BUILDING TRUST

PRODUCT DATA SHEET

SikaCeram®-204 Medium White

WHITE, DUST REDUCED, CEMENT BASED TILE ADHESIVE

PRODUCT DESCRIPTION

SikaCeram®-204 Medium White is a white, dust reduced, cement based tile adhesive with improved adhesion, 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®-204 Medium White is classified C2 TE according to EN 12004.

USES

SikaCeram®-204 Medium White is suitable for bonding the following types of tiles:
- All kinds of medium-sized ceramic tiles
- Earthenware tiles
- Natural, artificial and concrete stone slabs not sensitive to deformation
- Natural, artificial and cast stone tiles not sensitive to discolouration

SikaCeram®-204 Medium White can be used indoors and outdoors on the following substrate surfaces:
- Gypsum and cement based substrates
- Heating floors indoors

CHARACTERISTICS / ADVANTAGES

- No vertical slip
- Extended open time
- Frost resistant
- Dust reduced

ENVIRONMENTAL INFORMATION

VOC emission classification according to Emicode EC1 plus

APPROVALS / STANDARDS

- Cementitious adhesive with improved adhesion, reduced slip and extended open time classified C2 TE according to EN 12004:2007, Declaration of Performance 49652043, assessed by notified laboratory 0799 and 1378 for fire testing, and provided with the CE marking.
- Licence for use of EMICODE n. 12345/24.02.97.

PRODUCT INFORMATION

Chemical Base	Portland cements, selected aggregates, water retention additives, re-dispersible polymer	
Packaging	20 kg bag	
Appearance / Colour	White powder	
Shelf Life	12 months from date of production	
Storage Conditions	Undamaged original sealed packaging, in dry cool conditions	
Product Declaration	C2 TE	(EN 12004)
Maximum Grain Size	Dmax: 0,5 mm	

TECHNICAL INFORMATION

Tensile adhesion strength	Initial	≥ 1,0 N/mm²	(EN 1348)
	Water immersion	≥ 1,0 N/mm²	
	Heat ageing	≥ 1,0 N/mm²	
	Freeze-thaw cycles	≥ 1,0 N/mm²	
Slip resistance	≤ 0,5 mm		(EN 1308)

APPLICATION INFORMATION

Mixing Ratio

5,8 litres of water per 20 kg bag
29 % ± 1 %

Consumption

Consumption is always depending on the substrate surface's profile and roughness, 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 a guide:

Size of tiles	Notched trowel size	Consumption
Small	6 mm	~2,4 kg/m²
Medium	8 mm	~2,9 kg/m²
Large	10 mm	~3,4 kg/m²

Layer Thickness

10 mm max.

Ambient Air Temperature

+5 °C min. / +35 °C max.

Substrate Temperature

+5 °C min. / +35 °C max.

Pot Life

~3 hours at 20 °C

Open Time

≥ 0,5 N/mm² after 30 min (EN 1346)

Curing Time

~24 hours

Applied Product Ready for Use

Use	Waiting time
Grouting inside / walkability	~24 hours
Grouting outside	~48 hours

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

Fresh mortar density	1,70 kg/dm³

SYSTEM INFORMATION

System Structure

For the following substrates a primer shall be used:

Substrate	Primer
Absorbent substrate (cementitious screed, gypsum, plaster or anhydrite screed)	Sikafloor®-01 Primer Sikafloor®-03 Primer
Non or partly absorbent substrate (existing ceramic tiles, PVC sheet, linoleum and existing vinyl tiled floors)	Sikafloor®-02 Primer

Application and consumption details of the primers are given in their respective Product Data Sheet.

VALUE BASE

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

LIMITATIONS

- 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®-204 Medium White. Please refer to the respective Sika Product Data Sheets for more information.

SikaCeram®-204 Medium White 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.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets before using any products. 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.

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 contaminants to remove, perform adequate preparation techniques, such as water-jet washing or blastcleaning, in order to remove all traces which could reduce the product's adhesion to the substrate.
- Any small surface defects and variations in level, can be prefilled and levelled with an additional layer of SikaCeram®-204 Medium White, to a maximum thickness of 10 mm, applied at least 24 h before laying the ceramic tiling. For large and thick areas of surface reprofiling, 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 substrates with limited absorbency, such as existing ceramic tiles, painted surfaces etc., confirm that these surfaces are 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 predampen 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®-204 Medium White 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®-204 Medium White is applied using a notched trowel.
- Apply sufficient product to ensure complete ‘wetting’ of the back 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 a trowel, discard this material and apply a fresh layer of SikaCeram®-204 Medium White adhesive.
- Avoid application in direct sunlight and/or strong wind/draughts.
- SikaCeram®-204 Medium White is specifically designed to be ideal for laying non-absorbent tiles up to 3600 cm² (e.g. 60 × 60 cm) indoors, and 1600 cm² (e.g. 40 x 40 cm) for outdoors.
- To lay any tiles larger than 900 cm² (e.g. 30 × 30 cm), the double-spreading (buttering and floating) 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.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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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