BUILDING TRUST

PRODUCT DATA SHEET

SikaGrout®-880 ID

CEMENTITIOUS HIGH STRENGTH, NON-SHRINK, IRON REINFORCED PRECISION GROUT

DESCRIPTION

SikaGrout®-880 ID is a non-shrink, iron aggregate precision grout with high early and ultimate strengths. It is formulated to provide extended working time even at high ambient temperatures and is typically placed at a flowable consistency at thicknesses between 10 mm and 150 mm.

USES

SikaGrout®-880 ID is used in the power and heavy industry sectors for all precision, non-shrink grouting applications particularlythose requiring dynamix load bearing and impact resistance such as:

- Turbines, generators, pumps and centrifugal compressors;
- Crane rails, ball mill, crushers;
- Rolling, stamping, drawing and finishing mills for the steel and alumunium industries;
- Critical equipment baseplates, soleplates & columns;
- Anchor bolts and bars;
- Installations requiring high early and ultimate compressive strengths.

FEATURES

- Iron reinforced – Contains treated inert iron aggregate as internal reinforcement – Provides improved resistance to heavy impact, and repetitive loading as well as rotational torque.
- High early strength – ensures rapid commissioning of new equipment and structures.
- High ultimate strength – ensures permanence of the installation under static and dynamic loads.
- Good flow characteristics – easy to grout intricate spaces normally inaccessible by conventional grouting techniques.
- Extended working time – facilitates grouting of large or difficult placements under a variety of conditions
- Dense, non-shrink grout – hardens free of bleeding, segregation and settlement shrinkage, to provide the maximum effective bearing area for load transfer
- Easy to use – pumpable for large installations and cementitious based for ease of cleaning equipment
- Compliance with codes – Meets the performance requirements of ASTM C1107 when tested in accordance with ASTM C109 and ASTM C1090

PRODUCT INFORMATION

Packaging	25 kg bag
Shelf life	6 months from date from production
Storage conditions	The products must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +10 °C and +30 °C.

TECHNICAL INFORMATION

Compressive strength	1 day	~ 40 N/mm²	(ASTM C-109)
	3 days	~ 60 N/mm²	
	7 days	~ 75 N/mm²	
	28 days	~ 90 N/mm²	

Flexural-strength	1 day	> 7 N/mm²	(ASTM C-348)
Expansion	28 days	0.0 - 0.3%	(ASTM C1090)
Tensile adhesion strength	28 days	> 1.5 MPa	(ASTM D4541)

APPLICATION INFORMATION

Mixing ratio	Actual water demand will depend on consistency required and temperature (both ambient and grout). As a guide, the following table indicates the approximate quantity of water required to mix a 25 kg bag SikaGrout®-880 ID to various consistencies. **Temperature** — **Flowable** 20°C — 3.75 L
Consumption	~2 173 kg/m³ of mortar
Yield	~11.5 L per 25 kg bag
Layer thickness	Recommended thickness is 20 - 100 mm
Material temperature	Very low or very high temperature will make application more difficult and careful consideration should be given to storage of materials. In hot weather conditions, some form of air-conditioned storage is required. Pre-conditioned materials at 20–25 °C will reduce the possibilities of flash or slow setting and other defects.
Ambient air temperature	+10°C to +30°C
Relative air humidity	70% max.
Pot Life	25 minutes
Flowability	*Flow cone* > 200 mm (ASTM C230/230M)
Setting time	4 - 6 hours
Fresh mortar density	~2.50 kg/L

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.

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

SURFACE PREPARATION

- Remove dirt, oil, grease, loose material and other bond-inhibiting materials.
- Anchor bolts to be grouted must be degreased with suitable solvent.
- Concrete must be sound and roughened to promote mechanical adhesion.
- Prior to pouring, surface must be wetted to saturated surface dry.

MIXING

SikaGrout®-880 ID can be mixed to a flowable or trowelable (plastic) consistency. The quantity of water required for a 25 kg bag is approximately 3.75 L (flowable). Water addition may be affected by temperature con- ditions on site. Trials are recommended to determine the correct water requirement. SikaGrout®-880 ID should be mixed using a suitable mixer. For flowable consistency, use a hand drill and paddle for small works up to two bags at a time and specialise grout mixers for larger volume Drum type mixers may not provide sufficient mixing efficiency to derive the op- timum performance.The clean water is added into a clean pail.

The filler of SikaGrout®-880 ID is added gradually while continuously mixing. Continue to mix till the desired consistency. This will normally be between 3 minutes after mixing has started. For best results, SikaGrout®-880 ID should be used within 30 minutes once mixed.

APPLICATION

After mixing, the grout is poured immediately into the prepared formwork or baseplate. Grouting for thicker section, which is more than 100 mm, it is necessary to add the graded 10 mm clean aggregate to minimise the heat generation. Steel rods or chains is used to assist in the flowability of the grout.
If a shaped shoulder is required, it should be formed before the grout has reached its final set. Carefully remove the formwork once the SikaGrout®-880 ID is self-supporting and cut the shape of the shoulder with a trowel. Preferably the shoulder should be cut to a 45° angle to minimise stresses.

CURING TREATMENT

As for all cementitious materials, curing is essential to prevent rapid drying out of the grout and shrinkage caused by the water loss. Curing should be carried out using curing compounds (Antisol), polythene sheet, wet hessian or water ponding.

CLEANING OF EQUIPMENT

Clean the tools and equipment using clean water. Once hardened, the product may only be removed using 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.

PT. Sika Indonesia Head Office and Manufacturing
Jl. Raya Cibinong-Bekasi Km.20
Limusnunggal-Cileungsi
Bogor 16820-Indonesia
Tel. +62 21 8230025, Fax +62 21 8230026