## Cemfix® Porcelain

High performance porcelain tile adhesive



#### **DESCRIPTION**

Cemfix Porcelain is a single component, high performance tile adhesive consisting of a blend of cement, well graded aggregate, and high content of modified polymers that forms when mixed with water an outstanding tile adhesive that is capable of fixing all types of heavy or large ceramic tiles and natural stone on all common construction substrates that may be subjected to vibration or limited deflection internally or externally.

The high flexibility characteristics of Cemfix Porcelain make it highly recommended for fixing large format tiles or heavy natural stone such as marble and granite on floors and walls, these characteristics make it an excellent choice for fixing tiles over headed screed or for external applications like balconies and terraces where floors and walls are continuously exposed to temperature variations.

#### **APPLICATIONS**

- Fixing all types of porcelain tiles
- » Specialised for heavy & large format porcelain tiles
- » Specialised for outdoor applications.
- Tile over tile applications:
  - i. Porcelain over porcelain;
  - ii. Porcelain over ceramic;
- » High flexibility to resist high temperature variations.

#### **ADVANTAGES**

- » High flexibility characteristic to cope with the movement in substrates.
- » High bond strength.
- » Extended open time for easier application.
- » Easy to apply, non-sag with good workability.
- » Ready mixed, just requires an addition of water.

## **LIMITATIONS**

Do not use for:

- Thick bed applications.
- Cases that require a rapid utilization for the surfaces.
- » On metal, rubber, PVC or wood substrates.

#### **STANDARDS**

Cemfix Porcelain complies with the following standards:

- » ISO 13007-1 and BS EN 12004 as an improved cementitious tile adhesive with slip resistance, extended open time and deformability characteristics (C2TES1).
- » ANSI A118.4 for shear strength requirements.

## **TECHNICAL PROPERTIES. W/P = 0.30:**

Colour: White or grey

Fresh wet density:  $1.75 \pm 0.1 \text{ g/cm}^3$ 

Open time:

ISO 13007-2.4.1

Pot life: 2 hr @ 25°C

# Tensile adhesion strength in compliance with ISO 13007-2.4.4

Initial bond @ 28 days > 1.0 MPa
After heat exposure > 1.0 MPa
After water immersion > 1.0 MPa
After freeze/thaw cycles > 1.0 MPa

Slip

ISO 13007-2.4.2 < 0.5 mm

Transverse deformation:

ISO 13007-2,4.5 ≥ 2.5 mm

VOC: < 10 g/ltr

ASTM 2369 (comply with LEED)

#### **METHOD OF USE**

## SUBSTRATE PREPARATION

All surfaces must be clean, dry and free from dust, oil, grease, paints or any loose material.

Concrete and cement based substrates must be sufficiently cured and dimensionally stable. Allow time for shrinkage and structural strain movements.

Gypsum boards, plaster boards, anhydrite screeds, or any highly absorbent cement based substrates such as hollow blocks and foam concrete must be sufficiently dry and free from dust. These substrates must be primed with Keybond 2000 diluted with water at a ratio of 1:2 by volume (1 part Keybond 2000 to 2 parts water).

Tiles should not be placed over expansion and contraction joints, these joints should be filled with a suitable flexible sealant from the DCP Flexseal range.





#### **MIXING**

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

5.8 - 6.2 litres of clean fresh water for each 20 kg bag (water/powder ratio of 0.29 - 0.31 by weight) should be added to a clean container. The powder is then added slowly to the water while mixing continuously at low speed (400 - 600 rpm).

Mixing time should be continued for 3 minutes until a uniform consistency and a lump free mixture is obtained. Allow the mixto rest for 2 - 3 minutes, then remix for an additional minute without adding any more water.

## **APPLICATION**

- » Apply a thin layer of the adhesive onto the substrate using the flat edge of the trowel.
- Comb the adhesive with a suitable notched trowel horizontally to achieve a bed thickness of 2 - 5 mm.
- » Place the tiles with firm pressure to ensure proper contact with the adhesive.
- It is always better to work in a manageable area that can be tiled within the open time of the adhesive.
- » Leave the tiled surfaces for 24 hours before grouting.

## **CLEANING**

All tools should be cleaned immediately after use with fresh clean water. Hardened materials should be cleaned mechanically.

## **REMARKS**

- » Do not apply at temperatures below 2°C.
- For heavy traffic or submerged areas, it is good practice to apply adhesive to the back of the tile to ensure 100% coverage.
- » For large format and heavy tiles where the weight of the tiles cannot be supported by the adhesive, the installation method shall follow a bottom-up approach, and If more than two rows of tiles are to be fixed simultaneously, the tiles are to be mechanically supported using temporary anchor nails in between tile gaps or by using inclined support stud.

For further information please contact your local DCP Office.

## **PACKAGING**

Cemfix Porcelain is available in 20 kg bags.

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#### **YIELD**

7.4 m<sup>2</sup>/20 kg bag @ 2 mm thickness.

#### **STORAGE**

Cemfix Porcelain has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 50°C.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

#### **CAUTIONS**

#### **HEALTH AND SAFETY**

As Cemfix Porcelain contains Portland cement and sand, Cemfix Porcelain may cause irritation to skin or eyes. Gloves and goggles should be worn.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.

For further information refer to the Safety Data Sheet.

## **FIRE**

Cemfix Porcelain is nonflammable.

#### DCP Saudi Co.

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