ADHESIVE White/Grey TER 3 C2ES1

FOR THE SETTING OF:
- Any type of ceramic material, internal and external
- Any kind of stone
- Clay tiles
- Glass mosaic tiles
- Klinker

SUITABLE BASE:
- Cementicious and plaster subs
- Cellular cement
- Clay or natural stone walls
- Concrete slab
- Hardened concrete
- Prefabricated concrete panels
- Self-leveling cement based subs
- Electric and water under floor heating subs
- Old glazed ceramics, porcelain, marble, and natural stones floors
- Insulating cork panels, expanded polyurethane and polystyrene panels, stone, glass and fibre cement wool panels as long as they are properly secured.
- Cementicious and acrylic waterproof mortars
- Anhidrite subs if sanded and pre-treated with a water based acrylic primer
- Rubber, PVC, linoleum, wood and wood derivates surfaces (must be pre-treated with an acrylic binder)
- External areas:
  1. the subfloor must guarantee tensile strength of >= 1.0 N/mm²
  2. the weight of the covering material must be <= 40kg/m²
  3. for sizes over 30cm it is advisable to consider using appropriate fixings (hooks)
- Swimming pools

Contraindications

Do not use in the following:
- On metal surfaces
- To set marble or natural stones which are prone to stains or growths.
- To set stone slabs or composites which can be subjected to movements due to water and humidity absorption
- Where is needed an adjusting time of less than 24h

Base Preparation

The supporting base at the time of the setting must conform to: hardening time, mechanical and superficial resistance, dimesional regularity, residual humidity and the absence of contaminating agent as reported in the reg UNI 11493 sez. 7.3 - 7.6 – 7.6.2 (appendix D; prospetto/ D.6). Fill all irregularity with appropriate mortar.

Cementicious subs: the area must be clear from puddled water. Traditional cementicious surfaces must have reached suitable hardening (28 days at a temp between +23C and U.R 50%). The supporting base must be flat, dimensionally stable and mechanically resistant in relation to its use, free from crumbling parts, oils, paints, laquers, wax and anti-adhesive materials.

Plasters: plasters must have a curing time of at least a week per cm of thickness. The supporting base must be flat, dimensionally stable and mechanically resistant in relation to its use, free from crumbling parts, oils, paints, laquers, wax and anti-adhesive materials. The area must be clear from puddled water. Chalk or anhydrite based vertical subs must be dry (Residual humidity less than 0.5%), sufficiently resistant, with a non-adhesive surface (if gloss it must be sanded), dust free and pre-treated with a water based acrylic primer.

On pre-existing flooring: if set on top of old ceramic or stone floors it is necessary to make sure that all the existing tiles/slabs are strongly attached and pre-cleaned with a universal degreaser or an equivalent alcaline detergent. Plan the removal of any part that will impede bond. Craks and gaps must be filled with bicomponent structural adhesives. For gloss surfaces or less porous it is advisable to pre-apply an acrilic binder. Gypsum plasterboards must be of a kind suitable to be covered in ceramic tiles using cementicious adhesives, must be resistant and with a surface devoided of contaminating agents.
**Mix Preparation**

Mix 25 kg of TER3 C2E S1 with clean water. Mix with a mechanical mixing drill slowly to get a smooth and lump free mix; leave it to rest for 5 min and the mix again briefly. **For regular consistency:** add approx 7.0 l of clean water to a 25 kg pack. **For a wet consistency:** add approx 8.0 l of clean water to a 25 kg pack.

**Application**

Apply with a serrated spatula directly on the supporting base. **For regular consistency:** for setting large size tyles internally or for tyles of any size externally apply the product with the smooth side of the spatula on the underside of the tyle itself to avoid hollow gaps between the tyles and the adhesive. **For a wet consistency:** it is possible to avoid the double application. Set the tyles to make sure the underside is wet. During the set make sure that there isn’t an anti-adhesive layer; if so please reapply the adhesive.

**Warning**

Remove any dust from the the back of the tyles and stone slabs. Set the tyles/slabs using an adequate pressure: check systematically that the underside of the materials to be set is covered in adhesive for at least 70-80% of its area. Protect the area from rain or water for at least 12h and from direct sunlight and frost for at least a week.

**Coverage**

<table>
<thead>
<tr>
<th>Serrated spatula (mm)</th>
<th>6X6</th>
<th>8X8</th>
<th>10X10</th>
<th>15X15</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg/m²</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

**Grouting and seal**

After 24h for flooring and after 4/6h for walls. Grouting can be done using cementious or epoxi grouts. Silicon or poliurethanic epoxi sealants can be used to seal gaps of a thickness over 5mm as per reg UNI 11493.

