COMPAKTUNA®

# FLEXcement® PLUS

## Flexible construction and tile adhesive

CE
06

COMPAKTUNA® bv/srl
INDUSTRIEPARK ZWIJNAARDE 6
9052 GENT – BELGIUM

1136

081/CPR/130701

EN 12004+A1:2012

FLEXcement® PLUS

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 | ≥ 1 N/mm² |
| - Tensile adhesion strength after water immersion | ≥ 1 N/mm² |
| - Tensile adhesion strength after freeze-thaw cycles | ≥ 1 N/mm² |

GEV-EMICODE EC 1 PLUS very low emission

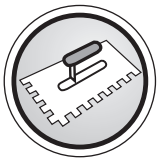
CONFORM C2 TE S1 NBN EN 12004

## CHARACTERISTICS

FLEXcement® PLUS is a dry composition that will give a ready-to-use glueing mortar for tiles with great “flexibility” by the simple addition of water.

FLEXcement® PLUS has the following special characteristics:

1. An extra-ordinary **adhesion** that is far superior to the ordinary conventional glueing mortars on cement base.
2. An extra-ordinary **elasticity** that is not found in the common conventional adhesives on cement base. This allows FLEXcement® PLUS to economically replace the paste-glues (for instance, for gluing on chipboards and woodfibre boards).
3. A total range of qualities that can offer solutions in problematic areas. FLEXcement® PLUS offers solutions in the numerous applications of gluing tiles to tiles (only for indoor work).



FLEXcement® PLUS is not only used for traditional adhesive cements and pasteglues, but admits of numerous solutions for which these products do not offer any answers. With FLEXcement® PLUS, the following materials can be glued, both indoors and outdoors: tiles, ceramics, mosaics, and the like, and this on bases such as concrete, masonry, cementation, cellular concrete, chipboards, wood-fibre boards, veneer sheeting (the latter two only indoors), and the like. Even the glueing together of tiles to tiles is possible with FLEXcement® PLUS (only indoors). Floors with floor-heating can also be tiled with FLEXcement® PLUS.

FLEXcement® Plus can be used as tile adhesive for tiles up to 1 x 1 m on heated floors (see reports R2EM/EM 18-CC-020 and R2EM/EM 18-CC-006). For the application of large format tiles some guidelines and precautions must be followed. They can be found in our advice : « Application of XL-tiles on heated floors »., that can be obtained upon simple request.

Before installing natural stone, we recommend that you coat the entire panel with glue ironing and not working with studs. The bonding of certain natural stones (e.g. marble) must be done with FLEXcement® PLUS white. FLEXcement® PLUS is an easily workable adhesive that is very easy to spread. Due to its excellent adhesive properties, it is very well adapted for bonding to walls. The vertical sag is minimal. The adhesive has also hardened sufficiently 24 hours after installation (at +23 °C) to enter the area and grout the tiles. Based on CE marking, FLEXcement® PLUS gray and white has been tested.

| Technical characteristics | Corresponds to the requirements according NBN EN 12004-1: 2017 (MPa (N/mm²) |
|---|---|
| Initial tensile adhesion strenght (C2) | ≥ 1 |
| Tensile adhesion strenght after water immersion (C2) | ≥ 1 |
| Tensile adhesion strenght after heat ageing +70 °C (C2) | ≥ 1 |
| Tensile adhesion strenght after freeze-thaw cycles (C2) | ≥ 1 |
| Open time: tensile adhesion strenght after 20 minutes | ≥ 0,5 |
| Extended open time: tensile adhesion strenght after 30 minutes (E) | ≥ 0,5 |
| Slip resistance (T) | ≤ 0,5 mm |
| Flexibility (S1 according to EN 12004-1: 2017) | ≥ 2,5 |

| Mixing ratio | Consumption | Packaging |
|---|---|---|
| ±6,5 L water per bag of 25 kg (±26%) | ±1,4 kg/mm/m² in powder | 25 kg PE |
| **Colours** | **Processing time** | **Application temperature** |
| Grey & white | ±3 houres | +5 °C till +30 °C |

