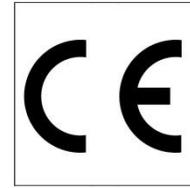
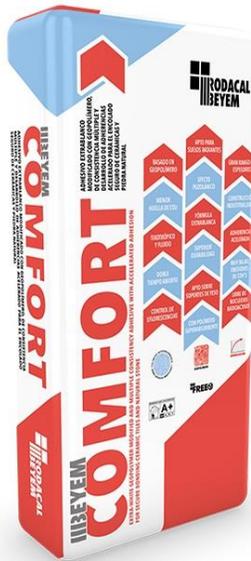


# Beyem Comfort

Extra-white geopolymer-modified and multiple consistency adhesive with accelerated adhesion for secure bonding ceramic tiles and natural stone.



EN 12004



- |                                 |                                |
|---------------------------------|--------------------------------|
| Geopolymer-based                | Superior durability            |
| Lower CO <sub>2</sub> footprint | Suitable on plaster substrates |
| Thixotropic and fluid           | With super absorbent polymer   |
| Doble open time                 | Wide range of thicknesses      |
| Efflorescence control           | Industrialized construction    |
| Suitable for underfloor heating | Accelerated adhesion           |
| Pozzolanic effect               | Very low VOCs emissions        |
| Extra-white formula             | Free of radionuclides          |

## About this product

BEYEM **Comfort** is an extra-white geopolymer-modified and multiple consistency flexible adhesive with accelerated adhesion for secure bonding ceramic tiles and natural stone. Formulated with geopolymer, synthetic resins, selected aggregates of exceptional whiteness, fibers, pozzolan and last generation superabsorbent polymers that provide an exceptional workability, accelerated adhesions and an effective pore structure that translates into a superior wetting capability in a greater range of thickness and consistency of the adhesive. It does not cause settlement. No vertical slip. Resistant to mechanical stress in all its types (tensile strength, flexural strength, compression and shearing). Excellent durability (chlorides, CO<sub>2</sub> penetration, sulfates, arid-alkali reaction and freeze-thaw cycles) thanks to its special formulation.

Indoor environment quality. Classified as A+ class according to Décret n°. 2011-321 (France). Free of radionuclides.

## Use

Laying of ceramic tiles of low/medium/high absorption, natural stone, vitreous mosaic, porcelain and stoneware tiles, etc ... in interior walls and interior and exterior floors. Laying of ceramic tiles of medium/high absorption in exteriors walls. BEYEM **Comfort** is especially suitable for laying natural stone, since it significantly reduces the formation of efflorescence. Thanks to its geopolymer-based formulation, BEYEM **Comfort** exhibits excellent performance on underfloor heating and/or cooling compared to other conventional solutions. Applications on gypsum-based substrates without the need for prior priming.

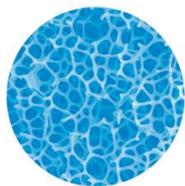
Suitable for laying ceramic tiles and existing ceramic tile floors. Swimming pools. Industrial and commercial applications (heavy traffic...) on floors. Ideal for industrialized construction and rehabilitation where a rapid development of performance and a wide range of thicknesses of use are required. Regularization.

## Substrates

BEYEM **Comfort** is suitable for the following substrates , among others:

- Cement based substrates.
- Cement based renders /plasters and screeds. Concrete floors. Cement based waterproofing membranes.
- Plasterboards. Gypsum-based substrates.
- Cellular concrete.
- Compact natural stone, underfloor heating and existing ceramic substrates (overcoating)
- Use over other materials (wood, etc ...) with previous BEYEM PRO primer.

## Technology and product certificates



### Super absorbent polymer on modified sepiolite

Provides an effective pore structure with "sponge" effect: the water is concentrated in the cavities of the adhesive, making a reserve and releasing it as needed.

Allows the use of the adhesive in a wide range of consistencies and thickness thanks to the intelligent management of the mixing water.

Allows internal curing of the material

Reduces the formation of skin by drying on the surface due to the homogeneous distribution of water.

Result: Doble open time



**Accelerated adhesion**



### Geopolímero

Efflorescence control  
Superior durability  
Lower carbon footprint



Indoor Environment Quality



Certificate n° LQAI.MC. 27/20  
EN 16000-09

### Indoor environment quality

Very low VOCs emissions

No harmful emissions



### Radiation Free

Free of radionuclides

Free of Radon

"Radiation-free Certificate"  
IAF- Radioökologie GmbH

## Preparation of substrates

Substrates must be clean, compact and free of substances that reduce adhesion such as dust, oil, grease and with no loose material.

Uneven areas must be corrected with suitable smoothing and finishing products. Substrates must be free from any rising damp and have already completed the curing period of hygrometric shrinkage. Dampen substrates with water to cool down if they should be too warm, in case of wind or over absorbent substrates and wait until the thin layer of water disappears.

## Instructions for use

Mix manually or mechanically BEYEM **Comfort** with 6,5-8,0 l per bag of clean water until a homogeneous, creamy and lump-free paste is obtained. Let the mix stand for 5 minutes before application.

Small tiles must be fixed using a notched trowel of 6x6 mm. For tiles sizes greater than 400 cm<sup>2</sup>, a notched trowel 8x8 mm must be used. Spread the mixed product onto the substrate to a maximum surface area of 1-2 m<sup>2</sup> or no more than can be tiled within 30-40 minutes in normal conditions. Unfavorable environmental conditions (strong sunlight, drying wind, high temperature as well as a highly absorbent substrate), could drastically reduce this time to a few minutes. Bed the tiles firmly into the adhesive with a slight sliding and/or twisting action, to ensure a good contact and complete coverage.

