

PRODUCT DATA SHEET

SikaCeram[®]-205 Medium

TILE ADHESIVE FOR MEDIUM SIZED CERAMIC TILES



DESCRIPTION

SikaCeram[®]-205 Medium is a polymer modified, cement-based, improved adhesive for medium sized ceramic tiles. It can be used in layers up to 10 mm thick and is suitable for tiling on both floors and walls, inside and outside of residential properties. SikaCeram[®]-205 Medium is C2 TE classified according to EN 12004.

USES

SikaCeram[®]-205 Medium is suitable for bonding the following types of tiles:

- All kinds of medium-sized ceramic tiles
- SikaCeram[®]-205 Medium can be used indoors and outdoors on the following substrate surfaces:
 - Gypsum and cement based substrates
 - For overlaying existing sound ceramic tiles, when indoors and primed with Sika[®] Primer-21W
 - Also for spot-fixing insulating panels of polystyrene, polyurethane foam, and glass / rock wool indoors

CHARACTERISTICS / ADVANTAGES

- No vertical slip, high slump resistance and grab
- Extended open time
- Frost resistant
- Suitable for all types of ceramic tiles

SUSTAINABILITY

VOC emission classification according to French regulation A+.

APPROVALS / CERTIFICATES

Improved cementitious adhesive with reduced slip and extended open time classified C2TE according to EN 12004:2007. Declaration of Performance n. 55630532 assessed by notified laboratory 1599, and provided with the CE marking.

PRODUCT INFORMATION

Composition	Polymer modified, Portland cement based, with selected aggregates, water retainers and other special additives
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
Maximum Grain Size	D _{max} : 0.5 mm
Product Declaration	C2TE (EN12004)

TECHNICAL INFORMATION

Tensile Adhesion Strength	Initial	$\geq 1.0 \text{ N/mm}^2$	(EN1348)
	Water immersion	$\geq 1.0 \text{ N/mm}^2$	
	Heat ageing	$\geq 1.0 \text{ N/mm}^2$	
	Freeze-Thaw cycle	$\geq 1.0 \text{ N/mm}^2$	
Slip Resistance	$\leq 0.5 \text{ mm}$	(EN 1308)	
All data collected from test reports released by laboratory Modena Centro Prove, Notified Body 1599.			

SYSTEMS

System Structure	For the following substrates a primer must be used:		
	Substrate	Primer	
	Gypsum plaster or anhydrite screed	Sika® Primer-11W	
	Existing ceramic tiles, PVC sheet, linoleum and existing vinyl tiled floors	Sika® Primer-21W	
Application and consumption details of the primers are given in their respective Product Data Sheets.			

APPLICATION INFORMATION

Mixing Ratio	7.5 litres of water per 25 kg bag $30\% \pm 1\%$		
Fresh Mortar Density	~1.6 kg/l		
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 $30 \times 30 \text{ cm}$). As a guide:		
	Size of tiles	Notched trowel size	Consumption
	Small	6 mm	~2.5 kg/m ²
	Medium	8 mm	~3 kg/m ²
	Large	10 mm	~4 kg/m ²
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	$\geq 0.5 \text{ N/mm}^2$ after 30 min		(EN 1346)
Adjustability Time	~50 min		
Curing Time	24–36 hours		
Curing Treatment	Protect from adverse weather conditions, such as extremely high or freezing temperatures, rain, direct exposure to sun, for at least 12–24 hours from application.		

Applied Product Ready for Use

<u>Use</u>	<u>Waiting time</u>
Grouting on floors / walkability	24–36 hours
Grouting on walls	4–6 hours
Full surface traffic / use	~14 days

Values determined at laboratory conditions: 23 °C ± 2 °C, R.H. 50 % ± 5 %.
Higher temperatures will reduce the indicated waiting time, 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.
- 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®-205 Medium, 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.
- When laying tiles on non-absorbent or substrates with limited absorbency, such as existing ceramic tiles, painted surfaces 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.
- 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 Sika® waterproofing product / system should be applied before the tiling.

MIXING

Pour the recommended amount of water into a suitable, clean mixing container. Whilst stirring slowly, slowly add the SikaCeram®-205 Medium 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®-205 Medium is applied using a notched trowel.
- Apply sufficient product to ensure complete 'wetting' of the backs of the tiles.
- Tiling must 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®-205 Medium adhesive.

- Avoid application in direct sunlight and/or strong wind / draughts.
- SikaCeram®-205 Medium is specifically designed to be ideal for laying non-absorbent tiles up to 2050 cm² (e.g. 45x45 cm) indoors, and for tiles up to 900 cm² (e.g. 30x30 cm) outdoors.
- To lay any tiles larger than 900 cm² (e.g. 30x30 cm), the double-layer 'buttering' technique is always recommended.

CLEANING OF EQUIPMENT

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.

IMPORTANT CONSIDERATIONS

- Gypsum plaster substrates must have a maximum moisture content of 0.5 %.
 - If a waterproofing layer is required under the tiles, then cement and/or acrylic-based systems are suitable for use under SikaCeram®-205 Medium. Please refer to the respective Sika Product Data Sheets for more information.
 - For any natural stones tiles always carry out a small test application first.
- SikaCeram®-205 Medium must not be applied in the following situations:
- On metal or wood surfaces.
 - On existing ceramic tiles outdoors.
 - For any situations or applications 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.

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