
Take care when connecting non-bitumen-compatible polymer sealing membranes to painted or epoxidised floor drains that the sealing membrane around the floor drain is protected from the painted surfaces by installing a separating layer⁶⁾ (covering an area of approximate 0.6m x 0.6m) above and below the flange. The separating layer must be compatible with the coating on the floor drain as well as the high-polymer sealing membrane.



When connecting non-bitumen-compatible polymer sealing membranes

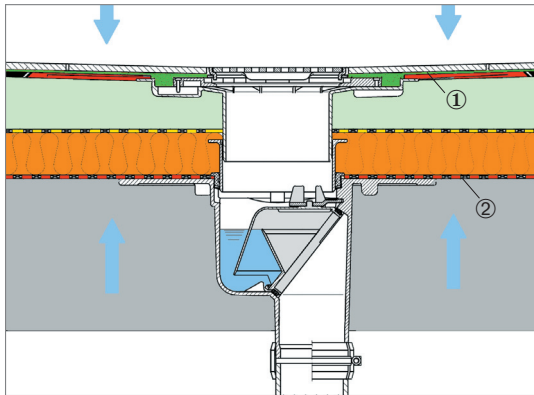
⁶⁾ We recommend a separating layer made of sealing collars produced by Sarnafil GmbH, 85622 Feldkirchen/Germany

Unlike adhering and compression-sealing flanges, thin-bed flanges already contain an integrated sealing mat which is embedded into the sealant during installation. The sealant⁷⁾ must be applied in accordance with the manufacturers instructions.



Thin-bed sealing – the sealing layer in this case lies directly below the tiles.

The construction of the building may make it necessary to install separate seals at two different levels within the floor structure. This is always the case when the floor structure is to be protected above and below against non-pressurised or rising wastewater.



It is possible here to use either a seal consisting of two sealing membranes (with two adhering flanges) or compression-sealing flanges) or a combination of thin-bed seal and a sealing membrane – see adjacent installation example.

Sealing using two sealing layers: sealing membrane (①) and thin-bed seal (②).

4. Maintenance and Inspection

Floor drains also require regular inspection and maintenance. For example, German regulations recommend inspection twice a year to make sure that the inlets and outlets are not blocked. The lateral inlets should also be inspected.

The following work must be carried out:

- Inspection to ensure that nothing blocks the inflow and outflow of water
- Cleaning the inflow gratings
- Checking the level in the odour seals and topping up the water and cleaning the odour seals if necessary

⁷⁾ e.g. PCI, Augsburg / Deitermann, Datteln / Schomburg, Detmold/Germany

5. Products and Applications

5.1 WAL-SELECTA floor drain DN 50 of cast iron with adhering flange with AV-SELECTA top section for thin bed

Fields of application:

Wet rooms in

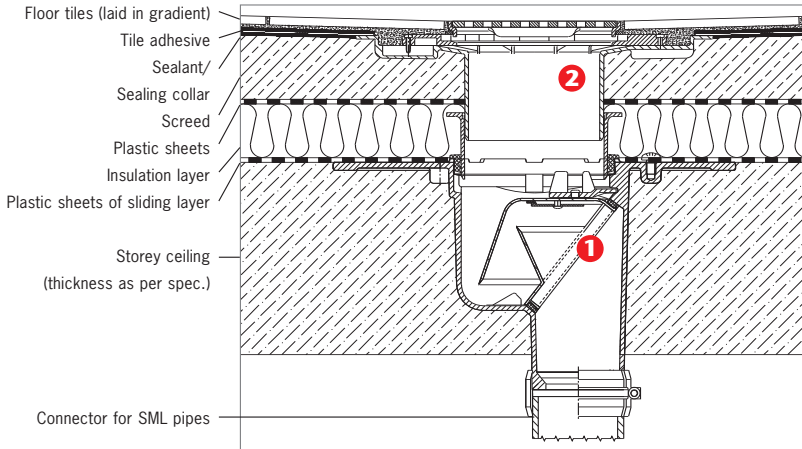
- Hotels
- Hospitals
- Schools

Standards/regulations

- EN 12056-2 — Grey water plants, planning and dimensioning
- LBO — State building regulations