It is good practice to lift an occasional tile after fixing, to verify that the required contact is being achieved. Back of the tile must be completely wet.

## Cautions and recommendations

- Do not apply on plastic, metal or wood.
- Do not apply below 5°C or above 30°C.
- Do not apply when there is risk of frost, rain, strong wind or direct sunlight.
- Leave joints between tiles with a minimum width of 2 mm in interior situations and 5 mm in exterior works. Grout with BEYEM JUNTA UNIVERSAL or BEYEM ADVANCE.
- On floors with a surface area greater than 30 m<sup>2</sup>, it is recommended to leave separation or sealing joints filled with a deformable material.
- On interior floorings larger than 15 m<sup>2</sup>, it is advisable to keep a free perimeter expansion joint between the floor and the wall or pillar, hidden by a skirting board (of approximately 5 mm).
- On facades and external cladding, the material should always be fixed with anchors or mechanical fixing, when some of the following conditions apply: format above 900 cm<sup>2</sup>, one side of the largest piece is larger than 60 cm, weight above 40 kg/m<sup>2</sup> or height of tiling up to 3 meters.
- Existing ceramic tile/natural stone: requires preliminary treatment. Do not use on very low absorption rehabilitation substrates.
- Underfloor heating/warming: the heating must be off, and should be turned on gradually at least 5 days after tiling and grouting.
- The temperature, ventilation, and absorption of the substrate and covering materials, may vary the adhesive workability and setting times.

## Technical data

### Product identity. Properties of mixture and application data

Appearance	Powder
Color	Extra-white
Bulk density	≈ 1250 Kg/m <sup>3</sup>

**Product identity. Properties of mixture and application data (continuation)**

Density of the mix	≈ 1550 Kg/m <sup>3</sup>
Grading	0-500 μm
Mixing water,%	± 29%
Pot life	≈ 3-6 h (may vary according to environmental conditions)
Adjustability time (23°C)	≥ 30 min
Grouting joints on walls (23°C)	≈ 20 h
Thickness range	2-15 mm
Coverage per mm of thickness	≈ 1,25 Kg/m <sup>2</sup>
Tariff code	3824.50.90.00
<b>Final performances</b>	
Type	C2TE
Initial tensile adhesion strength (EN 12004-2, 8.3) 72 h	≥ 1,0 N/mm <sup>2</sup> ≥ 0,50 N/mm <sup>2</sup>
Tensile adhesion strength after water immersion (EN 12004-2, 8.3)	≥ 1,0 N/mm <sup>2</sup>
Tensile adhesion strength after heat ageing (EN 12004-2, 8.3)	≥ 1,0 N/mm <sup>2</sup>
Tensile adhesion strength after freeze/thaw cycles (EN 12004-2, 8.3)	≥ 1,0 N/mm <sup>2</sup>
Extended open time (EN 12004-2, 8.1) 30 min 40 min	≥ 0,5 N/mm <sup>2</sup> ≥ 0,5 N/mm <sup>2</sup> ≥ 0,5 N/mm <sup>2</sup>
Shear adhesion (Rodacal Beyem Method)	≥ 0,50 N/mm <sup>2</sup>
Slip	≤ 0,5 mm
Interval before use (23°C) Foot traffic Heavy traffic Pools	72 h 96 h 7-10 days
Total VOCs (28 days)	≤ 500 μg/m <sup>3</sup>
Radioactivity index (U, Ra, Pb, Th, others)	I < 0,085

## Packaging

BEYEM **Comfort** is packed 25 kg plastic lined paper bags.

Storage: when stored unopened in a cool dry place, shelf life is 12 months from date of manufacture.

## Cleaning tools

Tools can be cleaned easily with water before the product hardens. Hardened product can be removed only mechanically.

## Project specification

*Laying of ceramic tiles, reconstituted stone, vitreous mosaic, porcelain and stoneware tiles, marble or natural stone, etc ... must be carried out with extra-white geopolymer-modified and multiple consistency adhesive with accelerated adhesion compliant with EN 12004 - class C2TE, such as Beyem **Comfort**, manufactured by Rodacal Beyem company. The substrate must be compact, free from any flaky, loose parts and must be clean and cured, having already completed the shrinkage stage. Existing joints must be respected and elastic fractionizing and perimeter joints must be created. Ceramic tiles must be laid with joint-gap spacers with a width of \_\_\_ mm.*

## Health and Safety

For further and complete information about the safe use of our product please refer to our latest version of the Safety Data Sheet, which is available upon request.

Disposal of the product and packaging must be in accordance with current legislation. This is responsibility of the final product user.

## Certifications



ER-1089/1999



IDI-0004/2012



### Contact



[www.rodacal.com](http://www.rodacal.com)



[rodacal@rodacal.com](mailto:rodacal@rodacal.com)



967 44 00 18

### Note

#### Product for professional use

The above guidelines and information is accurate to the best of our knowledge and is offered in good faith. This information is true and accurate, but as conditions of use and any labour involved are beyond our control, the end user must satisfy himself by prior testing that the product is suitable for his specific application, and no responsibility can be accepted, or any warranty given by our Representatives, Agents or Distributors. End user should ensure that he has our latest literature, copy of which will be sent upon request.

de la Ficha Técnica u Hoja de Datos, copia de las cuales se mandará a quien la solicite.