



# FLEXcement®

## Cement based tile glue

<b>CE</b> 1136	
POLYTECHNISCH BEDRIJF BVBA/SPRL – P.T.B.-COMPACTUNA® INDUSTRIEPARK ZWIJNAARDE 6 9052 GENT – BELGIUM	
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023/CPR/130701 EN 12004+A1	
FLEXcement® Cementgebonden tegelijm/wand en muur/binnen en buiten Ciment colle/murs et sols/intérieur et extérieur Cementitious adhesive/floors and walls/internal and external Zementhaltiger Klebemörtel/Boden und Wand/Innen und Außen	
Brandklasse/Réaction au feu/Brandverhalten/Reaction to fire:	NPD
Hechtsterkte als/Force d'adhérence/Klebkraft/Bond strength as:	
- initiële hechting/adherence initiale/Haftzugfestigkeit nach Trockenlagerung/initial tensile adhesion strength (28 days)	≥ 1 N/mm <sup>2</sup>
Duurzaamheid/Stabilité d'adhérence/Haltbarkeit/Durability for:	
- hechting na veroudering onder hoge warmte/après action de la chaleur/ Haftzugfestigkeit nach Warmlagerung/tensile adhesion strength after heat ageing	≥ 1 N/mm <sup>2</sup>
- hechting na onderdompeling in water/après immersion/ Haftzugfestigkeit nach Wasserlagerung/tensile adhesion strength after water immersion	≥ 1 N/mm <sup>2</sup>
- hechting na vorst-dooicycli/après gel-dégel/ Haftzugfestigkeit nach Frost-Tauwechel-Lagerung/tensile adhesion strength after freeze-thaw cycles	≥ 1 N/mm <sup>2</sup>
Vrijstelling gevaarlijke substanties/Emission de substances dangereuses/ Freisetzung von gefährlichen Stoffen/Release of dangerous substances	MSDS



### Qualities



FLEXcement® 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® has the following special properties:

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® 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® offers solutions in the numerous applications of gluing tiles to tiles (only for indoor work).

FLEXcement® 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®, 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, wood-fibre boards, chipboards, veneer sheeting (the latter two only inside), and the like. Even the glueing together of tiles to tiles is possible with FLEXcement® (only indoors). Floors with floorheating can also be tiled with FLEXcement®.

TECHNICAL CHARACTERISTICS	Corresponds to the requirements according NBN EN 12004
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 min.	≥ 0,5
Extended open time: tensile adhesion strenght after 30 min. (E)	≥ 0,5
Slip resistance (T)	≤ 0,5 mm
Flexibility (S1 according to EN 12002)	≥ 2,5 mm

Mixing ratio	Consumption	Packaging
± 6 l water per bag of 25 kg (± 24 %)	± 1,4 kg/mm <sup>2</sup> , according to the thickness of the glue	5 & 25 kg
Colours	Processing time	Application temperature
Grey & white	± 3h	+ 5°C till + 30°C

## 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 P.T.B.-PRIMER. Plates and sheeting that serve as base need to be attached in a stable position prior to the positioning of the tiles. FLEXcement® is mixed with  $\pm 24\%$  of water, which is  $\pm 6$  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 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 P.T.B.-JOINT HY, P.T.B.-FILLER or P.T.B.-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® 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;
- since air can escape at the bottom of the tile, a 100 % adhesion is achieved, even when working with large-size tiles.

To achieve this paste composition, mix FLEXcement®  $\pm 35$  to 40 % water, which is  $\pm 8,5$  l to 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  $\pm 10$  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 large teeth to better catch the irregularities of such tiles.

## Remarks

- 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 (P.T.B.-SILICONE SN).
- In some cases, a base coating with COMPAKTUNA® (PRO)/water (1/4) or P.T.B.-PRIMER (BL) 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 pre-treatment (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 P.T.B.-PRIMER. Then wait 24 hours before starting the adhesive coating.

## Packaging

FLEXcement® is available in bags of 25 kg and 5 kg, in grey and white colours. Each bag of 25 kg contains a bag in polyethylene. Sustainability is 12 months in original, sealed packaging and dry preserved.

