

# BG-Filcoten<sup>®</sup> dreneringsrenner

INSTALLASJONSVEILEDNING  
BG-Filcoten<sup>®</sup> TEC





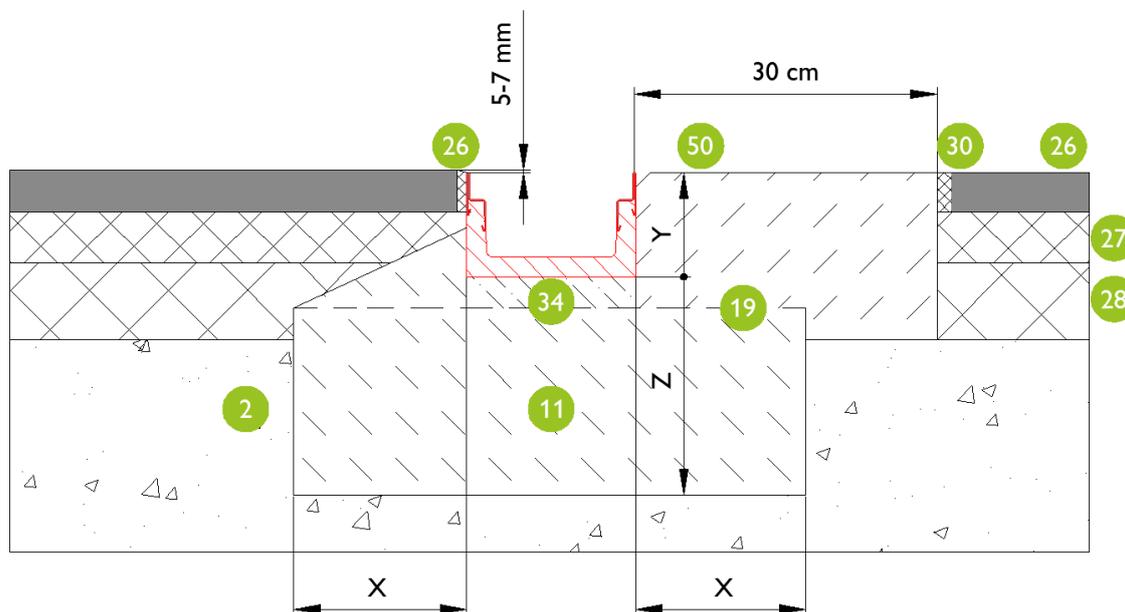
## general note

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 instruction FILCOTEN® tec

1. FILCOTEN® channels 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. 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 marked 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. We advise by use in highly frequented areas according to the area of application, frequency and driving speed to fix the grates with the anti-vandalism locking device.
5. 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).
6. 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.
7. Occurring shear forces pavement must be positively connected to the back support. This can be done by offsetting the first three pavement rows (at the channel line) in a mortar bed. The joints have to be mineral backfilled. Push forces from the pavement must not act directly on the channel walls (eg thermal expansion, braking forces, ...)
8. 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.
9. 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.
10. The installation instructions also apply to sump units.

## Asphalt / asphalt - Asphalt / asphalt: Kl. A - C



### Legende / key:

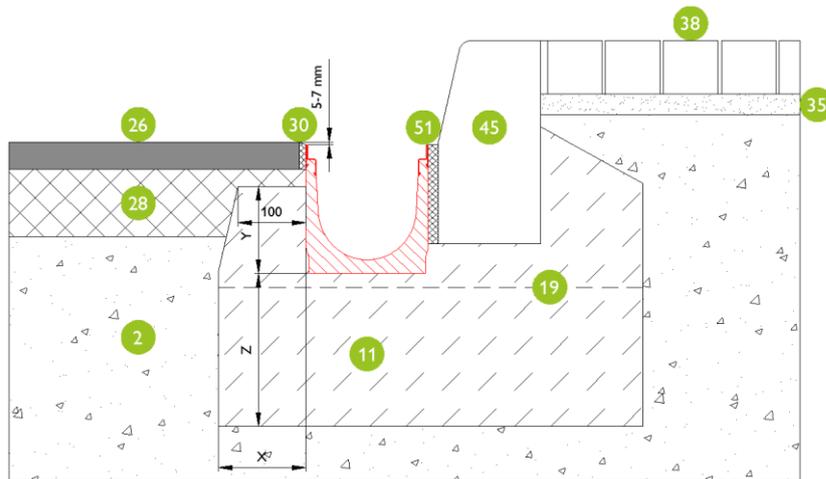
- |     |  |     |   |
|-----|--|-----|---|
| 2.  | tragfähige Schottererschicht /<br>load-bearing gravel layer                                  | 28. | tragfähige Bitumenschicht / bitumen layer   |
| 11. | Betonfundament lt. statischer Bemessung /<br>concrete foundation acc. to static calculations | 30. | bituminöses Fugenband / bituminous sealing tape   |
| 19. | Arbeitsfuge / working joint  | 34. | Mörtelbett / mortar bed   |
| 26. | Feinbelag / surface course   | 50. | Quer-Scheinfuge alle 6m am Rinnenstoß, altern.<br>Bewehrung konstruktiv bzw. lt. Statik /<br>transversal-concealed joint each 6m at channel<br>joints, alternatively structural reinforcement |
| 27. | Bitukies / bitumen gravel  |     |   |

