





Road Construction Compass

Even the longest way begins with the first step!

Surface / Crack- / Pothole Rehabilitation, Seam- / Joint-/ Edge Formation, Formations of Connections

Road













A company rich in traditions, BORNIT-Werk Aschenborn GmbH has unerringly continued on its course of business expansion. Today, the Zwickau based company is present with a complete sales program of chemical construction products for the protection and repair of foundations, facades and roofs, as well as a complete program of road construction products. The company was a successor to the Zwickauer Dachpappen- und Asphaltfabrik (founded in 1868 by Alwin Aschenborn), and has now developed in the family's fifth generation into a medium size industrial company.

After state takeover in 1972 and renaming as the VEB Bitumen-Chemie Zwickau, BORNIT® 1990 was one of the first businesses to be reprivatized. Thanks to extensive investments in new production systems and logistics BORNIT® has become a manufacturer of the latest in chemical construction products. The extensive quality program is largely the result of our own research and development work. A Europe wide sales network forms the basis of competent applications advice and reliable service. One of the most important goals of BORNIT® is to be a reliable partner to its national and international customers. The most convenient geographical location, in the middle of Europe, assures short delivery times, closeness to customers and competent technical advice on site.

Tradition means commitment - since 1868 the mark BORNIT® has stood for the production and sale of chemical construction products of high quality made to protect buildings. This is a tradition which commits us to infusing the market with new ideas based on our own research and development. BORNIT® products are easy to apply in compliance with ecological standards and modern environmental protection.

The BORNIT® program for professionals comprises system solutions for protecting and repairing foundations, facades and roofs, as well as for the new construction and maintenance of road surfaces. A further line offered by BORNIT® comprises tools which permit a more efficient application of the products.

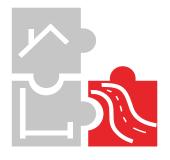
General information on the BORNIT® professional program

Since the working conditions on construction sites and the areas where the products are applied vary considerably we can only give guidelines of a general nature here. These reflect the latest information available.

The statements about quantities required are estimates and depend on the quality of the individual structure, the substrate etc. Test surfaces must be prepared on site to determine the precise quantities needed. In the course of improving our products we reserve the right to modify specifications.

All the data in the current sales catalog are based on the knowledge available at the time of publication. Current information can be found in the German individual specification sheets, safety data sheets and transport regulations which can be ordered for free from BORNIT® or be downloaded at our German website www.bornit.de/de. We reserve the right to modify the packaging so that the product pictures cannot be construed as the basis of a legal claim at the time of delivery. Minor deviations in color related to the raw materials may occur from one batch to another. That is why if you have ordered colored products you should use the same batch number.





Definitions



Surface rehabilitation

- > reworking or refreshing, resp., of aged, worn out, rough or porous surfaces
- > prevention of cracks and potholes due to freeze-thaw cycles







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Cracks

- width max. 5 mm Longitudinal, transverse and alligator cracks
- paps due to thermal or mechanical, resp., stress in concrete or asphalt surfaces, resp.





Extreme crack formation; stability of the subsoil not given Elementary upgrading required

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Potholes

- breakouts in the road surface
- caused by freeze-thaw cycles





Extensive asphalt loss

New application of hot mix

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Joint

> width 5-25 mm

intended or tolerance-related gap between two components or materials to prevent stress cracks, which would occur due to production or usage, resp.





Joint width exceeded



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Seam

contact point / edge between two asphalt surfaces

upon web-like application of rolled asphalt with comparable properties ("hot on cold")





Contact point between concrete and asphalt ← Connection



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Formation of Connections

Connection

> contact point / edge between two asphalt surfaces with different properties (e.g. mastic asphalt on asphalt concrete), or

at the transition of the asphalt to components of concrete, natural stone, metal, etc., resp.





Contact point between concrete and concrete ⁄ Joint







Definitions



Edge sealing

- >> Sealing of the elevated edge of the road for asphalt traffic areas
- Against laterally penetrating surface water.





Centre seam of a base / binder course Seam





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Notes on processing



Machine processing



Manual processing



Protect product against frost!

