

SikaGrout[®] 300PT (au)

High performance, zero bleed, sand free, cementitious grout for post-tensioned structures

Construction

Description	SikaGrout [®] 300 PT (au) is a non-shrink, cementitious grout with a unique 2 phase shrinkage compensating mechanism. It is non-metallic and contains no chlorides. With a special blend of shrinkage-reducing and plasticising/water-reducing agents, SikaGrout [®] 300 PT (au) compensates for shrinkage in both the plastic and hardened states.
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Uses	<ul style="list-style-type: none"> • Use for horizontal and vertical grouting of ducts within bonded, post-tensioned structures • Use to grout and fill or repair voids within ducts of post-tensioning strands for corrosion protection • Use for grouting with tight clearance requirements
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Advantages	<ul style="list-style-type: none"> • Sand free allows filling and repairing of voids within ducts of post-tensioned structures • Pre-packaged in accordance with ISO 9001 which ensures consistency of the manufactured material • Does not contain aluminium powder or any components which generate hydrogen gas, carbon dioxide or oxygen • Silica fume enhanced for low permeability • Easy to use...just add water • Non metallic, will not stain or rust • Zero bleeding, even at high flow • Low heat build-up • Excellent for pumping: <ol style="list-style-type: none"> 1. Does not segregate even at high flow 2. No build-up on equipment or hoppers • Non-corrosive, does not contain chlorides • Superior freeze/thaw resistance
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Storage and Shelf Life	9 months from date of production if stored in undamaged and unopened original sealed bags. Stored in a cool dry place between +5°C and +35°C. For best results, it is recommended to condition the material to +15°C to +25°C for 24 hours before using.
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Instructions for Use

Surface Preparation

Cable Duct Grouting: Ensure that ducts, openings, inlets and outlets are clean, free of dirt and debris, fuel, oils and any other contaminants at all times.

Other grouting applications: Remove all dirt, oil, grease, and other bond-inhibiting materials by mechanical means. Anchor bolts to be grouted must be decreased with a suitable solvent cleaning agent. Concrete must be sound and roughened to promote mechanical adhesion. Prior to pouring the concrete, surfaces should be in a saturated surface dry condition.

Approval

Complies with RTA specs B113.

Technical and Physical Data

Form / Colour Powder, grey

Packaging 20 kg bag

Testing Parameters 5.4 l water per 20 kg bag. Storage of specimens at +23°C / 50% r.h.

Density 2.0 kg/m³ (wet)

W/C ratio Less than 0.40.

Aggregate Fine: contains none (sand-free)

Compressive Strength	1 day	20 MPa
	3 days	33.3 MPa
	7 days	46.7 MPa
	28 days	53.3 MPa

Workability (Tested to AS1478.2-2005)	Immediately after mixing:	7 - 20 seconds
	30 minutes after mixing:	7 - 20 seconds

Total Chloride Ion Content % w/w < 0.08% by weight of cementitious material

Bleeding 4 hours: 0.0 %

Change of Volume
24 hours: 0.0% shrinkage
28 days: between 0 and +0.2% expansion

Thermal Expansion 3 hours: between 0 and 2.0% expansion

Yield 12.4 litres per bag

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Application	
Mixing Equipment / Time	SikaGrout [®] 300 PT (au) must be mechanically mixed using a mechanical grout mixer or a suitable drum mixer. Mix for approximately 3 minutes after the addition of the last bag or until a homogeneous mix is achieved. DO NOT MIX BY HAND
Placement	The method of pumping the grout must ensure complete filling of the ducts and complete surroundings of the strands or bar. A mock-up should be completed on-site and inspected by the engineer to ensure that the placement means and methods yield the specified results. Material must be placed within 60 minutes of mixing. When grouting ducts or other critical elements, it is highly recommended that experienced, trained technicians complete the work.
Initial Set	~ 3 to 12 hours
Placement Thickness	Minimum application thickness is 3mm.
Cleaning	Remove uncured SikaGrout [®] 300 PT (au) from tools and equipment with water. Hardener material can only be removed mechanically.
Important Notes	<ul style="list-style-type: none"> • For detailed information on grouting application and guidelines, refer to Sika Grouting Systems. • Store SikaGrout 300 PT in dry conditions in unopened original packaging. • Ensure that the mixing instructions are strictly followed. If too much water or not enough water is added at the start of mixing, the grout will not achieve the recommended flow. • If the grout is mixed by a high shear mixer, allow the mix to be agitated slowly once it is homogenous. Failure to do so may cause the grout mix to overheat and cause it to lose its flow characteristics. • Do not add too much water, or apply the material at high temperatures, that will allow the SikaGrout[®] 300 PT (au) to segregate or bleed. • Never apply to a dry substrate.
Handling Precautions	<ul style="list-style-type: none"> • Avoid contact with skin and eyes. • Wear protective gloves and eye protection during work. • If skin contact occurs, wash skin thoroughly.
Important Notification	<p>The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.</p> <p>PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.</p>

