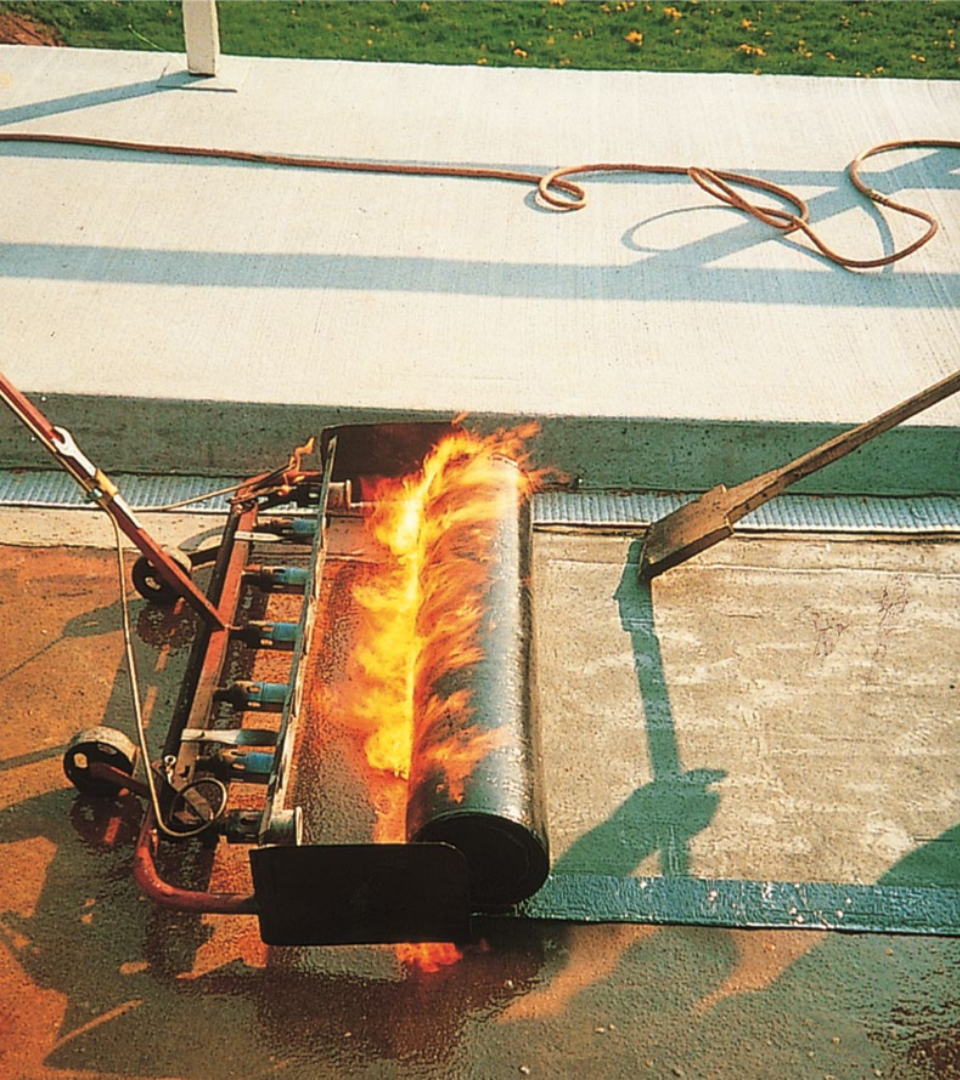




Road construction materials



Bitumen membranes

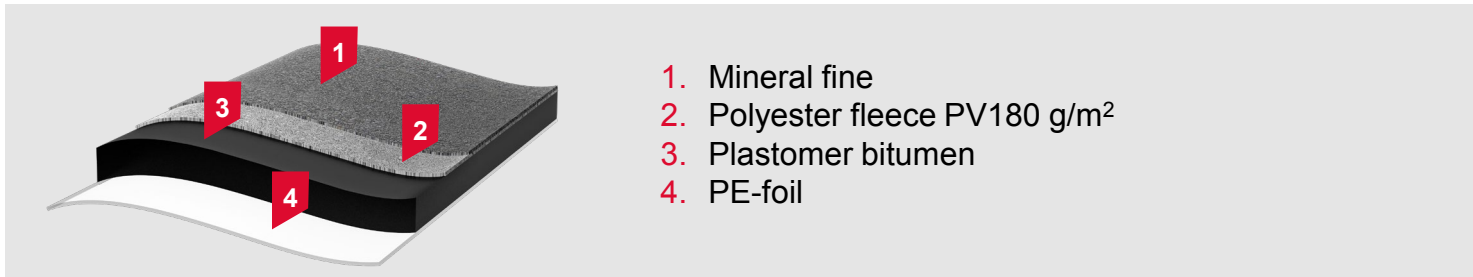
BITUMEN MEMBRANES



BÖRNER OK 50 N

BÖRNER OK 50 N is a polymer bitumen torch-on membrane with a raised layer of reinforcement (without metal lining).

BÖRNER OK 50 N-sealing systems are used as a single-layered solutions for the sealing of concrete bridge decks and for the sealing parking garages, parking levels etc. in connection with a protective layer and a layer for wear made of mastic asphalt.



BITUMEN MEMBRANES



BÖRNER OK 45

BÖRNER OK 45 is a polymer bitumen torch-on membrane with a raised layer of reinforcement (without metal lining).

BÖRNER OK 45-sealing systems are used as a single-layered solutions for the sealing of concrete bridge decks and for the sealing parking garages, parking levels etc. in connection with a protective layer and a layer for wear made of mastic asphalt.



