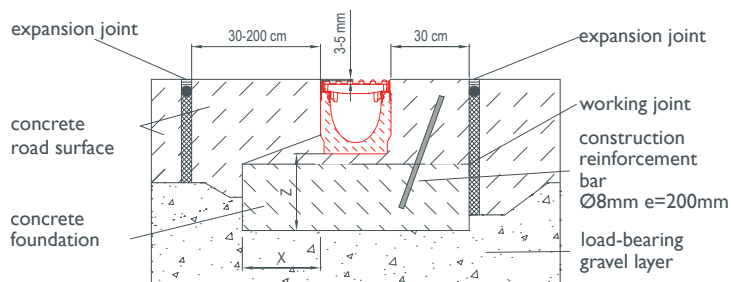
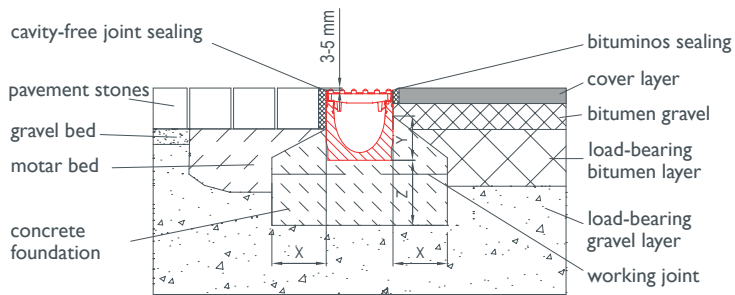
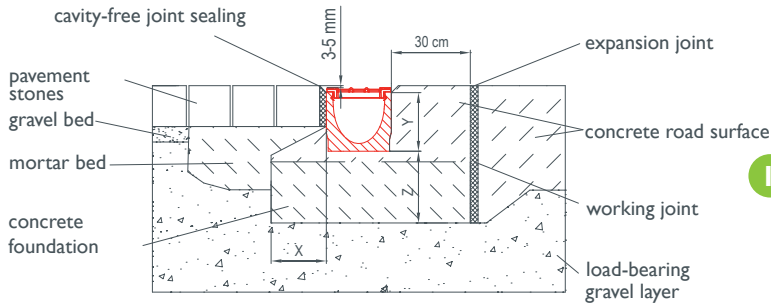


Installation guidelines



The following installation guidelines and examples are designed to use for an accepted standard. The load class and the installation location according to EN 1433 have to be adapted to the location conditions from the planner. Consider the common known technical rules and guidelines which are accepted among experts.

1 BG concrete drains are set up in a concrete foundation according to Ö-Norm B4710-1 or in drainage-concrete according to RVS 08.18.01. Mind the slope of the channel while excavating. Each channel is marked with an arrow showing the direction of flow – see the table below for details and measurements.

2 For a traffic-safe fastening of the grates we recommend, depending on the application area, to use grates with a quick-locking system or in conjunction with locking- or fixing-clips. According to Ö-Norm EN1433 from cl. D 400 kN there is to use preferably a locking device e.g. bolting material.

3 The rebated joint between the channel bodies can be sealed and cemented with appropriate sealing compounds - for description of material and quantity calculation see - BG sealing system.

4 Before assembling the adjacent cover layer make sure that the gratings are inserted and if necessary fixed or the channels are braced adequate against compression. Pay attention not to damage the channels while compacting the superstructure and the pavement (asphalt, pavement, concrete).

5 If there are occurring horizontally forces (e.g. due to concrete areas, gradients,...) you have to build out an adequate running joint at an interval of 30 - 200 cm from the channel. In a concrete area where there are running joints crossing the channel line they have to be arranged to go through a rebated joint of the line.

6 All adjacent surfaces should be permanently 3-5mm higher than the surface of the channel/grate to avoid mechanical damage (e.g. snow clearing) and to guarantee the water drainage.

7 In areas that were enhanced chemical attacks (eg, de-icing salts, acids, bases, etc.) can be expected, we recommend to install drainage channels with stainless steel edge or to use steel-channels out of stainless steel with high quality.

8 Drainage channels are not suitable to use across the road on motorways and highways.

load class	A 15 kN	B 125 kN	C 250 kN	D 400 kN	E 600 kN	F 900 kN
concrete quality - base according to Ö-Norm B4710-1*	C16/20	C20/25	C20/25	C25/30	C25/30	C25/30
X	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 15 cm	≥ 15 cm	≥ 20 cm
Y	min. channel height -8 cm			min. channel height -5 cm		channel height
Z	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 20 cm	≥ 20 cm	≥ 25 cm
reinforcement bar	unnecessary				Ø 8 mm all 20 cm	Ø 8 mm all 20 cm

*Required minimum quality strength concrete, which has to be adapted to the local requirements.