Belastungsklasse / load class	A 15 kN	B 125 kN	C 250 kN
Betongüte - Fundament gem. / concrete quality - base acc. to Ö-Norm B4710-1*	C 16/20	C 20/25	C 20/25
Breite / width: X	≥ 8 cm	≥ 10 cm	≥ 15 cm
Höhe / height: Y	Rinnenhöhe / channel height - 5 cm (mini - 3 cm)		
Stärke / thickness: Z	≥ 8 cm	≥ 10 cm	≥ 15 cm
Konstruktive Bewehrung / structural reinforcement	nicht erforderlich / not necessary		
* Betongüte ist eine Mindestanforderung und den örtlichen Anforderungen anzupassen. * Concrete quality is a minimum requirement and has to be adapted to the local conditions.			

## Asphalt / asphalt - Asphalt / asphalt: Kl. A - C



## Asphalt / asphalt - Bordstein / kerbstone: Kl. A - B



### Legende / key:

- |     |  |     |   |
|-----|--|-----|---|
| 2.  | tragfähige Schottererschicht /<br>load-bearing gravel layer                                  | 38. | Pflastersteine / paving stones  |
| 11. | Betonfundament lt. statischer Bemessung /<br>concrete foundation acc. to static calculations | 45. | Bordstein / kerbstone   |
| 19. | Arbeitsfuge / working joint  | 46. | Läuferstein oder Betonläufer / stretcher paving or<br>concrete stretcher  |
| 26. | Feinbelag / surface course   | 50. | Quer-Scheinfuge alle 6m am Rinnenstoß, altern.<br>Bewehrung konstruktiv bzw. lt. Statik /<br>transversal-concealed joint each 6m at channel<br>joints, alternatively structural reinforcement |
| 28. | tragfähige Bitumenschicht / bitumen layer  | 51. | Lunker-freier Fugen-Verguss / cavity free sealing   |
| 30. | bituminöses Fugenband / bituminous sealing tape  |     |   |
| 35. | Splittbett / grit bed  |     |   |

Belastungsklasse / load class	A 15 kN	B 125 kN	C 250 kN
Betongüte - Fundament gem. / concrete quality - base acc. to Ö-Norm B4710-I*	C 16/20	C 20/25	C 20/25
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Höhe / height: Y	Rinnenhöhe / channel height - 5 cm (mini - 3 cm)		
Stärke / thickness: Z	≥ 8 cm	≥ 10 cm	≥ 15 cm
Konstruktive Bewehrung / structural reinforcement	nicht erforderlich / not necessary		
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Pflaster / pavement - Plattenbelag / flag pavement: Kl. / cl. A – C

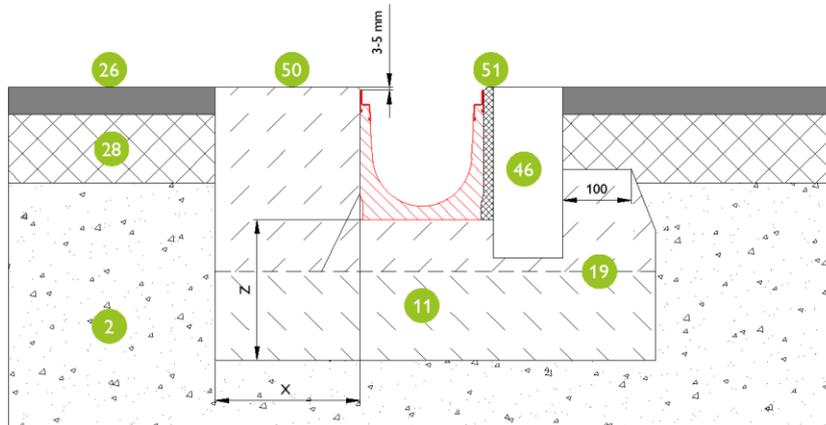


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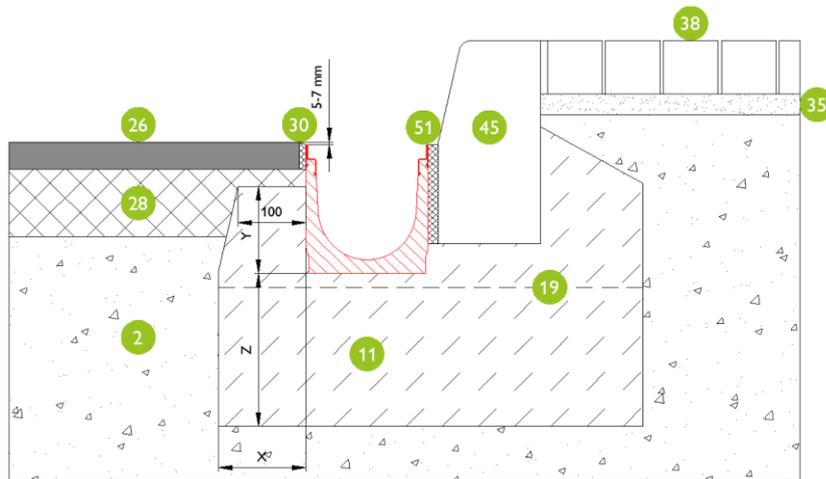
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|-----|--|-----|---|
| 2.  | tragfähige Schottererschicht /<br>load-bearing gravel layer                                  | 34. | Mörtelbett / mortar bed                           |
| 11. | Betonfundament lt. statischer Bemessung /<br>concrete foundation acc. to static calculations | 35. | Splittbett / grit bed                             |
| 19. | Arbeitsfuge / working joint  | 38. | Pflastersteine / paving stones                    |
|     |  | 41. | Steinzeug-Belag / tile covering                   |
|     |  | 51. | Lunker-freier Fugen-Verguss / cavity free sealing |

