# Cemfix C1 ECO

General purpose, cementitious tile adhesive for ceramic tiles, C1



## DESCRIPTION

Cemfix C1 ECO is a general purpose, cement based tile adhesive for bonding all types of ceramic tiles and stone on most common construction substrates.

Cemfix C1 ECO is supplied in the form of grey powder that is ready to use with the addition of water to provide a workable and easy to apply tile adhesive. Cemfix C1 ECO complies with the requirements of EN 12004 as a normal cementitious tile adhesive (C1).

## APPLICATIONS

- » For wall and floor applications.
- On concrete, cement based mortar, screed and plaster.
  On drywall such as gypsum boards and fibre cement
- On drywaii such as gypsum boards and libre cement boards.
   Used fearersi vitrified tiles such as example and feirers.
- >> Used for semi-vitrified tiles such as ceramic and faience tiles (absorption 3% – 10%), and non-vitreous tiles such as terracotta (absorption 10% - 20%).

#### **ADVANTAGES**

- » General purpose can be used in wet or dry conditions.
- » Good bond strength to all common substrates.
- » Easy to apply, with good workability.
- » Economical.
- » Ready mixed, just requires the addition of water.

### LIMITATIONS

Do not use for:

- » Continuously submerged conditions.
- » Thick bed applications.
- » Tile over tile applications.
- » Cases that require a rapid utilization for the surfaces.
- » On metal, rubber, PVC or wood substrates.
- » for vitrified or impervious tiles such as porcelain (absorption < 3%), use C2 grade tile adhesives instead.</p>

## STANDARDS

Cemfix C1 ECO complies with EN 12004 as a normal cementitious tile adhesive (C1).

#### 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.

## **TECHNICAL PROPERTIES @ 25°C:**

Fresh wet density: BDS EN 1015-6	1.60 ± 0.10 kg/m³
Open time: ISO 13007-2,4.1	20 min

Tensile adhesion strength in compliance with EN 12004

Initial: BDS EN 1348	≥ 0.5 N/mm²
After immersion in water: BDS EN 1348	≥ 0.5 N/mm²
After heat ageing: BDS EN 1348	≥ 0.5 N/mm²
Tensile adhesion strength after freeze- thaw cycles: BDS EN 1348	≥ 0.5 N/mm²
Open time - tensile adhesion strength: BDS EN 1346	≥ 0.5 N/mm² (after 20 min)

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 to avoid drying the adhesive too quickly. When laying tiles on gypsum bases, ensure to pre-prime with Grundix Contact+.

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. 7.0 - 7.5 litres of clean fresh water for each 25 kg bag (water/ powder ratio of 0.28 - 0.30 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 free of lumps mixture is obtained. Allow a slake time for 2 - 3 minutes, then remix for additional 1 minute without adding any more water.

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#### APPLICATION

- Apply a thin layer of the adhesive onto the substrate using the flat edge of the trowel.
- >>> Use a notched trowel to have a uniform thickness according to the size of the tile.
- Comb the adhesive horizontally with a suitable notched trowel with a tooth size of 8 x 8 or 10 x 10 mm to achieve a bed thickness of 2 - 5 mm.
- » On a very flat base you can also use a 6 x 6 mm trowel.
- » For vertical application on walls, the adhesive should be combed with a trowel only in a horizontal (parallel) direction to the floor.
- Place the tiles with firm pressure and fix it in place with a rubber hammer to ensure proper contact with the adhesive leaving no cavities or air bubbles.
- When laying larger tiles, apply the adhesive not only on the base but also on the back of the tile (back buttering).
- Leave a minimum of 2 mm of joint between the tiles, the joint for large tiles must be at least 3 mm.
- » For rooms larger than 36 m<sup>2</sup>, provide an expansion joint.
- It is always better to work in a manageable area that can be tiled within the open wet time of the adhesive.
- >> Use a damp sponge to clean the faces of the tiles from any accidental adhesive.
- Leave the tiled surfaces for 24 hours before grouting, brush the joints between the tiles before grouting.

#### CLEANING

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

#### REMARKS

- Laying the tiles should be performed only at the temperature of the base and the environment in the range from 5 to 25°C.
- For heavy traffic 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.

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Note:

#### PACKAGING

Cemfix C1 ECO is available in 25 kg bags.

#### YIELD

Approximately 6.5 - 7.0 m<sup>2</sup>/25 kg bag @ 3 mm thickness.

#### STORAGE

Cemfix C1 ECO has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 30°C.

If these conditions are exceeded, contact DCP Technical Department for advice.

#### CAUTIONS

#### **HEALTH AND SAFETY**

As Cemfix C1 ECO contains Portland cement and sand, Cemfix C1 Plus 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 C1 ECO 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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