BUILDING TRUST

PRODUCT DATA SHEET

SikaCeram® -280 Light

MULTI-FLOW, HIGH COVERAGE, DEFORMABLE, LOW DUST TILE ADHESIVE WITH LIGHTWEIGHT FILLERS

DESCRIPTION

SikaCeram® -280 Light is a one-component, multi-flow, deformable, high-coverage (up to 80 % extra coverage compared to normal tile adhesive), low dust tile adhesive containing lightweight fillers. It contains recycled raw materials which reduce the carbon footprint.

Suitable for bonding porcelain tiles and natural stone on facades, heated floors, swimming pools and industrial floors. Classified C1TES1 according to Israeli Standard SI 4004.

USES

For thin-bed tile bonding in layers up to 7 mm thick according to the Israeli standard. Suitable for common tile types such as ceramic, porcelain, marble, mosaic and stone, on concrete, blocks, plaster, gypsum, plasterboard, gypsum blocks and other substrates. In addition:

- Suitable for tiling in wet rooms
- Suitable for highly absorbent tiles
- Suitable for thin tiles
- Suitable for horizontal and vertical surfaces

CHARACTERISTICS / ADVANTAGES

- High coverage: up to 80 % extra compared to normal tile adhesive
- Low dust emission
- Enhanced deformability
- No vertical slip
- Extended open time

PRODUCT INFORMATION

Chemical Base	Portland cement, selected aggregates, water retention additives, polymers and lightweight additives.
Packaging	14 kg paper bags; 60 bags per pallet.
Appearance / Colour	Grey powder; concrete grey after drying.
Shelf Life / Storage Conditions	12 months in original, sealed, unopened packaging. Store in the shade, away from heat, moisture and direct sunlight.
Maximum Grain Size	3 mm

TECHNICAL INFORMATION

Tensile Adhesion Strength	Initial (after 28 days): > 1.0 MPa After water immersion: > 0.5 MPa After heat ageing: > 1.0 MPa

SYSTEM INFORMATION

Primers	For the following substrates, a primer must be used before application:
Absorbent substrates	Cementitious substrates, plaster / gypsum: Sikafloor® -01 (diluted 1:3) Sika Ceram Primer WB
Non- or low-absorbent substrates	Porcelain, existing ceramic tiles, vinyl tiled floors: Sikafloor® -01 Primer Sikafloor® -02 Primer Sika-Top 10
	Application and consumption details of the primers are given in their respective Product Data Sheets.

APPLICATION INFORMATION

Mixing Ratio	4.15–4.6 litres of water per 14 kg bag.
Density	~1.2 kg/l
Consumption	Consumption depends on the surface profile, substrate roughness, tile size, joint width and application technique (single layer on the substrate or double application also to the back of the tile, as recommended for tiles larger than 30 × 30 cm). **Tile size / Notched trowel / Consumption** Small / 6 mm / ~1.3 kg/m² Medium / 8 mm / ~1.6 kg/m² Large / 10 mm / ~2.0 kg/m²
Layer Thickness	15 mm maximum. Always comply with the applicable standard requirements.

APPLICATION INFORMATION (CONTINUED)

Substrate Temperature	+5 °C min. / +30 °C max.
Ambient Air Temperature	+5 °C min. / +30 °C max. In hot weather, application at falling temperatures (late afternoon or evening) is recommended to limit gas exchange caused by substrate heating.
Substrate Moisture	May be applied to a damp substrate without standing water or sweating.
Open Time	~30 minutes at 23 °C.
Applied Product Ready for Use	**Use / Waiting time** Grouting on floors / walkability: ~16 h indoors; ~48 h outdoors Grouting on walls: ~6 h Full traffic (full load): ~14 days Water immersion (e.g. swimming pools): ~21 days Values determined under laboratory conditions: 23 ± 2 °C, relative humidity 50 ± 2 %. Higher temperatures reduce waiting times; lower temperatures increase them.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Substrates must be structurally sound, free of loose particles, clean, dry and free of contaminants such as dust, dirt, oil, grease or efflorescence.
- Depending on the substrate condition and contaminants to be removed, use appropriate preparation techniques such as high-pressure water washing or jet blasting to remove all traces of materials that could reduce adhesion.
- Small surface defects and variations in level or profile may be prefilled and levelled with an additional layer of SikaCeram® -280 Light, up to 15 mm thick, applied at least 24 hours before tiling. For larger and thicker areas, use appropriate repair mortars from the Sika MonoTop or Sikafloor Level ranges. Identify and seal cracks appropriately, for example with Sikadur epoxy resins.
- When tiling on non- or low-absorbent substrates (existing ceramic tiles, painted surfaces, etc.), ensure they are firmly bonded and stable. Clean thoroughly using suitable cleaning/degreasing agents. A suitable primer for non-absorbent surfaces is mandatory.
- For hot climates/environments and/or absorbent substrates, thoroughly pre-dampen the surface immediately before application. Avoid standing water; the surface must be saturated surface dry (SSD).
- For frequently damp or wet rooms, apply a suitable Sika waterproofing system before tiling. This product is not a waterproofing material.

