

PRODUCT DATA SHEET

SikaGrout[®]-212

CEMENT BASED GROUTING MORTAR

DESCRIPTION

SikaGrout[®]-212, is a one part, flowable, non-shrink cementitious grout.

USES

- Under stanchion plates
- Void filling
- Concrete repairs
- Machine base plates
- For exterior and interior use

CHARACTERISTICS / ADVANTAGES

- Excellent flow properties
- Just add water
- Compatible with Sika[®] FerroGard[®] corrosion inhibitors
- High compressive strength gain
- Easy to mix and apply
- Excellent bond to concrete
- Contains no chloride admixtures
- Overcoatable with Sika reprofiling/levelling mortars and coatings
- Generally more durable than equivalent class of concrete
- Does not segregate or bleed
- Fire rating and protection properties comparable to concrete
- Can be pumped or poured
- Good mechanical properties
- Grouting thickness between 10-75 mm

APPROVALS / CERTIFICATES

Conforms to the requirements of EN 1504-3 R4 Classification.

Conforms to the requirements of EN 1504-6.

PRODUCT INFORMATION

Chemical base	Cement, selected aggregates and special additives
Packaging	25 kg bags
Appearance / Colour	Grey, powder
Shelf life	6 months from date of production
Storage conditions	SikaGrout [®] -212 shall be stored properly in dry conditions in unopened and undamaged original sealed packing.
Density	~2.2 - 2.4 kg/l (fresh mortar)
Maximum Grain Size	D _{max} : 2 mm
Soluble Chloride Ion Content	≤ 0.05% (EN 1015-17)

TECHNICAL INFORMATION

Compressive Strength	1 day	28 days
	30 - 50 N/mm ²	60 - 90 N/mm ²
Modulus of Elasticity in Compression	26 GPa	(EN 131412)
Expansion	%0.25 - 0.50 (Early Expansion)	

APPLICATION INFORMATION

Consumption	For 1 litre fresh mortar, approximately 2,0 kg powder. Excluding allowances for loss wastage, surface profile and porosity.
Yield	Approximately 1 bag can make 12.5 lt volume.
Product Temperature	Product properties, desired rate of strength development and workability time can be changed depending on ambient temperature. When using the product at a temperature higher than recommended, the working time will be reduced. When using in a lower temperature, strength gain will be retarded. Heat water if necessary to achieve a temperature between 15-20° C.
Ambient Air Temperature	+5°C min. / +30°C max.
Substrate Temperature	+5°C min. / +30°C max.
Pot Life	~40 minutes (at 20 °C)

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

SUBSTRATE QUALITY

Concrete, mortar, stone:

Surfaces must be sound, clean, free from ice, oils, grease, standing water and any loose or friable particles and any other surface contaminants. The concrete "pull off" (tensile) strength should be > 1.0 MPa.

Steel, iron:

Clean, free from oil or grease, rust and scale etc.

Shutter/Formwork:

All formwork should be of adequate strength, treated with release agent and sealed to prevent leakage. Sealing can be achieved by using Sikaflex® -11FC+ sealant beneath or around formwork and between joints. Ensure formwork includes outlets for extraction of the pre-soaking water. A header box/hopper should be constructed on one side of the formwork so that a grout head of 150-200 mm can be maintained during the grouting operation.

SUBSTRATE PREPARATION

The substrate should be prepared by suitable mechanical preparation techniques such as high pressure water jetting, breakers, blast cleaning, scabblers, etc. The concrete substrates should be pre-soaked with clean water continuously for 2 - 6 hours to ensure a saturated surface dry condition throughout the operation. Immediately before pouring grout, remove all excess or standing water from within any formwork, cavities or pockets.

MIXING

2,75 or 3,25 lt water must be used for 25 kg powder material. Measure the appropriate quantity of water and place it into a suitable mixing pail. Pour slowly half bag powder while mixing by using low speed electric stirrer (max. 500 rpm). Continue mixing until a homogeneous free flowing grout is achieved. Then add rest of the powder in portions and mix until the desired application consistency can be obtained and ensure no unmixed grout remains stuck to the container. Please do not use more water than advised.

Mixing Time: 3 minutes minimum

Mixing Tools: Suitable mixing equipments are basket type mixers with one or two arms, forced actions or stand type mixers. Mix the powder material with the appropriate quantity of water by using low speed electric stirrer (max. 500 rpm) avoiding entraining too much air.

APPLICATION

Pour mortar immediately after mixing into the prepared openings. Ensure that air displaced by the grout is allowed to escape; otherwise entrapped air will prevent full contact grouting.

When carrying out base plate grouting, ensure sufficient head of pressure is maintained to keep mortar flowing. To make optimum use of the products expansion properties, apply the grout as quickly as possible (within max. 15 minutes). Use steel banding or chains to assist flow where necessary. For large volume placement, grout pumps are recommended.

CURING TREATMENT

Keep visible, free mortar surface as small as possible and protect it from premature drying out by suitable measures (keep moist, cover with wet hessian etc.) In cold weather apply heat blankets or the other precautions must be taken to maintain a constant temperature.

CLEANING OF EQUIPMENT

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

IMPORTANT CONSIDERATIONS

Please only use SikaGrout®-212 for grouting works. Application thickness must be between 10 mm and 75 mm. If application thickness is thicker than recommended thickness, please use following recommendations; Up to 100 mm, 5-10 mm aggregate can be added to grout

Up to 150 mm, 5-15 mm aggregate can be added to grout

The amount of washed, clean and dry aggregate, which will be added to grout, must be less than half of grout amount by weight. In case of adding extra aggregate (preferably natural) to the grout, due to the reduction of cement, strengths and consistency can be reduced approx. 20-40%. After application curing shouldn't be neglected.

- Not to be used for patch repair work
- Do not use vibrating pokers
- Do not apply when there is a risk of frost
- Pour or pump from one side only
- For the best result, it is suggested to condition material to +15°C to +25°C before using.

BASIS OF PRODUCT DATA

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

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 the exact product data and uses.

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.

Sika Yapı Kimyasalları A.Ş.

İstanbul Deri Organize Sanayi Bölgesi

Alsancak Sokak No:5 J-7 Özel Parsel

Tuzla İstanbul TÜRKİYE

Tel. : +90 216 5810600

Fax : +90 216 3940773

bilgi@tr.sika.com | www.sika.com.tr



SikaGrout-212-en-TR-(06-2018)-1-1.pdf

PRODUCT DATA SHEET

SikaGrout®-212

June 2018, Version 01.01

020201010010000002