

Two component, highly deformable, modified cementitious ceramic tile and stone adhesive with high slip resistance and extended open time

### **DESCRIPTION**

Cemfix 2C Flexible is a two component tile adhesive consists of special blend of cement, well graded aggregate and modified additives that forms when mixed with the synthetic latex liquid admixture a high performance tile adhesive with exceptional bond strength and deformability characteristics.

These characteristics make Cemfix 2C Flexible ideally suitable for bonding all types of large format tiles and stone internally or externally in dry, wet or continuously submerged areas.

Cemfix 2CFlexible is highly recommended for fixing tile in difficult cases such as tiling over all kind of conventional substrates that are subjected to vibration or deflections or tiling over existing tiles.

#### **APPLICATIONS**

- » Laying large format tiles and natural stone over concrete and cement base screed, mortar and plaster substrates.
- » For tile over tile applications.
- » Laying all types of ceramic tiles and stone on all common construction substrates where slightly movements or deflections are likely.
- » For permanent fixing of all types of ceramic, porcelain and other non-porous tiles on submerged condition such as swimming pools and fountains.
- » Highly recommended for bathrooms, kitchens and other wet areas.
- » Excellent for external application such as terraces and balconies.
- Excellent for underfloor heating systems.
- » Non-sag, can be used for vertical walls.
- On drywall such as gypsum boards and plaster boards.
- » May be applied on metal substrates depending on type of metal, surface roughness, application orientation, and exposure conditions. Consult DCP Technical Department for specific recommendations.

#### **ADVANTAGES**

- Exceptional bond strength between all types of tiles and all common construction substrates.
- » High deformability characteristic to cope with the deformation in substrates.
- » Superb performance in submerged conditions.
- » Extended open time.
- » Easy to apply, non-sag with good workability.

## **TECHNICAL PROPERTIES:**

Colour: White or grey

Fresh wet density:  $1.70 \pm 0.10 \text{ g/cm}^3$ 

Open time: 30 min

ISO 13007-2.4.1

Pot life: 2 hr @ 25°C

Shear strength,

Porcelain tile: > 1.4 MPa @ 28 days

ANSI A118.4,5.2.4

Shear strength,

Porcelain tile after > 1 MPa @ 7 days

ANSI A118.4.5.2.3

Shear strength, Glazed

wall tile: > 2.1 MPa @ 28 days

ANSI A118.4,5.1.5

## Tensile adhesion strength in compliance with ISO 13007-2.4.4

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

cycles

Slip: < 0.5 mm

VOC: < 10 g/ltr

ASTM 2369 (comply with LEED)

## LIMITATION

Do not use for:

- Cases that require a rapid utilization for surfaces.
- On rubber, or PVC substrate.

## **STANDARDS**

Cemfix 2C Flexible 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 high deformability characteristics (C2TES2).
- » ANSI A118.4 for shear strength requirements.



#### **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.

The liquid part of Cemfix 2C Flexible should be added to a clean container. The powder is then added slowly to the liquid while mixing continuously at low speed (400 - 600 rpm).

Mixing time should be continued for 3 minutes until a uniform consistency and free of lumps mixture is obtained.

Allow a slake time for 2 - 3 minutes, then remix for additional 1 minute.

## **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 wet 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 temperature below 2°C.
- For heavy traffic or submerged areas, it is good practice to back butter the tile back surfaces with the adhesive 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 Representation Office.

#### **PACKAGING**

Cemfix 2C Flexible is available in 15.3 kg powder part and 4.7 kg liquid part.

## **YIELD**

Approximately 4 m<sup>2</sup>/20 kg @ 3 mm thickness.

#### **STORAGE**

Cemfix 2C Flexible has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C.

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

## **CAUTIONS**

## **HEALTH AND SAFETY**

As Cemfix 2C Flexible contains Portland cement and sand, Cemfix 2C Flexible may cause irritation to skin or eyes. 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 Material Safety Data Sheet

## **FIRE**

Cemfix 2C Flexible is nonflammable.

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- » Concrete admixtures.
- » Surface treatments
- >> Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.



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