

## Wepox 120 (A+B)

### Primer, Sealer or Scratch coat

in acc. with TL/TP-BEL-EP



#### Brief description

Wepox 120 (A+B) is a solvent-free primer for concrete.

Wepox 120 (A+B) is tested to the "Technical Delivery Specifications / Technical Test Specifications for Catalyzed Resins for Primers, Sealants and Scratch Coats under Asphalt Surfacing on Concrete", (TP-BEL-EP) and the additional H PMMA requirements and may be used for the production of waterproofing systems consisting of a welded polymer-bitumen sheet on a seal coat, primer or scratch coat based on epoxy resin for civil engineering structures. Wepox 120 (A+B) is approved for application to young concrete (> 7 d). The application and usability on structures and components of the Federal Transport Network is verified in the "Compilation of certified substances and substance systems according to TL-BEL-EP", a list by the Federal Highway Research Institute (BAST).

#### Material

2-component, epoxy-based catalysed resin

#### Properties and advantages

- Easy to apply
- Fast-curing
- Hydrolysis- and alkali-resistant
- Heat-resistant (welded sheeting, mastic asphalt)
- Fills pores and cracks
- Solvent-free
- Stabilises the surfaces of inferior grades of concrete
- Can be used at temperatures as low as +8 °C

#### Approval / Areas of application

The product can be used for new surfacing or existing surfacing that needs to be fully or partially replaced and that is applied to concrete bridge deck slabs, with welded polymer bitumen sheeting as the waterproofing layer.

Wepox 120 (A+B) is approved and tested (abP: P 12675/ 20-606, Kiwa Flörsheim) in accordance with TL/TP-BEL-EP as well as the compatibility tests in accordance with TL/TP-BEL-B, part 1 and can therefore be applied on bridge deck surfacing on concrete with a welded polymer-bitumen sheeting as waterproofing layer.

Approved Welded polymer-bitumen sheeting:

- BÖRNER OK 50 N – Welded polymer-bitumen sheet (test report P12477-2)
- VEDAPONT BE – Welded polymer-bitumen sheet (test report P12477-1)

[https://www.bast.de/BAST\\_2017/DE/Ingenieurbau/Qualitaetsbewertung/Listen/pdf/tl-bel-ep.html?nn=1815704](https://www.bast.de/BAST_2017/DE/Ingenieurbau/Qualitaetsbewertung/Listen/pdf/tl-bel-ep.html?nn=1815704)

#### System build-up suitable for the concrete surface or roughness heights

The system build-up (primer or finish/sealant or scratch coat) must be selected to suit the ascertained roughness heights and the age of the concrete. At roughness heights up to 1.5 mm in the concrete surface a primer or sealer must be applied. At roughness heights > 1.5 mm a scratch coat must be applied. Individual depressions in the concrete, up to 5 mm in



Product information sheet

## Wepox 120 (A+B) Primer, Sealer or Scratch coat in acc. with TL/TP-BEL-EP

depth and approx. 500 cm<sup>2</sup> in area, may also be filled with Wepox 120 (A+B) (scratch coat).

The roughness height must be determined in accordance with ZTV-ING - part 1 General Information, section 4, "Determination of Roughness Height".

### **Roughness heights < 1.5 mm**

#### Primer on concrete (age of concrete $\geq$ 21 days):

Consists of Wepox 120 (A+B) and is largely used for filling the pores in the surface of the concrete and creates a permanent bond between the concrete and the next coating. The primer is topped.

Wepox 120 (A+B) is poured onto the substrate at a rate of at least 500 g/m<sup>2</sup> until the surface is saturated and then spread with a sheepskin roller or rubber squeegee. Broadcasting of (kiln-dried) quartz sand 0.2 - 0.7 mm (quantity: approx. 500 - 800 g/m<sup>2</sup>) must begin while the primer is being applied. On no account must topping be applied to excess. Any topping that is not firmly incorporated in the primer after curing must be removed.

#### Sealer on concrete (age of concrete $\geq$ 14 days):

Consists of Wepox 120 (A+B) and is used for closing the pores in the surface of the concrete and creates a permanent bond between the concrete and the next coating. Two coats are applied, with a topping of quartz sand in between. The second coat is not topped with quartz sand.

As a first coat, Wepox 120 (A+B) is poured onto the substrate at a rate of approx. 500 g/m<sup>2</sup> until the surface is saturated and then spread with a sheepskin roller or rubber squeegee.

Begin with broadcasting of quartz sand (kiln-dried) 0.7 - 1.2 mm in excess (grain to grain, consumption approx. 3.0 - 3.5 kg/m<sup>2</sup>) while the resin is being applied. Any sand that is not firmly incorporated in the first layer of the sealer after curing must be removed. The second layer of Wepox 120 (A+B) is applied with a sheepskin roller or rubber squeegee at a quantity of at least 600 g/m<sup>2</sup>.

#### Application to concrete that is at least 7 days old:

The product is applied to concrete that is at least 7 days old as described for the build-up "Sealant / Finish on Concrete".

The surface of the concrete must be dry. To determine whether the concrete surface is dry, it must be heated locally with a hot air blower or fan. If the concrete is moist, this will make it noticeably lighter, in which case the product must not be applied.