Suggested installation



Products

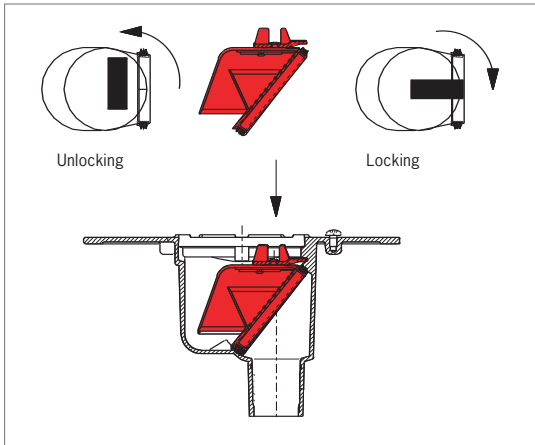
Item	Article description	Art. no.	Catalogue chapter
1	WAL-SELECTA floor drain DN 50, 90° inclination with adhering flange	5125.10.00	Drainage Floor drains
2	AV-SELECTA®-PP top section	5141.91.00	Cast iron

Installation instructions

Assembly/dismantling of the ALL-PURPOSE odour seal

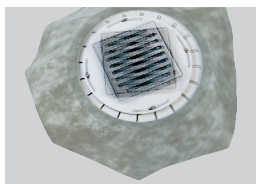
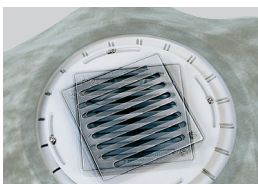
Dismantling: Turn the lock of the odour seal in the anti-clockwise sense. Then, the odour seal can be removed by pressing it away from outside wall.

Assembly: Apply lubricant to the seal of the odour seal. Then, apply odour seal to slant of drain body and push it downwards behind the two retaining cams at drain bottom. Turn lock in the clockwise sense.



Carrying out the sealing in the thin bed process with AV-SELECTA-PP top section

- After fitting the drain body, apply the sealing ring (included in scope of supply) to the drain and insert the top section tightly.
- Complete remaining floor structure.
- Apply sealant to screed and bed in sealing collar (refer to installation manual and detail).
- Complete remaining floor structure.
- The AV-SELECTA top section is telescopically height-adjustable and can be adjusted to tile thickness by means of 3mm and 9mm thick top frame.
- Thanks to the special sliding flange, the grating frame can be turned and slid to all directions.



5.2 WAL-SELECTA floor drain DN 70 of cast iron with compression-sealing flange and lateral inlet

Fields of application:

Wet rooms in

- Old people's homes
- Hospitals
- Hotels

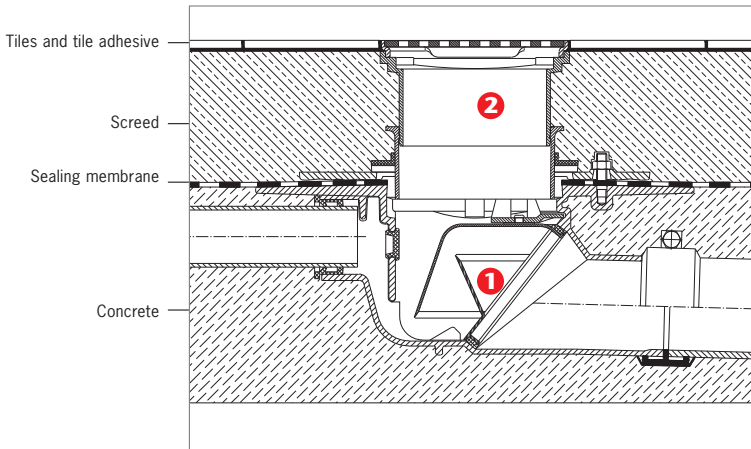
With connection of sanitary equipment below the sealing membrane

Standards/regulations

EN 12056-2 — Grey water plants, planning and dimensioning



Suggested installation



Products

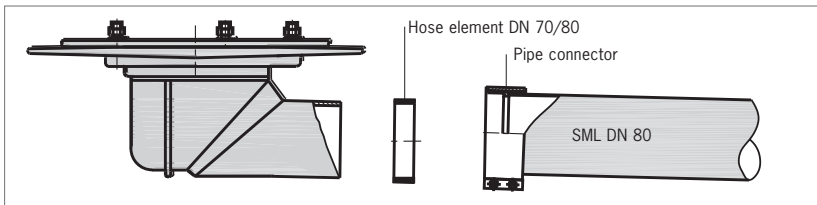
Item	Article description	Art. no.	Catalogue chapter
1	WAL-SELECTA floor drain DN 70, 1,5°, with lateral inlet DN 50	5181.94.00	Drainage Floor drains Cast iron
2	MEKU top section of plastic with stainless steel frame and grating	5141.81.00	

Installation instructions

Pipe connection

The outlet socket can be connected to SML pipe DN 70 according to EN 877.

