

PRODUCT DATA SHEET

SikaCeram®-100 Basic

POWDER TILE ADHESIVE TO LAY CERAMIC TILES.

DESCRIPTION

SikaCeram®-100 Basic is one-pack tile adhesive intended to lay absorbent tiles on absorbent substrate in residential use. EN 12004 class C1.

USES

SikaCeram®-100 Basic is suitable for bonding the following types of tiles:

- Absorbent ceramic tiles

SikaCeram®-100 Basic can be used on indoor walls and floors, and outdoor floors including:

For residential use

- On spot-gluing insulating panels made of polystyrene, polyurethane foam, rock or glass wool

SikaCeram®-100 Basic mixed with SikaCeram® T Latex (7-7.25 L /bag) is used for:

Bonding the following types of tiles:

- All kind of ceramic tiles, even grès porcelain in large size and in thin slabs

On the following surfaces:

- Gypsum- or cement- based substrates
- Old ceramic tiles, stones or paint
- PVC, linoleum, old vinyl floors

For applications high performances demanding, such as:

- Swimming pools
- Heating floors, water and electric systems
- Industrial and heavy traffic floors
- Facades

CHARACTERISTICS / ADVANTAGES

- One-pack
- Frost resistant

ENVIRONMENTAL INFORMATION

VOC emission classification according to French classification A+.

APPROVALS / STANDARDS

Normal setting cementitious adhesive C1 classified according to EN 12004:2007. Declaration of Performance 30817317, assessed notified laboratory 1599, and provided with the CE marking.

PRODUCT INFORMATION

| | |
|----------------------------|---|
| Chemical Base | Portland cement, selected aggregates, water retention additives, re-dispersible polymer |
| Packaging | 25 kg bag |
| Appearance / Colour | Grey powder |
| Shelf Life | 12 months from date of production |

| | |
|----------------------------|---|
| Storage Conditions | Undamaged original sealed packaging, in dry cool conditions |
| Density | ~1.5 kg/l (fresh mortar) |
| Maximum Grain Size | D _{max} : 0.5 mm |
| Product Declaration | C1 (EN12004) |

TECHNICAL INFORMATION

| | | | |
|---|--------------------|-------------------------|----------|
| Tensile Adhesion Strength | Initial | ≥ 0.5 N/mm ² | (EN1348) |
| | Water immersion | ≥ 0.5 N/mm ² | |
| | Heat ageing | ≥ 0.5 N/mm ² | |
| | Freeze-Thaw cycles | ≥ 0.5 N/mm ² | |
| All data collected from test reports released by laboratory Modena Centro Prove, Notified Body no. 1599 | | | |

Chemical Resistance

SYSTEM INFORMATION

| | | | |
|---|---|------------------|--|
| System Structure | For the following substrates, a primer shall be used: | | |
| | Substrate | Primer | |
| | Gypsum plaster or anhydrite screed | Sika® Primer-11W | |
| | PVC, linoleum and old vinyl floors | Sika® Primer-21W | |
| Application and consumption details of the primer are given in the relevant Product Data Sheet. | | | |

APPLICATION INFORMATION

| | | | |
|---|--|----------------------------|-------------------------|
| Mixing Ratio | ~6.6 litres of water (26.5 % ± 1 %) per 25 kg bag | | |
| Consumption | Consumption is always dependent on the substrate surface profile and roughness, the size of the tiles and the joints between them, as well as on the application technique (single adhesive layer on the substrate, or with an additional 'buttering' layer on the back of the tiles as recommended for tiles larger than 30 x 30 cm). As a guide: | | |
| | Size of tiles | Notched trowel size | Consumption |
| | Small | 6 mm | ~ 2–3 kg/m ² |
| | Medium | 8 mm | ~ 3–4 kg/m ² |
| | Large | 10 mm | ~ 5–7 kg/m ² |
| Or use our on line tile adhesives consumption calculator at http://sikaceram.com/nz/consumption-calculator/adhesive | | | |
| Layer Thickness | 10 mm max. | | |
| Ambient Air Temperature | +5 °C min. / +35 °C max. | | |
| Substrate Temperature | +5 °C min. / +35 °C max. | | |
| Maturing Time | ~3 min | | |
| Pot Life | ~6 hours | | |
| Open Time | ≥ 0.5 N/mm ² after 20 min | | (EN 1346) |
| Adjustability Time | ~45 min | | |
| Curing Time | 24–36 hours | | |
| Curing Treatment | Protect from adverse weather conditions, such as extremely high or low (freezing) temperatures, rain, direct exposure to sun, for at least 12–24 hours from application. | | |

