

Single-element bonding slurry for layers on cement base

Characteristics of product

The single-element bonding slurry **Fortedur 1091** is a mixture containing special types of cements, fillers and chemical additives to ensure a high level of adhesion of the bonded layers.

Use of product

The single-element bonding slurry **Fortedur 1091** is intended for firm bonding of base concrete layers with other layers or bonding between layers on a cement base. After mixing with water the product is applied in the form of thin mushy material.

The product **Fortedur 1091** is an integral part of the screed material systems Fortedur 1011, 1021, 1026, 1031 and 1041 applied using the "wet to dry" method.

Properties of system

- The dry mixture directly contains the special additive ASA (Anti-Shrinkage Agent), which significantly reduces the formation of cracks and prevents negative volume changes of the bonding slurry. This improves the functionality and improves the mechanical properties of the resultant bonding slurry.
- Thanks to the **SILICA EFFECT**, through the use of very fine round particles in the dry element of the system a lower porosity is achieved and thus lower absorbability, greater frost resistance and corrosion resistance, and primarily greater bonding to the base.

Advantages of system

- Bonding increased many times in comparison with variants without use of bonding slurry, and increase in bonding in comparison with traditionally used bonding slurries
- High level of productivity and simplicity of laying
- Useable indoor and outdoors
- Water resistance, frost resistance

Technical parameters

Workability time at 20°C and 55% RH	min. 15 minutes
Thickness of applied layer	max. 2.0 mm
Maximum grain size	max. 2.0 mm
Consumption of dry mixture	2.0 – 2.5 kg / m ²
Mixing water	approx. 5.5 – 6.0 l / 25 kg
Colour	Brick red

Packaging

Bonding slurry **Fortedur 1091**: 25 kg paper sack with polyethylene liner

Storage

12 months from the date of production in intact sealed original packaging. Sacks stored on wooden pallets. Must be protected from moisture and frost.

Test certificates

Initial tests of the product and evaluation of compliance according to Council Directive 89/106/EEC (CPD – Construction Products Directive), as amended, have been performed.

Application procedure

Before the actual application it is necessary to remove any non-cohesive elements and dirt from the concrete base, and in the case of excessive smoothness of the surface or local unevennesses, to roughen and even the surface (by coarse grinding, shot blasting or milling). The base prepared in this way must be thoroughly soaked with water for at least 18 hours before the actual application. The soaking of the surface with water must be maintained for the entire duration of the application. The formation of dry patches or puddles must be prevented. The bonding slurry **Fortedur 1091** is applied to the soaked base in the form of a thin mushy material prepared by mixing an entire package of **Fortedur 1091** dry mix with mixing water in a range of 5.5 – 6.0l. During mixing, the dry mix is gradually added to the mixing water during constant mixing using a low-rev mixer or in a forced mixer for a period of at least 3 minutes. The mixture must be free of lumps and must be applied to the damp concrete base immediately after mixing. The mixture is applied evenly using brushes or stiff-bristled brooms. Before application, for the entire period of application, and during the application of further layers on the bonding slurry, the layer must not dry out, and the applied surface must not be exposed to direct sunlight, draught or rain.

Cleaning and maintenance

The cleaning and maintenance procedures constitute a part of the document Instructions for Cleaning and Maintaining the Product **Fortedur**.

Warning

- It is necessary to prevent draughts, direct sunlight and premature drying after laying.
- The addition of bonding agents or other additives or the sieving of the mixture is not permitted.
- The mixture may only be applied at a temperature higher than +5°C.
- Liquidation of contaminated packaging - dispose as "other waste".
- Without the prior agreement of the manufacturer, another coating is used at own risk.
- Before application please check on the pages www.fortemix.eu, whether you have up-to-date technical documentation.

Health and safety

Fortedur 1091 contains cement. During work it is necessary to use protective gear (clothing, gloves, glasses). There is more data on the Safety Sheet and description on the **Fortedur** product package.

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		Cement screed
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