

SikaQuick[®] 2500 (au)

Very Rapid Hardening Repair Mortar

Construction

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| Description | SikaQuick 2500 (au) is a one component, very rapid hardening, early strength gaining, cementitious patching material for concrete. |
| Uses | <ul style="list-style-type: none"> ▪ Use on grade, above and below grade on concrete ▪ Highway overlays and repairs ▪ Structural repair material for concrete roadways, parking structures, bridges, dams and ramps ▪ Economical patching material for horizontal repairs of concrete and mortar |
| Advantages | <ul style="list-style-type: none"> ▪ Very rapid hardening as defined by ASTM C-928 ▪ Allows application of an epoxy coating within 4 hours (23°C / 50% r.h.) ▪ Easy to use, labour saving material ▪ Contains no added chlorides ▪ Not gypsum based ▪ High early strength ▪ Fast setting ▪ Open to foot traffic in 45 minutes, to vehicle traffic in 1 hour (at 23°C) ▪ Easily applied to clean, sound substrate ▪ Not a vapour barrier |
| Storage and Shelf Life | Store dry at 4°C-35°C. Shelf life is one (1) year in original unopened bag. |
| Consumption | Yield : 9 litres per 20 kg bag |
| Instructions for Use | |
| Surface Preparation | Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease and other contaminants from the area to be repaired. Be sure repair area is not less than 5 mm deep. Preparation work should be done by appropriate means. Obtain an exposed aggregate surface with a minimum surface profile of 3 mm on clean, sound concrete. To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test. Saw cutting of edges is recommended. Saturate surface to be repaired with clean water. Substrate should be saturated surface dry (SSD) prior to application. |
| Priming | <p>For priming of reinforcing steel use SikaTop 110 EpoCem (consult Technical Data Sheet).</p> <p>Concrete Substrate: Prime the prepared substrate with a scrub coat of SikaQuick 2500 (au) prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.</p> |
| Mixing | <p>Mechanically mix in an appropriately sized mortar mixer. Wet down all tools and mixer to be used.</p> <p>Start with 2 litres of water added to the mixing vessel. Add 1 bag of SikaQuick 2500 (au) while continuing to mix. Add up to another 0.3 litres of water to achieve desired consistency. Do not over water.</p> |

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| Application | <p>The prepared mortar must be scrubbed into the substrate. Be sure to fill all pores and voids. Force material against the edge of the repair, working toward the centre. After filling the repair, screed of excess. Allow concrete to set to desired stiffness, then finish. If a smoother finish is desired, a magnesium float should be used. Mixing, placing and finishing should not exceed 15 minutes maximum.</p> <p>Maximum application thickness 30 mm as a mortar.</p> <p>For applications greater than 30 mm in depth add 10 mm coarse aggregate. The rate is 10 kg of aggregate per bag of SikaQuick 2500 (au). The aggregate must be clean, well graded and smooth.</p> <p>To control setting times, cold water should be used in hot weather and hot water used in cold weather.</p> |
| Curing | Moist cure should commence immediately after finishing. If necessary, protect newly applied material from rain. To prevent from freezing, cover with insulating material. |
| Limitations | <ul style="list-style-type: none"> • Minimum ambient and surface temperatures 7°C and rising. • Minimum application thickness 5 mm as a mortar. • Use only potable water. • Do not use SikaTop 110 EpoCem as a bonding agent with SikaQuick 2500 (au). |

Technical and Physical Data (Material and curing conditions @23°C and 50% r.h.) Water/powder = 0.12

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| Mixing Ratio | Approximately 2.1 litres of liquid per 20 kg bag. | |
| Potlife | Approximately 15 minutes after adding powder to the water. | |
| Compressive Strength | 1 hour | 13 MPa |
| | 2 hours | 20 MPa |
| | 1 day | 35 MPa |
| | 7 days | 75 MPa |
| | 28 days | 100 MPa |
| Flexural Strength (ASTM C-78) | 1 day | 5.5 MPa |
| | 7 days | 6.9 MPa |
| | 28 days | 7.6MPa |
| Splitting Tensile Strength (ASTM C-496) | 1 day | 4.1MPa |
| | 7 days | 6.9MPa |
| | 28 days | 7.6MPa |
| Bond Strength (ASTM C-882) modified | 1day | 12.4MPa |
| | 7 days | 18.6MPa |
| | 28 days | 21.4 MPa |



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| Modulus of Elasticity (ASTM C-469) | 28 days 31GPa |
| Initial set (ASTM C-266) | 14-18 minutes |
| Final Set (ASTM C-266) | Approx 20 minutes |
| Colour | Concrete Grey |
| Packaging | 20 kg multi-wall bag |
| Caution Irritant | Skin/Eye/Respiratory Irritant. Avoid breathing dust. Dust may cause respiratory tract irritation. May cause delayed lung injury (silicosis). Warning: This product contains crystalline silica. |
| First Aid | Eyes: Rinse thoroughly with water a minimum of 15 minutes. Consult a physician. Skin: Wash thoroughly with soap and water. Remove contaminated clothing. Inhalation: Remove person to fresh air. Consult a physician Ingestion: Dilute with water. Consult a physician. In all cases, if symptoms persist contact a physician. |
| Handling Precautions | Avoid contact. Wear suitable personal protective equipment (chemical resistant goggles/gloves/clothing). Remove contaminated clothing and laundry before reuse. Use in the presence of adequate ventilation. In the absence of adequate ventilation, wear a properly fitted NIOSH respirator. Uncured material can be removed with water. Cured material can only be removed mechanically. Store in a cool, dry area. Keep bag tightly closed. |
| 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 Technical Data Sheet for the product concerned, copies of which will be supplied on request. PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION. |

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