

## F2700

### Properties:

F2700 is a ready to use expansive mortar based on cement with a grain size of 0.2 mm. The material is shrink proof with high initial strength and very high final strength.

It is a cement for joints in accordance with DIN/EN 206-1 1045/2 article 5.3.8.

F2700 is used for solidifying closing of horizontal or vertical joints of prefabricated concrete elements, big cracks and break outs as well as for sealing off drill holes up to  $\varnothing$  100 mm, e.g. in tunnel construction.

### F2700

- is free of chloride
- has a controlled extension force and does definitely not shrink. Thus the force transmission between the precast concrete elements is warranted.
- is not flammable according to DIN 4102 (fire protection class A1)
- has a plastic/thixotropic consistency and is even low slump at thicker layers.
- develops high strength values. Thus it can be loaded 1 day after filling.
- is produced mainly from natural raw materials and protect the environment.

### Technical data:

#### Substance data:

|                |                |                  |
|----------------|----------------|------------------|
| Consistency    | solid, powdery |                  |
| Colour         | grey           |                  |
| Odour          | odourless      |                  |
| Solids content | 100 %          |                  |
| pH value       | 11 - 13.5      | DIN EN ISO 10523 |

#### Reaction data:

|                        |                |                       |
|------------------------|----------------|-----------------------|
| Processing temperature | 5 - 30°C       | substrate temperature |
| Pot-life               | approx. 45 min | at 20°C               |
| Swelling ratio         | > 0.5 %        | after 24 h            |

#### Hardened mortar properties:

|                          |                              |                    |
|--------------------------|------------------------------|--------------------|
| Freeze-thaw resistance   | passed                       | DIN CEN/TS 12390-9 |
| Compressive strength     |                              | DIN EN 12390-3     |
| after 1 day              | > 40 N/mm <sup>2</sup>       |                    |
| after 7 days             | approx. 60 N/mm <sup>2</sup> |                    |
| after 28 days            | approx. 80 N/mm <sup>2</sup> |                    |
| Bending tensile strength |                              | DIN EN 12390-5     |
| after 1 day              | approx. 7 N/mm <sup>2</sup>  |                    |
| after 7 days             | approx. 8 N/mm <sup>2</sup>  |                    |
| after 28 days            | approx. 11 N/mm <sup>2</sup> |                    |

### Processing:

#### 1. Preparation:

F2700 is a ready-for-use dry mixture. Simply water is added.

Before processing, the surface must be well cleaned and is watered up to saturation point. It must be ensured that any surface water and cement laitance has been removed. The capillary pores of concrete must be open.

## 2. Water requirement:

4 - 4.25 litre of water per 25 kg bag *F2700*

## 3. Mixing:

*F2700* should be mixed by means of a slowly rotating mixer. First 2/3 of the water is added and bit by bit the remaining quantity.

Mixing time: approx. 2-3 minutes

Consumption: 25 kg of dry mortar yields about 15 litre of fresh mortar

## 4. Further references:

*F2700* is applied by mixing pumps, hand presses or conventional suitable tools.

### **Safety information:**

*F2700* contains cement and is classified as hazardous according to Regulation (EC) 1272/2008 (CLP).

It is therefore necessary, before beginning processing, to become familiar with the precautions and safety advice as indicated in the material safety data sheet.

### **Packaging:**

25 kg paper bag  
42 x 25 kg per pallet

### **Storage:**

Shelf life at least 12 month in original packaging when stored in dry conditions between 15-25°C, protected from heat, frost and direct sunlight.

After the expiration the use of the product is generally not recommended, unless an approval has been provided by TPH. This approval can only be obtained by the quality assurance department of TPH releasing the material after verification of main properties being within specification.

### **Disposal:**

Small quantities of cured product residues can be disposed of as normal domestic waste. Dispose of not cured product components must be effected in accordance with the corresponding local regulations. For further information please refer to the material safety data sheets.

### **Test certificates:**

Determination of pullout strength at a load of 75 kN and concentration of chloride ions; SGS INTRON Labor Sittard 2011



**Legal notice:**

The correct and thus successful application of our products is not subject to our control. A guarantee can be issued for the quality of our products within the framework of our sales and supply conditions, however not for successful processing. All data and specifications in this specification sheet are based on the present state of the art and the right to changes and adaptations for the sake of development remains explicitly reserved. The consumption specifications designated by us can be only average empirical values, where deviations are possible on an individual basis and therefore cannot be excluded by us.

**TPH Bausysteme GmbH**  
Nordportbogen 8  
**D-22848 Norderstedt**

Tel.: +49 (0)40 / 52 90 66 78-0  
Fax: +49 (0)40 / 52 90 66 78-78  
e-mail [info@tph-bausysteme.com](mailto:info@tph-bausysteme.com)  
Web [www.tph-bausysteme.com](http://www.tph-bausysteme.com)

