**Ter 4 Base Zero**

**Cementicious screed CT C20 F4**

**LEGAL AND TECHNICAL NOTES**
Always follow the technical data sheets when using our products. It is recommended the regulation and normative of each country are followed (UNI, ONORM, SIA, etc) together with the indication of professional bodies.

**PRODUCT DESCRIPTION**
Rapid cementitious mortar for screed conform. To UNI EN 13813 e B 3732. Can be used as a multi layered bonded screed, insulating floating screeds, as underfloor heating screed; also for the creation of angled surfaces in humid and constantly wet areas, basements, garages and workshops as well as lofts, balconies and any remedial works. For industrial use please contact an FBM representative prior to commencing work.

**PRODUCT CONTENT**
- Cement
- Selected fine silica sand
- Additives to aid a better workability

**CHARACTERISTICS**
- Universal application
- Suitable for underfloor heating
- Reduced shrinkage
- Constant quality
- Pumpable

**Preparation**

**Temp of application**
During product preparation, application and drying the temperature of both the surrounding area and of the support must not be lower than +5°C. Until the product has completely dried and hardened protect it from frost, from a too fast drying (direct heat from the sun, wind) and from humidity and wet (rain).

**Preliminary treatment of the supporting base**
The supporting base must be solid, consistent, dry and free from dust, cracks and any substance that can impede adherence such as oils, paint and solvent residue. Depending on need (floating screeds, bonded screeds, on a separating layer screed, heated screed) the sub must be prepared accordingly (see manufacturer’s regulations).

**Preparation**
For small quantities TER4 Base can be mixed manually with a spatula. Add the required amount of clean water to the content of a pack and mix in a cement mixer or with a pump mixer for mortar until you get a wet-ground paste. Adding any kind of additive is the sole responsibility of the user.

**Application**
The methodology used for the application of the product must be planned carefully in advance so that the whole area is finished within the product working time (approx 1 hour). Application must be carried out only when the product is in its plastic consistency. The screed must be filled adequately and evenly. As soon as the surface assumes an opaque matt look it is possible to start smoothing.
**Warnings**

For bonded and composi screed a pre-treatment with a primer or an adherence bridge may be needed to balance out the absorption levels. Protect from breeze and winds, direct sunlight and drying too fast. Cover with plastic protective sheets if necessary. A too dry consisteny damages the quality of the surface, whereas a too liquid one reduces its resisnity, created cracks and increases the drying time. Any unused material must not be used nor mixed with fresh product. Drying times are calculated for a 3 cm thick screed in normal weather condition (20°C / 65% UR). Before covering it with any other product a damp test must be performed using a CM damp reader (see damp values allowed). Low temp values and high humidity values together with elevated thickness of the screed will mean longer drying times. The measurement for the thickness needed are reported in the relative regulations and directives, and in the planning documents. Any different application must be discussed with the manufacturer. The regulations re the rubber tape roll, surface dimensions and adjacent building elements are reported in the relative current regulations. Underfloor heating screeds must be pre-heated. Follow this heating protocol before application of the screed. The following technical info have been obtained under standard conditions. Description of the CM method: add calcium carbide to the product (50g), close and shake for approx 1 min. The index on the manometre will starts to climb. Leave it for 5 min and then start shaking it again. Read the values of the manometre after 10 min from when the CM was first closed.

**Safety Instruction**

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.

**Warning re packaging**

In anti humidity paper bags

**Storage**

Keep in a dry place, ideally on wooden pallets. Use by: min. 6 months under reg 1907/2006/EG allegato XVII a 20°C, e 65 % U.R.

**Technical data**

<table>
<thead>
<tr>
<th>Product code:</th>
<th>TER4BaseZero</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging:</td>
<td>in moisture protective paper bags</td>
</tr>
<tr>
<td>Quantity per pack:</td>
<td>25 kg/cf.</td>
</tr>
<tr>
<td>Quantity per pallet (CH):</td>
<td>42 cf/banc</td>
</tr>
<tr>
<td>Granulometry:</td>
<td>0 - 3 mm</td>
</tr>
<tr>
<td>Water needed:</td>
<td>approx 2.25 L/cf</td>
</tr>
<tr>
<td>Wet mortar:</td>
<td>approx 16 L/cf</td>
</tr>
<tr>
<td>Consumption:</td>
<td>approx 18 kg/m²/cm</td>
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</tbody>
</table>

The above consumption rates are purely for iidication purpose, and largely depend on the characteristics of the subfloor and the type of technique of application used. When used for the first time and on large areas it is advisable to first apply the product on a test area.

| Apparent bulk density: | 1.800 kg/m³ |
| Bulk density of mortar dried at 105 °C (EN 1015-10): | approx 2.150 kg/m³ |
| Coefficient of permeability to water vapour μ (EN 1015-19): | approx 30 |
| Thermaic conductivity λ 10,dry: | 1.4 W/mK |
| Specific heat: | approx 1 kJ/kg K |
| Specific thermal accumulating value: | approx 2.070 kJ/m² K |
| Compression resistance (28 days): | ≥ 20 MPa |
| Flex resistance (28 days): | ≥ 4 MPa |
| Ahesion to the support base: | ≥ 1.5 Mpa |
| Set to light foot traffic: | 2 days |
| Ready for use and cover: | approx 1 m (6cm) |
| Ready to be heated: | 21 days |
| Residual moisture allowed: | <3% (vapour resistant screeds and all tiles); < 2% (vapour permable covers such as wood flooring, parquets and PVC, etc); < 1.8% (underfloor heating screed) |

| Fire reaction (EN 13501-1): | A1 |
| Mortar for screeds group (EN 13813): | CT-C20-F4 |
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 held 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.

**General Warning**

**Mortar for screeds group (EN 13813):**

CT-C20-F4

**Temp of the supporting base:**

> 5 °C <25 °C

**Icons**

- **Interior and Exterior**
  - Use a notched trowel

- **Interior/Exterior/Ceiling**
  - Self levelling

- **Interior/Exterior/Floor**
  - Do not apply in temp below 5°
  - Do not apply in temp below 5° and over 30°

- **Manually workable**
  - Use protective clothing and masks

- **Use a notched trowel**
  - Protect from sun and rain

- **Use a continuous mixer**
  - Shelf life 12 months

- **Use a mixer**

- **Can use a plastering machine**
  - Refer to the technical data sheet

- **Mix before apply**