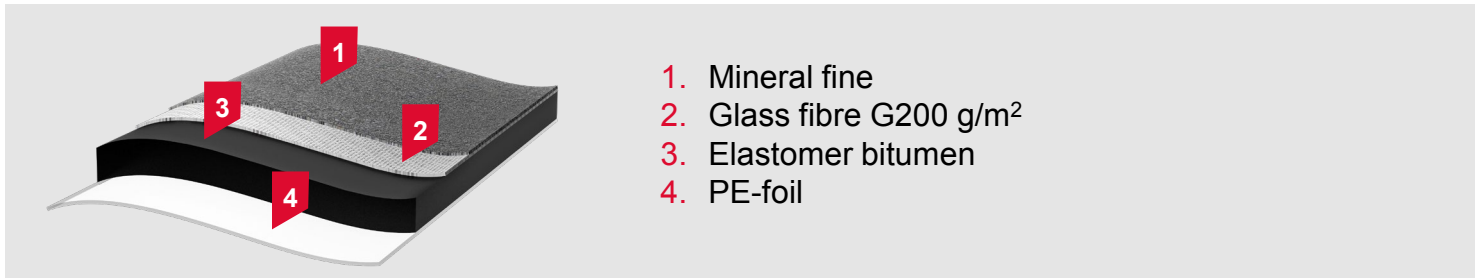
BITUMEN MEMBRANES



PRODOFLEX GW 40 GG

PRODOFLEX GW 40 GG is a elastomeric bitumen torch-on membrane with a reinforcement layer of glass fibre (without metal lining).

The PRODOFLEX GW 40 GG-sealing system is used as a double-layered sealing solution for the sealing of concrete bridge decks with a layer of protection and against wear made by gravel mastic asphalt.



BITUMEN MEMBRANES



PRODOFLEX GW 40 PV

PRODOFLEX GW 40 PV is a elastomeric bitumen torch-on membrane with a reinforcement layer of polyester fleece (without metal lining).

The PRODOFLEX GW 40 PV-sealing system is used as a double-layered sealing solution for the sealing of concrete bridge decks with a layer of protection and against wear made by gravel mastic asphalt.

