# **BONDING COURSE ZE**



FOR PERFECT BONDING OF CONCRETE AND SCREED. GUARANTEED.

# **BONDING COURSE ZE** WITH GUARANTEED FUNCTIONALITY.

Bonding course ZE is suitable for making cement-bonded bonding courses of all strength classes on concrete substrates or cement screed. The simple production using a 25 kg bag of Portland cement and the addition of 150 ml Bonding Course ZE is unique. Bonding Course ZE provides excellent, durable bonding between the concrete surface and the bonded screed and guarantees the function of the bonding course. Also suitable as a bonding course on adequately sandblasted and cured reaction resin coatings. For the warranty a separate assignment for supervision of the construction site is required. Please request information material and an individual consultation.

Instructions for use:

#### **1. STANDARDS AND DIRECTIVES**

DIN EN 13813, DIN 18353, DIN 18560 and the customary industry practices and standards for making bonded screeds are applicable.

## 2. SUBSTRATE

For bonded screeds of quality CT-C40 concrete substrates of strength class C20/C25 are usually sufficient. For higher strength classes (> CT-C50) and for fair-faced bonded screeds applied at layer thicknesses above 40 mm the substrate must comply with strength class C25/C30. The average tensile strength of the surface must be 1.5 N/mm<sup>2</sup> (smallest single value: 1.2 N/mm). The surface of cement-bonded substrates must be clean, absorptive, load-bearing and firm. Too soft and flaking layers and are-as affecting the bond strength must be removed entirely by milling and/or shot peening. Any cracks in the substrate must then be durably closed and force-bonded with a suitable reaction resin and mechanical anchors in accordance with customary industry practices and standards (standard corrugated connectors and simple, thin steel bolts are insufficient). The areas treat-ed with reaction resin must be liberally scattered with quartz sand (grit size at least 0.8 – 1.2 mm!). Excessive, not firmly bonded sand must be entirely removed after the resin has cured and before wetting the surfaces or applying the bonding course. **A high-pressure cleaner must be used for precision cleaning.** The dirty water must be removed with a suitable wet vacuum cleaner. Pre-wetting: The substrate must be matt and damp but must not be wet (glossy) when brushing in Bonding Course ZE! **Pre-wet the substrate one day before applying the bonding course (!)** so that the surface of the substrate can dry a little.

#### 3. MIXING

Mix Bonding Course ZE bag by bag of cement before use. Fill a mixing vessel with approx. 6 I water, mix in a 25 kg bag of cement and 150 ml Bonding Course ZE and stir with an agitator until a pliable, pasty (yet not liquid) slurry is obtained. The mixing time is 3 minutes. This ensures proper blending of the ingredients with the cement and durable bonding.

#### 4. APPLICATION

Spread the mixed Bonding Course ZE on the prepared substrate and brush into the substrate with a hard brush (preferably with a rotating scouring machine). Cover the brushed-in Bonding Course ZE with Retanol<sup>®</sup> screed immediately to prevent premature drying. Then apply, compact and smooth the screed using the standard technique. Any dried (matt or light-coloured) bonding course is now unusable and must be removed mechanically down to the loadbearing substrate. It must be made sure that the upper pore structure is stripped again to guarantee a sufficient bonding for a new application of bonding course.



## 5. MIXING INSTRUCTIONS

A 25 kg bag of cement, 150 ml Bonding Course ZE, **max. (!)** 10 litres water. Only cements complying with the PCT Cement Approval List may be used in combination with Bonding Course ZE. One mixture (25 kg cement and max. 10 litres water) provides a sufficient amount for a surface area of 10–12 m<sup>2</sup>, depending on the nature of the substrate.

All the information on this product given above is based on extensive practical experience and tests implemented by PCT Performance Chemicals GmbH. However, it is not possible to take all construction site conditions into account and to give suitable instructions for use in each case. It is therefore recommended to verify the applicability, appropriateness and practicability of this information and the intended measures by means of individual tests. PCT assumes warranty for the correctness of this product information and the described properties as well as for the effect of the product. PCT reserves the right to change the product specifications. If the site is or has been supervised by PCT the user is under no obligation to check applicability and appropriateness.



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