

# PRIMESEAL MC

WATER BASED EPOXY BARRIER MEMBRANE, PRIMER & SEALER FOR DAMP SURFACES

#### DESCRIPTION

**Duram Primeseal MC** ('Moisture Cure') is a water based, epoxy waterproof membrane.

**Duram Primeseal MC** is a high performance, versatile, two-part, water based, hydrostatic pressure resistant, 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** cures to form a strong, waterproof, hydrostatic pressure resistant and water vapour pressure barrier and is formulated for application on to damp, newly laid concrete and most other construction surfaces.

**Primeseal MC** is suitable for potable (drinking water) applications and can withstand up to 25 meter head of water pressure.

**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.

**Primeseal MC's** standard colour is light grey but is also available in off-white and black (minimum quantities apply).

Primeseal MC has very low VOCs and meets the 'Green Star' environmental criteria.

The Duram Brand has been an industry leader for over 30 years.

# **USES**

## SUITABLE SURFACES

Duram Primeseal MC is formulated for demanding waterproofing, sealing and priming applications including:

- Waterproofs and seals damp and green (newly laid) hardened concrete
- Waterproofs negative (inside) surfaces
- Waterproofs positive (outside) surfaces
- Low water vapour pressure barrier. (Prevents or minimises bubbling of membranes due to vapour emissions from the substrate)
- Waterproofs basements, retaining walls, lift wells, cellars etc
- Waterproofs tanks and water retaining structures, i.e. concrete or cementitious structures
- Excellent primer for subsequent Duram membranes, paints and industrial coatings
- Seals and primes timber floors prior to applying waterproofing membranes and other coatings
- Seals concrete floors before laying timber floors
- Moisture barrier
- Structural slabs on ground

- Concrete
- Cement and cement render
- FC and CFC Sheeting
- Block & Brick work
- Masonry/Stone
- FC, CFC, asbestos and Blue board sheeting
- Particle board (see notes below)
- 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

## ADDITIONAL USES

- A general and universal primer on most types of substrates for membranes, paints and industrial coatings.
- A milled aluminium etch primer for water stop angles, solvent cleaned prior
- A sealer coat over bitumen surfaces to allow the application of solvent and water based waterproofing membranes and other coatings.
- A sealer over damp surfaces to allow the application of urethane based waterproofing membranes.
- An intercoat bridging coating to allow the application of incompatible coatings.
- A primer and sealer of concrete, cement, cement render, timber, brick, block work, FC sheeting, CFC sheeting, plasterboard and bituminous surfaces.
- A primer over bituminous and torch-on membranes so that they can be top-coated or re-membraned.
- Top coat over **Duram Crystoflex** to provide an attractive colour and finish.

# **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.

#### BENEFITS AND ADVANTAGES

- Primeseal MC is user and environmentally friendly, solvent free and has negligible odour.
- Very low VOCs and meets the 'Green Star' environmental criteria.
- 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.
- Non-toxic and non-flammable.
- Can be applied in sensitive areas.
- Withstands up to 25 meter head of water.
- Easy to apply by brush, roller, squeegee and spray.
- Ouick drying.
- Has excellent adhesion.
- Excellent water barrier.
- 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

# PRECAUTIONS IN USE

**Primeseal MC** is water based and contains very low VOC's and is considered safe to use. However, observe good hygiene and safety practices. The wearing of gloves and goggles against splashes is strongly recommended. Good ventilation is recommended and avoid contact with skin, eyes and mouth. If poisoning occurs contact Poison Information Centre. If swallowed DO NOT induce vomiting, give plenty of water to drink and seek medical advice. If in eyes thoroughly flush with clean water, holding lid open to ensure any product maybe flushed away. If on skin wash with soap and water.

#### 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, surfaces 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.

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

# **COVERAGE**

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 3m<sup>2</sup> per litre per coat.
- If this coverage is not achieved in two coats, an additional coat should be applied.
- The dry film thickness should be 0.33mm.
- The waterproofing properties are enhanced when used in conjunction with suitable Duram waterproofing membranes.

Coverage per Kit Size for 2 Coats:

4 Lt. Kit - 6m<sup>2</sup> 10 Lt. Kit - 15m<sup>2</sup> 20 Lt. Kit - 30m<sup>2</sup> As a general primer:

• 1 coat applied at 3m<sup>2</sup> to 4m<sup>2</sup> per litre per coat.

As a bitumen sealer to enable subsequent membranes or coating to be applied:

• 2 coats applied at 5m<sup>2</sup> 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.

#### **COLOURS**

Standard colour is a light grey when parts A and B are mixed and cures to a semi-gloss finish but dulls off with ageing. It is available in 4.10 and 20 litre kits.

**Primeseal MC** is also available in black and other colours, by special order and minimum quantities may apply.

## DRYING AND 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 Recoat Time: Pot Life (Approximately): Full Cure: 3 hours 4 hours 2 hours at 25°C & 1 Hours at 35°C 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.

# **STORAGE**

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

# 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.

# SAFETY AND PRECAUTIONS

Although this is a safe product to use product if recommended good safety and hygiene practices are followed. Refer to products Safety Data Sheet.

It is strongly recommended that protective clothing, gloves and eye protection are worn. Good ventilation is recommended and avoid contact with skin, eyes and mouth. If poisoning occurs contact Poison Information Centre. If swallowed DO NOT induce vomiting, give plenty of water to drink and seek medical advice. If in eyes thoroughly flush with clean water, holding lid open to ensure any product maybe flushed away. If on skin wash with soap and water.

For full safety data refer to the products Safety Data Sheet. Observe precautions as per label.

## TESTS AND TECHNICAL DATA

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.

Water vapour transmission

 $1.33 \,\mathrm{g/m^2/24}$  hours

Permeance

0.0013ug/N.s

## 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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