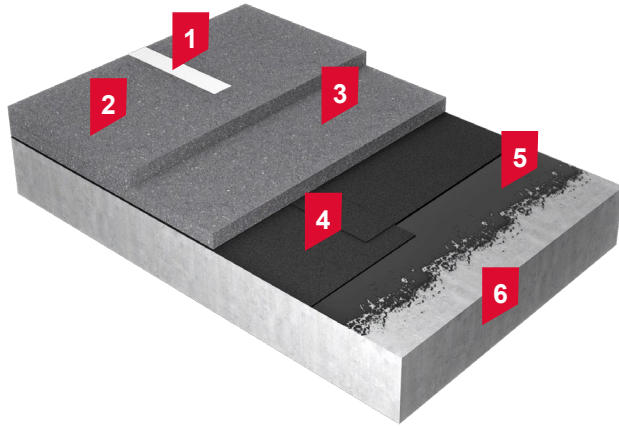


BITUMEN MEMBRANES



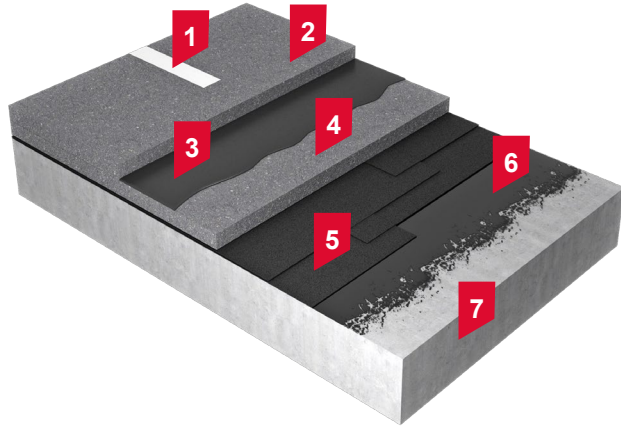
Essential characteristics	Unit	BÖRNER OK 50 N	BÖRNER OK 45	PRODOFLEX GW 40 GG	PRODOFLEX GW 40 PV
Length	m	≥ 7.5	≥ 7.5	≥ 7.5	≥ 7.5
Width	m	≥ 1.0	≥ 1.0	≥ 1.0	≥ 1.0
Approx.thickness	mm	4.8 (±0.3 abs.)	4.8 (±0.3 abs.)	4.0 (±0.2 abs.)	4.0 (±0.2 abs.)
Mass per unit area	kg/m ²	5.47 (±10%)	5.17 (±10%)	5.00 (±10%)	4.75 (±10%)
Tensile properties: L/T	N/50mm	≥ 880 / 700 (±150)	≥ 880 / 700 (±150)	≥ 1400 / 1600 (±300)	≥ 1350 / 1050 (±200)
Flow resistance at elevated temperature	°C	≥ + 110	≥ + 150	≥ + 100	≥ + 100
Flexibility at low temperature	°C	≤ - 16 (±6)	≤ - 16 (±6)	≤ - 16 (±6)	≤ - 16 (±6)
Coating type		Elastomer bitumen	Plastomer bitumen	Elastomer bitumen	Elastomer bitumen
Reinforcement	-	Polyester PV180 g/m ²	Polyester PV180 g/m ²	Glass fibre G200 g/m ²	Polyester PV250 g/m ²

Single-layered waterproofing system on a concrete deck



1. Paint for road marking
2. Asphalt concrete
3. Asphalt concrete
4. Bitumen waterproofing membrane
BÖRNER OK 50 N / BÖRNER OK 45
5. Epoxy resin
6. Reinforced concrete deck

Double-layered waterproofing system on a concrete deck



1. Paint for road marking
2. Asphalt concrete
3. Bitumen emulsion
4. Asphalt concrete
5. Bitumen waterproofing membranes (2 layers)
PRODOFLEX GW 40 GG + PRODOFLEX GW 40 PV
6. Epoxy resin
7. Reinforced concrete deck

AREAS OF USE



ROAD



TUNNEL



RAILWAY



BRIDGE



**Hot applied
joint sealing compounds**

HOT APPLIED JOINT SEALING COMPOUNDS



BÖRFUGA DS

BÖRFUGA® DS is a joint sealing compound that is poured into joints in concrete and asphalt to change the joint gap width of up to 25 %.

