

## MONNELI NEOFIL F50 S1

*Highly Deformable Cementitious Tile Adhesive*

### Product Description

NEOFIL F50 S1 is a cement based professional grade highly deformable tile adhesive that works with most types of tiles and flexible substrate. NEOFIL F50 S1 is composed of a blend of cement, carefully selected aggregates, special additives, and polymers. The product is suitable for internal as well as external use.

It does not contain asbestos nor any other harmful components.

### Uses

- Easy to apply, single component product
- Highly deformable
- Flexible
- High bond strength
- Can be used internally and externally
- Suitable for use with underfloor heating system
- Immersed and wet areas tiling
- Eco-friendly
- Formulated to suit Middle East conditions

### Advantages

NEOFIL F50 S1 is used for internal and external tile laying both on wall and floor applications. It is suitable for use on the following:

- Ceramic tiles, natural stone conglomerates (Granite & Marble Terrazo), Porcelain Artificial Stone, and Large format tiles
- Laying of large format heavy tiles in internal and external applications
- Tile over tile applications & with heated screeds
- Laying on flexible substrates as well as dry walls (gypsum and cement boards)

### Instructions for Use

#### Surface Preparation

All surfaces should be sound, clean & uncontaminated. This preparation should leave an exposed concrete surface free from dust, loose particles, deleterious matter, oil, grease, chemical films & other contaminant. All loose particles of mortar, paint, etc. must be physically removed.

Concrete or blockwork: should be allowed to cure sufficiently so that all shrinkage movements take place before fixing tiles.

Gypsum supports: must be treated with PRIMER A16. Should not have a percentage of humidity more than 10%.

The surface of substrates must be moistened slightly with clean water to reduce the absorption of water from the mortar. Do not moisten the tiles.

#### Mixing

Place 5.0 – 6.0 liters of cold, potable water in the mixing bucket and add slowly 25kg bag of NEOFIL F50 S1 under continuous mixing for 3-4 minutes till a uniform lump free consistency mix is achieved. For mixing process, a slow speed drill (200- 300rpm) fitted with a suitable paddle is recommended.

Allow the mixed material to stand for about 10 minutes and remix briefly without adding further water.

#### Application

Apply the mixed mortar adhesive in a thin layer, and firmly press onto the surface that will be tiled and work with the trowel's flat edge. Comb the adhesive with a suitable notched trowel horizontally to achieve a 2-6 mm bed thickness. Spread the mortar adhesive to a manageable area that can be tiled within 5-10 minutes. Press the tiles firmly over the mortar adhesive and immediately knock them into the desired position. Adjust the position of the tiles, if required within its adjustability time of 10 minutes after installation.

In case of large size tiles, it is necessary to spread the adhesive also to the backside of the tile and then place the tile into the adhesive bed.

Apply enough material that can be tiled during the adhesive's open wet time. Spreading large areas may result in drying the adhesive before tiles can be fixed causing poor adhesion.

Allow the installed tiles to remain undisturbed for at least 24 hours.

Mortar adhesive must not rise between tile joints higher than halfway the thickness of the tiles. It is recommended to use Neofil Color to fill the joint gaps after 2 days of installation.

If more deformability is required to reach S2 specifications, the mixing water is either completely replaced or partially replaced by 2.5 liters of Elastokol depends on the flexibility needed.

### **Cleaning**

Tools and equipment should be cleaned with water immediately after use. Hardened materials should be mechanically removed.

### **Recommendations**

- To achieve improve adhesion strength, it is recommended to replace water with ELASTOKOL
- The grey type presents higher mechanical resistances. It is therefore advisable to use to fix tiles on floor
- Stiffened mortar must neither be diluted with water nor with fresh mortar
- Do not use NEOFIL F50 S1 on metal, wood or non-absorbing surfaces
- Do not apply NEOFIL F50 S1 in rainy weather, high winds and sand storms
- Do not apply under direct sun
- Keep equipment cool and use cold water
- Porosity of tiles and substrates has significant effect on adhesive strength of tiles
- Marbles should not exceed 40kg/m<sup>2</sup> on vertical applications.

## **Technical Data**

Properties	Results
Appearance	Powder
Color	Grey or White
Wet density	1.55 kg/L
Application thickness	2 to 6mm
Working time	60 minutes
Open time	30 minutes
VOC	<25 g/L
Compressive Strength At 28 days (BS EN 196-1)	10 N/mm <sup>2</sup>
Bond Strength at 28 days (BS EN 1348)	1.3 N/mm <sup>2</sup>

All values are subject to 5-10 % tolerance

## **Applicable Standards**

- European EN 12004 C2TE S1
- European EN 12004 C2TE S2 (if mixed with ELASTOKOL)
- ISO 13007 – C2TE S1
- ISO13007 C2TE S2 (if mixed with ELASTOKOL)

## **Consumption**

Approx. 5.0 to 6.0 m<sup>2</sup> per 25 kg bag of NEOFIL F50 S1 Consumption will vary according to type of tiles and support condition.

## **Packaging**

NEOFIL F50 S1 is packed in 25Kg bags.

## Storage

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Store in dry covered place in the original closed bags and shelf life is 12 months if stored as recommended.

## Health & Safety

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NEOFIL F50 S1 can be harmful to skin as it contains cement powders which may releases alkalis when mixed with water.

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

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