

ÉMISSIONS DANS L'AIR INTÉRIEUR\*

# **BENFERFIX EXTRA**

Cement based adhesive for ceramic tiles application, indoor and outdoor

- Extended open time
- Excellent workability
- Also for porcelain stoneware up to 45x45
- + 40 years of applications
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# Improvable with CEMLATEX 600



TECHNICAL FEATURES: BENFERFIX EXTRA is a cement based adhesive in white or grey with excellent workability and grip, for the interior and exterior application of ceramic floor and wall coverings. Its formula is the result of years of experience and guaranteed by thousands of applications in Italy and abroad, each year.

Mixed with CEMLATEX 600, and once dry, it becomes the most indicated product for supporting the most severe stress in: swimming pools, cold rooms, prefabricated structures, heated floors, and floors that are subjected to heavy loads.

# AREAS OF APPLICATION:

Interior and exterior laying of ceramic floor and wall tiles, marble and other natural stones of any type with size > 45 cm internal and 30 cm external.

# Mixed with CEMLATEX 600

# 5 kg of CEMLATEX 600 and 2 litres of water each 25 kg of BENFERFIX EXTRA=C2TES2

- Laying of floor and wall tiles in difficult environmental conditions such as: swimmingpools, cold rooms, terraces, surfaces exposed to the action of the water, etc.
- Laying of heated floors

CONTRACT ITEM SPECIFICATIONS: Ceramic floors and walls must be applied with a cement, single component adhesive, applicable with spatula in thickness up to 10 mm; conforms to norm EN 12004 class C1TE as BENFERFIX EXTRA by Benfer.







# SUITABLE SUBSTARATES:

- Concrete\*
- Cement-based screeds
- Cement-based plaster
- Flexible waterproofing membranes made up of cement and polymers (ACQUASHIELD-2KF)\*
- Cement based blocks

#### INSIDE:

- Old ceramic tiles (prior application of an appropriate primer)
- Elastomeric waterproofing membranes (ACQUASHIELD-GEL)\*
- Standard plasterboard (prior application of BENFERPRIM or STARPRIM)

### \*mixed with CEMLATEX 600

#### MAXIMUM SIZES:

- Internal floors with maximum length of longest tile side up to 45 cm.
- External floors with maximum length of longest tile side up to 30 cm.
- Internal walls coverings with maximum length of longest tile side up to 30 cm

#### See the choice table to verify size limits by tile/substrates characteristics.

#### MAXIMUM SIZES mixed with CEMLATEX 600 (25 KG BENFERFIX EXTRA 5 KG CEMLATEX 600)

- Internal floors with maximum length of longest tile side up to 360 cm.
- External floors with maximum length of longest tile side up to 120 cm.
- Internal walls coverings with maximum length of longest tile side up to 360 cm
- External walls coverings with maximum length of longest tile side up to 120 cm

### See the choice table to verify size limits by tile/substrates characteristics.



# METHOD OF USE: SUBSTRATES PREPARATION:

The substrates must be solid, free from oil, grease and dust. Any paint-work must be in good condition, washed and degreased. If this is not the case, the paint must be removed. Gypsum or calcium sulphate based or absorbent substrates substrates must be previously treated with BENFERPRIM.

# PREPARATION OF THE MIXTURE:

Mix BENFERFIX EXTRA with 29% (7,25 litres of water with 25 kg of powder), until you obtain a homogeneous adhesive. Leave it rest for 5 minutes; then mix again for a little of time. The adhesive is now ready for use and it should be employed within 3 hours.

WITH CEMLATEX 600: Mix BENFERFIX EXTRA with 5 kg of CEMLATEX 600 and 2 liters of water until you obtain a homogeneous, bright, plastic paste. Leave it rest for 5 minutes, then mix again for a little of time. The adhesive is now ready it has to be used within 3 hours.

**INTERIOR:** Lay the tiles by exerting a good pressure so that contact with the adhesive will be at least 95-100% of their surface.

**EXTERIOR:** The contact between tile and adhesive must be 100% so to avoid the eventual rain infiltrations that in case of frost could cause the detachment of the tiles. Therefore, it is suggested to spread also a layer of BENFERFIX EXTRA on the back of the tiles.

We suggest to do the same things even inside for:

- Floor tiles largest than 500 cm<sup>2</sup> with water absorption of the tiles  $\geq$  0.5% (e.g. porcelain tiles)
- Floor tiles largest than 1100 cm<sup>2</sup> with all the other types of tiles
- Wall tiles largest than 120 cm<sup>2</sup> with water absorption of the tiles  $\geq$  0.5% (e.g. porcelain tiles)
- Wall tiles largest than 500 cm<sup>2</sup> with all the other types of tiles
- Special applications such as industrial refrigerators, basins, swimming pools, etc.

