

Technical Data Sheet

Pool Render



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Description

Pool Render is a cementitious, ready-mixed waterproof repairing and sealing mortar. It consists of rapid setting cement, specially treated quartz sand and a compound of active chemicals which resist positive or negative side water pressure.

Pool Render contains active waterproofing chemicals which react with moisture and free lime in the mortar and concrete, creating insoluble crystalline complexes. These crystalline complexes, similar to a gel which grows in the presence of water, block the capillaries of the Pool Render and minor shrinkage cracks, thus preventing water ingress. Chemical activation begins when the Pool Render powder is mixed with water and may take several days to completely block the capillaries depending on ambient temperature and environmental conditions. The waterproofing chemicals remain active for the life of the structure, permanently sealing it from water penetration.

Uses

- Installation of seal strips (reglets and coves) at joints to assure water tightness
- Patching of tie holes and faulty construction joints
- Filling of routed outcracks
- Waterproof sacking of concrete "bug holes"
- Repairing of spalled and honeycombed areas.

Features and Benefits

- NSF/ANSI Standard 61 approved for potable water
- Applied to the positive or negative water pressure side of a structure
- Resists strong hydrostatic pressure
- Post sealing effect of shrinkage cracks up to 0.4mm
- Easy to use
- Not a vapor barrier, lets concrete "breathe"
- Can be skim coated or feather edged
- Applied to moist concrete
- No odour - no fumes; inorganic - no polymers

Surface Preparations

- Substrates must be of load bearing capacity, and free from all potential bond breakers such as dirt, dust, grease, oil, sealers, curing compounds, laitance, loose or deteriorated concrete and any bond-inhibiting foreign substances
- Mechanically prepare surfaces to achieve a surface profile equal to CSP 5 -7. Concrete Surface Profile as per ICRI Guideline No. 310.2- 1997 (Formerly Guideline No. 03732)
- All surfaces to be repaired should be saturated surface dry (SSD) but have no standing water. Hot surfaces should be cooled and shaded while cold surfaces should be heated and sheltered. Mechanically remove all loose materials by suitable means such as chipping hammer, chisel, sandblast, high pressure water blast (>5000 psi), or similar methods
- Repair areas should have saw-cut straight edges with a minimum of 10 mm depth (avoid featheredging)
- Only proceed with application when the temperatures remain between 5°C and 30°C and protect from freezing for 24 hours after application. For temperatures above 30°C, follow ACI hot-weather application guidelines to ensure a successful installation
- Cracks should be routed out to a U-shaped configuration, approx. 20 mm wide and a minimum of 25 mm deep
- Tie holes should be roughened prior to filling
- Spalled and honeycombed areas must be thoroughly cleaned and chiselled back to sound concrete prior to repair

Features and Benefits

- Mechanically mix with clean water to a trawable mortar consistency. Approximate mixing ratio is: 22.7kg powder to 3.4-3.8 L water. For glove pointing add small amount of water
- NOTE: Mix only as much material as can be used within 30 minutes

Application

Cracks / Seal strips (Reglet's & Coves):

- After proper surface preparation and routing to appropriate configuration, prime areas to be patched or repaired. Properties of Render may change when extended with coarse aggregate

Spalled and Honey Combed Areas:

- Prepare surface and chisel back to sound concrete. Prime areas to be repaired, apply Pool Render in layers of 13 mm until desired profile is obtained

Curing

Begin curing as soon as the patch has set by keeping surface moist as per ACI recommendations for cement concrete, using burlap, polyethylene or a fine mist of water. If this is not practicable, damp cure for six hours, then coat with an approved water-based curing compound. However, curing compound may adversely affect following lifts of mortar, leveling mortar or protective coatings.

Packaging

20kg bags

Aggregate State:	Powder
Bulk Density:	~93 lbs/ft ³ (1.5 kg/dm ³)
VOC:	0 g/L
Pot Life:	30 - 40 minutes
Compressive Strength: ASTM C-109	24 hrs: 2,400 psi (17MPa) 28 days: 4,000 psi (27 MPa)
Flexural Strength: ASTM C-348	24 hrs: 660 psi (4.6 MPa) 28 days: 820 psi (5.7 MPa)
Shrinkage: ASTM C-596	28 days: 0.04% (0.4 mm/m)
Temperature, humidity and absorbance of the substrate may influence the above given values.	
Yield:	Generally single coat
Coverage:	Matt

Important Information

- Do not apply render over expansion joints
- Pool Render should be completely dry before application of top coats, minimum 3 days and ideally 7 days from date of application.
- General Guide to hardening/drying -Allow 1 day per mm thickness (render will reach maximum strength in 28 days from application)
- Avoid application in full sun, on hot surfaces or in hot windy conditions, application should be carried out on a day with temperatures between 5°C and 30°C

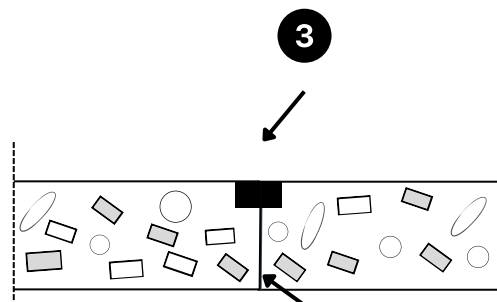
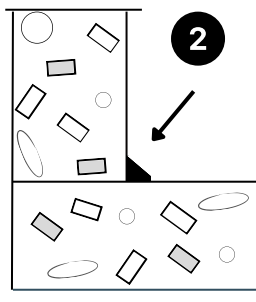
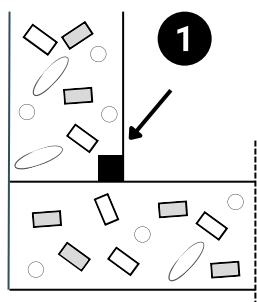
Safety and Handling

Refer to Material Safety data sheet and warranty document before use

- This product contains cement and sand (crystalline silica) and is highly alkaline (irritant) in contact with water. Avoid breathing dust. May cause delayed lung injury (silicosis). Use rubber gloves and goggles during mixing and application. Protect skin and eyes. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of cool water and seek medical advice
- KEEP OUT OF REACH OF CHILDREN
- This product contains material listed by of known to cause cancer, birth defects, or other reproductive harm
- Wear protective clothing to minimize skin contact and wear goggles where splatter is likely, refer to Material Safety Data Sheet and Warranty Document before use.
- Avoid inhalation of the dust
- Wear suitable respiratory protection mask
- Avoid prolonged skin contact with wet mortar and eye contact (contains sand based crystalline silica)

For further information on Material Safety Data Sheet, please call (03) 9364 4489 or visit www.ultratexvic.com.au

Typical detail sealing of construction joints



Cold join sealed with Pool Render

1 Reglet (seal Strip) - Pool Render

2 Cove (seal strip) - Pool Render

3 Seal strip - Pool Render