- When connecting to SML pipe DN 80, the hose element DN 70/80 art. no. 5170.70.80 must be used (refer to figure below).
- Without this hose element, the SML pipe DN 70 can be connected directly to the floor drain socket.

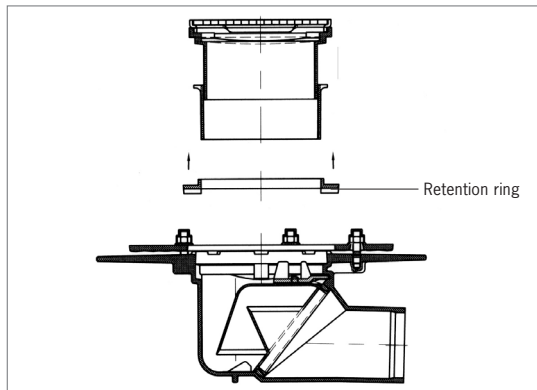


Connecting the lateral inlet

The inlet pipe is connected to drains with lateral inlets by means of rubber sleeve supplied.

Fitting the top section

The retention ring of floor drains equipped with continuously height-adjustable top sections must be applied to the cylindrical socket of the top section with the reinforcement pointing upwards. Then, insert the top section with the retention ring into the drain body in such a manner that the top section incl. its socket extends into drain for about 5mm.



5.3 WAL-SELECTA floor drain DN 100 of cast iron with compression-sealing flange

Fields of applications:

Wet rooms in

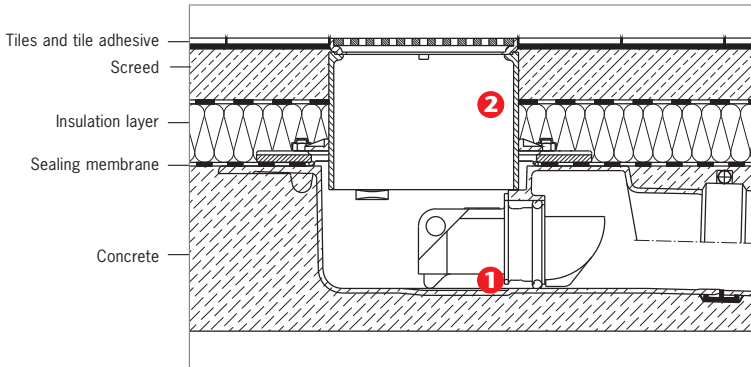
- Industrial shower and washing facilities
- Handicapped homes
- Hospitals

Standards/regulations

EN 12056-2 — Grey water plants, planning and dimensioning



Suggested installation



Products

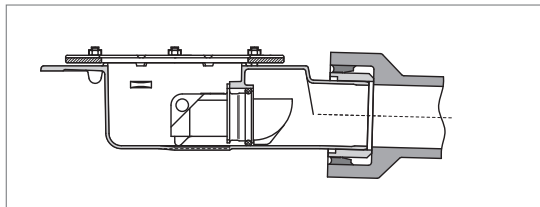
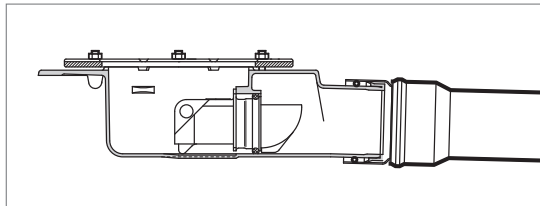
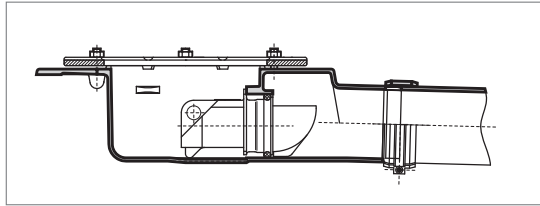
Item	Article description	Art. no.	Catalogue chapter
1	WAL-SELECTA floor drain with compression-sealing flange DN 100, 1.5°	5086.90.00	Drainage Floor drains
2	MEKU top section	5084.81.00	Cast iron

Installation instructions

Pipe connection

The outlet socket of the drain body can be connected to SML pipe EN 877 (upper figure).