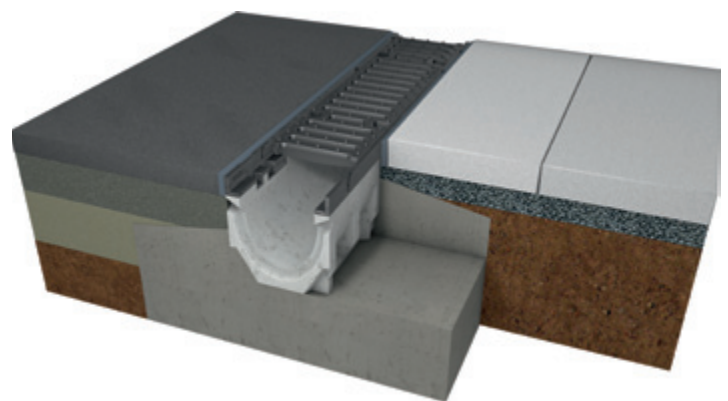
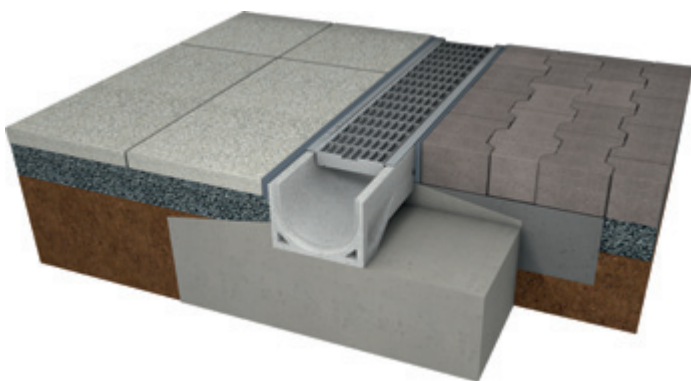
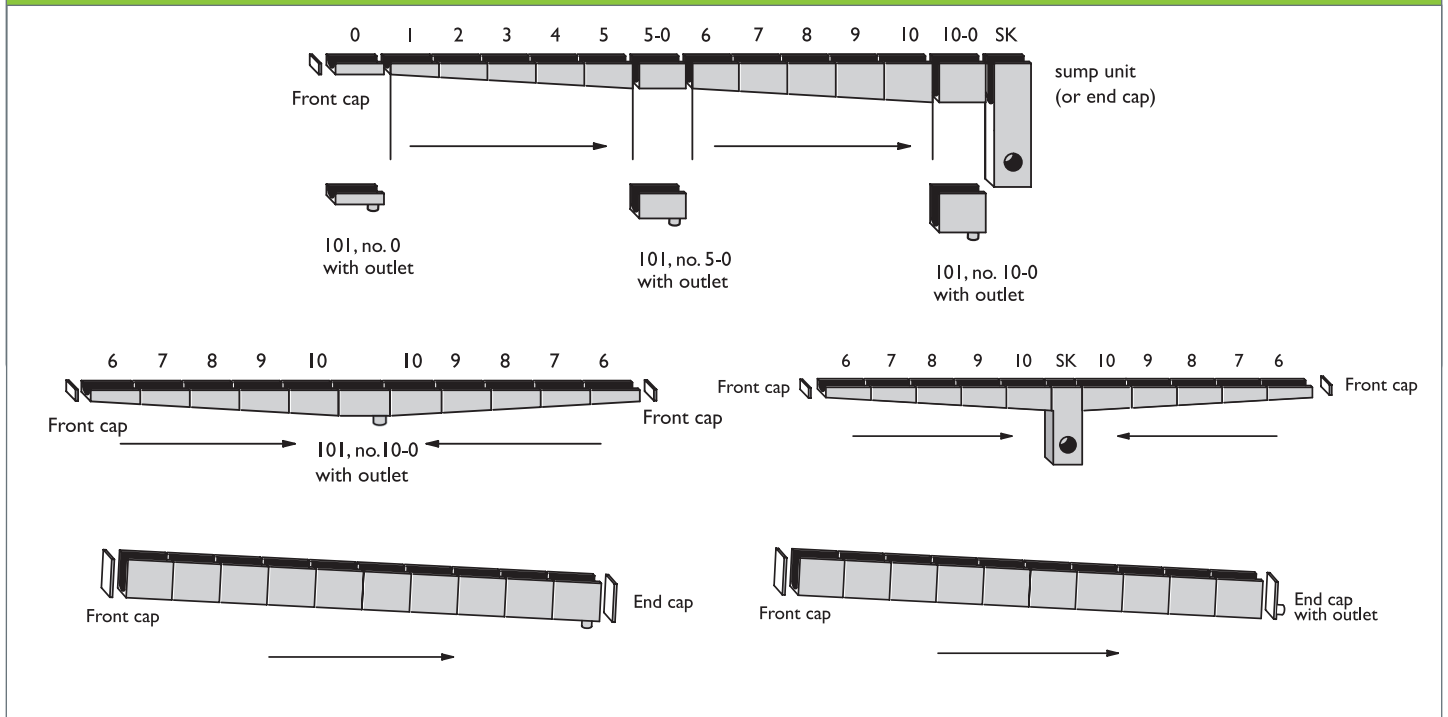
ATTENTION: Acceleration, braking and torque forces must be taken in consideration for product selection and installation. Installation must be performed according to the installation instruction. Technical specifications are subject to change without further notice.

For further information visit us at www.bg-company.com or contact our technical support team.



The installation instructions also apply to sump units.

INSTALLATION EXAMPLES



FILCOTEN light:

- load class C 250 kN
- Paving stones or plates can be laid directly up to the channel body and no concrete edges are visible
- The grates can be fixed with locking- and fixing clips.

FILCOTEN tec/pro:

- load class C 250 kN (tec) or E 600 kN / F 900 kN (pro) - depending on the channel type
- Optimum machining of adjacent coating surfaces to the edge
- If there are occurring horizontally forces you have to build out an adequate running joint at an interval of 30 - 200 cm from the channel.
- According to Ö-Norm EN1433 you have to use preferably a locking device e.g. bolting material for grates up to cl. D 400 kN.