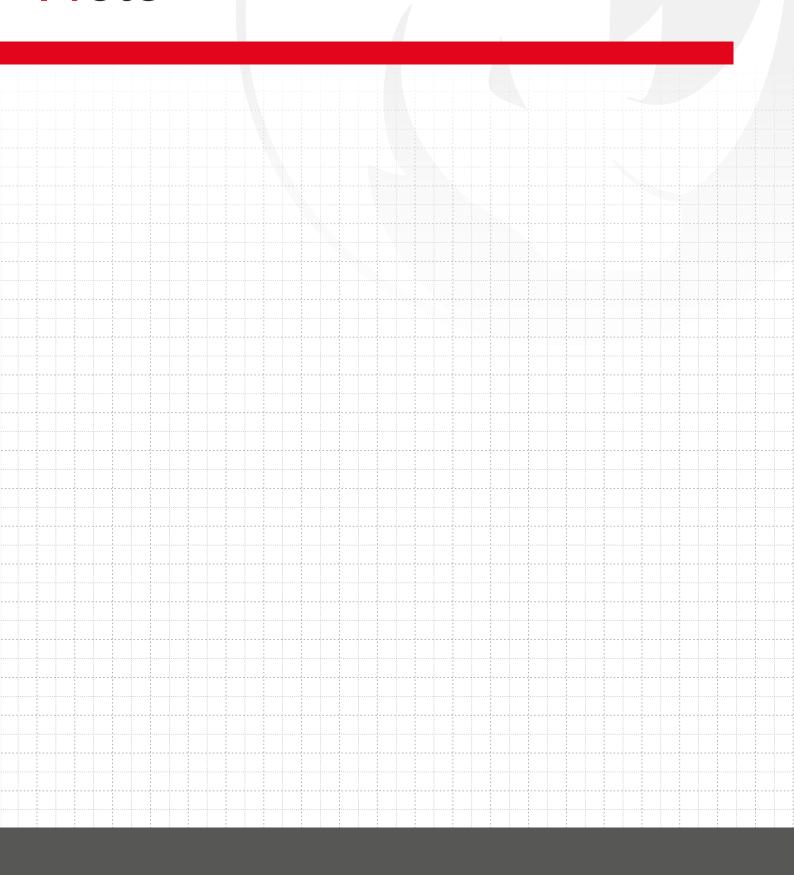


Cold workable



Hot workable

Note





Surface Rehabilitation



For closing pores of open-pored, aged asphalt surfaces (height increase +/-0 mm):











BORNIT® Asphalt Pore Sealer

ready-to-use, solvent-free bituminous slurry with mineral fillers, easy to process, quick-drying.















BORNIT® RoadSealer

flexible piggyback system for communal vehicles for mechanical closing of pores with BORNIT® Asphalt Pore Sealer S; ideal for cost-effective rehabilitation of large surfaces; environmentally friendly bulk packaging – BORNIT® BituBox (approx. 1000 kg); slurry system enables road rehabilitation of up to 1000 m 2 /h.



Surface Rehabilitation



For asphalt repairs with low layer thicknesses (height increase 3 – 10 mm):











BORNIT® Reactive Asphalt 20

cold mix reactively hardening with water, repaired spots immediately traversable after application and compaction; no post-compaction by moving traffic required – very well suitable for repairs at driveways, pavements and car parks.

















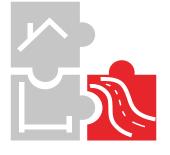
BORNIT® Asphalt Repair Mortar RE 30 / RE 50

quick-drying, 3-component repair compound, traversable after 30 minutes. Layer thicknesses producible from 5 to 20 mm (RE 30) or 10 to 30 mm (RE 50), resp. Higher layer thicknesses possible with repeated application.









Crack Rehabilitation



For rehabilitation of open seams and cracks in asphalt road construction:











BORNIT® Crack Tape CSA

polymer-modified bituminous tape for fast and easy crack rehabilitation, can serve as a substrate for asphalt mix, crack-bridging and easy to process. Priming with BORNIT® Bitumen Primer Spray.