In the case of plastic and stoneware pipes, adequate transition elements have to be used if necessary (refer to centre and lower figure).



Connecting bitumen sheetings to floor drains

The sealing has to be applied to fixed flange (adhering flange) of the drain body in accordance with the pertinent standards and regulations. Sealing must be laid directly to collar of drain body. The seepage openings have to remain free. In the case of compression-sealing flange, first apply sealing and then clamp it to loose flange. Contact pressure of nuts must be compliant with sealing.

5.4 VARIANT-CR floor drain DN 70 of stainless steel with compression-sealing flange

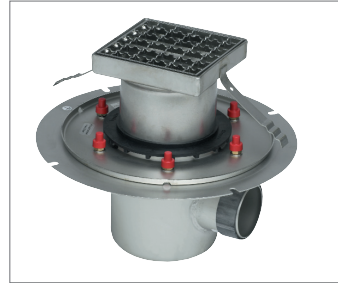
Fields of application:

Wet rooms in

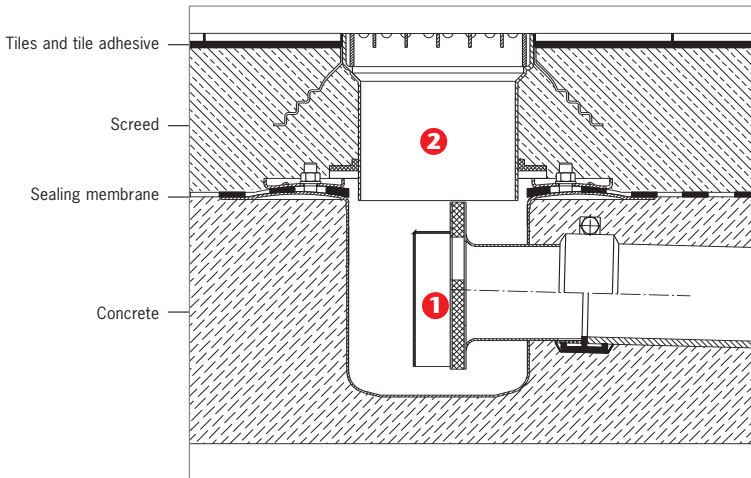
- Kitchens
- Hygiene facilities
- Food processing

Standards/regulations

EN 12056-2 — Grey water plants, planning and dimensioning



Suggested installation



Products

Item	Article description	Art. no.	Catalogue chapter
1	VARIANT-CR floor drain, DN 70, 1.5°, with compression-sealing flange	9302.17.00	Drainage Floor drains
2	Top section with slip-proof lattice grating Cr-Ni, class L	5141.92.00	Stainless steel

Installation instructions

Fitting the floor drain and connecting the pipe

The drain is inserted prior to pouring the ceiling/ground plate, aligned and fixed or it is applied to an existing recess subsequently.

The fixed flange (adhering flange) of the drain body is fitted flush with the concrete ceiling.

The outlet socket is equipped with a rubber hose element and can be directly connected to the SML pipe. When connecting to GM-X- or HT pipes, the rubber hose element has to be removed and relevant transition pieces have to be used.

Connecting bitumen sheetings to floor drains

The sealing has to be applied to fixed flange (adhering flange) of the drain body in accordance to the pertinent standards and regulations. Sealing must be laid directly to collar of drain body. The seepage openings have to remain free. In the case of compression-sealing flange, first apply sealing and then clamp it to loose flange. Contact pressure of nuts must be compliant with sealing.

Operation/maintenance of the bell-type odour seal

The drain must not be used for disposal of solids - risk of blockage!

For hygienic reasons it is required from time to time to clean the drain and to remove the odour seal.

The following has to be carried out in this case:

- Take out the odour seal and rinse in a washing-up liquid to render it free of grease. Pay special attention to the roller ring. Position the ring (free of grease) into lower cavity of bell. Pay attention that ring does not twist.
- If required, also clean socket support in the drain with washing-up liquid to render it free of grease. Insert the odour seal and press into socket. Place roller ring to intended position at stand pipe of odour seal. Roller ring seals reliably.