It is essential to leave a joint of at least 3 mm between each tile, and to ensure that the tiling conforms with the expansion joints of the structure, to be elastically sealed, as well as the joints between walls, and the joints between wall and floor. In any case expansion joints and perimeter joints must be carried out every about  $20 \text{ m}^2$ .

#### FULL SERVICE:

At 23°C and with 50% relative humidity, the open time of the mix is approximately 30 minutes. In unfavourable conditions, these times may be significantly reduced. You are therefore advised to spread the adhesive a little at a time and to check frequently that it has not formed a surface film before laying the tile. To improve workability, especially in summer, it is beneficial to exclude draughts. In the first 48 hours after application, the adhesive does not withstand frost. Flooring installed using BENFERFIX EXTRA can be walked over cautiously after about 24 hours for grouting (48 under 15°C), and are fully loadable after 7 days.



**CLEANING:** The cleaning of the coatings should be performed with a moist cloth or sponge when the adhesive has already started to set and it can be performed by using more water after only 48 hours from tiling.

**PACKAGING:** BENFERFIX EXTRA is available in 25 kg poly-lined bags, 1500 kg pallet loads. **STORAGE:** In the original unopened packaging in a dry and cool place.

SHELF LIFE: 12 months from the date printed on the packaging.

**CONSUMPTION:** It depends on the conditions of the foundation, on the tile backs and so on the thickness of the necessary layer. With smooth foundation and adhesive layer

Support	Tiled surface	Laying System	Trowel type mm.	Consumption kg/m <sup>2</sup>
Int. Floor	S<1100	simple gluing	8/10	4/5
	100 <s<3600< td=""><td>double gluing</td><td>10/15</td><td>6/7</td></s<3600<>	double gluing	10/15	6/7
Ext. Floor	400 <s<1200< td=""><td>double gluing</td><td>8/10</td><td>5/6</td></s<1200<>	double gluing	8/10	5/6
Int. Wall.	S<400	simple gluing	6	3,5
	400 <s<2000< td=""><td>double gluing</td><td>8/10</td><td>5/6</td></s<2000<>	double gluing	8/10	5/6

PRODUCT TECHNICAL DATA
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#### MIXED WITH WATER

MIXED WITH CEMLATEX 600

Maximum grain size:0,5 mmStorage and Duration:12 months in the original closed package in a cool dry placeDanger of toxicity:No. The product may cause irritation to the eyes and skin due toInflammable:No.Mixture ratio:29 %, 7,25 lt water/25 kg bagMixture consistency:DoughyDensity of paste:1,65 kg/dm³Application temperature:From + 5°C to + 35°CPot Life:30 minutes*Open time:0,5 mmVertical sliding to EN 1308:<0,5 mmMaximum thickness:10 mmGrouting:12 hours*Final performance:28 days*Adhesion after the effect of heat:>0,5 N/mm²Adhesion after the effect of heat:>0,5 N/mm²Adhesion after the effect of heat:>0,5 N/mm²Adhesion after frosthaw cycles:>0,5 N/mm²Deformability according EN 12004:>0,5 N/mm²Adhesion after frosthaw cycles:>0,5 N/mm²Deformability according EN 12004:1,4 mmTemperature resistance:* rom -30°C to +90°C	Storage and Duration: Danger of toxicity: Inflammable: Mixture ratio: Mixture consistency: Density of paste: Application temperature: Pot Life: Open time: Vertical sliding to EN 1308: Maximum thickness: Grouting: Full service: Final hardening: <b>Final performance:</b> Adhesion at start (after 28 days): Adhesion after the effect of heat: Adhesion after frost-thaw cycles: Deformability according EN 12004: Temperature resistance:	12 months in the original closed package No. The product may cause irritation to th presence of cement No 29 %, 7,25 lt water/25 kg bag Doughy 1,65 kg/dm <sup>3</sup> From + 5°C to + 35°C 3 hours* 30 minutes* < 0,5 mm 10 mm 12 hours* 7 days* 28 days* > 0,5 N/mm <sup>2</sup> > 0,5 N/mm <sup>2</sup> > 0,5 N/mm <sup>2</sup> 1,4 mm	e eyes and skin due to 5 lt CEMLATEX 600 + 2lt
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PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.