BORNIT® Crack Flex

highly flexible plastic-modified bitumen repair compound, solvent-free, weather- and UV-resistant, elastic, crack-bridging and highly adhesive to the substrate after thorough drying. Spreading of high-quality chippings 1/3 possible. Manual processing with BORNIT® Hand Applicator or machine processing with BORNIT® Flexomat 3.1 with Crack Module SpeedUp.









Crack Rehabilitation





For rehabilitation of open seams and cracks in asphalt road construction:











BORNIT® Flexomat 3.1 with Crack Module SpeedUp

core unit and add-on module for fast and clean application of BORNIT® Crack Flex and BORNIT® SpeedUp for rehabilitation or closure of cracks in asphalt road construction in a cold process.















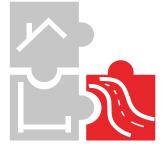
BORNIT® SpeedUp

reactive component for BORNIT® Crack Flex; effects accelerated thorough drying – treated crack areas traversable after a few minutes. Application only possible in connection with BORNIT® Crack Flex and BORNIT® Flexomat 3.1 with Crack Module SpeedUp.









Pothole Rehabilitation



Priming:













BORNIT® Bitumen Primer Spray

sprayable, solvent-containing bitumen primer for substrate pre-treatment in road and bridge construction for cold asphalt products and BORNIT® Crack Tape, quick-drying.







For repair work on asphalt and concrete surfaces:



For long-lasting repairs









BORNIT® Reactive Asphalt 40 / 80

cold mix reactively hardening with water, layer thicknesses up to 50 mm, repaired spots immediately traversableafter application and compaction; no post-compaction by moving traffic required – very well suitable for repairs at driveways, pavements and car parks with high traffic load.





Pothole Rehabilitation





For repair work on asphalt surfaces:



For long-lasting repairs









BORNIT® Asphalt Fix

stable, quick-hardening cold mix, usable for layer thicknesses up to max. 50 mm, for asphalt and concrete traffic areas, no post-compaction by moving traffic required, in the thoroughly hardened state performance characteristics like hot mix.







For long-lasting repairs







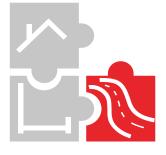


BORNIT® Mastic Asphalt 20 / 50

repair compound to be processed hot; application in layer thicknesses up to 30 mm; melting using mastic asphalt heater; immediately traversable after cooling, no post-compaction by moving traffic required.







Pothole Rehabilitation



For repair work on asphalt surfaces:



For temporary, cost-effective repairs









BORNIT® Cold-Mix Asphalt (Bucket)

cold processable repair material for asphalt roads; post-compaction by moving traffic required; not suitable for car parks, driveways as well as pavements and cycle paths.







For temporary, cost-effective repairs









BORNIT® Cold-Mix Asphalt (Bag)

ready-to-use cold mix for elimination of potholes and frost buckling damages in asphalt roads; post-compaction by moving traffic required; not suitable for car parks, driveways as well as pavements and cycle paths.





Pothole Rehabilitation







For pore closure of the elevated edge of the road in asphalt surfaces:









BORNIT® Edge Flex

ready-to-use, solvent-free modified bitumen emulsion with special fillers, for sealing the elevated edge of the road; fast machine application with BORNIT® Flexomat 3.1 and Edge Module.













BORNIT® Flexomat 3.1 with Edge Module

core unit and add-on module for edge sealing in base, binder and cover courses with BORNIT® Edge Flex and binder accumulation for seams of the base and binder courses with BORNIT® Edge Flex.







Seam Treatment



For treatment of the centre seam area in asphalt road construction:



For binder accumulation in the seam area of base and binder courses









BORNIT® Joint Flex

highly flexible, stable, solvent-free bituminous compound, applicable down to -5 °C; fast machine application with BORNIT® Flexomat 3.1 and Edge Module.





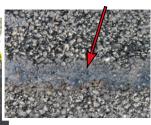




For producing sealed seams in the surface course









BORNIT® Joint Flex

highly flexible, stable, solvent-free bituminous compound, applicable down to -5 °C; fast machine application with BORNIT® Flexomat 3.1 and Edge Module.