MIXING

Pour the recommended amount of water into a suitable, clean mixing container. While stirring slowly, gradually add the SikaCeram® -280 Light powder to the water and mix thoroughly using a low-speed electric mixer (~500 rpm) until a completely homogeneous, lump-free mix is obtained. Allow the material to mature for 60–120 seconds, then briefly mix again immediately before application. The resulting mix has a creamy consistency and is easy to spread.

APPLICATION

SikaCeram® -280 Light is applied using a notched trowel.

- Apply sufficient product to ensure complete wetting/coverage of the backs of the tiles.
- Lay tiles on freshly applied adhesive, applying adequate pressure to ensure full and uniform contact. If a skin forms on the adhesive, it has been exposed too long. Immediately remove and discard the adhesive layer and apply a fresh layer.
- Avoid application in direct sunlight and/or strong winds or draughts.
- The product is specifically designed for laying non-absorbent tiles indoors without size or substrate limitations.
- For outdoor application, non-absorbent tiles up to 10,000 cm² (100 × 100 cm) are recommended for floors, and up to 7,000 cm² (e.g. 80 × 80 cm) for walls without mechanical fixing. These limits apply to non-heated cementitious substrates.
- For tiles larger than 900 cm² (e.g. 30 × 30 cm), the double-buttering technique (adhesive on both substrate and tile back) is always recommended.

CLEANING OF TOOLS

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

LIMITATIONS

- Gypsum plaster substrates must have a maximum moisture content of 0.5 %.
- If waterproofing is required beneath the tiles, cementitious and/or acrylic-based systems are suitable beneath SikaCeram® -280 Light. Refer to the relevant Sika Product Data Sheets.
- For natural stone tiles, always carry out a small test application first to ensure the adhesive does not stain the tile.

Do not apply SikaCeram® -280 Light in the following situations:

- On metal or wood surfaces.
- On existing ceramic tiles outdoors.
- In any situation or application not explicitly described in this Product Data Sheet.

ECOLOGY, HEALTH AND SAFETY

Contains Portland cement and chemicals. May cause skin irritation. May cause serious eye damage. May cause respiratory irritation. If medical advice is needed, show the product packaging to the attending medical professional. Keep out of reach of children. Use outdoors or in a suitably ventilated environment. Wear protective gloves, respiratory protection and safety goggles when using the product.

If in eyes: rinse with plenty of cold water for several minutes. Remove contact lenses if possible and continue rinsing. Contact a poison centre, doctor or medical centre for further treatment. Dispose of empty packaging in accordance with the instructions of the local authority / Ministry of Environmental Protection.

The product Safety Data Sheet is available from Gilar Ltd. by telephone at 03-9019004 or on the company website: www.gilar.co.il.

LEGAL NOTES

The information, and in particular the recommendations relating to the application and use of Gilar products, are given in good faith based on Gilar's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. Differences in materials, substrates and actual site conditions are such that no representation regarding merchantability or fitness for a particular purpose, nor any legal liability whatsoever, can be inferred from this information, any written recommendations or any other advice offered. Instructions for use are subject to our current terms of sale and delivery. Users must refer to the most recent publication of the Product Data Sheet for the product concerned. Copies are available on request.

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