



ICC Premiscelati

DIE KOLL C1TE

PROFESSIONAL QUARTZ CEMENT-BASED ADHESIVE
FOR LAYING OF CERAMIC TILES
WITH NO VERTICAL SLIP AND EXTENDED OPEN TIME



Description:

DIE KOLL C1TE is an easy-to-work, white or grey powder adhesive with high adhesive power and thixotropy it can be applied vertically without dripping and without letting tiles, heavy ones included, slip. Thanks to its extended open time, it counteracts the reduction in workability and setting times caused by the porosity of substrates and the absorption of tiles.

Areas of application:

Internal and external bonding of any kind of ceramic tiles and mosaics (single- and double-fired ceramics, porcelain tiles, klinker, terracotta, etc.) on floors, walls and ceilings, in domestic, commercial, and industrial environments. Suitable for laying on traditional walls plastered with conventional plaster or cement-based mortar, on ordinary cement screeds or reinforced floating cement screeds provided they are sufficiently cured and dry. Suitable for laying on gypsum substrates after treatment with **ICC GRIP primer**. Do not apply **DIE KOLL C1TE** on wooden, metal, rubber, PVC, linoleum substrates, plasterboard panels, prefabricated concrete and non-absorbent surfaces in general.

Substrate preparation:

Substrates must be cured (1 week for each centimetre of thickness and in any case at least 28 days, unless the substrate is made of special quick-setting binders), compact and mechanically strong, with no loose debris and moisture rising, sufficiently even, free from oil, grease, wax, dust, paint and dirt in general or anything else that may hinder adhesion to the substrate. Cement-based substrates must not be subject to shrinkage after the tiles have been laid. Any cracks or fissures must be suitably treated. Any depressions or differences in evenness must be corrected. Slightly dusty and very absorbent surfaces must be treated in advance with the special **ICC GRIP**

consolidating *primer*. Sun-drenched or predominantly dry surfaces must be moistened with clean water half an hour before laying; avoid applying adhesive on standing water.

Mortar preparation:

DIE KOLL C1TE is mixed using a mixer or drill-type mixing device with a low-rev agitator with approximately 6.2-6.7 litres of clean water per 25 kg bag, until a creamy, smooth and lump-free mixture is obtained. Leave the mixture to rest for approximately 5-10 minutes. Remix briefly the mortar and start laying. The product is not suitable for mixing by hand or with a concrete mixer.

Applicazione:

DIE KOLL C1TE is applied to the substrate with a toothed spreader of variable size depending on the format, size and characteristics of the back of the material to be laid. Spread a first layer of adhesive on the substrate with the smooth part of the spreader, then work it with the toothed part to obtain the thickness necessary for bonding the tiles. Important: only cover enough surface area with the adhesive in order to allow the tiles to be laid within the specified open time. Under standard environmental conditions the open time of **DIE KOLL C1TE** is more than 30 minutes; unfavourable conditions (direct sunlight, dry wind, high temperatures, very absorbent substrates) may drastically reduce open time. Check frequently that the adhesive has not formed an anti-adhesive surface film; if necessary, spread again the product with the toothed spreader. It is not necessary to wet the tiles; however, in case of tiles presenting a dusty surface, wash them by immersing them in clean water and remove surface water before laying. Press down the tiles to allow for uniform and complete contact with the adhesive. For external laying and when laying floors subject to heavy traffic, the double-spread technique must be used in order to ensure full wettability of the back of the tile.

Coverage:

With no. 5/6 spreader: approximately 2.5 - 3 kg/m².

With no. 8/10 spreader: approximately 4 - 5 kg/m².

TECHNICAL DATA

Consistency	White or grey powder
Maximum grain-size	0.6 mm
Density (wet mortar)	1.6 gr/cm ³ approximately
Mixing water for each 25 kg bag	6.2 ÷ 6.7 litres
Permitted application temperatures	from +5°C to +35 °C
Workability time	approximately 6 hours*
Setting time	approximately 45 minutes*
Wall joints	after approximately 4÷8 hours*
Floor joints	after approximately 24÷36 hours*
Foot traffic	after 24 hours*
Ready for use	after 14 days*

FINAL PERFORMANCE

Initial adhesion (after 28 days)	≥ 0.5 N/mm ² (EN 1348)
Adhesion after heat ageing	≥ 0.5 N/mm ² (EN 1348)
Adhesion after water immersion	≥ 0.5 N/mm ² (EN 1348)
Adhesion after 25 freeze/thaw cycles	≥ 0.5 N/mm ² (EN 1348)

Open time	≥ 30 minutes* (EN 1346)
Tile slip	≤ 0.5 mm (EN 1308)
Resistance to ageing	excellent
Moisture resistance	excellent

*Data measured at (23±2)°C and (50±5)% relative humidity. Lower temperatures lengthen curing and hardening times.

Cleaning of equipment:

Wash hands and equipment with plenty of clean water before the adhesive starts setting; mechanical means should be used afterwards.

Hygiene and safety:

EUH 208 Contains cement. May cause an allergic reaction. Portland cement contained in the product can cause skin irritation and serious eye injuries. Do not inhale dust, ventilate areas during mixing and carefully protect yourself with gloves, protective clothing and goggles. Before use, carefully read the instructions on the packaging and consult the Safety Data Sheet.

Packs:

DIE KOLL C1TE is available in bags of 25 kg each and delivered on 1500 kg wooden pallets.

Storage:

Store the product in its undamaged original packaging in a cool, dry place. Do not disperse dust. Cr VI content less than 2 p.p.m. Properly stored product must be used within 6 months of the packaging date stamped on the bag.

Warning:

Do not use on metal surfaces, wood, plastic, prefabricated concrete, old existing floors or floors subject to strong movements. We recommend to use **DIE KOLL C2TE ECO** when laying porcelain tiles. For laying on heated screeds or large formats and for any use that must take into account strong mechanical or hygrothermal stresses, use **DIE KOLL FLEX C2TE S1**, or use **DIE KOLL C1TE** mixed with **DIE LATEX** synthetic latex instead of water. If necessary, level the surfaces beforehand with a product from the **Industria Calce Casertana Srl** range and wait for it to cure before laying. Protect work carried out for at least 48 hours from rain, washouts or frost and for at least 5 days from direct sunlight. Do not apply on frozen substrates or in any case at ambient temperatures below + 5°C. It is recommended not to add unrelated products. Do not add water or the product to the mix during the setting phase. Do not use on panels coated with protective films. Only the latest updated version of this technical data sheet, available on the website www.calcecasertana.it, is to be considered valid.

PRODUCT FOR PROFESSIONAL USE ONLY

All the data and information contained in this technical data sheet, although resulting from laboratory tests performed and from our direct application experiences, due to the infinity of variables related to site conditions, are to be considered in any case as purely indicative. Before applying the product, the user is therefore required to establish whether it is suitable for the intended use, in the specific hygrothermal and application conditions provided for at the time of use. All responsibilities are therefore borne by the user. We are not liable for damage to persons or things deriving from improper use of the product.