



X280™ Densi-Proof™ Reo Protect™

Technical Data Sheet

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PERMANENT ENGINEERED PROTECTION FOR CONCRETE & STEEL REINFORCEMENT

Description & Uses

X280 Densi-Proof Reo Protect™ effectively prevents conditions that create and/or promote corrosion activity, arresting, or at the very least significantly retarding rust producing reactions.

Features and Benefits

- Prevents or Greatly Retards Any Future Corrosion
- Greatly Retards Existing Corrosion
- Significantly Densifies Concrete
- Internally Waterproofs Concrete
- Makes Concrete More Durable
- Greatly Diminishes Permeability
- Greater Surface Bondability
- Restricts Vapour Transmission
- Preserves Concrete's Integrity
- Eliminates Internal Water Migration
- Resists Freeze-Thaw Damage
- Adds Surface Abrasion Resistance
- Decreases Dusting Potential
- Increases Acid / Chemical Resistance
- Lowers Chemical Reaction Potential

Physical and Chemical Properties

Appearance:	Low viscosity cloudy-white liquid.	Explosive Limits:	Not applicable.
Odour:	Almost none.	Relative Density:	Ca. 1.10 @ 20°C.
pH:	Ca. 11.4	Solubility:	Fully miscible in water.
Initial Boiling Point/ Boiling Range:	> 100°C @ 760 mm Hg.	Auto-ignition Temperature:	Product is not self-igniting.
Flash-point:	Not applicable.	Viscosity:	Low.
Flammability (solid, gas):	Not applicable.	Volatile Organic Compounds (VOC) Content; Per Cent Volatile:	0.0 % w/w. Ca. 0 % w/w.
Flammability or			

Recommended Substrate Conditions & Preparation

Freshly Placed Concrete: One application @ 4m² per litre.

Existing Concrete: One application @ 4m² per litre.

Important Notes:

1. Wax, paint, curing compounds or a burnished surface restricting access to concrete's interior must be chemically or mechanically removed for X280 Densi-Proof Reo Protect™ to penetrate and work properly.
2. Areas of high porosity have a faster penetration rate. These areas appear dry immediately after spraying and will require additional product.
3. Do not apply if the ambient temperature is over 34°C Plan to apply in the cool of the late afternoon or early morning. Mist wet the surface before applying in hot windy conditions.
4. Do not apply if raining or rain is expected within 3 hours of application completion. If rain falls on treated area within 3 hours of application call Oxtek Head Office for instruction and advice.

5. Before applying any paint, adhesives or any other coatings, wait 24 hours after application with X280 Densi-Proof Reo Protect™. Pressure wash or sand and clean, then check visually to be satisfied purging has completed (If required a second or subsequent coats may be required). Always follow coating manufactures surface requirements.

6. X280 Densi-Proof Reo Protect™ may etch glass/tiles or dull brushed and shiny aluminium and can be difficult to remove from other surfaces once it dries. Cover and mask surrounding surfaces or rinse immediately if sprayed.

7. X280 Densi-Proof Reo Protect's™ spray mist is not hazardous to breathe. However, we do recommend the use of a face mask during application.

Refer to MSDS www.oxtekaus.com

Available in 15, 200 and 1250 litre containers.



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On Already-Set Concrete:

Note: In hot climates, mist-wet the surface with water and remove any puddles prior to application. Apply X280 Densi-Proof Reo Protect™ twice in back to back applications using a medium to high-pressure airless spray unit, complete with fan spray nozzle.

Holding spray tip (eg .019" - .024") 150mm from surface, apply X280 Densi-Proof Reo Protect™ at minimum rate of 4m² per litre with an overlapping spray pattern of 50%.

Begin application at the lowest elevation. For example, walls and slopes should be applied side to side, from the bottom up. Using a soft broom sweep and spread out puddled product as it penetrates.

Do not allow X280 Densi-Proof Reo Protect™ to puddle dry on the surface. If product gels on the surface remove with a squeegee.

As a Cure Method at Time of Pour:

Apply with a low-pressure non-atomizing, spray apparatus such as a pump-tank sprayer or airless spray unit set at 800psi. X280™ Densi-Proof Reo Protect is ideally applied to the newly-poured concrete surface as soon as is practical following its surface finishing phase. Should conditions require the surface to be walked on, for application, concrete should be allowed the time to adequately set, so as not to imprint or mar its surface during application. Recommended minimum coverage rate as a cure method is 4m² per litre with an overlapping spray pattern of 50%.

Warranty Registration

Call your Oxtek Australia office to arrange personal assistance and advice anywhere in Australia or New Zealand. We have technical expertise and experience to help and consult on your next project or help your existing project maintain time and budget. An issued warranty is project specific and will require us to provide consultation

and a registered specification number.

Warranties are not available on concrete older than 15 years, call **+61 3 9798 7534** for advice today.

Email Technical Manager- info@oxtekaus.com.au

www.oxtekaus.com

On site - In Office

We can save you time and money, call now to arrange face to face personal assistance and advice any where in Australia or New Zealand. We have the expertise, answers and experience to help and consult on your next project or help your existing project maintain time and budget.
Australia **1300 698 351** New Zealand **+64 9 441 9003**

Test		Control Sample*	Densi Proof Sample	Results Comparison
Designation	Property			
AS 1012.9 ASTM C39	Compressive Strength	28.9 MPa 4,191 psi	31.0 MPa 4,496 psi	7% Increase
AS 1012.8 ASTM C78	Flexural Strength	2.52 MPa 365 psi	2.89 MPa 419 psi	15% Increase
Chaplin Abrader	Abrasion Loss	2.47 mm 0.10 in	1.46 mm 0.06 in	41% Reduction
Surface Dusting		2.57 g/0.25 m ²	1.78 g/0.25 m ²	31% Reduction
ASTM C1202	Rapid Chloride Penetration	597 / 543 / 10,097 Coulombs	148 / 136 / 6,582 Coulombs	35% to 75% Reduction
HKHA B2.9	Sorptivity	0.164 mm/(min) ^{1/2}	0.010 mm/(min) ^{1/2}	94% Reduction
ACCI Water Permeability Test	Water Permeability	1.5 x 10 ⁻¹³ m/s	2.5 x 10 ⁻¹⁴ m/s	83% Reduction
USACOE C48	Water Permeability	NA	0 Leakage @ 30.5 m Head Pressure 0 Leakage @ 100 ft Head Pressure	
DIN 1048	Water Permeability	98.4 mm @ 0.33 hrs 3.9 in @ 0.33 hrs	5.5 mm @ 72 hrs 0.22 in @ 72 hrs	94% Reduction
ASTM C666	Mass Loss @ 300 Freeze/Thaw Cycles	4.8%	0.7%	85% Reduction

*Note – All control samples were moisture cured.

March 2013



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