According to TL Fug-StB 15 as well as
DIN EN 14188-1 type N2 – plastic configuration



HOT APPLIED JOINT SEALING COMPOUNDS

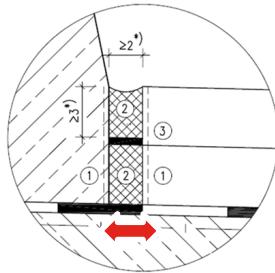


BÖRFUGA BVE

BÖRFUGA® BVE is a joint sealing compound to seal joints of concrete and asphalt like joints that have to endure heavy movement e.g. on a bridge kerb/DICHT9 and also for quiet or busy traffic areas.

Used to change the joint gap width up to 35 %.

According to TL Fug-StB 15 as well as DIN EN 14188-1Typ N1 – elastic configuration.



HOT APPLIED JOINT SEALING COMPOUNDS



BÖRFUGA AR 2000

BÖRFUGA® AR 2000 is a crack repair compound on polymer bitumen basis according to TL Fug-StB 15. It is characterized by its stability at high temperatures and sufficient elasticity at low temperatures.

In addition, BÖRFUGA AR 200 can also be used as a joint compound for asphalt joints according to type N2.



HOT APPLIED JOINT SEALING COMPOUNDS



BÖRFUGA AR 2000. Areas of application

Cracks



Joint sealing in asphalt



Seam adhesive



HOT APPLIED JOINT SEALING COMPOUNDS



BÖRFUGA BAB 20 EL

BÖRFUGA® BAB 20 EL is a rail sealing compound. The compound is suitable to fill rail joints in road surface areas according to TL Fug-StB 15.



HOT APPLIED JOINT SEALING COMPOUNDS



BÖRFUGA 700 Ü

BÖRFUGA® 700 Ü is suitable as a rail underlayer compound for the rail underlay. It can withstand a high surface pressure, contribute to the vibration damping and thus be noise-reducing.



HOT APPLIED JOINT SEALING COMPOUNDS



BÖRFUGA C

BÖRFUGA® C is a paving stone joint.

The compound is recommended to fill paving stone joints according to TL Fug-StB 15. A good filling of paving stone joints requires evenly spread and levelled paving stones on a well prepared surface and even and dry joints.

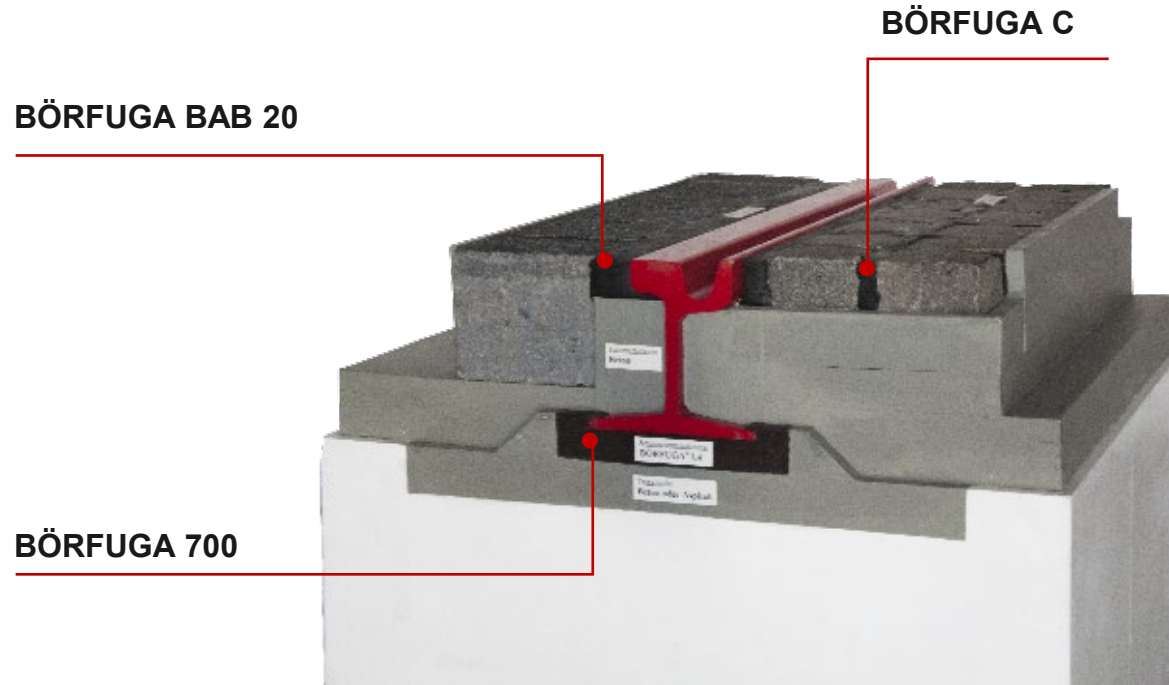
On paved traffic areas, the filling can only take place if it can be ensured that the settling of the paving stones has been finished before traffic commence.



