TECHNO-ONE+

Highly deformable, high-efficiency powder adhesive for laying ceramic tiles. Suitable for porcelain stoneware and over-tiling. Ultra-high workability.
**MAIN FEATURES**

High efficiency  
Monocomponent  
Very creamy  
Frost proof  
No creep  
Extended open time

**APPEARANCE**

Grey powder

**STORAGE**

12 months in dry place

**FIELDS OF USE**

- Fixing ceramic tiles of all types, even large sizes, on walls and floors, indoors and outdoors.
- Suitable for use when high performance is required, such as: tile laying in industrial environments, swimming pools or facades.
- Fixing on electric or water heating screeds.
- Over-tiling on top of old ceramic tiles without the use of primer.
- Suitable for fixing thin porcelain stoneware slabs.
- Fixing natural stone and marble, so long as they are not affected by water.
- Spot-glueing insulating panels made of polystyrene, polyurethane foam, rock or glass wool.

**SUBSTRATES**

Cement-based plaster, cement-lime mortar, gypsum-based plaster¹, anhydrite screeds², cement-based screeds, concrete, aerated concrete, old ceramic floors, old linoleum floors², PVC² or vinyl², plasterboard³, RASOGUM + or products of RASOLASTIK range.

¹ after application of PRIMER-T PLUS  
² after application of PRIMER-101

**NATURE OF THE PRODUCT**

TECHNO-ONE+ mainly consists of high-strength cements, selected mineral charges and specific additives. Ask the technical office for the safety brief containing further details.
**OPERATIONS PRIOR TO APPLICATION**

Substrates must fulfill the requirements of the local standards, be properly cured, structurally sound, dimensionally stable, free of any loose or friable particles, clean, dry and free of any contaminants such as dust, dirt, oil, grease, release agent, cement laitance or efflorescence.

Cement substrates should not be subject to shrinkage after the installation of the product, therefore they must be properly cured. Comply with local standards. Depending on the substrate condition and contaminants to be removed from the surface, perform adequate preparation techniques, such as water-jet washing or blast cleaning, in order to remove all traces of any materials that could reduce the product’s adhesion to the substrate. Cracks in substrates must be identified and sealed appropriately e.g. with REPAIR epoxy resin. On non-absorbent or substrates with limited absorbency, such as existing ceramic tiles etc., check to confirm that these surfaces are all firmly and securely bonded and stable, then use suitable degreasing/descaling products to thoroughly and completely clean the surface e.g. with DET-BASICO and DET-ACIDO. For applications in hot climates / environments and / or on absorbent substrates, thoroughly pre-dampen the surface immediately prior to the product application, but avoid any ponding / standing water on the surface, which must not be damp to touch and not with a dark-matt / wet surface appearance i.e. it must be saturated surface dry (SSD). For tiling in frequently damp or wet rooms, then a suitable TECHNOKOLLA® waterproofing product / system should be applied before the tiling. Small localized hollows or gravel pockets in the case of concrete can be leveled (not more than 3 mm thick) with TECHNO-ONE+ 24 h prior to fixing. If thicker layers are required, use RASO or GAP-R respectively 24 h and 6 h before fixing the tiles.

**HOW TO PREPARE THE MIXTURE**

Blend TECHNO-ONE+ with approximately 9 l of clean water (36±1%). Blend until mixture is homogeneous and lump-free. It is advisable to use blender at low speed (approx. 500 rpm) as high speed will reduce the mechanical characteristics of the product. Wait 5-10 minutes, then stir the product briefly again before applying. The creamy paste obtained can be easily applied by trowel and possesses optimum thixotropy.

**APPLICATION**

Apply using a notched trowel. Apply sufficient product to ensure complete ‘wetting’ of the back of the tiles. Tiling must be carried out on freshly applied adhesive, applying adequate pressure to ensure complete and uniform contact with the adhesive and thus optimum bond. If a film is seen to form on the surface, the adhesive has been left for too long, then immediately remove the adhesive layer with the trowels, discard this material and apply a fresh layer of adhesive. Do not wet the adhesive once applied, as the water compromises the adhesion. Avoid application in direct sunlight and/or strong wind / draughts.

**WARNINGS AND RECOMMENDATIONS**

It is always advisable to apply two coats when laying tile sizes measuring 900 cm² or larger.

**Do not apply to:**
- metal
- old tiles outdoors

**Do not use:**
- at temperatures less than 5°C or more than 35°C
- in coats more than 5 mm thick
The advice about technical matters in the technical data sheets, or given verbally or in writing by our personnel as part of our customer assistance service, is the result of our best and most up to date experience. Since we are unable to personally modify the conditions in the building site or the way the work is carried out, this information is purely indicative and, thus, binds us neither legally nor in any other way in relation third parties. This information does not relieve the end user from being responsible for testing our products so as to make sure they are fit for the required use. We therefore strongly advise the customer/user to subject Technokolla’s products to preventive tests in order to ensure that they are suitable. The end user is also responsible for checking to make sure that this technical data sheet is not obsolete and that more recent editions have not replaced it. Thus, before using our products, you are advised to download the most up to date version of the technical data sheet from our web site www.technokolla.com.

Technokolla reminds you to examine the “notes” document that completes the information in this data sheet. The document can be downloaded in the pdf format from the website www.technokolla.com.

### SPECIFICATION

Ceramic floor and wall tiles must be fixed with class “C2TE S1 cement-based powder adhesive according to standard EN 12004”, such as TECHNOKOLLA’s TECHNO-ONE+, which can be applied in layers up to 5 mm thick on cement-based substrates.

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Value</th>
<th>Requirement</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curing time</td>
<td>10 min</td>
<td></td>
</tr>
<tr>
<td>Pot life</td>
<td>*6 h</td>
<td></td>
</tr>
<tr>
<td>Open time</td>
<td>*30 min</td>
<td>*30 min</td>
</tr>
<tr>
<td>Adjustability time</td>
<td>* ~ 50 min</td>
<td></td>
</tr>
<tr>
<td>Treadable</td>
<td>*After 24-36 h</td>
<td></td>
</tr>
<tr>
<td>Floor tiles can be grouted</td>
<td>*After 24-36 h</td>
<td></td>
</tr>
<tr>
<td>Wall tiles can be grouted</td>
<td>*After 4-6 h</td>
<td></td>
</tr>
<tr>
<td>Creep on vertical wall</td>
<td>≤ 0.5 mm</td>
<td>≤ 0.5 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GREY</th>
<th>WHITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial tensile strength</td>
<td>~ 1.7 N/mm²</td>
</tr>
<tr>
<td>Tensile strength after the action of heat</td>
<td>~ 1.7 N/mm²</td>
</tr>
<tr>
<td>Tensile strength after immersion in water</td>
<td>~ 1.1 N/mm²</td>
</tr>
<tr>
<td>Bond after freezing/thawing cycles</td>
<td>~ 1.1 N/mm²</td>
</tr>
</tbody>
</table>

* according to standard “EN 12004”
* time intervals refer to a temperature of 23°C-50% R.H.. They become shorter with higher temperatures and longer at lower temperatures.

### CONSUMPTION

<table>
<thead>
<tr>
<th>Trowel Size</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>6x6 mm</td>
<td>~ 2.4 kg/m²</td>
</tr>
<tr>
<td>8x8 mm</td>
<td>~ 3.4 kg/m²</td>
</tr>
<tr>
<td>10x10 mm</td>
<td>~ 4.2 kg/m²</td>
</tr>
</tbody>
</table>

Consumption data refer to sole use of a trowel on flat substrates.