

# Fastfill WP

## Rapid Setting Water Plugging Mortar

### Product Overview

**Rapid setting cementitious plugging and sealing compound.**

### Uses

For arresting water seepage and infiltration under pressure through cracks, joints, and voids in concrete and masonry. Can also be used for rapid sealing and jointing in and around pipework on water retaining structures.

### Advantages

- Pre-packaged material requiring mixing with clean water.
- Low shrinkage and high bond strength ensure monolithic performance and a watertight seal.
- Sets in 2 minutes at 20°C., yielding a durable, high strength mortar.
- Physical properties of cured materials similar to base concrete.
- Polymer modified to ensure enhanced adhesion in jointing situations and prevent wash out.
- Non-toxic when cured.
- No more hazardous to handle than ordinary Portland cement.

### Description

**FASTFILL WP** is a single component, polymer modified, fibre reinforced, Portland cement-based plugging and sealing compound. When mixed with water, it exhibits unique hydraulic properties to produce a rapid setting mortar which can arrest water seepage and infiltration through joints, cracks or porous areas in concrete and masonry structures. It is ideally suited for sealing in and around pipework and for forming fillets in tanking situations.

### Specification Clause

The repair mortar shall be a single component, polymer modified, fibre reinforced, Portland cement-based plugging and sealing compound, which is physically and chemically compatible with the host concrete.

The cured repair mortar shall set in 2 minutes at 20°C., achieving a compressive strength of 4MPa in 1 hour and 26MPa in 28 days.

### Application Instructions

#### Preparation

Mechanically remove all damaged concrete and masonry back to a sound core. Joints and cracks should be square cut or ideally dovetail cut out to a minimum depth and width of 20mm. On cutting back, feather edges and V-cuts must be avoided. The perimeter of the area should be broken to a depth of 10mm preferably using a power chisel.

The areas to be treated must be free from all unsound material, i.e. dust, oil, grease, corrosion by-products and organic growth. Smooth surfaces should be roughened, and all loose material and surface laitance removed using high pressure water techniques.

The prepared substrate should be thoroughly soaked with clean water until uniformly saturated without any standing water.

#### Mixing

**FASTFILL WP** should be mixed by hand in a clean plastic or rubber bowl. Ideally no more than 0.5kg should be mixed at a time using an initial mix ratio by volume of 1 part of water to 3-4 parts of **FASTFILL WP**. Adjust the mix ratio as necessary to give a putty like consistency. Mixing time must not exceed 2 minutes.

#### Placing

The mixed material should be formed into a ball shape in a gloved hand until slight stiffening occurs. The **FASTFILL WP** should then be forced into the void with a minimum of working and held in place firmly for 1-2 minutes until setting occurs.

When sealing joints in pipework or forming a fillet at a wall/floor angle, a steel float or coving trowel may be used to produce the desired finish.

#### Curing

Once the **FASTFILL WP** has been placed and stiffened sufficiently, the surface should be kept in a damp condition for a minimum of 15 minutes to aid curing.

## Technical Data / Mechanical Characteristics

Property	Standard	Result
Compressive Strength Development @20°C	BS 4551	1 hour: 4.0MPa    1 day: 11.0MPa 2 hours: 5.0MPa    7 days: 19.5MPa 4 hours: 8.0MPa    28 days: 26.0MPa
Mixed Density		2150kgs/m <sup>3</sup>
Mixed Colour		Concrete grey
Min Application Thickness		20mm
Final Setting Time		2-3 minutes at 20°C.

The properties given above are obtained from laboratory tests: results obtained from on-site testing may vary according to site conditions.

### Cleaning and Storage

All tools should be cleaned with water immediately after use. Materials can be stored for 12 months in dry, frost free conditions with unopened bags at 20°C.

### Packaging

**FASTFILL WP** is supplied in 8kg packs.

### Yield and Coverage

4.25 litres of mortar per 8kg pack:

An 8kg pack covers 0.212m<sup>2</sup> at 20mm thickness

### Health and Safety

Safety Data Sheets are available on request.

### Application Top Tips

1. Experiment with water contents to achieve different setting times before progressing.
2. Use warm water to accelerate setting further and in cold conditions.
3. Half of a tennis ball or an old hard hat is an ideal mixing vessel.

The information herein is correct to the best of our knowledge, but it does not necessarily refer to the particular requirements of the customer. If the customer has any particular requirements it should make them known in writing to Flexcrete Technologies Limited, and obtain further advice accordingly.

