

SikaGrout[®]-300PT (au)

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

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.
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■ Meets RMS B113 requirements
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:■ Does not segregate even at high flow■ No build-up on equipment or hoppers■ Non-corrosive, does not contain chlorides■ Superior freeze/thaw resistance
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.



Instructions for Use

Surface Preparation	<p>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.</p> <p>Other grouting applications: Remove all dirt, oil, grease, and other bond-inhibiting materials by mechanical means. Anchor bolts to be grouted must be degreased with a suitable solvent cleaning agent. Concrete must be sound and roughened to promote mechanical adhesion. Prior to placement of grout the substrate must be pre-soaked for a minimum of 2 number of hours, preferably overnight. No ponding water should be present with the concrete substrate being in a saturated surface dry condition at the beginning of the placement.</p>
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Approval	Complies with RTA specs B113.
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Technical and Physical Data

Form / Colour	Powder, grey
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Packaging	20 kg bag
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Testing Parameters	5.4 l water per 20 kg bag. Storage of specimens at +23°C / 50% r.h.
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Density	2,000 kg/m ³ (approx.)
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W/C ratio	Less than 0.40.
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Aggregate	Fine: contains none (sand-free)
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Compressive Strength AS 1478.2 Cube size: 50x50x50mm	1 day	20 MPa
	3 days	55 MPa
	7 days	70 Mpa
	28 days	90 MPa

Workability (Flow cone tested as per AS 1478.2)	Initial flow after mixing:	15 - 25 seconds
	Flow retention at 30mins:	30 - 40 seconds

Total Chloride Ion Content % w/w	< 0.08% by weight of cementitious material
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Bleeding	4 hours: 0.0 %
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Change of Volume (ASTM C 1090)	24 hours:	0.0% shrinkage
	28 days:	between 0 and +0.2% expansion

Thermal Expansion	3 hours:	between 0 and 2.0% expansion
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Yield	12.4 litres per bag
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Mixing Equipment / Time	<p>Water addition per 20kg bag: Add 5.4L of water to mixer prior to adding 20kg bag of Sikagrout 300PT.</p> <p>For best results use a colloidal mixer. Alternatively, mechanically mix with a high speed drill (2500 rpm). Mix for approximately 3 minutes after the addition of the last bag or until a homogeneous mix is achieved. Continue to agitate material in the holding hopper to achieve optimum flow.</p> <p>DO NOT MIX BY HAND</p>
Placement	<p>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.</p> <p>Material must be placed within 60 minutes of mixing.</p> <p>When grouting ducts or other critical elements, it is highly recommended that experienced, trained technicians complete the work.</p>
Initial Set	6-9 hours
Placement Thickness	Minimum application thickness is 3mm – Maximum application thickness (neat): comply with PTI (Post-tensioning Institute) specification for grouting of post-tensioned structures. For other applications 75 mm maximum.
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.



Disclaimer

Sikagrout and Sikadur products are tested in accordance with Australian Standards and/or Internationally accepted Standards. The published performance data is achieved by testing strictly in accordance to the procedures of these standards.

Any test procedures performed by others on our products that are not in strict accordance with the standard in every facet will likely produce results different from the published above. On site testing by others can be affected by external factors such as incorrect mixing methods, poor sampling techniques, varying temperatures, curing, crushing procedures etc.

Sika can provide Certificates of Compliance of all products delivered to site prior to installation if required.

If results of site testing or testing facilities by others vary from the Sika published data we recommend the following items be reviewed before contacting the manufacturer as one or all of these items could be influencing the results attained on site.

These include but are not limited to the following: site conditions, ambient, substrate and product temperature, mixing equipment, mixer speed, pump equipment, contractor experience, and incorrect test methods.

Sika Australia do not take responsibility nor have to make a case for any such tests where results of testing by others do not achieve the published data as above.

Important Notification

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 Australian version of the Product Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

