

KingTile® C5

Thick bed, non-slip cementitious ceramic tile and stone adhesive for thicknesses up to 10 mm

DESCRIPTION

KingTile C5 is a grey or white blend of cement, well graded aggregates and special additives that forms when mixed with water a good workable and non-slip tile adhesive excellent for fixing all types of ceramic tiles and stone on floors and walls up to 10 mm thickness with no need for previous leveling internally or externally.

The non-slip properties that characterized KingTile C5 makes it suitable to be applied vertically without sagging and with no need for using spacers for normal sized tiles.

APPLICATIONS

- ☐ For permanent fixing of ceramic tiles and natural stone on irregular concrete and cement based substrates up to 10 mm thickness.
- ☐ Installing of natural stone and tiles with large thicknesses variation over all common construction substrates.
- ☐ Suitable for vertical wall applications.
- ☐ Suitable for internal and external applications.
- ☐ Can be used in wet or dry areas.
- ☐ Can be used with underfloor heating systems.
- ☐ On drywalls such as gypsum boards and plaster boards.

ADVANTAGES

- ☐ Specially designed to accommodate thick bed applications.
- ☐ Good bond strength.
- ☐ Easy to apply, non-sag with good workability.
- ☐ Ready mixed, just require requires the addition of water.

LIMITATIONS

Do not use for:

- ☐ Continuously submerged conditions.
- ☐ Tile over tile applications.
- ☐ Cases that require a rapid utilization for the surfaces.
- ☐ On metal, rubber, PVC, or wood substrates.

STANDARDS

KingTile C5 complies with the following standards:

- ☐ ISO 13007-1 and BS EN 12004 as a normal cementitious tile adhesive with slip resistance (C1T).

TECHNICAL PROPERTIES W/P = 0.28:

| | |
|---|------------------------------------|
| Colour: | White or grey |
| Fresh wet density: | 1.8 ± 0.1 g/cm ³ |
| Open time: ISO 13007-2.4.1 | 20 min |
| Pot life: | 2 hr @ 25°C |
| Shear strength, Porcelain tile: ANSI A118.1, 5.2.4 | >1 MPa @ 28 days |
| Shear strength, Porcelain tile after immersion: ANSI A118.1, 5.2.3 | >0.7 MPa @ 7 days |
| Shear strength, Glazed wall tile: ANSI A118.1, 5.1.4 | >1.7 MPa @ 28 days |
| Tensile adhesion strength in compliance with ISO 13007-2.4.4 | |
| Initial bond @ 28 days | ≥0.5 MPa |
| After heat exposure | ≥0.5 MPa |
| After water immersion | ≥0.5 MPa |
| After freeze/thaw cycles | ≥0.5 MPa |
| Slip: ISO 13007-2.4.2 | < 0.5 mm |
| VOC: ASTM 2369 | < 10 g/ltr (complies with LEED) |

- ☐ ANSI A118.1 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 KINGKRETE KingSeal range.

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MIXING

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

6.75 - 7.25 litres of clean fresh water for each 25 kg bag (water/powder ratio of 0.27 - 0.29 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.

APPLICATION

- ☞ Apply a 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 up to 10 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.

PACKAGING

KingTile C5 is available in 25 kg bags.

YIELD

3.5 m²/25 kg bag @ 5 mm thickness.

REMARKS

- ☞ Do not apply at temperatures below 2°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 KINGKRETE Representation Office.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative.

KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a



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management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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KK-SA-06.3-TC-C5-R3-2601

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.

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