

PRODUCT DATA SHEET

SikaCeram[®]-650 Classic

CEMENTITIOUS FLOOR/WALL COLORED TILE GROUT FOR JOINTS 1–6 MM

DESCRIPTION

SikaCeram[®]-650 Classic is a cementitious setting, floor /wall tile grout powder for use in joints from 1–6 mm in width. Additives contained in the powder provide protection against mould, bacterial and fungal growth while maintaining a colour stable, abrasion resistant, water repellent durable finish. For indoor and outdoor use.

USES

Grouting the following tile types:

- Ceramic
- Earthenware
- Glass mosaic
- Marble and other natural stones
- Grès porcelain

Grouting tiles for the following high performance and demanding applications:

- Heated floors
- Commercial / Industrial / Residential environments
- Facades

CHARACTERISTICS / ADVANTAGES

- Floor and wall application
- Water-repellent
- Abrasion resistant
- High degree of hardness
- UV resistant
- Frost proof
- Contains mould protection

PRODUCT INFORMATION

Chemical Base	Polymer modified, portland cement based, with selected fine silica/quartz sand, water retainers and other special additives.				
Packaging	5 kg bags				
Shelf Life	24 months from date of production				
Storage Conditions	Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging				
Appearance / Colour	White	Grey	Steel	Concrete	Black
	Blue	Ivory	Beige	Cream	Ash
	Earth	Pearl	Terracota	Tile	Chocolate
	Ebony	Sand	Teak	Caramel	Beech
	Anthracite	Salvia	Moka	Mink	
Maximum Grain Size	Dmax: 0,25 mm				
Density	1,1 ± 0,1 kg/ L				

TECHNICAL INFORMATION

Abrasion Resistance	≤ 1000 mm ³ (EN 1208-2)																																																	
Compressive Strength	After dry storage	≥ 20 N/mm ²																																																
	After freeze/thaw cycles	≥ 15 N/mm ² (EN 12808-3)																																																
Tensile Strength in Flexure	After dry storage	≥ 4 N/mm ²																																																
	After freeze/thaw cycles	≤ 3 N/mm ² (EN 12808-3)																																																
Shrinkage	≤ 3 mm/m																																																	
Joint width	1–6 mm																																																	
Fresh mortar density	1,9 ± 0,1 kg/ L																																																	
Consumption	<p>The consumption is dependent on the size of the tiles, joint width and depth. As a guide, consumption is indicated in following table and is expressed in g/m².</p> <table border="1"> <thead> <tr> <th rowspan="2">Tile Size</th> <th colspan="3">Joint Width</th> </tr> <tr> <th>2 mm</th> <th>3 mm</th> <th>5 mm</th> </tr> </thead> <tbody> <tr> <td>Glass mosaic</td> <td>1300</td> <td>-</td> <td>-</td> </tr> <tr> <td>2 × 2 × 0,4</td> <td></td> <td></td> <td></td> </tr> <tr> <td>5 × 5 × 0,4</td> <td>450</td> <td>-</td> <td>-</td> </tr> <tr> <td>10 × 10 × 0,6</td> <td>350</td> <td>500</td> <td>840</td> </tr> <tr> <td>15 × 15 × 0,9</td> <td>350</td> <td>500</td> <td>840</td> </tr> <tr> <td>20 × 20 × 0,9</td> <td>250</td> <td>380</td> <td>630</td> </tr> <tr> <td>30 × 30 × 1</td> <td>190</td> <td>280</td> <td>470</td> </tr> <tr> <td>30 × 60 × 1</td> <td>140</td> <td>210</td> <td>350</td> </tr> <tr> <td>50 × 50 × 1</td> <td>110</td> <td>170</td> <td>280</td> </tr> <tr> <td>60 × 120 × 1,1</td> <td>80</td> <td>110</td> <td>200</td> </tr> </tbody> </table> <p>These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc. Consumption can be also calculated with the following formula:</p> <p>Consumption (g/m²) = A × B × [(C + D)/(C × D)] × 140.</p> <p>A = Gap width (mm) B = Tile height (mm) C = Tile length (cm) D = Tile width (cm)</p>			Tile Size	Joint Width			2 mm	3 mm	5 mm	Glass mosaic	1300	-	-	2 × 2 × 0,4				5 × 5 × 0,4	450	-	-	10 × 10 × 0,6	350	500	840	15 × 15 × 0,9	350	500	840	20 × 20 × 0,9	250	380	630	30 × 30 × 1	190	280	470	30 × 60 × 1	140	210	350	50 × 50 × 1	110	170	280	60 × 120 × 1,1	80	110	200
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Ambient Air Temperature	+5 °C min. / +35 °C max																																																	
Mixing Ratio	5 kg bag	~1,5 litres of water	(30 % ± 2 %)																																															
Substrate Temperature	+5 °C min. / +35 °C max																																																	
Pot Life	~1 hours																																																	
Waiting Time	24–36 hours																																																	
Applied Product Ready for Use	24–36 hours																																																	

