
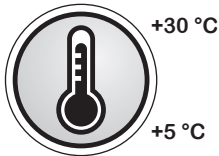


COMPAKTUNA®

FLEXcement® ECO

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COMPAKTUNA® bv/srl INDUSTRIEPARK ZWIJNAARDE 6 9052 GENT – BELGIUM 0679	
355/CPR/250214 EN 12004+A1:2012 FLEXcement® ECO Cementitious adhesive/floors and walls/internal and external	
Bond strength as: - Initial tensile adhesion strength (28 days)	≥ 1 N/mm²
Durability for: - Tensile adhesion strength after heat ageing - Tensile adhesion strength after water immersion - Tensile adhesion strength after freeze-thaw cycles	≥ 1 N/mm² ≥ 1 N/mm² ≥ 1 N/mm²

CHARACTERISTICS



Flexible construction and
tile adhesive



FLEXcement® ECO is a dry mixture that, by simply adding water, produces a ready-to-use adhesive with high “flexibility.”

FLEXcement® ECO has the following special properties:

1. Exceptional adhesion that far exceeds that of traditional tile adhesives.
2. Remarkable elasticity not found in traditional tile adhesives. This allows FLEXcement® ECO to economically replace paste adhesives (e.g., for bonding on chipboard).
3. Excellent workability thanks to specific additives.
4. A combination of qualities that provide solutions in difficult situations. FLEXcement® ECO, for example, is the solution in many applications for tile-on-tile bonding (interior use only).

FLEXcement® ECO not only covers the range of traditional cement-based and paste adhesives, but also finds many applications where these products no longer offer a solution. With FLEXcement® ECO, the following materials can be bonded both indoors and outdoors: faïence, ceramics, mosaic, etc., onto substrates such as concrete, masonry, cement rendering, aerated concrete, chipboard, veneer panels (the last three only indoors and preferably prepared with MEMBRANE LIQ), etc. Even tile-on-tile bonding (indoors) is possible with FLEXcement® ECO.

For the installation of natural stone, we recommend applying adhesive over the entire surface of the slab and not using dabs or dots. FLEXcement® ECO is a lightweight adhesive that spreads very easily. Due to its excellent bonding properties, it is particularly well-suited for vertical applications. Slippage on vertical surfaces is minimal. Additionally, the adhesive is sufficiently cured 24 hours after application (at +23 °C) to allow foot traffic and grouting of the tiles.

Based on CE marking, FLEXcement® ECO has been tested. The CO₂ reduction is achieved for products that offer the same performance for the same application compared to existing and commercialized products. The ECO label reflects a demonstrable and significant effort by COMPAKTUNA to reduce the CO₂ footprint of new products.

Mixing ratio	Consumption	Packaging
±5 L mixing liquid per 20 kg bag (± 25%)	±1,4 kg/mm² in powder	20 kg PE
Colour	Processing time	Operating temperature
Grey	±3 hours	+5 °C to +30 °C

Technical characteristics	Corresponds to the requirements according NBN EN 12004-1 (MPa (N/mm²))
Initial bonding (C2)	≥ 1
Bonding after immersion in water (C2)	≥ 1
Bonding after aging at +70 °C (C2)	≥ 1
Bonding after freeze-thaw cycles (C2)	≥ 1
Bonding after open time of 20 minutes	≥ 0,5
Bonding after open time of 30 minutes (E)	≥ 0,5
Vertical slip resistance (T)	≤ 0,5 mm
Flexibility (S1 according to EN 12004-1)	≥ 2,5

DIRECTIONS FOR USE

Work must always be carried out on a clean, sound, dust- and oil-free substrate. Highly absorbent substrates should first be treated with a COMPAKTUNA® (PRO)/water solution (1/4) or with PRIMER PO. Panels used as a substrate must always be securely fixed before tile installation begins. FLEXcement® ECO is mixed with approximately 25% water, i.e., about 5 L of water per 20 kg of product. After thorough mixing, let the mixture rest for 5 to 15 minutes. Then mix the adhesive thoroughly again. The adhesive is now ready for use. First, apply a thin layer to the substrate using a trowel or notched trowel. This layer must be pressed in firmly. Immediately after, apply a second layer using a notched trowel (notch size 4 to 10 mm, depending on the size of the tiles), creating even ridges. Then press the tiles firmly into place with a slight twisting motion. The open time of the applied adhesive layer depends on the working conditions and the substrate. Grouting (with JOINT HY or JOINT-BREED SP) should only be done once the adhesive has developed sufficient strength (depending on temperature and humidity — wait at least 24 hours).

SPECIAL APPLICATIONS

FLEXcement® ECO can also be used to replace the cement slurry that is poured onto a fresh screed (within 24 hours) when installing tiles using the traditional method. This offers numerous advantages:

- Due to its high polymer content, it provides an elastic, rock-solid bond;
- Thanks to its even distribution, it ensures perfect placement;
- Because air can escape from under the tile, full adhesion is achieved, even with large-format tiles.

To obtain this paste, FLEXcement® ECO is mixed with approximately 35–40% water, i.e., 7 to 8 liters of water per 20 kg bag. Mixing is preferably done mechanically until a smooth, plastic paste is obtained. Let it rest for about 10 minutes before mixing again. Then pour the paste onto the fresh cement screed and spread it evenly with a notched trowel. The tiles are pressed into place with a twisting motion. For small-format tiles, use a trowel with small notches; for large-format tiles, it is best to use a larger notch size to better accommodate the irregularities of such tiles.

REMARKS

- The contact surface between tile and adhesive must be at least 80%.
- For outdoor applications and heavily loaded surfaces, full bonding is recommended.
- The joint construction is designed so that occurring stresses (e.g., due to expansion) can be absorbed by the tile surface. Restraints against ceilings, floors, columns, etc., must be avoided; expansion joints in the substrate must be continued through the tile surface. All these joints are sealed with an elastic joint sealant (SILICONE SN & NA).
- In some cases, a primer layer with COMPAKTUNA® PRO/water solution (1/4), PRIMER BL, or PRIMER PO may be necessary.
- For non-compatible substrates, such as anhydrite screed, after drying (the moisture content must be a maximum of 0.3%) and any pretreatment (sanding — consult the screed supplier), the substrate must be pretreated with a COMPAKTUNA® (PRO)/water solution (1/3) or with PRIMER PO. Then wait 24 hours before starting the bonding process.
- Protect drying tile adhesive from frost, precipitation, strong wind, and direct sunlight. The work must be sheltered from cold, driving rain, and wind.

PACKAGING

FLEXcement® ECO is available in grey in 20 kg polyethylene bags. The shelf life is 12 months when stored dry in the original, unopened packaging.