### **Roughness heights > 1.5 mm**

#### Scratch coat on concrete

This is designed to level out major roughness heights > 1.5 mm and is applied on top of the cured primer. The scratch coat (Wepox 120 (A+B) K) must be smoothed over the particle tips. Wepox 120 (A+B) K must be topped with fire-dried quartz sand 0.2 - 0.7 mm so that the same surface is



Product information sheet

## Wepox 120 (A+B) Primer, Sealer or Scratch coat in acc. with TL/TP-BEL-EP

achieved as when a primer is applied. Any sand that is not firmly incorporated in the scratch coat after curing must be removed. If scratch coat and sealer are combined side by side on one surface or if a scratch coat must be applied instead of sealer, the surface of the scratch coat has to be topped with quartz sand 0.7 - 1.2 mm in excess (grain to grain, consumption approx. 3.0 - 3.5 kg/m<sup>2</sup>). Any sand that is not firmly incorporated in the scratch coat after curing must be removed. Wepox 120 K (A+B) K is then sealed with Wepox 120 (A+B) at a consumption rate of approx. 600 g/m<sup>2</sup>.

**Pack size**



The product is supplied in separate containers (resin and hardener).

21.00 kg      Wepox 120 A (base component)  
  7.00 kg      Wepox 120 B (hardener)  
28.00 kg

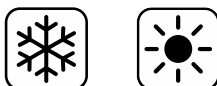
**Colour**

Reddish

**Storage**

Store products sealed in their original airtight container and in a cool (under 20 °C), dry and frost-free place. The unopened products have a shelf life of at least 12 months.  
Direct sunlight on the containers should be avoided, including on site.

**Application conditions**



**Temperatures**

The product can be applied within the following temperature ranges:

Product	Temperature range, in °C		
	Air	Substrate	Material
Wepox 120 (A+B)	+8 to +30	+8 to +30*	+8 to +30

The relative humidity must be ≤ 75%.  
The surface to be coated must be dry and ice-free.  
The dryness of the concrete surface has to be tested by heating a small area with a hot-air blower or fan (moist concrete will get noticeably lighter).  
The surface must be protected from moisture until the coating has hardened.

**Concrete replacement systems**

Since the primer was developed specifically for concrete, its use on concrete replacement systems must be tested separately, since curing problems can occur.

**Wepox 120 (A+B)**  
**Primer, Sealer or Scratch coat**  
 in acc. with TL/TP-BEL-EP

**Reaction times**

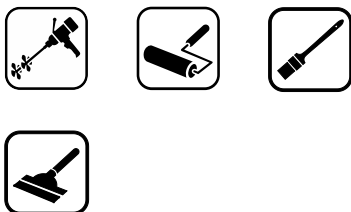
	Wepox 120 (A+B) (at 20 °C)
Pot life	approx. 35 min
can be walked on	approx. 18 hours
overlayable with welded polymer-bitumen sheeting	approx. 24 hours

Higher temperatures will reduce reaction times, while lower temperatures will increase reaction times.

**Technical data**

Density: 1.10 g/cm<sup>3</sup>

**Product application**



**Application equipment / tools**

For mixing the product:

- Mixing tool with twin-paddle stirrer

For applying the product:

- Rubber squeegee (ensure adequate consumption rate), then use the sheepskin roller to smooth over.
- Brush (only for areas not accessible with roller)

**Substrate preparation**

The primer must only be applied to a prepared substrate. Please refer to the appropriate application guide for information about correct surface preparation.

Once the substrate has been prepared, the bond strength of the concrete must be checked. The mean bond strength must be at least 1.5 N/mm<sup>2</sup>. The lowest individual value must not be less than 1.0 N/mm<sup>2</sup>.



Prior to application carefully mix the base component and hardener using a slow-speed mechanical stirrer (approx. 300 - 400 rpm) e.g. with an anchor stirrer. For pigmented resins, the base component needs to be stirred separately before, for approx. 1 minute.

Please ensure that the material is mixed thoroughly even in the corners (wall/ground) of the mixing container. Do not stop the mixing process until a homogeneous mixture is obtained. After mixing, refill into a clean container and mix again briefly ("repotting"). Mixing of partial amounts is not allowed. The material must be applied within the stated application time.

**Application**

Use the sheepskin roller or rubber squeegee to apply the recommended amount for an even and film-forming coat of primer. Avoid creating puddles. Once the coating has cured, apply a second coat to cover any defects



Product information sheet

## Wepox 120 (A+B) Primer, Sealer or Scratch coat in acc. with TL/TP-BEL-EP

(bubbles, areas not fully coated). If necessary, use a brush to make good any individual indentations. The primer coating must form a continuous film over the entire substrate before the next layers can be applied.

### **Preparation of the scratch coat**

The scratch coat consists of Wepox 120 (comp. A + comp. B) and kiln-dried quartz sand (0 - 2.0 mm)

Mixing ratios: 1:2.5 to 1:4

### **Cleaning**

If work is interrupted or when it is completed, clean the tools thoroughly with WestWood Cleaning Agent within the pot life of the material (approx. 10 minutes). This can be done with a brush. Do not use the tools again until the Cleaning Agent has evaporated fully. Simply immersing the tools in the Cleaning Agent will not prevent the material from hardening.

### **Information on safety and risks**

Please refer to the safety data sheets for the products used.

### **General information**

The above information, especially information about application of the products, is based on extensive development work as well as many years of experience and is provided to the best of our knowledge.

However, the wide variety of requirements and conditions on site mean that it is necessary for the product to be tested to ensure that it is suitable for the intended purpose. Only the most recent version of the document is valid. We reserve the right to make changes to reflect advances in technology or improvements to our products.

Rev.: 01 February 2022