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.

LIMITATIONS

- Do not exceed the recommended amount of water in the mix. The mix must never be fluid.
- Do not add or allow any additional water to be added into the mixed product during or after mixing.
- Prevent contact of freshly applied material with water (including rain), except during cleaning operations.
- Also prevent exposure with excess atmospheric humidity / condensation or residual moisture in the substrate etc.
- Avoid significant temperature variation during application and setting times, as well as excessive draughts, forced ventilation or winds.
- Excess water and ventilation, temperature variations, application on very porous tiles or on substrates leading to rapid water absorption etc. can result in colour shade variations.
- When coloured grout is applied for aesthetics such as on polished porcelain or natural stone tiles, always carry out cleanability testing on a small area prior to full application.
- On highly absorbent tiles, it is always recommended to thoroughly pre-dampen the surface before grouting.
- Always apply SikaCeram®-650 Classic in a continuous operation and do not interrupt for more than two hours in the same room or area of tiling.
- Premature exposure to water or excess water in the mix can result in white efflorescence on the grout surface.
- Avoid application in direct sunlight to avoid cracking in the joint.
- Ensure grout has set sufficiently before carrying out the tile cleaning procedure to avoid grout being removed from joint.
- Do not add anything to the product that is not specified in this Product Data Sheet.
- Do not use for any applications not explicitly described in this Product Data Sheet.

ECOLOGY

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.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Check joints are dry, clean, and clear of excess adhesive, contaminants and tile joint spacers. Remove from joint before grout application.
For applications in hot climates / environments, or on absorbent substrates, thoroughly pre-dampen the sur-

face immediately prior to product application. Avoid any ponding / standing water on the surface. Surface must not be damp to touch.

MIXING

Pour the recommended amount of clean cold water into a suitable, clean mixing container. Slowly add SikaCeram®-650 Classic powder to the water while mixing using a low speed (~500 rpm) drill mixer. Then mix thoroughly until the material is fully mixed and lump free. Avoid entraining air into the mix by over mixing.
Allow the product to stand for 2–3 minutes before re-mixing for 30 seconds.
The finished mix has a creamy consistency, uniformly coloured and is easy to apply and spread.
For areas requiring only small quantities, these can be mixed by hand. Measure the water : powder ratio carefully as small differences in the mix ratio can result in colour shade variations.

APPLICATION

Before grouting check adhesive has fully set. SikaCeram®-650 Classic is applied using an appropriate tool such as a grout spreader, squeegee or grouting float/trowel.
Completely fill and compact the joints uniformly. If required, finish grout with a grout finishing tool while grout is wet.
Using the same spreader/ float, remove excess grout from the tile surfaces moving the tool diagonally across the joints.
When the grout is touch dry. Use a damp sponge or sponge float to clean the tile surfaces. Clean sponge regularly with clean water.
When grout has set hard enough in the joint (finger nail hard). Polish the tile surfaces by wiping with a clean, soft dry cloth.
If SikaCeram®-650 Classic has been used instead of water in the grout mix, polish the tile surfaces immediately after the initial cleaning with a damp sponge.

CLEANING OF TOOLS

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

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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, sub-

strates 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.

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