Applied Product Ready for Use

| Use | Waiting time |
|----------------------------------|--------------|
| Grouting floors / walkable | 24–36 hours |
| Grouting walls | 4–6 hours |
| Full traffic | ~14 days |
| Water filling (mixed with latex) | ~21 days |

Values determined at laboratory conditions: 23 °C ± 2 °C, R.H. 50 % ± 5 %. Higher temperatures will reduce the indicated waiting times, lower temperatures increase them.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Substrates must be properly cured, structurally sound, free of any loose or friable particles, clean, dry and free of any contaminants such as dust, dirt, oil, grease, cement laitance or efflorescence, old coatings or other surface treatments.
- Depending on the substrate condition and contaminants to be removed from the surface, perform adequate preparation techniques, such as water-jet washing or blastcleaning, in order to remove all traces of any materials that could reduce the product's adhesion to the substrate.
- Any small surface defects and variations in level, profile, or around exposed aggregates for example, can be prefilled and levelled with an additional layer of SikaCeram®-100 Basic, to a maximum thickness of 10 mm, applied at least 24 h before laying the ceramic tiling is laid. For larger and thicker areas of surface reprofiling and making good, appropriate mortars from the Sika MonoTop® or Sikafloor® Level range should be used. Cracks in substrates must be identified and sealed appropriately e.g. with Sikadur epoxy resins.
- For applications in hot climate 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).

MIXING

Pour the recommended amount of water into a suitable, clean mixing container. Whilst stirring slowly, slowly add the SikaCeram®-100 Basic powder to the water and then mix thoroughly using a low speed (~500 rpm) electric mixer until a completely homogeneous and lump-free mix is achieved. After mixing, leave the material to stand and 'mature' for a few minutes, and then briefly stir again immediately prior to application. The resulting mix has a very creamy consistency and is easy to apply and spread.

APPLICATION

- SikaCeram®-100 Basic is applied using a notched trowel.
- Apply sufficient product to ensure complete 'wetting' of the backs of the tiles.
- Tiling must to be carried out on freshly applied adhesive, exerting 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; should this happen, then immediately remove the adhesive layer with the trowels, discard this material and apply a fresh layer of SikaCeram®-100 Basic adhesive.
- Avoid application in direct sunlight and/or strong wind / draughts.
- SikaCeram®-100 Basic is specifically designed to be ideal for laying for laying absorbent tiles up to 900 cm² (e.g. 30×30 cm).
- SikaCeram®-100 Basic mixed with SikaCeram® T Latex can be used for laying absorbent and non-absorbent tiles indoor without any size or support limits. Preferred use outdoors is for laying non-absorbent tiles not larger than 10 000 cm² (e.g. 100×100 cm) for floors, and 7000 cm² (e.g. 80×80 cm) for walls without support of mechanical fixing. These limits are valid for cementitious, non-heating substrates.
- To lay any tiles larger than 900 cm² (e.g. 30×30 cm), the double-layer (buttering) technique is always recommended.

CLEANING OF TOOLS

Thoroughly clean all tools and equipment with clean water before the product has set, preferably immediately after use. Once hardened the product can only be removed by mechanical means.

LIMITATIONS

- Gypsum plaster substrates must have a maximum moisture content of 0.5 %.
 - If a waterproofing layer is required under the tiles, then cement or acrylic-based systems are suitable for use under SikaCeram®-100 Basic. Please refer to the respective Sika Product Data Sheets for specific information.
 - For any natural stones tiles always carry out a small test application first.
- SikaCeram®-100 Basic must not be applied in the following situations:*
- On metal or wood surfaces.
 - For any situation or application not explicitly described in this Product Data Sheet.

BASIS OF PRODUCT DATA

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.

ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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