

## **R - 17F**

Rapid Setting And Hardening Internal Repair Mortar

Pack Size 11Kgs



### TDS Technical Data Sheet

#### Features

For infilling holes around fittings and for patch work on wall and floor areas For internal and external use Rapid hardening - walkable in 2 - 3 hours For repairing stair treads and risers To produce gradients for ramps To smooth wall and floor areas from 2 to 30 mm thick Easy to smooth and float Stress and crack free Wearing surface in lightly trafficked areas Ideal for patch repairs prior to the application of suitable damp proof membranes

#### Description

R-17F is a rapid setting and hardening, slump-free mortar ideal for external or internal repairs. The mortar sets and hardens rapidly, providing a repair of exceptional strength and hardness. The mixed mortar sets after 20 minutes and can be trafficked after only 2 - 3 hours at 27  $\pm$  1°C. R-17F is ready to receive floor coverings that are not sensitive to moisture, such as ceramic tiles, after 24 hours at 27  $\pm$  1°C.

#### Use

R-17F is ideal for:

- Repairing and refacing external concrete stair treads and risers, brickwork (not lightweight concrete), renders, and concrete floors.
- Filling and patching cracks in walls and floors.
- Making good around pipework, door and window frames.
- Forming ramps from 2 mm to 30 mm in thickness.
- Making patch repairs prior to the application of a damp proof membrane.
- Forming coves.

R-17F may be used as a wearing surface in lightly trafficked areas. For heavy-duty areas, consult CLI for guidance.

#### **Surface Preparation**

R-17F can be applied to dry or moist substrates, provided they are hard, sound, and free of dust, grease, oil, and other barriers to adhesion. Worn or trafficked surfaces should be mechanically prepared to remove contamination and expose a clean surface to ensure good adhesion. Very dense, smooth, impervious surfaces should be primed with sand-blinded CLI IF - 3E Solvent Free Epoxy Primer. Priming is not usually necessary on concrete, cement/sand, brickwork, etc., unless the surface is extremely porous. On absorbent substrates, the mortar must be initially applied firmly in a thin layer; after that, apply the mortar to the required thickness Product Data Sheet

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#### Mixing

The R-17F powder is added to the required amount of clean water in a clean mixing container and mixed thoroughly to obtain a lump-free and slump-resistant mortar. The mix proportions are:

- 25 kg R-17F powder to 6 7 liters of water
- 11 kg R-17F powder to 2.7-3 liters of water

Avoid using too much water. The mixed mortar has a working time of 15 to 20 minutes at 27 ± 1°C, this time being extended at lower, and reduced at higher temperatures. R-17F can be applied from 2 mm to a maximum of 30 mm in thickness.

#### Application

**Repairs:** Apply the mortar with a trowel to holes, cracks, and damaged areas, ensuring that the mortar "wets" the surface by troweling it in firmly, leaving the repair proud. After about 10 minutes, trim off excess and finish with a wet trowel, sponge, or sponge float to obtain a smooth surface. This smoothing operation needs to be completed within 15 minutes of application. As soon as the R-17F repair has hardened, the surface of the floor, stair tread, etc., can be leveled, if necessary, with the appropriate CLI sub-floor smoothing compound. Smoothing and Refacing: Apply the mixed mortar with a trowel to the required thickness, considering the short working time. The material may be finished with a wet trowel after 10 to 15 minutes to provide a finish suitable for the direct application of tiles or stone. Apply at temperatures above 5°C. The finished surface must be protected against direct sunlight and drafts, which could lead to rapid drying of the surface.

#### Cleaning

R-17F can be removed from tools and equipment by washing in clean water immediately after use. Any hardened material will need to be removed mechanically.

#### Properties

The values shown are typical of results obtained in the laboratory at 27 ± 1°C. Actual performance values obtained on-site may vary from those quoted.

#### **Physical Properties**

Bulk density of powder:	approx. 1.3 kg/liter
• Weight of fresh mortar:	approx. 1.8 kg/liter
Working Time: approx.	15 minutes

#### **Compressive Strength**

• After 1 day:	10.0 N/mm <sup>2</sup>
• After 7 days:	15.0 N/mm²
After 28 days	: 20.0 N/mm²

#### **Tensile Bending Strength**

• After 1 day:	2.0 N/mm <sup>2</sup>
• After 7 days:	4.0 N/mm <sup>2</sup>
• After 28 days	: 6.0 N/mm²
Additional Properties	

# • Freeze-thaw and salt resistant: Yes • Suitable for Underfloor Heating: Yes

#### Coverage

• Approximately 1.4 kg R-17F powder/m<sup>2</sup>/mm.

• 11 kg: Approximately 8 liters (1/4 cu ft) of mortar.

• 25 kg: Approximately 18 liters of mortar.

#### Storage and Shelf Life

R-17F should be stored under the same conditions as cement. Store R-17F in cool, dry, shaded warehouses. R-17F should not be stored in direct contact with the floor. When stored under the correct conditions, R-17F will have a shelf life of 9 months.





Pack Size



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#### **Data Reliability**

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

#### Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information. **Legal Disclaimer** 

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