5.5 VARIANT-CR floor drain DN 100 of stainless steel with thin bed sealing

Fields of application:

Wet rooms in

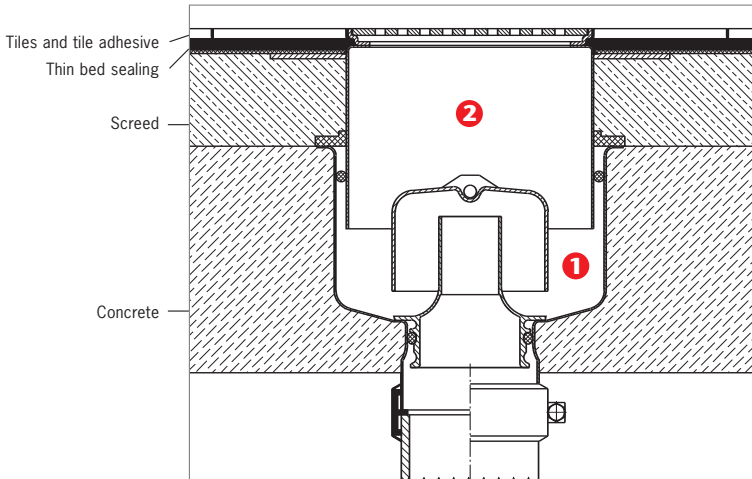
- Kitchens
- Hygiene facilities
- Food processing

Standards/regulations

EN 12056-2 — Grey water plants, planning and dimensioning



Suggested installation



Products

Item	Article description	Art. no.	Catalogue chapter
1	VARIANT-CR floor drain DN 100, 90°, with holding edge	9292.10.00	Drainage Floor drains
2	AV-VARIANT top section for thin bed sealing	9405.89.00	Stainless steel

Installation instructions

Fitting the floor drain and connecting the pipe

The drain is inserted prior to pouring the ceiling/ground plate, aligned and fixed or it is applied to an existing recess subsequently.

The holding edge of the drain body is fitted flush with the concrete ceiling.

The outlet socket can be connected to the SML pipe in accordance with EN 877. When connecting to GM-X- or HT pipes, relevant transition pieces have to be used.

Connecting the integrated sealing collar to sealant

Application of sealant and thin bed mortar as well as insertion of tiles and plates have to be carried out state-of-the-art and in accordance with pertinent standards. Curing time of sealants may vary depending on manufacturer.

Operation/maintenance of the bell-type odour seal

The drain should not be used for disposal of solids - risk of blockage!

For hygienic reasons it is required from time to time to clean the drain and to remove the odour seal.

The following has to be carried out in this case:

- Take out the odour seal and rinse in a washing-up liquid to render it free of grease. Pay special attention to the roller ring. Position the ring (free of grease) into lower cavity of bell. Pay attention that ring does not twist.
- If required, also clean socket support in the drain with washing-up liquid to render it free of grease. Insert the odour seal and press into socket. Place roller ring to intended position at stand pipe of odour seal. Roller ring seals reliably.

5.6 Easyflow floor drain DN 50 of plastic with lateral inlet

Fields of application:

Drain points up to load class K3 without sealing in

- Storey ceilings
- Base plates

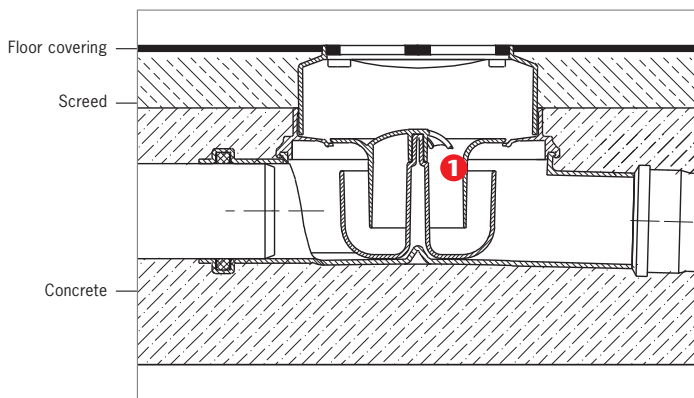
Standards/regulations

EN 1253 — Drains for buildings

EN 12056 — Gravity drainage inside buildings



Suggested installation



Products

Item	Article description	Art. no.	Catalogue chapter
1	Floor drain DN 50, 1.5° inclination, with lateral inlet DN 50	2505.00.77	Drainage/Floor drains/ Plastic