AUEM00110 EMER Emer-Proof Silane Sealer Clear on New Concrete walls - Off Form, Tilt Up, Pre Cast [Exterior]

Description

Emer-Proof Silane Sealer is clear, penetrating, water repellent silane-siloxane sealer that can be used on concrete and masonry substrates to provide a clear finish while allowing the substrate to breathe. It can be used on all types of new and existing structures including those in coastal environments.

Substrate and Substrate Preparation

Substrate Notes

Concrete is a mixture of Portland cement, fine and coarse mineral aggregates, water and admixtures. Off-form concrete is produced by pouring the wet concrete mix into formwork in which reinforcing steel had been laid. The formwork holds the slab together as the concrete cures. The concrete should be kept wet according to best practice methods to allow the cement to fully hydrate during the curing process of 4-6 weeks to allow it to reach its design strength. Methods include ponding, wet hessian, wet sand or plastic sheet. If allowed to dry out prematurely, concrete will develop laitance, a weak, friable layer on the surface.

Off-form concrete can be produced on site (also known as cast in situ or tilt-up concrete), or off-site (also known as precast concrete).

Pre-cast concrete panels are cast on horizontal formwork, then cured in racks before being delivered to site. Transportation, lifting, and placing precast concrete into position limits panel size.

Substrate Preparation Notes

Assess suitability

Concrete substrates must be fully cured for a minimum of 28 days before coating as per AS 2311 Painting of Buildings (Current Edition). Off Form Concrete should be installed as per AS3610 Control of Concrete Surface Formwork (current edition) and AS 3850.2 Tilt-Up Concrete & Pre Cast Elements for use in Buildings (current edition). Examine the surface for the presence of grease, form oils, release agents, mortar splashes, efflorescence or other contaminants. Efflorescence is a sign of moisture ingress and must be addressed before any coating can be applied.

Clean surface

Remove all dirt, dust, efflorescence, laitance, powdery surfaces and all other surface contaminants with a suitable cleaning agent and rinsing or with high-pressure water blast using clean, potable water. 1500 to 2500 PSI water blast is usually sufficient, but pressure must be adjusted to clean surface effectively without damaging the underlying substrate. Treat mould or moss with a suitable biocide strictly in accordance with the manufacturer's instructions. Remove any residual efflorescence with wire brush.

Check for grease, form oils, release agents and other surface contaminants simply by splashing water onto the substrate; if water beads on the surface, then it is contaminated and must be cleaned. Clean with Acratex Tiltwash according to instructions. Repeat until water no longer beads anywhere on the surface. Where doubt exists always refer to the manufacturer of the Release Agent or Bond Breaker on their recommended practice of removal. Ensure that the surface is dry, clean and free from dust.

Repair surface imperfections

Remove embedded steel fragments such as nails, chair legs, tie wires or spacing bars lying on or very close the surface. Clean and coat any remaining visible steel fragments with epoxy mastic to prevent rust stains and premature coating system failure. Reinstate surface and fill cracks, voids blowholes, pinholes and other flaws with a suitable patching compound such as AcraPatch Fine or Coarse (depending on size of flaw) with the addition of 10-20% fresh Portland cement to match the existing surface.

Remove shiny surfaces by mechanical abrasion. Prime over any patched sections. Fill structural control or expansion joints with a flexible paintable polyurethane mastic.

Check moisture

Ensure concrete moisture content is less than 10% as measured with a standard moisture meter.
If the building is near the coast, this is considered a marine environment. Airborne salts can shorten the life of the coating systems. Care needs to be taken to wash down all areas twice; the first wash removes surface contaminants and raises salts to the surface and the second wash remove these salts.
Weather conditions and lag time during application of the coating system may require an extra wash between coats.

Coating System Summary

- 1st Coat — Emer Silane Sealer Clear
- 2nd Coat — Emer Silane Sealer Clear

Coating System

1st Coat — Emer Silane Sealer Clear

Coat Type	Datasheet
1st Coat	**AUEM00021 Emer Silane Sealer Clear**

Read the full Datasheet details at https://duspecplus.com.au/pdf/datasheet/emer-silane-sealer-clear/0cf82304-b1c4-4db5-bc53-461afe549b51

Application Methods

Brush **Roller**

Low pressure spray

	Min	Max	Recommended
Theoretical Spread Rate *			**5**
Recoat Time **			**2 hours**

Meets GBCA V.O.C. Requirements?
Not Applicable

Coating Application Details
Emer-Proof Silane Sealer can be applied by brush, roller or low pressure spray.

2nd Coat — Emer Silane Sealer Clear

Coat Type	Datasheet
2nd Coat	**AUEM00021 Emer Silane Sealer Clear**

Read the full Datasheet details at https://duspecplus.com.au/pdf/datasheet/emer-silane-sealer-clear/0cf82304-b1c4-4db5-bc53-461afe549b51

Application Methods

Brush **Roller**

Low pressure spray

	Min	Max	Recommended
Theoretical Spread Rate *			**5**
Recoat Time **			**2 hours**

Meets GBCA V.O.C. Requirements?
Not Applicable

Coating Application Details
Emer-Proof Silane Sealer can be applied by brush, roller or low pressure spray.

Coating System Notes
Ensure substrate moisture content is <5%
* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness.
** Recoat times are quotes for 20°c and 50% relative humidity, these may vary under different conditions.
*Emer-Proof Silane Sealer should not be contaminated with water. The application of Emer-Proof Silane Sealer should not commence if the temperature of the substrate is below 2°C.
*Emer-Proof Silane Sealer may darken some polymer modified substrates and white cement. A trial area is recommended.
*Emer-Proof Silane Sealer may leave a residue on some tiles if applied excessively. Test absorption of tiles before applying to entire area.
*Emer-Proof Silane Sealer may leave a residue on non porous surfaces it is advised to cover the surrounding areas prior to application.
Coverage figures are theoretical - due to wastage factors and the wide variety and nature of possible substrates, practical coverage figures will be reduced.

Disclaimer

Unless Dulux has provided you with a customised, project-specific specification, this Duspec+ document does not represent that any particular product or product system will be suitable for your project.

Any information provided in this Duspec+ is given in good faith and is believed by Dulux to be correct at the time of publication. Products and coating systems can be expected to perform as indicated in this Duspec+ document, provided the substrate is in good condition, the coatings are applied by a suitably experienced and skilled applicator, and the preparation, application and maintenance is followed strictly as set out in this Duspec+ document, and as recommended on the applicable Dulux Product Data Sheet and Safety Data Sheets for the relevant products (available from www.duspecplus.com.au). Climatic conditions at application time can affect Duspec+ documentation suitability and product performance.

The correct colour or colour match is the responsibility of the applicator. Colours will change over time and Dulux does not guarantee that the same colour newly mixed will match a colour applied earlier which has been subjected to weathering or other change elements. No product colour is guaranteed against colour change.

Where any liability of Dulux in respect of this Specification cannot by law be excluded, Dulux's liability is limited, as permitted by law and at Dulux's option, to resupply of the relevant products or services or to reimbursing the cost of those products or services.

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.