

PRODUCT DATA SHEET

SikaCeram[®]-255 Big Slab

CEMENT-BASED, DEFORMABLE, C2TES1

DESCRIPTION

SikaCeram[®]-255 Big Slab is a cement-based, improved, deformable, one-pack cementitious adhesive. Suitable for setting big slab on both floors and walls, inside and outside for residential and commercial, balconies and terraces. C2 TE S1 classified according to EN 12004.

USES

SikaCeram[®]-255 Big Slab is suitable for bonding the following types of tiles:

- All kinds of granite tiles
- In large size and in thin slabs

SikaCeram[®]-255 Big Slab can be used indoors and outdoors, on floors and walls on the following substrate surfaces:

- Mortar plaster, Concrete
- Existing ceramic tiles, stones

SikaCeram[®]-255 Big Slab is suitable for high performance and demanding applications, such as:

- Industrial and heavy traffic floors
- Balconies and terraces

CHARACTERISTICS / ADVANTAGES

- Deformability
- Reduced vertical slipping
- Extended open time
- Smooth application

APPROVALS / STANDARDS

Improved deformable cementitious adhesive with reduced slip and extended open time classified C2TE S1 according to EN12004.

PRODUCT INFORMATION

Chemical base	Portland cement, selected aggregates, water retention additives
Packaging	25 kg bag
Appearance / Colour	Grey powder
Shelf life	9 months from date of production
Storage conditions	If stored properly in original, unopened and undamaged sealed packaging, in dry and cool conditions.
Maximum Grain Size	D _{max} : 0,42

TECHNICAL INFORMATION

Tensile Adhesion Strength	Initial	$\geq 1.0 \text{ N/mm}^2$	(EN 1348)
	Water immersion	$\geq 1.0 \text{ N/mm}^2$	
	Heat ageing	$\geq 1.0 \text{ N/mm}^2$	
Slip Resistance	$\leq 0.5 \text{ mm (T)}$		(EN1308)
Transverse deformation	$\geq 2.5 \text{ mm, } < 5 \text{ mm (S1)}$		(EN 12002)

APPLICATION INFORMATION

Mixing ratio	Water : SikaCeram®-255 Big Slab $\pm 7.75 \text{ L} : 25 \text{ kg (by weight)}$ (as per consistency requirement)											
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 a guide: <table border="1"> <thead> <tr> <th>Size of tiles</th> <th>Notched trowel</th> <th>Consumption</th> </tr> </thead> <tbody> <tr> <td>Big Slab*</td> <td>size 10 mm square</td> <td>$\sim 10 \text{ kg/m}^2$</td> </tr> <tr> <td>< 60 cm x 60 cm**</td> <td>size $\sim 8 \text{ mm}$ square</td> <td>$\sim 5 \text{ kg/m}^2$</td> </tr> </tbody> </table> <p>Note : * Method : additional buttering, 2 sides application ** Method : single adhesive layer, 1 sides application</p>			Size of tiles	Notched trowel	Consumption	Big Slab*	size 10 mm square	$\sim 10 \text{ kg/m}^2$	< 60 cm x 60 cm**	size $\sim 8 \text{ mm}$ square	$\sim 5 \text{ kg/m}^2$
Size of tiles	Notched trowel	Consumption										
Big Slab*	size 10 mm square	$\sim 10 \text{ kg/m}^2$										
< 60 cm x 60 cm**	size $\sim 8 \text{ mm}$ square	$\sim 5 \text{ kg/m}^2$										
Layer Thickness	$\pm 6 \text{ mm}$ (Big Slab adhesive)											
Ambient Air Temperature	$+5 \text{ }^\circ\text{C min.} / +35 \text{ }^\circ\text{C max.}$											
Substrate Temperature	$+5 \text{ }^\circ\text{C min.} / +35 \text{ }^\circ\text{C max.}$											
Maturing Time	$\sim 3 \text{ min}$											
Pot Life	$\sim 1 \text{ hour}$											
Open time	$\geq 1 \text{ N/mm}^2$ after 30 min (normal condition, interior)		(EN 1346)									
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 on floors / walkability	24–36 hours										
	Grouting on walls	4–6 hours										
	Full traffic / use	$\sim 14 \text{ days}$										
	Filling with water	$\sim 21 \text{ days}$										
Values determined at laboratory conditions: $+23 \text{ }^\circ\text{C} \pm 2 \text{ }^\circ\text{C}$, R.H. $50 \text{ } \pm 5 \text{ } \%$.												

Adjustability Time ~30 min (normal condition, interior)

Fresh mortar density ~1.6 kg/l

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.

USES

- If a waterproofing layer is required under the tiles, then cement-based and acrylic-based systems are suitable for use under SikaCeram®-255 Big Slab. 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®-255 Big Slab 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 (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Higher temperatures/exterior will reduce the indicated open time, waiting time, pot life.
- Substrates must be SSD, 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 refilled and levelled with an additional layer of SikaCeram®-255 Big Slab, to a maximum thickness of 15 mm, applied at least 24 h before 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. Use primer if necessary.

- 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 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®-255 Big Slab powder to the water and then mix thoroughly using a low speed (~300-600 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®-255 Big Slab 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, applying 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®-255 Big Slab adhesive.
- Avoid application in direct sunlight and/or strong wind / draughts.
- SikaCeram®-255 Big Slab is suitable for laying absorbent and non-absorbent tiles indoors without any size limits. Use support if necessary.
- To lay any tiles larger than 1500 cm² (e.g. 50 x 50 cm), the double-spreading (buttering) technique is always recommended.

CLEANING OF TOOLS

Thoroughly clean all tools and equipments 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

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, 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.

Sika Limited (Vietnam)

Nhon Trach 1 Industrial Zone,
Nhon Trach Dist., Dong Nai Province,
Vietnam

Tel: (84-251) 3560 700

Fax: (84-251) 3560 699

sikavietnam@vn.sika.com



Product Data Sheet

SikaCeram®-255 Big Slab

February 2025, Version 03.01

021710102000000875

SikaCeram-255BigSlab-en-VN-(02-2025)-3-1.pdf