Belastungsklasse / load class	A 15 kN	B 125 kN	C 250 kN
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## Asphalt / asphalt - Asphalt / asphalt: Kl. A - C



## Asphalt / asphalt - Bordstein / kerbstone: Kl. A - B



### Legende / key:

- |     |  |     |   |
|-----|--|-----|---|
| 2.  | tragfähige Schottererschicht /<br>load-bearing gravel layer                                  | 38. | Pflastersteine / paving stones  |
| 11. | Betonfundament lt. statischer Bemessung /<br>concrete foundation acc. to static calculations | 45. | Bordstein / kerbstone   |
| 19. | Arbeitsfuge / working joint  | 46. | Läuferstein oder Betonläufer / stretcher paving or<br>concrete stretcher  |
| 26. | Feinbelag / surface course   | 50. | Quer-Scheinfuge alle 6m am Rinnenstoß, altern.<br>Bewehrung konstruktiv bzw. lt. Statik /<br>transversal-concealed joint each 6m at channel<br>joints, alternatively structural reinforcement |
| 28. | tragfähige Bitumenschicht / bitumen layer  | 51. | Lunker-freier Fugen-Verguss / cavity free sealing   |
| 30. | bituminöses Fugenband / bituminous sealing tape  |     |   |
| 35. | Splittbett / grit bed  |     |   |

Belastungsklasse / load class	A 15 kN	B 125 kN	C 250 kN
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Pflaster / pavement - Plattenbelag / flag pavement: Kl. / cl. A – C



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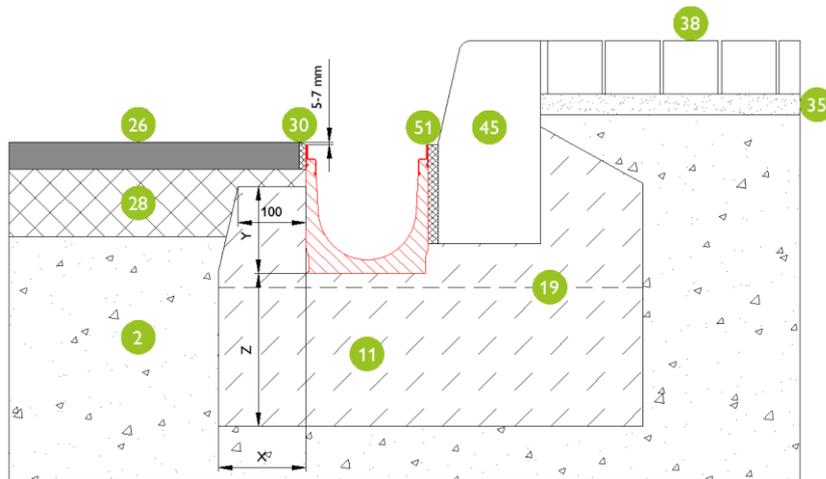
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|-----|--|-----|---|
| 2.  | tragfähige Schottererschicht /<br>load-bearing gravel layer                                  | 34. | Mörtelbett / mortar bed                           |
| 11. | Betonfundament lt. statischer Bemessung /<br>concrete foundation acc. to static calculations | 35. | Splittbett / grit bed                             |
| 19. | Arbeitsfuge / working joint  | 38. | Pflastersteine / paving stones                    |
|     |  | 41. | Steinzeug-Belag / tile covering                   |
|     |  | 51. | Lunker-freier Fugen-Verguss / cavity free sealing |

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## Asphalt / asphalt - Asphalt / asphalt: Kl. A - C



## Asphalt / asphalt - Bordstein / kerbstone: Kl. A - B



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- |     |  |     |   |
|-----|--|-----|---|
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| 28. | tragfähige Bitumenschicht / bitumen layer  | 51. | Lunker-freier Fugen-Verguss / cavity free sealing   |
| 30. | bituminöses Fugenband / bituminous sealing tape  |     |   |
| 35. | Splittbett / grit bed  |     |   |

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Pflaster / pavement - Plattenbelag / flag pavement: Kl. / cl. A – C



Legende / key:

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|-----|--|-----|---|
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|     |  | 41. | Steinzeug-Belag / tile covering                   |
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