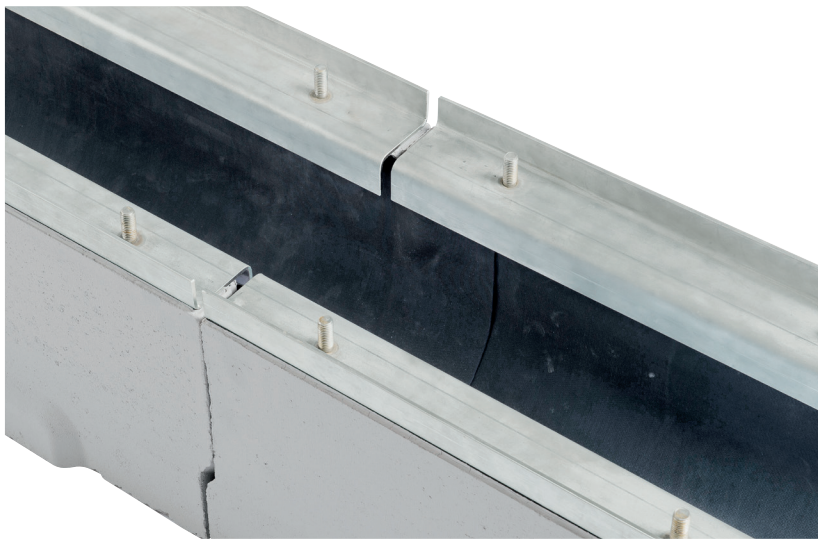


BIRCOprotect^{PLUS} with inliner

The inliner makes the channel resistant to manure, sludge and silage liquids (and many other chemicals)

A channel system based on BIRCOprotect but with an EPDM inliner that has been factory fitted. Resistant to manure, sludge and silage liquids and many other chemicals.



The BIRCOprotect^{PLUS} with EPDM-Inliner combines a drainage performance and a safe discharging of media. The pollutants are unable to enter the groundwater so that they can be disposed of

in compliance with the regulations. The channels are provided with 4 mm solid stainless steel (V2A) or hot-dipped galvanised steel Z-frames.

8-point per metre bolt connection are integrated in the frame, rendering them safe for traffic. Stainless steel (V2A) or galvanised steel end plates complete the system.

Inliner information:

- + Inliner 1 mm thick EPDM-material with test certificate
- + UV-resistant
- + Temperatur resistant to 150 °C
- + Fire resistant class E
- + Resistant to numerous types of media
- + Test certificates exist for diff. uses
- + Also withstands mechanical loads

On site sealing:

- + Inliner factory fitted and ready for installing
- + On site adhesion of the overlappings
- + Channels can also be grouted on site

Areas of use:

- + Industrial grounds
- + Recycling grounds
- + Biogas grounds
- + Agriculture
- + Intensive livestock farming
- + Rotting grounds
- + Breeding facilities
- + Chemical grounds



BIRCOprotect^{PLUS} with inliner

NW 150

Channel elements with inliner | without internal inbuilt fall

- + Inliner factory fitted
- + High temperature resistance
- + Fire resistant Class E

Description	Length	Width at top/ at ground	Height	Weight	Load Class DIN EN 1433	Article no.
Channel element with galvanised frame / stainless steel frame (V2A)	1000 mm	250/255 mm	230 mm	77,5 kg	A 15 - F 900	046126 / 046526

End caps galvanised/stainless steel (V2A), Art. no. 046190/046590, End caps with outlet galvanised/stainless steel (V2A), Art. no. 046145/046545
End caps with outlet DA 160 x 9,5 - SDR 17, PEHD, length 300 mm, Art. no. 046191

Ductile iron slotted gratings

- + Black immersion-lacquered
- + Load Class A 15 - D 400 as twofold ductile iron slotted grating
- + 8-point per metre M12/A2-bolt connection



Description	Length	Width	Height	Weight	Inlet opening	Inlet cross section	Load class DIN EN 1433	Article no.
black	500 mm	237 mm	30 mm	8,8 kg	SW 150/12 mm	644 cm ² /m	A 15 - C 250	146172
black	500 mm	237 mm	30 mm	6,2 kg	SW 85/18 mm	855 cm ² /m	A 15 - D 400	146174
black	500 mm	237 mm	30 mm	12,4 kg	SW 150/12 mm	644 cm ² /m	A 15 - F 900	146178

Other gratings are available upon request.