Seam Treatment



For repair work on asphalt surfaces:

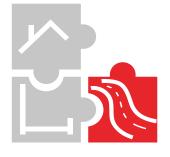






core unit and add-on module for fast and clean application of BORNIT® Joint Flex at centre seams of the surface course upon web-like application of rolled asphalt.





Formations of Connections



For producing connections in asphalt road construction:



patented, shaped-profile, cold self-adhesive bituminous joint tape for producing connections in road construction. The innovative shape, with the pre-formed assembly clay, ensures fast work progress and sealed closure of the connection. The special shape reduces the risk of asphalt voids underneath the tape. Priming with BORNIT® Hot Compound Primer or BORNIT® Hot Compound Primer Spray.

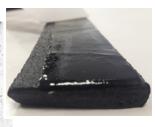














BORNIT® Joint Tape CSA

cold self-adhesive, highly elastic bituminous joint tape for producing joints and seam connections in road construction. Quickly and without flame heating applicable by one person, especially suitable for repair work. Priming with BORNIT® Hot Compound Primer or BORNIT® Hot Compound Primer Spray.





Formation of Connections



For producing connections in asphalt road construction:











BORNIT® Joint Tape

highly elastic, fusible bituminous joint tape with high inherent tack and good adhesive properties; easy to apply at low temperatures, too; for flexible joint and seam connections in road construction for edge and construction joints between asphalt and concrete, for seam connection during repair work with cold and hot asphalt; ageing-resistant, resistant against heavy traffic and weather impact. Priming with BORNIT® Hot Compound Primer or BORNIT® Hot Compound Primer Spray.















BORNIT® Hot Compound Primer / BORNIT® Hot Compound

Primer Spray – solvent-containing polymer primer for substrate pretreatment in road and bridge construction for hot sealing compounds and joint tapes, suitable for brushing on and spraying on, quick-drying.









Joint Formation



For sealing joints in concrete and asphalt surfaces (hot processing):



BORNIT® Hot Compound Primer / BORNIT® Hot Compound

Primer Spray – solvent-containing polymer primer for substrate pretreatment in road and bridge construction for hot sealing compounds and joint tapes, suitable for brushing on and spraying on, quick-drying.

















BORNIT® Hot Sealing Compound TL

hot (max. 180 °C) processable polymer-bitumen-based sealing compound for sealing joints in concrete road surfaces and repair work in asphalt surfaces. Priming with BORNIT® Hot Compound Primer or BORNIT® Hot Compound Primer Spray.





Joint Formation



For sealing joints in concrete and asphalt surfaces (hot processing):



hot (max. 180 °C) processable polymer-bitumen-based sealing compound for closing paving stone joints. Priming with BORNIT $^{\rm B}$ Hot Compound Primer or BORNIT $^{\rm B}$ Hot Compound Primer Spray.





hot (max. 180 °C) processable polymer-bitumen-based sealing compound for sealing joints at rails in the road area. Priming with BORNIT $^{\circ}$ Hot Compound Primer or BORNIT $^{\circ}$ Hot Compound Primer Spray.







For sealing joints in concrete and asphalt surfaces (hot processing):





BORNIT® Sealant Heater

used to melt and cast BORNIT® Hot Sealing Compounds into joints and cracks in asphalt, concrete and paved surfaces. Contents: 50 litres





For sealing joints in concrete and asphalt surfaces (cold processing):





primer or adhesion promoter, resp., for use with BORNIT® Cold Sealing Compound or BORNIT® Cold Joint Sealant, resp.; BORNIT® Asphalt Primer for freshly cut asphalt joints or non-absorbent or metallic substrates, resp.; BORNIT® Concrete Primer for concrete joints or absorbent, mineral substrates, resp.; 2-component, epoxy resin-based.







Joint Formation



For sealing joints in concrete and asphalt surfaces (cold processing):



2-component, permanently elastic polysulphide joint sealant, weather- and ageing-resistant; self-levelling for horizontal joints. Priming with BORNIT® Concrete or Asphalt Primer, resp.







2-component, permanently elastic polysulphide joint sealant, weather- and ageing-resistant; stable for vertical and sloping joints. Priming with BORNIT® Concrete or Asphalt Primer, resp.









