

# SikaGrout<sup>®</sup> Backfill

## Aggregate free grout

Construction

<b>Description</b>	SikaGrout Backfill is a ready-to-use aggregate free grout specially formulated for applications that require a fluid, shrinkage compensating grout.
<b>Uses</b>	<ul style="list-style-type: none"> <li>• For restricted spaces between precast wall panels, beams and columns.</li> <li>• Anchor bolts, rods and pipes for clearances of 6 to 25 mm.</li> <li>• Repairs to concrete, such as cracks and honeycombing and for filling small voids.</li> <li>• Grouting around pre-tensioned or post-tensioned cables and rods.</li> <li>• Placing around end sections of unanchored cables and rods to provide anchorage for subsequent tensioning.</li> <li>• Grouting cable anchor plates.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Aggregate free</li> <li>• Easy to pump or pour</li> <li>• Develops high strength at plastic consistency</li> <li>• Can be pumped into small and sensitive cavities</li> <li>• Does not segregate or bleed</li> <li>• Excellent flow characteristics</li> <li>• Protects stressed tendons, bolts or bars</li> </ul>
<b>Shelf life</b>	Stored in unopened original containers protected from direct sunlight and frost, shelf life is at least fifteen (15) months.
<b>Instructions for Use</b>	
<b>Surface Preparation</b>	<p>Correct and thorough surface preparation is essential to achieve the high performance qualities of SikaGrout Backfill.</p> <p>All surfaces must be clean, sound and free from dust, ice, oils, grease or other surface contaminants such as curing membranes and form release agent etc. Cables, ducts and bolt holes should be free of dirt and debris. For maximum bond, surfaces should be abraded or roughened, preferably by mechanical means such as needle gun, grit blasting, grinding etc.</p> <p>All prepared surfaces must be saturated with water several hours prior to grouting, ensuring it is free of any surface water or puddles.</p>
<b>Temperature control</b>	Temperature affects setting time and rate of increase for strength. For optimum performance maintain grout, concrete and/or steel substrates within the range of 18-25°C prior to, during, and for 48 hours after placement of the grout.
<b>Application</b>	
<b>Mixing equipment</b>	<p>SikaGrout Backfill must be mechanically mixed using a mechanical grout mixer or a suitable drum mixer. The grout mixer will reduce the chances of the mix becoming lumpy or aerated.</p> <p>It is advisable to have more than one mixer operating if large volumes are involved.</p> <p>DO NOT MIX BY HAND.</p>



<b>Mixing Method</b>	<ol style="list-style-type: none"> <li>1) Add approximately 6.8 litres of water per 20 kg bag to achieve a plastic grout.</li> <li>2) Place all of the water into the mixer first.</li> <li>3) Steadily add the grout as the mixer is operating.</li> <li>4) Mix the grout for 3 to 4 minutes until it is homogenous. Allow to stand so any entrapped air can escape. Do not add more water to increase flow of the grout if a mix has stiffened due to time delays. If the grout is unworkable discard.</li> </ol>	
<b>Placement</b>	<p>SikaGrout Backfill can be placed by gravity flow or by pump. It is essential that proper placing on the job site is practised to ensure placement is completed without problems. Sufficient labour, grout and equipment must be present to ensure continuous placement.</p> <p>Fill the pump hopper with water and pump the grout through the lines to lubricate the pump and hose. Pump water out until the hopper is empty, and ensure any free water is removed. Begin pumping grout through.</p> <p>When pumping SikaGrout Backfill, ensure the pump is suitable for the grout consistency and for the distance and height it is to be pumped. A positive displacement pump is recommended. Place grout by pumping into the farthest corner, filling the space gradually. Ensure that air is not entrapped under the base plate.</p>	
<b>Curing</b>	<p>Suitable curing methods such as plastic sheet, wet hessian, liquid membrane (eg, Antisol curing membranes) etc. must be used to protect the freshly applied grout from the drying effects of sun and wind. Curing must commence immediately after placement, and continue for at least 7 days. Curing is vital to the ultimate performance of grout as it allows optimum strength development and ensures tight contact with the baseplate.</p>	
<b>Cleaning</b>	<p>Remove uncured SikaGrout Backfill from tools and equipment with water. Hardened material can only be removed mechanically.</p>	
<b>Technical Data (Typical)</b>		
<b>Form</b>	Grey Powder	
<b>Density (mixed)</b>	1,815 kg/m <sup>3</sup> approx. (dependent on water addition rate)	
<b>Pot life @ 20°C</b>	30 minutes approx.	
<b>Application temperature</b>	Minimum 5°C Maximum 35°C	
<b>Colour</b>	Grey (when mixed)	
<b>Yield @ 20°C</b>	Approximate yield per 20kg bag	13 litres
	Approximate number of 20kg bags required for 1m <sup>3</sup> of grout	77
<b>Shrinkage</b>	< 1% @ 3 hrs	
<b>Workability (Tested to AS1478.2-2005)</b>	16 secs	
<b>Compressive Strength</b>	Age (days)	Strength (MPa)
	1	> 10
	3	> 25
	7	> 35
	28	> 45
<b>Packaging</b>	20 kg bag	

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## Important Notes

- For detailed information on grouting application and guidelines, refer to Sika Grouting Systems.
- Store SikaGrout Backfill 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 Backfill to segregate or bleed.
- Never apply to a dry substrate.
- Trials should always be conducted when adding a recommended Sika Admixture to SikaGrout Backfill to determine the optimum dosage rates under local conditions.

## Handling Precautions

- Avoid contact with skin and eyes.
- Wear protective gloves and eye protection during work.
- If skin contact occurs, wash skin thoroughly.

## 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 Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