NW 200

Channel elements with inliner | without internal inbuilt fall

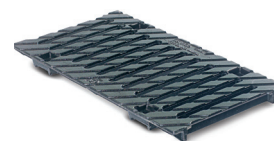
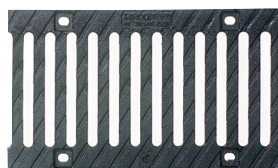
- + Inliner factory fitted
- + High temperature resistance
- + Fire resistant Class E

Description	Length	Width at top/ at ground	Height	Weight	Load Class DIN EN 1433	Article no.
Channel element with galvanised frame / stainless steel frame (V2A)	1000 mm	330/335 mm	310 mm	143,5 kg	A 15 - F 900	046226 / 046626

End caps galvanised/stainless steel (V2A), Art. no. 046290/046690, End caps with outlet galvanised/stainless steel (V2A), Art. no. 046245/046645
End caps with outlet DA 200x 4,9 - SDR 41, PEHD, length 300 mm, Art. no. 046291

Ductile iron slotted gratings

- + Black immersion-lacquered
- + Also available galvanised
- + 8-point per metre M12/A2 bolt connection



Description	Length	Width	Height	Weight	Inlet opening	Inlet cross section	Load class DIN EN 1433	Article no.
black	500 mm	317 mm	35 mm	17,3 kg	SW 200/18 mm	802 cm ² /m	A 15 - F 900	146278

NW 300

Channel elements with inliner | without internal inbuilt fall

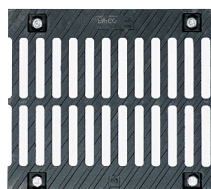
- + Inliner factory fitted
- + High temperature resistance
- + Fire resistant Class E

Description	Length	Width at top/ at ground	Height	Weight	Load Class DIN EN 1433	Article no.
Channel element with galvanised frame / stainless steel frame (V2A)	1000 mm	450/460 mm	470 mm	248,0 kg	A 15 - F 900	046326 / 046726

End caps galvanised/stainless steel (V2A), Art. no. 046390/046790, End caps with outlet galvanised/stainless steel (V2A), Art. no. 046345/046745

Ductile iron slotted gratings | twofold

- + Black immersion-lacquered
- + 8 point per metre M116/A2 bolt connection



Description	Length	Width	Height	Weight	Inlet opening	Inlet cross section	Load class DIN EN 1433	Article no.
black	500 mm	437 mm	45 mm	35,3 kg	SW 142/20 mm	1491 cm ² /m	A 15 - F 900	146378

NW 400

Channel elements with inliner | without internal inbuilt fall

- + Available upon request

Accessories

Inliner foil adhesive / processing set

Description	Article no.
Cartridge with 600 ml content	608578
Processing set (toothed strip B3, cartridge gun, pressure roller)	608585

BIRCOprotect^{PLUS} | Planning instructions

The BIRCOprotect^{PLUS}-System is based on BIRCOprotect. The basic rules for the use of this system are to be taken into account.

The following instructions are therefore valid for the channels that have been refinded at the factory.

Reference is made to the necessity of a permanent monitoring of the tightness and functionality of the parts pursuant to Sect. 1 (2) of the German Ordinance on Installations for the Handling of Substances Hazardous to Water from 31 March 2010 (Federal Gazette I p. 377) by the installation operator. The installation operator is responsible for the inspections (commissioning, recurring inspections) that are valid for the installation site, carried out by an expert pursuant to water protection.

1. The use of the channel system is to be professionally planned. The resistance of the channel system is to be inspected during the planning phase with regard to the media that is to be discharged.
2. Damaged prefabricated parts are not to be installed. The prefabricated parts are deemed to be undamaged if they do not show any signs of damage and no cracks wider than 0.1 mm and the EPDM inliner is undamaged.
3. Only specialised employees can install the channel system in the meaning of Sect. 3 of the German Ordinance on Installations for the handling of Substances Hazardous to Water dated 31 March 2010 (Federal Gazette I p. 377). Exception: If local authority provides an exemption.
4. Each end of the channel that is lined with the inliner, has to overlap. The adhesive that is available for this purpose has to be used (BIRCOprotect^{PLUS} inliner foil adhesive - Art.-No. 608578)

The following factors have to be permanently ensured on the site:

1. The Channel system has to be installed with a possible gradient.
2. The Channel system has to be regularly inspected and thoroughly cleaned avoiding soiling or accumulations of dirt and liquids that are hazardous to water (the cleaning takes place in the direction of flow). A professional disposal of the dirt is mandatory.
3. The discharging of solids into the channel has to be avoided.
4. It is to be ensured that discharged liquids are recognised as fast as possible and that they are removed from the channel system.
5. Caution must be taken during the cleaning moves of the channel to avoid any mechanical damage.
6. In case of damage, caused to the inliner, please use the repairing set - Art. No. 608582 without delay.