Sika® Ceram-205 T (Sika® Ceram 201)

High performance, flexible cementitious tile adhesive for thin bed application

**Product Description**

Sika® Ceram-205 T (Sika® Ceram 201) is a high performance flexible cementitious adhesive, supplied ready to use with the addition of water. It can be used for bonding ceramic tiles in internal and external situations, for vertical as well as horizontal applications.

**Uses**

Sika® Ceram-205 T (Sika® Ceram 201) can be used for bonding ceramic tiles in a continuous thin layer, up to 5 mm. As it has high adhesive strength and flexibility, it can be used in situations where traditional adhesives are not suitable due to the type of tile or the substrate etc.

*Sika® Ceram-205 T (Sika® Ceram 201) is suitable to bond the following types of high and low absorption tiles:
- Ceramic, extruded and earthenware tiles
- Low absorption ceramic tiles, which have poor adhesion to traditional tile adhesives

*Sika® Ceram-205 T (Sika® Ceram 201) can be used on substrates including:
- Concrete and mortar
- Bricks, plaster (with primer)
- Plasterboard, fibre cement
- Anhydrite floors (with primer)
- With underfloor heating
- Existing tiled substrates
- Any substrate where shrinkage movement or thermal expansion can occur

*Sika® Ceram-205 T (Sika® Ceram 201) can be used on walls and on floors, in exterior or interior situations including:
- Bathrooms, kitchens, balconies, terraces, poolsides etc.

**Characteristics / Advantages**

- Thixotropic effect - Class T (low slip)
- CE Classified C2T
- High flexibility, so it is suitable for use on façades
- Excellent adhesion to most substrates (concrete, cementitious mortar, stone, bricks, existing tiles…)
- Can be used with underfloor heating
- Very good adhesion to gypsum plaster/anhydride screeds when primed
- Easy to use with excellent workability and thixotropic consistency
- Water and weather resistant
### Tests

| Approval / Standards | Compliance tests for CE Marking by Applus, Spain - Report No. 07/32301686 |

### Product Data

#### Form

<table>
<thead>
<tr>
<th>Appearance / Colour</th>
<th>Grey powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>25 kg bag</td>
</tr>
</tbody>
</table>

#### Storage

| Storage Conditions / Shelf-Life | 6 months from date of production if stored properly in original unopened, sealed and undamaged packaging in dry and cool conditions. |

### Technical Data

#### Chemical Base

Cementitious mortar modified with polymers.

#### Density

Fresh mortar density: ~ 1.5 kg/l (at +20°C)  
(According to TS EN 12190)

#### Grading

$D_{\text{max}}$: 0.5 mm  
(According to TS EN 12192-1)

#### Layer Thickness

1.5 mm min. / 5 mm max.

### Mechanical / Physical Properties

<table>
<thead>
<tr>
<th>Tensile Adhesion Strength</th>
<th>(According to TS EN 1348:1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>$\geq 1.0 \text{ N/mm}^2$</td>
</tr>
<tr>
<td>After water immersion</td>
<td>$\geq 1.0 \text{ N/mm}^2$</td>
</tr>
<tr>
<td>After heat ageing</td>
<td>$\geq 1.0 \text{ N/mm}^2$</td>
</tr>
<tr>
<td>After freeze-thaw cycles</td>
<td>$\geq 1.0 \text{ N/mm}^2$</td>
</tr>
</tbody>
</table>

(According to TS EN 1346:1997)

| Open Time | $\geq 0.5 \text{ N/mm}^2$ at 20 minutes |

### System Information

<table>
<thead>
<tr>
<th>System Structure</th>
<th>In normal conditions, no primer is required.</th>
</tr>
</thead>
<tbody>
<tr>
<td>However for the following difficult substrates primer is recommended:</td>
<td></td>
</tr>
<tr>
<td>Substrate: Very high absorption (Gypsum Plaster / Anhydrite Screed)</td>
<td></td>
</tr>
<tr>
<td>Primer: Sika® Ceram-10 W Primer</td>
<td></td>
</tr>
<tr>
<td>Application and consumption details etc of primers are given in the relevant Product Data Sheet.</td>
<td></td>
</tr>
</tbody>
</table>
Application Details

Consumption
The consumption depends on the surface profile and roughness of the substrate and on the size of the tiles and the placing technique (simple placing or back-buttering).

