

# Tie Hole Fill



Class R3 EN 1504-3

## Tie hole fill and repair mortar

For the filling of tie holes formed by formwork bolts in new construction, particularly where a rapid setting, durable waterproof mortar is required. Can also be used for small repairs to insitu and precast elements as well as concrete and masonry.

### Application:

- **Preparation:** Surface should be clean and structurally sound
- **Mixing:** Prepare 0,8 litre of clean water in pail and add one bag of 4 kg whilst mixing. Mix with paddle mixer until lump free and homogeneous. Let it rest for 1 minute and mix again for 30 seconds.
- **Application:** apply with trowel within 30 minutes.
- **Consumption:** 1.9 kg/m<sup>2</sup>/mm



- Available in grey
- Packaging: pails 8 kg (2 bags of 4 kg)
- Storage: 12 months shelflife when stored protected

**30 minutes  
workability**



### Applications:

Filling of tie holes formed by formwork bolts

Levelling of substrates in concrete or masonry in general

Repairs and resurfacing of good quality concrete



SIG Construction  
Accessories  
Head Office:  
5 Fernhurst Road  
Bristol BS5 7FG

T: 0870 4208331  
F: 0117 301 3639  
E: sales@sigscp.co.uk  
www.sigscp.co.uk/sigca

Your contactperson:

technology



# TIE HOLE FILL

## TIE HOLE FILL and REPAIR MORTAR

### DESCRIPTION

For the filling of tie holes formed by formwork bolts in new construction, particularly where a rapid setting, durable waterproof mortar is required. Can also be used for small repairs to insitu and precast elements as well as concrete and masonry.

TIE HOLE FILL is an accelerated setting repair mortar, based on cement, selected silica, and spray dried polymers and is fibre reinforced. After mixing with water, a paste is obtained with excellent workability by trowel.

The product contains special polymers which allow smoothing operations at medium thickness.

### ADVANTAGES

- 30 minutes workability
- Packaging 2 bags of 4 kg which result in minimum loss of product
- The thixotropic qualities of the product give excellent adhesion, make it easy to spread on vertical surfaces, the lower parts of beams, shelves or slab. Often it can be applied to structures which are subject to dynamic stress from traffic.
- The product applies and adheres well to difficult substrates, very smooth or with low grip.
- When applications at higher thickness are required, TIE HOLE FILL can be used for thickness up to 10 cm, in layers of 20-30 mm each.
- Exceptionally strong adhesion to the support and maximum durability to carbonation and damaging acid rain.
- Has excellent waterproofing properties, but is permeable to water vapour.

### USE

- Filling of tie holes formed by formwork bolts
- Levelling of substrates in concrete or masonry in general
- Repairs and resurfacing of good quality concrete

### APPLICATION

- **Preparation:** prepare the substrate so that the adhesion shall be optimal. Remove the deteriorated or contaminated parts; remove eventual rust on the reinforcement, preferably by sandblasting. Clean the substrate with high water pressure.
- **Mixing:** Prepare 0,8 litre of clean water in pail and add one bag of 4 kg whilst mixing. Mix with paddle mixer until lump free and homogeneous. Let it rest for 1 minute and mix again for 30 seconds.
- **Application:** apply with trowel within 30 minutes. Do not remix, or add any water once the product has started to set. When applying on incoherent or difficult substrates, we recommend "brushing" the surface with a fluid version of the product using a hard brush. This will improve adhesion.
- **Consumption:** 1.9 kg/m<sup>2</sup>/mm

- It is not necessary to take any anti-evaporation measures (curing-compounds) but in extreme hot and windy conditions, protect the fresh repair adequately.

### PROPERTIES

- Density : 1,9 kg/Lt
- Compressive strength: 33-37 N/mm<sup>2</sup> (28 d)
- Flexural strength: 8-9,5 N/mm<sup>2</sup> (28 d)
- Adhesion to concrete: 2,0 N/mm<sup>2</sup>
- Pull-out rebars: >10 N/mm<sup>2</sup> (28 d)
- Carbonatation in time: 2,0 mm (8 years)  
11 mm (18 years)  
16 mm (25 years)
- Maximum particle size: 1,2 mm
- Initial setting time: 30 min (20 °C)
- Advised layer thickness: 4-15 mm
- Curing: wet: No
- Typical application: Levelling vertical substrates

### PACKAGING

Pail containing 2 bags of 4 kg.  
Total: 8 kg per pail.

### STORAGE

12 months shelflife when stored protected.

### PRECAUTIONS

Like all cement, lime, based products, skin and eyes can be irritated. Wear always gloves and safety glasses. Keep out of reach of children. Do not inhale the powder. In case of contact with eyes or skin, wash abundantly with water, and consult a doctor if irritation persists.

In case of doubt, check the safety datasheet.

### REMARK

The above data can be subject to changes . In that case, a new edition of this datasheet shall be edited. Use always the latest versions. No responsibility is taken for negative results, caused by external circumstances, other than the product quality.

Date of creation: 28.09.2009



**SIG Construction Accessories**

Head Office:

5 Fernhurst Road

Bristol BS5 7FG

T: 0870 4208331

F: 0117 301 3639

E: [sales@sigscp.co.uk](mailto:sales@sigscp.co.uk)

[www.sigscp.co.uk/sigca](http://www.sigscp.co.uk/sigca)

This information is based on our experiences and latest laboratory testing. The above information may be subject to modifications, which will be announced in the updated technical datasheets. Eventual changes to the information on top will be announced on [www.tecnochem.it](http://www.tecnochem.it) in which the technical datasheets are updated regularly and always the most updated can be found. SIG Construction Accessories cannot held responsible for poor results that are due to causes unconnected to the quality of the product or for defects deriving from factors different than the quality of the product including the wrong storage.