

TECHNICAL DATA SHEET



RAKAM



301 - RAK Bond - SBR

(Styrene Butadiene Copolymer)

RAK Bond - SBR is a rubberized styrene-butadiene co-polymer used with cement composition. When used with cement, this acts as a water resistant bonding agent and improves durability and shock resistance.

ADVANTAGES	TYPICAL PROPERTIES	WATERPROOFING NON-SLIP FINISHES																					
<ul style="list-style-type: none"> • Excellent flexural bond and tensile strength • Extreme resistance to water and water vapour • Good abrasion and chemical resistance • First-class bonding to asphalt • Thin screeds which are water/vapour proof • Low water/cement ratio • Resin performance at economic cost • Easier site use • Compatibility with all cements • Reduces shrinkage • Improved flexibility • Prevents bleeding • Increased durability and toughness • Excellent adhesion to steel and concrete • Good resistance to salt permeation • Good adhesion to brick, glass, asphalt, wood, expanded polystyrene and most building materials • Prolonged corrosion protection • Proven performance Similar thermal expansion and modulus properties to concrete (unlike resin mortars and primers) • Non-toxic • Can be used with potable water • More economical than epoxy or polyester resin 	<p>The results listed below were achieved by assessing the mechanical properties of a 3:1 sand: cement mortar containing RAK Bond-SBR in the proportions 8 kg per 50 kg cement against a 3:1 sand:cement control mortar. The test methods used were in full accordance with BS 6319 at 28 days-air cured.</p> <table border="1"> <thead> <tr> <th>Test Method</th> <th>Typical Result</th> <th>Control</th> </tr> </thead> <tbody> <tr> <td>Compressive strength (BS 6319, Pt 2)</td> <td>36 N/mm²</td> <td>28 N/mm²</td> </tr> <tr> <td>Tensile strength (ASTM C-190)</td> <td>6.2 N/mm²</td> <td>2.6 N/mm²</td> </tr> <tr> <td>Flexural strength (BS 6319, Pt 3)</td> <td>11.8 N/mm²</td> <td>7.2 N/mm²</td> </tr> <tr> <td>Slant shear bond (BS 6319, Pt 4 1984)</td> <td>39 N/mm²</td> <td>2.8 N/mm⁻¹</td> </tr> <tr> <td>Solid content</td> <td>48 %</td> <td></td> </tr> <tr> <td>Chemical resistance</td> <td colspan="2">Cementitious materials have limited chemical resistance. The addition of RAK Bond-SBR to cement mortars reduces permeability and therefore helps reduce the rate of attack by aggressive chemicals , acid gases and water.</td> </tr> </tbody> </table>	Test Method	Typical Result	Control	Compressive strength (BS 6319, Pt 2)	36 N/mm ²	28 N/mm ²	Tensile strength (ASTM C-190)	6.2 N/mm ²	2.6 N/mm ²	Flexural strength (BS 6319, Pt 3)	11.8 N/mm ²	7.2 N/mm ²	Slant shear bond (BS 6319, Pt 4 1984)	39 N/mm ²	2.8 N/mm ⁻¹	Solid content	48 %		Chemical resistance	Cementitious materials have limited chemical resistance. The addition of RAK Bond-SBR to cement mortars reduces permeability and therefore helps reduce the rate of attack by aggressive chemicals , acid gases and water.		<p>Car Decks, Walkways, Balconies, Staircases</p>
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		REPAIR OF CONCRETE																					
		<p>Weatherproof protection and making good:-</p> <ul style="list-style-type: none"> • Spalled or damaged concrete • Beams and panels • Floor patching 																					
		TOPPING																					
		<p>As an admixture for cementitious systems, RAK Bond-SBR improves the durability, water proofing and aberration proofing of mortars.</p>																					
		WORKABILITY																					
		<p>Mortars based on RAK Bond-SBR will remain workable for about one hour approximately.</p>																					
		ORDERING GUIDE																					
		<p>PRODUCT NO. 301 STANDARDS BS 6319 PT 2,3,4 ASTM C-190 PACKAGING 5 / 20 / 200 kg Packs COLOR White</p>																					
		HEALTH AND SAFETY																					
		<p>As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn (see packaging for specific instructions). Treat any splashes to the skin or eyes with fresh water immediately. Should any of the product be accidentally swallowed, do not induce vomiting but call for medical assistance immediately. Ensure the container is available for the medical attendant to examine any relevant instructions and contents details. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labelling immediately.</p>																					
MAIN USES	APPLICATION																						
<p>For bonding new concrete to old, tile bedding and fixing of slip bricks.</p>	<p>Surfaces should be clean of sand and free from oil, grease and loosely adhering particles. Hot, exposed, absorbent surfaces should be dampened prior to application or primed with a mix of 1:10 (RAK Bond SBR to Water.</p>																						
WATERPROOFING INTERNALLY																							
<ul style="list-style-type: none"> • Basements • Swimming pools and showers • Potable water tanks and towers • Sludge tanks and ducts • Tunnels and underpasses • Computer and plant rooms 																							
WATERPROOF/PROTECTIVE SLURRIES																							
<ul style="list-style-type: none"> • Potable water sewage and mild chemical holding tanks • Porous concrete, blockwork or brickwork. • Long term protection/reinforcement for concrete. 																							