Epoxy Coating Systems – Coatings

WEBAC® 4420 CE

Range of application

- Protective coating for concrete surfaces/mineral substrates – horizontal/vertical
- Sewer/shaft repair
- Chemically and mechanically resistant concrete coating for industrial sector
- Concrete protection according to DIN EN 13813

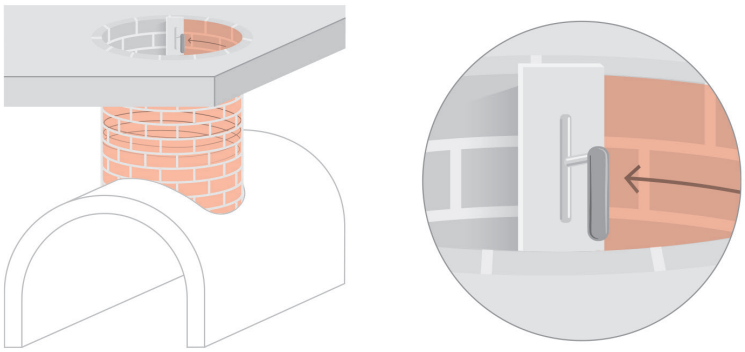
Properties

- Epoxy-based coating
- Fiber-reinforced
- Good adhesion to concrete, mineral substrates – dry, damp, wet
- High chemical resistance, high abrasion resistance
- High stability also on vertical surfaces
- High mechanical strength
- Easy application
- Total solid*

Test certificates

- Declaration of performance in accordance with the Construction Products Regulation (system 4)
- Environmental Product Declaration (EPD)
- List of chemical resistance

Example



Protective coating in sewer shaft

*according to test method by Deutsche Bauchemie e.V. (German Industry Association for Manufacturers of Construction Chemicals)

WEBAC-Chemie GmbH
Fahrenberg 22
22885 Barsbüttel
Germany
Tel. +49 40 67057-0
Fax +49 40 6703227
info@webac.de

www.webac.de

Epoxy Coating Systems – Coatings

WEBAC® 4420 CE

Technical data	Values			
Mixing ratio	5 : 1 parts by weight			
Density, 20 °C (DIN ISO 2811)	**Comp. A** **Comp. B**	≈ 1.6 g/cm³ ≈ 1.0 g/cm³		
Bulk density	≈ 1.5 g/cm³			
Pot life (WEBAC test specification based on DIN ISO 9514)		**23 °C** ≈ 25 min	**12 °C** ≈ 60 min	**5 °C** ≈ 80 min
Application temperature Building structure and material	> 5 °C			
Adhesive strength on concrete 7 d, 21 °C, dry (DIN EN 1542) wet (DIN EN 13578)	**dry** **wet**	≈ 2.0 MPa (N/mm²), concrete fracture ≈ 1.6 MPa (N/mm²), concrete fracture		
Compressive strength 7 d, 21 °C (DIN ISO 604)	≈ 70 MPa (N/mm²)			
Bending tensile strength 7 d, 21 °C (DIN ISO 178)	≈ 40 MPa (N/mm²)			
Tensile strength · Elongation at break 7 d, 21 °C (DIN ISO 527)	≈ 12 MPa (N/mm²) · ≈ 0.3%			
Shore hardness D 7 d, 21 °C (DIN EN 868)	≈ 75/70			
CE classification (DIN EN 13813)	SR - B2.0			
Fire behavior (DIN 4102-4, 2.3.2)	B2			
GISCODE	RE55			
EPD	EPD-DBC-20220176-IBF1-EN			
Exposure scenarios according to REACH	Assessment of industry standard application			

The specified data are values determined under laboratory conditions and are subject to a certain fluctuation. Deviations are possible in practice depending on the respective object situation.

WEBAC-Chemie GmbH
Fahrenberg 22
22885 Barsbüttel
Germany
Tel. +49 40 67057-0
Fax +49 40 6703227
info@webac.de

www.webac.de

Technical Information

Epoxy Coating Systems – Coatings

WEBAC® 4420 CE

Preparatory work

Structural analysis:

- Checking the substrate
  - Moisture condition (dry, damp or wet)
  - Surface strength (> 1.5 MPa (N/mm²))
  - Concrete quality
  - Condition of the surface (dirty, oily)
- Observe dew point

This results in:

- Selection of suitable material
- Pre-treatment of the substrate if necessary

The substrate must be open-pored, dry and free of dust and oil; if necessary, pre-treat the substrate.

Application instruction

- Application by spatula
- The mixture must be used completely within pot life
- Only use pure WEBAC material without any residues of cleaning agents or other impurity
- The pot life/curing time are influenced by the amount of material/layer thickness and the temperature of the material/building structure – higher temperatures accelerate, lower temperatures slow down the reaction
- Observe Dew Point Table (the substrate temperature must be 3 °C above dew point temperature to avoid condensation)

Mixing

- Briefly stir component A. Add component B to the container of component A (make sure that the containers are completely empty) and mix homogenously
- Transfer mixed material to another clean mixing vessel and stir briefly

Application

- Apply the coating to the primed surface at the desired layer thickness by spatula immediately after mixing

Final work and cleaning

- Clean the equipment with **WEBAC® Cleaner A**
- Never use **WEBAC® Cleaner A** for diluting products; avoid mixing with the coating material
- Use **WEBAC® Cleaner B** for dissolving cured material
- Observe the technical data sheets of the cleaners used

WEBAC-Chemie GmbH
Fahrenberg 22
22885 Barsbüttel
Germany
Tel. +49 40 67057-0
Fax +49 40 6703227
info@webac.de

www.webac.de

Epoxy Coating Systems – Coatings

WEBAC® 4420 CE

Product data

Material consumption depending on the substrate's absorbency	≈ 1.5 kg/m² per 1 mm layer thickness	
Delivery form	**Comp. A** 10 kg 5 kg	**Comp. B** 2 kg 1 kg
Storage	• Between 5 °C and 30 °C • Protected from moisture • In original, sealed containers	
Compatibility	• Compatible with masonry mortar, concrete, steel, foil, cable sheathing, metal and WEBAC injection materials	
Resistance	• Resistant to diluted acids and alkalis, lubricants, oil and fuels	

Occupational safety

The safety regulations of the industrial trade associations and the WEBAC Safety Data Sheets are to be observed at all times when working with this product. Safety data sheets according to Regulation (EC) No. 1907/2006 (REACH) must be accessible to all persons responsible for occupational safety, health protection and the handling of materials. For further information, please see the separate information sheet “Occupational Safety” in our product catalog or www.webac.com.

Waste disposal

In Germany, empty containers can be disposed of via “Interzero Circular Solutions Germany GmbH” observing the respective terms and conditions. It is not possible to dispose of containers at production facilities or delivery warehouses. For more detailed information, please see the separate information sheet “Disposal Notes” in our product catalog or www.webac.com and the safety data sheets.

WEBAC-Chemie GmbH
Fahrenberg 22
22885 Barsbüttel
Germany
Tel. +49 40 67057-0
Fax +49 40 6703227
info@webac.de

www.webac.de