BUILDING TRUST

PRODUCT DATA SHEET

SikaGrout®-215 NZ

HIGH STRENGTH, SHRINKAGE COMPENSATED, POURABLE CEMENTITIOUS GROUT

DESCRIPTION

SikaGrout®-215 NZ is a cementitious grout containing a carefully formulated blend of natural aggregates and other materials, plus Sika admixtures which enable it to achieve high early age strengths. SikaGrout®-215 NZ has been designed to incorporate a two-stage process that counteracts the effects of shrinkage often associated with cement based grouts. These special materials provide positive expansion in the plastic phase and shrinkage compensation once hardened. SikaGrout®-215 NZ is normally used in details where the material can be confined and restrained during placement and curing to optimise these characteristics. SikaGrout®-215 NZ is a one component grout and only requires the addition of clean, fresh water.

USES

SikaGrout®-215 NZ contains very fine natural aggregates. It is used as a high flow grout where dimensions are minimal. Typical applications for SikaGrout®-215 NZ are:
- For gaps 2 mm to 80 mm
- Grouting under base plates, tanks, etc., where dimensions are minimal
- Grouting around pipe sleeves and liners
- Grouting of rock anchors, tensioning cables, etc.
- As the grout in pre-packed aggregate repair systems

SikaGrout®-215 NZ can also be used for:
- Grouts for anchor bolts, ground anchors, rods, etc.
- Reinforcement ducts in the connection detail between precast columns and beams

CHARACTERISTICS / ADVANTAGES

SikaGrout®-215 NZ offers the following advantages:
- Positive shrinkage compensation
- High early age strength development
- High final strengths
- Excellent substrate adhesion
- Adjustable consistency
- High flow characteristics
- Ideal for use in pre-packed aggregate systems of repair
- Increased resistance to aggressive liquid penetration when hardened

PRODUCT INFORMATION

Packaging	25 kg bag
Appearance / Colour	Grey powder
Shelf Life	Six (6) months from date of manufacture when stored as stated.

Storage Conditions	Store in unopened, original containers, free from frost and below +25°C.
Density	~ 2.1 kg/litre

TECHNICAL INFORMATION

Compressive Strength	24 hours	20 MPa	(EN 196-1)
	7 days	50 MPa	
	28 days	60 MPa	

APPLICATION INFORMATION

Mixing Ratio	Maximum water content: 6.0 litres/25 kg bag
Yield	As a pourable grout (approx.): 25 kg = 15 litres when mixed with 6 litres of water.
Flowability	CRD Cone Flow times (approx.) at high flow condition: 30 seconds

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Surface Preparation:
- Concrete surfaces should be clean, sound and free from dust, oils, grease, loosely adhering particles or any other surface contaminants that will affect bond.
- The surface must be scabbled or sandblasted to remove all weak cement laitance.
- Dry concrete substrates shall be saturated with water for some time, and the surface allowed to dry (to achieve what is referred to as a 'saturated surface dry' condition) before grouting commences.
- Metal surfaces (iron and steel) should be free from rust, scale, oil, grease, etc.

Formwork Preparation:
- Formwork must be constructed to prevent any leakage of the plastic grout.
- Formwork should be constructed in such a manner as to ensure that a minimum horizontal surface area is left exposed. The formwork must be able to rigidly confine the grout during its expansion process.
- When grouting under base plates, etc, formwork should be constructed to ensure that a head of grout higher than the level of the base plate is maintained. This will provide a constant full flow of grout under the base plate to avoid the occurrence of air entrapment under the plate.
- When filling any detail ensure that an adequate volume of mixed grout is available to allow for a continuous and uninterrupted flow.
- In areas of formwork where air pockets may occur it is necessary to install bleed tubes or openings that will allow entrapped air to escape.
- When providing formwork for pre-packed aggregate repairs the forms may need to be built up in layers to allow for the aggregate to be packed into the cavity.
- In many cases it may be necessary to install grouting tubes or pipes that enable the cavity to be filled from bottom to top. This will force any air upwards and help to eliminate the possibility of air locks being formed.
- Ensure that all formwork has been thoroughly treated with a suitable mould release agent.
- Flush out all forms with clean, fresh water prior to grout placement

MIXING

Application temp: +5°C to +25°C. Pour the required amount of clean, fresh water into a suitable mixing container and slowly add all of the powder while mixing continuously with a Sika mixing paddle attached to a low speed electric drill (max. 500 rpm). Mix for 2-3 minutes until a smooth, lump free consistency is achieved.

APPLICATION

Grout should be placed into forms immediately after mixing, taking care to ensure no air is trapped.

CURING TREATMENT

Formwork should be left in place for at least 5 days if possible, to prevent moisture evaporation and provide restraint to early age hardened expansion. Once formwork is removed the use of a suitable curing membrane such as Sika Antisol® should be applied to any exposed faces. Refer to separate data sheet for further information.

CLEANING OF TOOLS

Clean all tools and equipment with water immediately after use. Hardened SikaGrout®-215 NZ can only be removed mechanically.

LIMITATIONS

- For further information on pre-packed aggregate repairs contact the Sika Technical Department.
- Large volumes of cement rich grout can generate excessive amounts of heat whilst hardening as a result of the cement hydration process. This heat build up may in some cases lead to thermal cracking within the grout as it cools down. For applications requiring larger volumes it is recommended that our high strength, flowing micro concrete, Sika MonoTop®-438 R (refer separate data sheet) be used.
- For concrete repairs refer to the Sika® MonoTop® Range.

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

Sika (NZ) Limited
85-91 Patiki Road
Avondale, Auckland 1026
New Zealand
0800 745 269
www.sika.co.nz