

DATA SHEET

Description	ultraPROOF™ is an advanced modified silicate liquid which reacts with free calcium ions in the cured concrete matrix to create calcium silicate hydrates within the pores and cracks in the concrete to form a permanent waterproof barrier. In turn, this also dramatically hardens and protects concrete.
Uses	<p>ultraPROOF™ application areas include:</p> <ul style="list-style-type: none"> • Roof decks • Bridge decks • Wharf decks • Podium/balcony decks • Potable water tanks • Tunnels • Unglazed tiles/stones • Car parks • Airport concrete surfaces • Viaducts • Concrete roads/pavements • Water treatment tanks • Rendered surfaces • Fascades/precast panels <p>ultraPROOF™ should not be used for negative hydrostatic pressure applications such as inside face or basement/retaining wall. Which is constantly wet.</p>
Performance Details	<ul style="list-style-type: none"> • Permanently seals cracks up to 2mm • Long term sealing of hairline cracks • Reduced chloride diffusion by 89% to 3.5 (10^{-12} m²/s) • Up to 70% reduction in water permeability 5.0 (10^{-12} m/s at 10 Kg/cm²) • Surface hardness increased by up to 8 Moh scale. Equivalent to granite • Greater than 80% vapour diffusion • Suitable for tanking (on active face) tested to a head of 400m • Non-toxic, suitable for potable water • Bond strength increased by 25% on ultraPROOF™ treated mortar • Unglazed tiles/stone treated with ultraPROOF™ will be more durable
Method of Use	<ul style="list-style-type: none"> • ultraPROOF™ must be applied to clean, dry, dustfree concrete surface at least 28 days old. Renders can be treated after 7 days • Curing compounds should not be present in materials • Any materials which prevent penetration should be removed • Where segregation or voids are apparent, chip out, treat with ultraPROOF™, then make good with cementitious materials
Application	
Equipment	Application equipment need only consist of hand or back-pack spray units. Protect all glass, aluminium, wood and painted surfaces.
Method	<ol style="list-style-type: none"> 1. Locate all cracks and flood with solution ensuring they are filled with product 2. Apply the solution to the remaining area at a rate of between 4-6 m² per litre 3. When surface becomes touch dry (usually 2-6 hours depending on wind conditions and ambient temperature) flood spray the treated areas with water. If product is still wet at 6 hours, begin first watering. At this stage, site becomes trafficable 4. On day 2 - 24 hours later, water again 5. On day 3 - 24 hours later, water again 6. After the third watering, pond for a minimum of 12 hours to verify a waterproof seal has been achieved
Larger or Stubborn Cracks	Grind out and treat with the solution. Fill with a non-shrink grout or polymer modified grout or an elastomeric sealant if there is a possibility that the crack is elastomeric "working" or volatile. Where product runs straight through the crack, use waterproof tape temporarily on the underside to keep material contained.

Technical Data

Ph	11.0
Specific gravity	1.112 at 25 C
Viscosity	6 centipoise
Solids content	35%
Elements present	Na, Si, Fe, Ni, Cu, Ba plus other trace elements
Note: Waterbased product	

Packaging

ultraPROOF™ is available in 25 and 200 litre packs. No dilution is required, ultraPROOF™ is applied at 100% concentration. Shelf life is indefinite but protect from direct sunlight

Precautions

ultraPROOF™ is a colourless, odourless material without any hazards for site application. However, with all chemical building materials in liquid form it is advised to use protective goggles when spraying to avoid eye exposure. If irritation occurs, flush with clean water until comfortable. ultraPROOF™ is non-toxic, biodegradable and non-flammable.

Contact Details

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