

Technical Data Sheet

StoCrete NSG 100

Ultra-high strength, dual shrinkage compensated grout for preplaced aggregate pressure grouting



Characteristics

- Area of application**
- To provide heavy duty support beneath load bearing units such as machine base plate and crane rails
 - Concrete repairs and pressure grouting

Properties

- Ease of application
- Positive expansion (dual) to ensure effective contact and support
- Minimal downtime
- Elimination of site batching errors
- Very high early strength and low permeability
- Elimination of staining or deterioration
- Chloride-free permitting use in contact with reinforced steel
- Good flow characteristic to allow ease of application

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Criteria	Standard / test specification	Value / Unit	Notes
Compressive strength @ 28 days	ASTM C942		
@ 1 day		> 50 N/mm ²	
@ 7 days		> 80 N/mm ²	
@ 28 days		> 100 N/mm ²	
Expansive characteristics	ASTM C940		
@ 3 days		< 0.2 %	
@ 28 days		< 0.2 %	
Setting time	ASTM C953		
Initial set		2.0 hours	
Final set		2.5 hours	
Final bleeding @ 3 hours	ASTM C940	< 2.0 %	

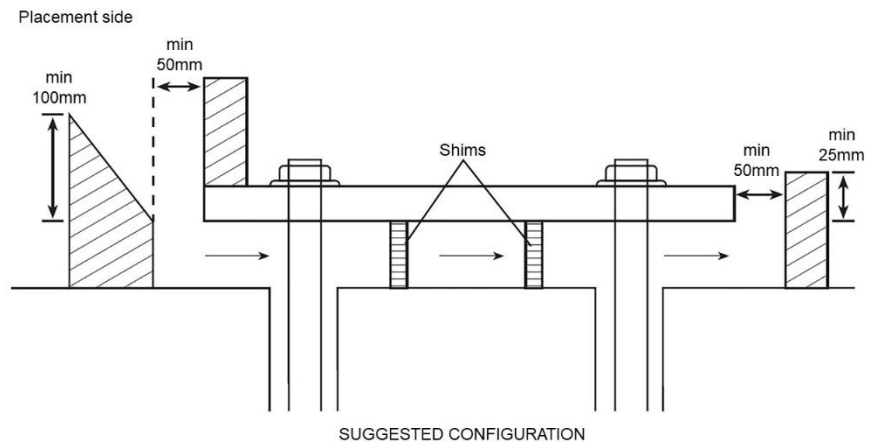
The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

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Substrate

Preparation



1. All concrete surfaces to be grouted must be sound, clean and free from oil, grease, laitance or any other loose adhering particles.
2. Formworks shall be sufficiently tight-fitting and sealed against leakages.
3. On the placement side, the forms should be constructed above the bottom of the plate to form a head-box.

The head-box should be positioned at a minimum of 50 mm from the plate and slope away at a 45° angle to assist grout placement as well as prevent air entrapment.

4. A minimum grout head (adjacent height of the slope form) of 100mm must be maintained. In general, this can be established as 1/5 of the travel distance for the grout.
5. On the opposite side, the form should be minimum 50 mm away from the plate and extend at least 25 mm above the bottom of the plate.
6. Non-absorbent formwork is preferred; otherwise, it should be properly oiled to prevent grout adhesion.
7. Thoroughly wet all surfaces prior placement and remove any excess water just before introducing the grout.

Bolt holes to be grouted should be cleaned of all debris, dirt and water by oil-free compressed air or vacuum.

Application

Application temperature

Lowest application temperature: +8°C
Highest application temperature: +45°C

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Consumption	Type of application	Yield approximately
	Fluid grout	0.0130 - 0.0135 m ³

Consistency on Mixing	Water content (litres / 25 kg bag)
Flowable	4.00

Material consumption/mix design depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project

Application method	Apply using grout pump or manual pouring
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Material Preparation	<ol style="list-style-type: none"> 1. Pour 3.75 litres of clean potable water into a mixing container. 2. With the mixer running, slowly add in the total content of the grout. 3. Mix continuously for about 3 minutes until a smooth and even consistency is obtained. 4. Add additional 0.250 litres into the mixer and mix for another additional 1 minute. 5. Flow consistency should be checked and care should be taken to ensure the grout will not bleed.
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Placing Procedure	<p><u>Placing</u></p> <ol style="list-style-type: none"> 1. The mixed grout should be placed promptly before it stiffens. Higher temperature will accelerate working time. 2. StoCrete NSG 100 can be placed in thickness from 20 mm to 100 mm in a single pour. For thicker section, it is necessary to fill out the grout using well graded, cleaned aggregates in sizes range of 4 mm – 10 mm. Quantity of aggregate added to the grout should not exceed 1 part aggregate to 1 part grout by weight. 3. Pour grout from one side only to avoid air entrapment. 4. Adequate grout head must be maintained at all time to achieve a continuous flow. 5. Use a rod or strap to assist in large/difficult placement as well as to facilitate maximum surface contact.
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Drying, curing, ready for next coat	<p><u>Curing</u></p> <p>As soon as the surface sheen disappear and the grout has begun to stiffen, water pond or cover with damp hessian, plastic sheet or other approved means such as Sto curing compound to prevent premature drying.</p>
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Cleaning the tools	Tools must be cleaned immediately after use with clean water.
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Notes, recommendations, special information, miscellaneous	Please consult the local sales office for further information and any site assistance required.
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Delivery

Packaging	Name	Packing
	StoCrete NSG 100	25 kg

Storage

Storage conditions	Store in cool dry conditions; avoid direct sunlight.
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Storage life	This product has a shelf life of 6 months from the manufacturing date.
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Identification

Product group Mortar and Grout

Safety Please refer to Safety Data Sheet.

Special Notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.

Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on www.sto-sea.com.

Sto SEA Pte Ltd
 159 Sin Ming Road
 #06-02 Amtech Building
 Singapore 575625
 Phone: +65 6453 3080
 Fax : +65 6453 3543
info.sg@sto.com
www.sto-sea.com

Sto SEA Sdn Bhd
 28, Jalan Rajawali 3
 Bandar Puchong Jaya,
 47170 Selangor, Malaysia
 Phone: +60 3 8080 9066
 Fax: +60 3 8080 9255
info.my@sto.com
www.sto-sea.com

Sto SEA Pte Ltd
 3656/49-52 Green Tower, 16th Floor
 Rama IV Rd, Klongton, Klongtoei,
 10110 Bangkok, Thailand
 Phone: +66 2 1684 921 Ext. 230
 Fax: +66 2 1684 999
info.sg@sto.com
www.sto-sea.com

StoCretec GmbH
 Gutenbergstr. 6
 65830 Kriftel,
 Germany
 Phone: +49 6192 401 104
 Fax: +49 6192 401 105
info.sg@sto.com
www.sto-sea.com

*Product images may differ from the actual product.