Primeseal MC

Water Based Epoxy Barrier Membrane, Primer and Sealer for Damp Surfaces

PRODUCT DESCRIPTION

Duram Primeseal MC ('Moisture Cure') is a high performance, versatile, two-part, water based, hydrostatic pressure resistant, epoxy waterproofing barrier membrane coating suitable for most types of porous and semi-porous surfaces including green (newly laid) hardened concrete and damp surfaces. Primeseal MC's versatility makes it also ideal as a primer for waterproofing membranes, paints, industrial coatings and as a bridging coating for normally incompatible coatings.

USAGE/PURPOSE

- ❑ Primeseal MC is suitable for potable (drinking water) applications and can withstand up to 25 meter head of water pressure.
- ❑ Waterproofs and seals damp and green (newly laid) hardened concrete.
- ❑ Waterproofs negative (inside) and positive (outside) surfaces.
- ❑ Waterproofs basements, retaining walls, lift wells, cellars etc.
- ❑ Waterproofs tanks and water retaining structures.
- ❑ Excellent primer for subsequent Duram membranes, paints and industrial coatings.
- ❑ A primer and sealer of concrete, cement, cement render, timber, brick, block work, FC sheeting, CFC sheeting and plasterboard.
- ❑ A primer over bituminous and torch-on membranes so that they can be top-coated or re-membraned.
- ❑ An intercoat bridging coating to allow the application of incompatible coatings.

PACKAGING

20Lt Kit.

COLOUR

Standard colour is light grey but is also available in off-white and black (minimum quantities apply).

STORAGE

Store in a cool, dry area away from direct sun light. Ensure unused product is sealed properly. Keep out of reach of children.

FEATURES & BENEFITS

- ❑ Can be applied to green (newly laid) hardened concrete.
- ❑ Can be applied to damp surfaces.
- ❑ Is a barrier against low water vapour pressure.
- ❑ Suitable for contact with potable (drinking) water. Conforms to AS4020-2000.
- ❑ Withstands up to 25 meter head of water.
- ❑ Can be applied in sensitive areas.
- ❑ Quick drying.
- ❑ Has excellent adhesion.
- ❑ Can be used as a primary waterproof barrier on rigid surfaces.
- ❑ It will not re - emulsify.
- ❑ Seals over most existing coatings.
- ❑ Can be used to seal both the negative and the positive sides of the substrate.
- ❑ Compatible with all Duram waterproofing membranes and floor coatings.
- ❑ Acts as a bleed sealer over bituminous surfaces, including over traditional torch-on waterproofing products.

TYPICAL PHYSICAL PERFORMANCE

PERFORMANCE TEST	TYPICAL VALUES
Service Temperature	0°C to 55°C
Application Temperature	10°C to 35°C
Volume Solids (approx.)	45%
Mixing Ratio	1:1 by volume (Part A: part B)
Hydrostatic Pressure	Can withstand up to 25 metre head of water when applied at the recommended coverage rate with minimum dry film thickness of 300 microns
Moisture Vapour Transmission	1.33g/m²/24 hours
Permeance	0.0013ug/N.s
VOC g/L - Test Method = (APAS) – AP-D181*	<30

COVERAGE/YIELD

The stated average coverage rate may vary depending upon type, condition, porosity, texture of the surface and application technique.

- **As an effective waterproofing membrane or barrier against low water vapour pressure:** A minimum of 2 coats applied at 3m² per litre per coat. The dry film thickness should be 0.33mm. If this coverage is not achieved in two coats, an additional coat should be applied. The waterproofing properties are enhanced when used in conjunction with suitable Duram waterproofing membranes.
- **As a general primer:** 1 coat applied at 3m² to 4m² per litre per coat.
- **As a bitumen sealer to enable subsequent membranes or coating to be applied:** 2 coats applied at 5m² per litre per coat.
- **As a sealer of a damp surface to allow the application of a polyurethane membrane:** 2 coats applied at 4m² per litre per coat.

Coverage per Kit Size for 2 Coats:

- 20 Lt. Kit - 30m²

LIMITATIONS

- Primeseal MC, being an epoxy, has low flexibility and is NOT designed to bridge live cracks or expansion joints.
- Primeseal MC can be effectively used for sealing inside (negative) wall surfaces, but this method should only be employed if waterproofing the outside (positive) surfaces is not feasible or inaccessible.
- Application Temperature Limitations: Between 10°C and 35°C
- Curing Limitations: Temperature must exceed 10°C and relative humidity must be less than 85%. If these conditions are not present then artificial ventilation and heating should be used. In confined, enclosed areas ventilation should be used to circulate air to enable the evapouration of water from product.
- Primeseal MC is not a permanently trafficable membrane, but suitable for service or trade foot traffic.
- Where the product is to be used in hydrostatic water pressure applications, the surfaces on which it is applied must be and remain structurally sound and stable.