As a guide, in kilogram of powder per m²:

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosaics and small tiles</td>
<td>~ 2 - 3 kg/m²</td>
</tr>
<tr>
<td>Normal size tiles (&lt; 200 x 200)</td>
<td>~ 3 - 4 kg/m²</td>
</tr>
<tr>
<td>Large tiles and on external floors</td>
<td>~ 4 - 7 kg/m²</td>
</tr>
</tbody>
</table>

Substrate Quality
The substrate must be structurally sound, cement laitance free, clean and free from dirt, oil, grease or other contaminants and loose or friable particles.

Substrate Preparation / Priming
Weak concrete and/or cement laitance must be removed.
Repairs to the substrate, filling of blowholes/voids etc must be carried out using appropriate products from the Sika® MonoTop range of materials or with site produced mortars improved with Sika® Latex. Allow a waiting time of 24 to 48 hours before tiling.
All dust, loose and friable material must be completely removed from all surfaces before application preferably by brush and/or vacuum.
If the substrate is very porous and if the temperature is high and relative humidity low, it is advisable to dampen the surface - do not leave any standing water.
Variations in the level must be less than 5 mm, measured with a 2 metre straight edge. If necessary the substrate must be levelled prior to application. If the level is not good enough, the substrate must be levelled with a mortar made with Sika® Latex or Sika® MonoTop type of product.
In refurbishment work on existing ceramic tiles:
- Check the ceramic tiles to ensure soundness
- Remove any tiles that are not adhering properly and rebond them
- Grind off glazed tiles and remove dust etc
- Wash other types of tiles with suitable detergent and rinse well with clean water. If after this washing operation, they remain greasy, repeat, then grind and remove dust etc.

Application Conditions / Limitations

Substrate Temperature  
+5°C min. / +35°C max.

Ambient Temperature  
+5°C min. / +35°C max.

Application Instructions

Mixing
~ 5.5 l of water per 25 kg bag

Mixing Time
Mix thoroughly with clean water for a minimum of 3 minutes.
Leave material for at least 5 minutes to stand in container. Then remix for 15 seconds - the product is now ready for use.

Mixing Tools
Sika® Ceram-205 T (Sika® Ceram 201) must be mechanically mixed using a forced action mixer or in a clean container using a drill and mixing paddle (< 500 rpm). A normal concrete free fall mixer is not suitable.
Application Method / Tools

Sika® Ceram-205 T (Sika®Ceram 201) is applied using a notched trowel. Choose the trowel that will give the right coverage to the back of the tile.

As a guide:
- For mosaics up to 5 x 5 cm, use a 3 mm notched trowel
- For normal ceramic tiles (less than 200 x 200), use a 6 mm notched trowel
- For large tiles, use a 9 mm notched trowel.
- For tiles larger than 300 x 300, or for highest performance requirements (tiles to be polished, heavy loads, poolside application etc.), the back-buttering technique for bedding must be used

Apply a uniform layer of Sika® Ceram-205 T (Sika®Ceram 201) by trowel in small areas at the recommended thickness. Then, immediately, adjust the thickness if necessary using a notched trowel. Finally, place the ceramic tile, pressing it firmly onto the adhesive.

Cleaning of Tools

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

Potlife

~ 3 hours (at +20°C)

Rectification Time

Once tiles are set into the mortar, they can be adjusted for ~ 10 minutes (at +20°C)

Notes on Application / Limitations

Cementitious substrate age must be at least 28 days.

Do not exceed the recommended water dosage. Apply only to sound, prepared substrates. Do not exceed maximum layer thicknesses.

Gypsum plaster substrates must have a minimum thickness of 10 mm and a maximum moisture content of 5%

If additional waterproofing underneath the tiles is required, then the following products can be used: SikaTop® Seal-107, Sika® Top Seal-107 Elastik, Sika® Lastic-850 W, SikaTop®-109 ElastoCem, Sika® SealTape-S, etc. Refer to the relevant product data sheet for more information.

Protect freshly applied material from freezing conditions and rain etc.

It is not necessary to pre-dampen the tiles.

Curing Details

<table>
<thead>
<tr>
<th>Applied Product Ready for use</th>
<th>At +20°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before jointing / grouting works</td>
<td>Min. 24 hours</td>
</tr>
<tr>
<td>Before opening to light foot traffic</td>
<td>Min. 24 hours</td>
</tr>
<tr>
<td>Before opening to full traffic</td>
<td>Min. 7 days</td>
</tr>
</tbody>
</table>

Value Base

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Local Restrictions

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.
The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika’s current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika’s recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.