



## general 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. In special cases contact the BG - application engineers.

## installation instructions BGZ-S

1. BG concrete drains are set up in a concrete-bedding according to Ö-Norm B4710-1 or in drainage-concrete according to RVS 08.18.01. Mind the slope of the channel while excavating. If the concrete foundation is already cured you have to provide a mortar bed of at least 2cm. Depending on the static demand you will need a supporting wedge or a concrete casing even with steel reinforcement – see the table below for details and measurements. BG channels should generally be set up with proper tools (e.g. BG lifting grab).
2. Take note of the different heights of channels with gradient and start setting at the outlet of the channel line. Each channel is labeled with an arrow showing the direction of flow.
3. The rebated joint between the channels 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 covers 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 shear 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. We advise, by use in highly frequented areas according to the area of application, frequency and driving speed, to use bolting material for the covers (due to 8 times bolting possible). Pay attention that the bolting-connection is durable and force-locked.
7. 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.
8. 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 and to use stainless steel covers.
9. The installation instructions also apply to sump units.