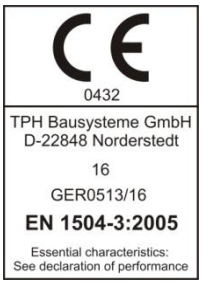
Technical Data Sheet
Issue: 20-04-2018

F2102 FV

CE-marking in accordance with EN 1504-3



Properties:

F2102 FV is a polymer-modified dry mix that is ready to use and cement-based. This repair and restoration mortar offers great adhesive strength according to EN 1504-3 R3. Its grain size is 0 - 2 mm.

F2102 FV can be used

- for repairing and restoring concrete surfaces of all kinds in a system-compatible way, for a minimum thickness of 6 mm,
- for minor repairs of industrial floors and screeds,
- for joint filling, sealing, coating and levelling,
- for inside and outside applications,
- for protection against moderate chemical attack.

F2102 FV is free of chloride, low in chromate according to directive 2003/53/EC, shrinkage compensated and resistant to oil. It has excellent adhesive strength on plaster, masonry and concrete. *F2102 FV* is resistant to abrasion, frost, de-icing salts and controls the formation of cracks due to added plastic fibers.

F2102 FV fulfills the requirements od DIN EN 206-1, also with regard to exposure classes XA1 and XA2 (slightly aggressive chemical environment or moderately aggressive chemical environment).

F2102 FV works for thicknesses of 6 mm up to 50 mm.

Technical data:

Substance data:		
Consistency	solid, powdery to granular	
Colour	grey, light grey or white	
Odour	odourless	
Bulk density	0.9 - 1.5 g/cm^3	
Solid content	100 %	
pH value	11 - 13.5	DIN EN ISO 10523
Reaction data:		
Processing temperature	5 - 30°C	substrate temperature
Pot-life		
at 10°C	approx. 90 min	
at 20°C	approx. 60 min	
at 30°C	approx. 25 mm	
Can be recoated (with *F3100*)	after approx. 12 h	

Hardened mortar properties:

Compressive strength		DIN EN 12390-3
after 1 day	approx. 10 N/mm^2	
after 7 days	approx. 32 N/mm^2	
after 28 days	approx. 40 N/mm^2	
Bending tensile strength		DIN EN 12390-5
after 1 day	approx. 2.1 N/mm^2	
after 7 days	approx. 5.1 N/mm^2	
after 28 days	approx. 8.2 N/mm^2	

Processing:

1. Preparation:

Parts that inhibit adhesion must be removed. It is recommended to clean the surface by means of sand blasting, flame blasting or shot blasting. This makes sure that the substrate has been sufficiently roughened.

The concrete must have an average tensile strength of ≥ 1.5 N/mm² (the smallest individual value should be ≥ 1.0 N/mm²).

Damaged reinforcement that is exposed should be blast cleaned to SA 2 ½ standard according to DIN 55928.
Two layers of *F1100* must be applied to the (steel) reinforcement. The second layer simultaneously serves as a bonding layer and is applied to the complete damaged area that has been pre-wetted.

If no reinforcement is exposed, apply *F2102 FV* as a bonding agent by using a bit more water. Brush it once into the pre-wetted substrate. If you use a plastering machine, no bonding agent is necessary.

Depending on the depth of the broken-out areas, apply *F2102 FV* to the not yet dried bonding agent, spread it, and smooth it out.

After that *F3100* can be applied to vertical surfaces to make an appealing (smooth) finish. It is also possible to add a thin color coat, which is economical because less paint is needed.

2. Water requirement:

4.00 - 4.50 litre of water per 25 kg bag, equal to 16%

3. Mixing:

The mortar and the corresponding amount of water should be mixed in a compulsory mixer (cyclone mixer) or with a slow running hand-held power mixer in a large mixing container. It should be mixed at least 3 minutes - until a mass is reached that is homogeneous and free of lumps. Let the mix rest; then mix it one more time briefly and use it immediately.

For machine processing, please ask for a special technical consultation.

Consumption: 25 kg of dry mortar yields about 13 litre of fresh mortar
for 1 m^3, approx. 1850 - 1950 kg of dry mortar is needed
for a layer thickness of 10 mm approx. 19 kg / m² is needed

4. After-treatment:

Freshly treated surfaces must be protected against premature evaporation.

Safety information:

F2102 FV 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.

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.

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