HOT APPLIED JOINT SEALING COMPOUNDS



AREAS OF APPLICATION



HOT APPLIED JOINT SEALING COMPOUNDS



BÖRNER REPHALT

BÖRNER Rephalt is used for repair and maintenance work on asphalt, mastic asphalt, stone mastic asphalt and concrete surfaces as well as for filling pot holes, core holes and to level out different heights.

Börner Rephalt can be used in all load classes (BK 0.3 – BK 100).



JOINT TAPES

BÖRFUGA Fugenband

BÖRFUGA® Fugenband is a polymer-modified, bituminous joint tape for the flexible formation and permanent sealing of connections and seams in asphalt road construction.

The tape is available as standard in 40x10 mm and 30x10 mm. Other dimensions on request.



JOINT TAPES



BÖRFUGA KSK Fungenband

BÖRFUGA® KSK-Fugenband is a cold, self-adhesive, polymer-modified, bituminous joint tape for the flexible formation and permanent sealing of connections and seams in asphalt road construction.

The tape is available as standard in 40x10 mm and 30x10 mm.



HOT APPLIED JOINT SEALING COMPOUNDS



PRIMER K

Primer K is a fast-drying synthetic primer for bitumen products and sealing products. It has a very good adhesion property on prepared asphalt, concrete and metal surfaces.

It is possible to spray-apply the product.

Primer K is used as a primer for bitumen sealing compounds on bitumen and asphalt joints as well as rail joints according to DIN EN 14188-1 and TL Fug-StB 15.



HOT APPLIED JOINT SEALING COMPOUNDS



APPLICATION



LANE MARKINGS

BÖRFUGA MV

BÖRFUGA® MV is based on a special bitumen with fine mineral fillers for an installation thicknesses of 1 to 3 mm.

BÖRFUGA® MV is used for the 3M Stamark Bitumen Plus program as a levelling and laying compound for foil lying procedures in traffic areas.



LANE MARKINGS



BÖRFUGA MV

BÖRFUGA® MV is slowly melted to the processing temperature of 180 -210 °C in an indirectly heated and thermostat-controlled melting boiler/cooker with agitator.

Essential characteristics	Unit	Value
External characteristics	-	Black,solid, homogeneous
Softening point ring and ball	°C	> 100
Density at 25°C	g/cm3	1.8 ±0.05
Stamp penetration depth	mm	≤ 20
Binding agent content	M-%	> 20



Road repair materials



ROAD REPAIR MATERIALS



BÖRNER „S“ (water-based porous filler)



BÖRFUGA KSK-RAB (crack tape)





**Thank you
for your attention**

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