For sealing joints in concrete and asphalt surfaces (cold processing):













BORNIT® Bitumen Joint Sealant 2K

cold processable, 2-component, reactively hardening joint sealing compound; for sealing cracks, seams and joints in asphalt and concrete surfaces as well as for adhering road studs; priming with BORNIT® Hot Compound Primer Spray. Easy processing with the BORNIT® Proficartridge gun with integrated mixing nozzle.



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- Core unit for different applications:
 - Seam treatment of base and binder courses
 - Seam treatment of surface courses
 - → Edge sealing
 - Crack rehabilitation
- core unit for the modular add-on systems BORNIT® Edge Module, BORNIT® Joint Module and BORNIT® Crack Module SpeedUp
- processing of the rehabilitation products BORNIT® Joint Flex, BORNIT® Crack Flex, as well as BORNIT® Edge Flex
- no laborious cleaning
- easy to operate
- low maintenance effort

Equipment data:

Dimensions (LxWxH): approx. 1100 mm x 580 mm x 1300 mm

Dead weight (empty): approx. 105 kg

Nominal contents pressure tank: 56.9 litres

Nominal contents pressure tank: 56.9 litres

Operating pressure: max. 4 bar

Engine: Four-stroke petrol engine

Engine type and power: Honda GX 100, 2.1 kW



Edge module







for sealing the elevated edge of asphalt traffic areas, for protection against water laterally penetrating into the asphalt body, excellent adhesion to horizontal and vertical surfaces (also on slightly moist substrates), UV- and weather-resistant in the hardened state.

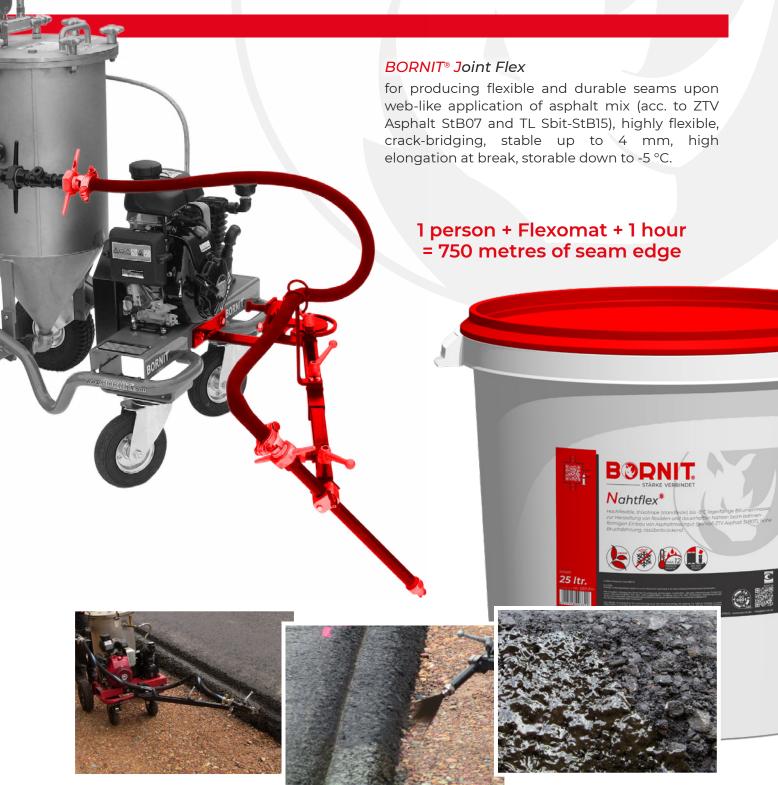
1 person + Flexomat + 1 hour = 750 metres of edge







For binder accumulation of centre seams in base and binder courses with BORNIT® Joint Flex





Joint module







For producing flexible and durable seams upon web-like application of asphalt mix (acc. to ZTV Asphalt StB07 and TL Sbit-StB15), highly flexible, crack-bridging, stable up to 4 mm, high elongation at break, storable down to -5 °C.

1 person + Flexomat + 1 hour = 750 metres of seam edge













Social Media







News, new products, current topics, product videos, application videos and much more!



New!

Finished markings made of thermoplastics















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