

PRODUCT DATA SHEET

SikaGrout[®]-212 HP

High early final strength, shrinkage compensated, self-leveling cementitious grout

DESCRIPTION

SikaGrout-212 HP is a cement based, 1-component, ready to mix, free flowing, high early strength shrinkage compensated expanding grout.

USES

SikaGrout 212HP can be used for grouting:

- Machine foundations and base plates
- Steel column base
- Bridge bearing pads
- Cavities, gaps and recesses etc.

CHARACTERISTICS / ADVANTAGES

- Easy to use
- Easy to mix, only add water
- Good flow characteristics
- Rapid strength development
- High final strengths
- Shrinkage compensated
- Non corrosive
- Chloride free

APPROVALS / CERTIFICATES

GB/T 50448-2015 (Type III) Technical code for application of cementitious grout

PRODUCT INFORMATION

Composition	Cement, selected fillers and aggregates, special additives		
Packaging	25 kg bag		
Shelf life	6 months from date of production		
Storage conditions	Store properly in dry conditions in undamaged and opened original sealed packaging.		
Appearance and colour	Grey powder		
Maximum grain size	D _{max} :3.3mm		
Density	~ 2.2 kg/L (density of fresh mortar)		
Soluble chloride ion content	<0.1%		(GB/T 50448-2015)
Compressive strength	<u>1 d</u> ≥45	<u>3 d</u> ≥70	<u>28 d</u> ≥90 (GB/T 50448-2015)

Expansion	<i>Vertical Expansion</i>		(GB/T 50448-2015)
	3 h	The difference between 24 h and 3 h	
	0.1 ~ 3.5	0.02 ~ 0.5	
Bleeding	0%		(GB/T 50448-2015)
Mixing ratio	3.5 litres water per 25 kg bag		
Yield	1 bag yields approximately 12.9 litres of mortar.		
Layer thickness	10 ~ 60 mm		
Flowability	Initial	30 min retained	(GB/T 50448-2015)
	≥ 290	≥ 260	
Ambient air temperature	+5°C ~ +35°C		
Substrate temperature	+5°C ~ +35°C		
Pot Life	~40 minutes at 20°C		

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.

IMPORTANT CONSIDERATIONS

- Not to be used for open repair works or overlay in unconfined spaces
- Refer to the Method Statement for Cementitious Grouts for more information regarding substrate preparation
- Avoid application in direct sun and/or strong wind
- Do not add water over recommended dosage
- Apply only to sound, prepared substrate
- Do not add additional water during the surface finishing as this may cause discoloration and cracking
- Protect freshly applied material from freezing and frost
- Keep exposed surfaces to a strict minimum

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 Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

SikaGrout-212 HP must be mechanically mixed using a mechanical grout mixer or a suitable drum mixer. The grout mixer will reduce the chances of the mix becoming lumpy or aerated. Smaller quantities should be mixed in clean drum using an electric drill and spiral drill and spiral mixer at a speed of approximately 500 rpm.

DO NOT MIX BY HAND.

SUBSTRATE QUALITY / PRE-TREATMENT

Substrate Quality Concrete

The concrete shall be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by the grouting materials.

Steel

Rust, scale, mortar, concrete, dust and other loose deleterious material which reduces bond or contributes to corrosion shall be removed.

Substrate Preparation Concrete

Delaminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.

Pre-wet the surface, the surface shall not be allowed to dry before application of the concrete repair mortar. The surface shall achieve a dark matt appearance without glistening and surface pores and pits shall not contain water.

Steel

Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting.

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SikaGrout®-212 HP

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MIXING

SikaGrout® -212HP can be mixed with a low speed (400~600 rpm) mixer to avoid entraining too much air. Mix only full bags for best results. Pour the water in the correct proportion into a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly at least for 3 minutes till a homogeneous mix is achieved. Wait for 1 to 2 minutes to allow the entrapped air to escape then mix again for 1 to 2 minutes.

APPLICATION

Pour grout immediately after mixing into the prepared openings. Ensure air displaced by the mortar can easily escape; otherwise entrapped air will prevent full contact grouting. When grouting base plates etc., ensure that a continuous and sufficient head of pressure is maintained to keep grout flowing. To make optimum use of the products expansion properties apply the grout as quickly as possible (refer to Potlife). In case of large volume / high layer thickness grouting clean, graded gravel may be added to the grout mix (up to 100% by weight of grout). Round pebbles in general are better than crushed stone. Grading should be in the ranges of 4 to 8 mm, 8 to 16 mm and 16 to 32 mm. Pre-trials are required to define grading and mixing ratio for best results.

CURING TREATMENT

Keep visible exposed grout surfaces to a minimum. Protect the fresh material from premature drying using appropriate curing method e.g. curing compound, moist geo-textile membrane, hessian, polythene sheet, etc.

CLEANING OF EQUIPMENT

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

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.