SUITABLE SURFACES

- Concrete
- Cement and Cement Render
- Block & Brick work
- Masonry/Stone
- FC, CFC, Asbestos and Blue Board Sheeting
- Scyon & Composite Sheeting
- Acrylic Coatings
- Vitreous, Ceramic & Terra Cotta Tiles
- Bitumen (when primed with Duram Primeseal MC)
- Metal (when primed with Duram ME Primer)
- Milled Finish Alloy Angles
- Timber, Particle Board, Plywood (when primed with Duram Primeseal MC)*
- Masonite
- Plaster Board
- Extruded Foam
- Fibreglass/Gelcoat/PVC

SURFACE PREPARATION

- Good preparation is essential. Surfaces must be sound, stable, dry, clean and free of dust, loose, flaking, friable material and substances that may diminish adhesion.
- To achieve a maximum bond existing coatings, membranes and adhesives should be removed so that the product can bond directly to the substrate.
- Concrete shall be water-cured and attain a 20 MPa minimum compressive strength. No ponding water should be present, and the concrete should not appear wet prior to installation of the Primeseal MC primer.
- Concrete surface moisture readings should not exceed 20% moisture content generally, while the Primeseal MC can be applied to damp surfaces, they should be allowed to dry to eliminate the risk of entrapping excessive amounts of moisture.

PRIMING

Holes, gaps, blowholes, honeycombed surfaces and non-structural cracks should be suitably filled and made sound using a suitable non-shrink mortar. If the surfaces need to be bagged, a bagging mix as follows should be applied to the surface.

Mixing: Before combining, each component should be individually well stirred. Then mix equal portions of Part A and Part B thoroughly to a homogenous consistency before application. Avoid undue aeration. Only mix enough product that can easily be applied within 1 to 2 hours or pot life, which may be affected by prevailing climate conditions.

Bagging Primer Mix: If a bagging mix is desired or required due to the condition of the substrate, it is important that the following mixing sequence is followed:

- Before combining, each component should be individually well stirred. Then mix equal portions of Part A and Part B thoroughly to a homogenous consistency. Add 30% water and thoroughly mix and then add sufficient 3:1 sand: cement mix to the Primeseal MC liquid to form a brush-able or roll-able consistency.
- Apply to surface, by brush or roller ensuring that the product is worked well in to the surface and that all holes, voids, indentations are properly covered. Allow to dry.

APPLICATION

Hydrostatic application:

- Apply by brush, nylon broom, roller, squeegee, or spray, in 3 or more coats, at the recommended application / coverage rate, to produce a uniform, solid coating. The wet film thickness per coat should approximate 330microns (0.33mm).

General primer application:

- If applying Primeseal MC to dry concrete, cement, blockwork or Hebel it is recommended that the surface be lightly pre-dampened with a fine water spray before application. The wet film thickness per coat should approximate 330microns (0.33mm).
- The product should be worked well into the substrate ensuring that all holes and voids are adequately covered. Avoid pinholes.

Damaged concrete application:

- Apply by brush, nylon broom, roller, squeegee, or spray, in 2 or more coats, at the recommended application / coverage rate, to produce a uniform, solid coating. The wet film thickness per coat should approximate 330microns (0.33mm).
- The first coat may be thinned up 20% to achieve good penetration depending upon the type, density, and porosity of the surface. Generally, this should not be required and if possible, should be avoided. However, if diluted, coverage must be adjusted (increased) to achieved net usage and curing times may increase.

If in doubt as to the adequacy of coverage, apply a further coat. Allow each coat to dry before applying the next.

CLEAN UP

Wet spills must be promptly cleaned up with water but should be avoided as it is difficult to remove entirely from surfaces.

CURING

Drying and curing of the product is affected by type, dryness and porosity of the surface, temperature, humidity, ventilation, climate conditions and application technique and therefore drying and curing can only be given as a guide.

It is essential that the membrane must not be damaged in any way including when applying subsequent coatings. Damp and cold surfaces will increase drying times.

At 25°C and 50% RH:

- ❑ Touch Dry: 3 hours
- ❑ Re-coat Time: 4 hours
- ❑ Pot Life (Approximately): 2 hours at 25°C and 1 hour at 35°C
- ❑ Full Cure: 7 days

In an immersed application, the membrane should be allowed to achieve full cure prior to filling with water.

Subsequent Treatments:

- ❑ Floor coating: Allow 3 days curing to prevent physical or mechanical damage.
- ❑ The membrane must be fully cured before applying decorative coatings, adhesives, mortars and levelling compounds.

TILING, TOPPING OR TOP COATING

Primeseal MC can be directly tiled or topped.

If using a solvent based adhesive to bond a covering over the surface, it is essential that the solvent vapours be allowed to fully escape before covering is applied or the covering allows for the full transmission of solvent.

SPECIFICATION

The information contained in this product data sheet is typical but does not constitute a full specification as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement. The applicator or contractor must use their skill, knowledge, and experience to carry out additional works as may be necessary to meet the requirements of the project. Specification for specific projects should be sought from the company in writing.

*The VOC content of the products is a weighted average of the VOC contents of all the raw materials in the formulation. It is determined by calculation using raw material data from suppliers.

HEALTH & SAFETY PRECAUTIONS

Although this is a safe product to use product if recommended good safety and hygiene practices are followed.

The Safety Data Sheet (SDS) must be read and understood prior to use.

CONDITIONS OF USE AND DISCLAIMER

The information contained in this TDS is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided and the product is sold on the basis that the product is used for its intended purpose and is used in a proper workmanlike manner in accordance with the instructions of the TDS in suitable and safe working conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.

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