

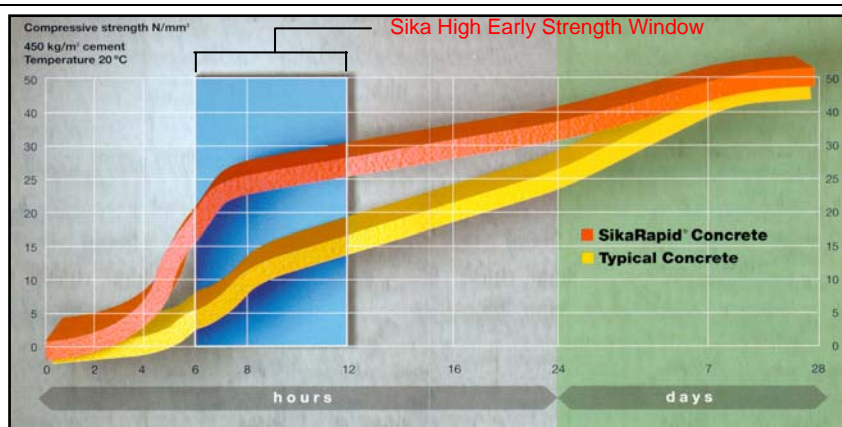
# SikaRapid<sup>®</sup> 1

## High Early Strength Accelerator

# Construction

<b>Description</b>	SikaRapid <sup>®</sup> 1 is a high early strength accelerator for concrete and mortar. It increases the early strengths of concrete without negatively influencing final strengths, or reinforcement.
<b>Uses</b>	<p>SikaRapid<sup>®</sup> 1 is recommended for use in concrete where high early strengths are required. This includes:</p> <ul style="list-style-type: none"> <li>• Precast concrete, enabling efficient mould utilisation and eliminating or reducing steam curing.</li> <li>• Prestressed concrete, where early release of stressing cables is necessary.</li> <li>• Ready-mix concrete, where minimum time delays are critical.</li> <li>• Colder temperatures, where accelerated strength development is necessary.</li> <li>• In tidal conditions, where wave action may damage fresh concrete.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• High early strength development within <b>Sika high strength development window</b>. Refer to the graph below.</li> <li>• When used in conjunction with a superplasticiser the SikaRapid-1 will not change the properties of the concrete influenced by the superplasticiser.</li> <li>• Will not affect long term strength of the concrete.</li> <li>• Chloride free – can be used in reinforced concrete.</li> </ul>
<b>Storage and Shelf Life</b>	Stored at temperatures between 0°C and 35°C in unopened original containers protected from direct sunlight and from frost, shelf life is at least one (1) year.
<b>Application</b>	
<b>Dosage</b>	Recommended dosage is between 400 ml – 2000 ml/100 kg cementitious. Exact dose rate (dependent on required acceleration effect) should be determined by site trials.
<b>Mixing</b>	SikaRapid <sup>®</sup> 1 is added to gauging water or is poured into the concrete mix at the same time as the gauging water. The SikaRapid <sup>®</sup> 1 may also be added into the ready-mix truck on site. In this case, the concrete should then be checked visually for uniform consistency before discharging.
<b>Application Method</b>	Concrete mixed with SikaRapid <sup>®</sup> 1 is transported to site in ready-mix trucks. Concrete should be placed according to good concrete practices and proper curing procedures should take place.

### Performance



**NOTE:** This table is to be used as a guide only. Site trials must be carried out to determine performance with local conditions and materials.

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**Technical Data (Typical)**


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<b>Form</b>	Water-based mixture of organic and inorganic complexing agents
<b>Colour</b>	Clear Red-Brown solution
<b>Density (20°C)</b>	1.17 kg/litre approx.
<b>pH-value (20°C)</b>	8.5 ± 1.0
<b>Chloride Content</b>	No added chlorides
<b>TEA Content</b>	Does not contain triethanolamine
<b>Air Entrainment</b>	Does not affect air content of concrete
<b>Packaging</b>	20 litre pails 205 litre drums Bulk deliveries
<b>Specification Type</b>	SikaRapid® 1 meets and exceeds all requirements of Australian Standard 1478.1-2000 for Set Accelerating Admixture (Ac).  Queensland Government Department of Main Roads approved.

<b>Important Notes</b>	<ul style="list-style-type: none"> <li>• Do not use SikaRapid® 1 in conjunction with expanding or shrinkage compensating admixtures.</li> <li>• Frozen SikaRapid® 1 may be used after it has been carefully thawed at room temperature and thoroughly stirred.</li> <li>• When using SikaRapid-1 site trials are always recommended to achieve the best results.</li> <li>• SikaRapid® 1 can be used in conjunction with any non-retarded Sika plasticiser or superplasticiser. It is beneficial to add the SikaRapid® 1 with the initial mixing water before the addition of superplasticiser to enhance strength development. Tests must be carried out to determine the optimum combination.</li> </ul>
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<b>Handling Precautions</b>	<ul style="list-style-type: none"> <li>• Avoid contact with skin and eyes.</li> <li>• Wear protective gloves and eye protection during work.</li> <li>• If skin contact occurs, wash skin thoroughly.</li> <li>• If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.</li> <li>• A full Material Safety Data Sheet is available from Sika on request.</li> </ul>
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<b>Important Notification</b>	<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>
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PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

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