**Cleaning**

Wash hands and all tools before the products sets. Once hardened use a buffered, diluted or pure acidic detergent or clean mechanically.

**Packaging**

25 kg packs on pallets.

**Safety instruction**

TER2 C2E S1 contains cement which if in contact with sweat or any other bodily fluids can cause an alcalinic irritant reaction. Always use protective clothes, gloves and goggles. Further and complete information about the safe use of our product can be found on our separate safety data sheet. These must be read accurately before working with the product.

**Technical Data**

<table>
<thead>
<tr>
<th>Classification under EN 124004 (ISO 13007-1)</th>
<th>C2E S1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>TER3FBMC2E51</td>
</tr>
<tr>
<td>Dangers</td>
<td>consult safety data sheet</td>
</tr>
<tr>
<td>Mixing ratio</td>
<td>28% normal consistency - 32% wet consistency</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1400 kg/m²</td>
</tr>
<tr>
<td>Application temperature</td>
<td>from +5 °C to +35 °C</td>
</tr>
<tr>
<td>*Open time</td>
<td>≥ 30 min EN1346</td>
</tr>
<tr>
<td>*Adjustability time</td>
<td>≥ 45 min</td>
</tr>
<tr>
<td>*Working time</td>
<td>≥ 4 h</td>
</tr>
</tbody>
</table>
**Final performance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesion strength after 28 days:</td>
<td>≥ 1.0 N/mm²</td>
<td>EN 1348</td>
</tr>
<tr>
<td>Adhesion strength after heat action:</td>
<td>≥ 1.0 N/mm²</td>
<td>EN 1348</td>
</tr>
<tr>
<td>Adhesion strength after water immersion:</td>
<td>≥ 1.0 N/mm²</td>
<td>EN 1348</td>
</tr>
<tr>
<td>Adhesion strength freeze-thaw cycles:</td>
<td>≥ 1.0 N/mm²</td>
<td>EN 1348</td>
</tr>
<tr>
<td>Deformability</td>
<td>≥ 2.5 mm</td>
<td>EN 12002</td>
</tr>
</tbody>
</table>

**Leed score - GBC Italy**

<table>
<thead>
<tr>
<th>LEED® Contributing points*</th>
<th>LEED points*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Credit 5 – Regional Material</td>
<td>up to 2</td>
</tr>
<tr>
<td>QI Credit 5 – Low Emission Materials</td>
<td>up to 1</td>
</tr>
</tbody>
</table>

*LEED® is an environmental performance measuring system specific for commercial, administrative and residential buildings which follows environmental and energetic principles recognised and accepted by the international scientific community. Participation to the LEED® score system is voluntary. Point calculation is done based on the directives found in the latest version available of the Manual LEED® Italia. ©2010, Green Building Council Italia, U.S. Green Building Council, all right reserved.

**Notes**

Ceramic, stone, mosaic and glass material, internal or external, will be laid through the use of an enhanced, deformable, mono component cementitious adhesive with an extended open time and double mix ratio like TER3 C2E S1 from FBM S.p.A.

**General Warning**

The above technical data sheet replaces and voids all previous versions. All data have been obtained with the utmost care and conscience. We cannot guarantee however its exact accuracy and precision and we are not responsible for any decision taken by the user. The data do not hold us responsible legally. No warranty can be given or responsibility accepted. For this reasons end users should ensure that they test the product in the conditions suited to its application and that are satisfied with its delivery and response. Our product are subjected to continuous and regular quality checks, on the finished product as well as on the prime materials in order to guarantee a high quality product. Our technicians and consultants are available for information, clarifications, and queries on the preparation and application of our products as well as for visiting sites. The most updated data sheets are available on www.fbmlab.it or they can be requested directly from our offices. National building directives must be respected at all times.

The technical data reported in the above data sheet have been obtained through trials, standard and modified tests under FBM and Pentachem systems. Informations on the methods used can be requested to FBM e Pentachem. All the technical details in the above data sheet represent the best of our knowledge, experience and expertise. We advise however to test the product beforehand for all different uses. In all cases, FBM Materials and Pentachem are not responsible for any damage, defect or consequence deriving from the use of their products, not being in the position to supervise the conditions for its correct usage and application. Our technical customer support is available to respond to any query related to the correct use of our product.