# FLEXcement® PLUS

## DIRECTIONS FOR USE

The application shall be carried out on a non-frozen, clean, well maintained surface free of dust and oil spots and bits of loose substances. Porous surfaces need to be lightly dampened prior to application with a layering of COMPAKTUNA®(PRO)/water solution (1/4) or with PRIMER PO. Plates and sheeting that serve as base need to be attached in a stable position prior to the positioning of the tiles. FLEXcement® PLUS is mixed with ±26% of water, which is ±6,5 l of water per 25 kg of product. After careful mixing, leave the mortar thus achieved to settle for 5 to 15 minutes. Then vigorously mix the mortar once again. The mortar is now ready for use. With a trowel or an adhesive trowel, first apply a thin layer and make certain this layer is firmly fixed to the surface. Immediately apply a second layer that is distributed with an adhesive trowel (4 till 10 mm) in regular ridges. Next, position the tiles firmly in place with a slight twisting action. The available time for the layer to settle depends on the application circumstances and the nature of the surface. The maximum thickness of the layer is 4 mm. The joining work (with JOINT HY or JOINT BREED) is carried out only after the glue has achieved sufficient resistance (depending on temperature and humidity - wait at least 24 hours).

## SPECIAL APPLICATIONS

FLEXcement® PLUS can also be used to replace cement paste that is poured onto a new fresh floor pavement (within 24 hours) when positioning tiles in the conventional manner. **This offers a large number of advantages:**

- an elastic, rock-hard adhesion because of its high plastic content;
- a perfect position because of its equal distribution;
- because the air can escape from under the tile, full adhesion is achieved, even with large-format tiles.

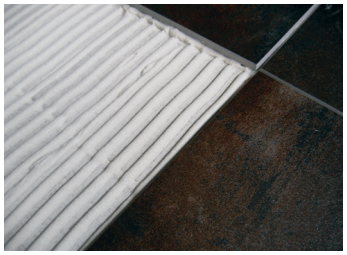
To achieve this paste composition, mix FLEXcement® PLUS ±40% water, which is ±10 L of water per bag of 25 kg. The mixing process is carried out preferably by mechanical means until a smooth, plastic paste is obtained. Let the paste settle for ±10 minutes before stirring it once again. Afterwards, pour the paste onto the fresh cement mortar and distribute it evenly with an adhesive trowel. The tiles are to be placed in position with a twist of the wrist. For small-size tiles use a trowel with small teeth. For large-size tiles (30 x 30 to 60 x 60) it is recommended to use trowels with larger teeth to better catch the irregularities of such tiles.

## REMARKS

- The contact surface between tile and adhesive must be at least 80%. Full bonding is recommended for outdoor applications and heavily loaded surfaces.
- The jointing work is carried out in a way that possible tensions (for instance, as a result of dilatation) can be dealt with by the tiling surface. Clamping against ceilings, floors, columns, and the like needs to be avoided; dilatation joints in the bearing surface need to be picked up in the tiling surface. All these joints need to be sealed off with an elastic jointing kit (SILICONE SN & NA).
- In some cases, a base layer with COMPAKTUNA® (PRO)/ water (1/4) or PRIMER PO may be necessary.
- For non-compatible substrates, such as an anhydrite screed, after drying (the maximum mass moisture content should be 0.3%) and any pretreatment (sanding, ask the supplier of the screed for advice) the substrate must be pre-treated with a COMPAKTUNA® (PRO)/water solution (1/3) or with PRIMER PO. Then wait 24 hours before starting to bond.
- Protect drying tile adhesive against frost, precipitation, strong wind and direct sun.
- The works must remain protected from cold, driving rain and wind.

## PACKAGING

FLEXcement® PLUS is available in grey and white colour in polyethylene bags of 25 kg. The shelf life is 12 months in the original, closed packaging and kept dry.



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As the applications of our products are diverse, no single application guideline can be laid down. All product data refl ect the state of knowledge of our products at the time of publication. Therefore all suggestions and recommendations concerning the use of our products are merely illustrative. Apply the product on a small and insignifi cant spot before starting to use our products to be sure the desired result is obtained. Always ask for the technical sheet of our products. Visit the website www.compaktuna.be. Consult our "technical department" which can be reached for free on the green number 0800/92279. The Dutch text shall be exclusively binding. Version 10/02/2014. **COMPAKTUNA BV is EN ISO 9001 certified.**

COMPAKTUNA®
Quality & Innovation

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**COMPAKTUNA bv/srl**
Industriepark III
Industriepark Zwijnaarde 6
9052 Gent - Belgium
T +32 9 221 11 16
VAT BE0400.166.768 - R.P.R. Gent
info@compaktuna.be
www.compaktuna.be