

### DESCRIPTION:

Metz 95M is a 100% solids polyurethane chemical resistant membrane, used as an underlay beneath Metz ceramic tiling systems or as a standalone trowellable lining system.

### FEATURES AND BENEFITS:

- Waterproof - protects substrate from penetration of water and chemicals
- Components not dangerous for transport or storage
- 100% solids, does not contain solvents
- Tough but flexible - not a brittle product
- Crack-bridging - minor substrate movement is accommodated
- Excellent adhesion to concrete and steel
- Liquid applied, eliminating joints and providing a continuous lining
- Excellent chemical resistance - resistant to a wide range of chemicals including acids, alkalis and salts. Refer Metz Chemical Resistance Chart (Polyurethane 'B')

### RECOMMENDED:

As a corrosion resistant membrane used behind acid proof ceramics, or as a trowellable lining for tanks, pits, bunds etc. in

- Chemical industry
- Petrochemical industry
- Waste water treatment plants
- Food & Beverage processing

### NOT RECOMMENDED:

- For heavy traffic or abrasion without ceramic overlay - refer Metz for alternative products

### PHYSICAL PROPERTIES:

(Typical Values)

Solid content:	100%
Density (mixed product):	1.4 - 1.5 g/cm <sup>3</sup>
Hardness, Shore D	40
Tensile Strength:	10 MPa
Tear propagation resistance:	27 MPa
Elongation at break:	100%
Adhesion (to concrete) (ASTM C1583):	>1.5MPa (concrete failure)
Max. service temperature (continuous):	100°C

### COVERAGE: Theoretical quantities (allow for wastage)

Metz Epoxy Primer:	0.2 - 0.3kg/sq.m depending upon absorbency of surface
Metz 95M:	Minimum thickness 1.5mm for ceramic overlay (2.2kg/sq.m) 2mm for standalone use (2.9kg/sq.m)

### APPLICATION TEMPERATURE:

The recommended temperature range for application is 5°C to 40°C, with a relative humidity of 90%.

At temperatures below 5°C, curing may be inhibited and final technical properties may be altered. At temperatures above 40°C, pot life and open time will be affected.

The material temperature should be below 35°C.

Substrate temperatures should be at least 3°C above the dew point.

### INSTRUCTIONS FOR USE

#### 1. Temperature of Working Area

Maintain a temperature of between 5 and 40°C on substrate and air during mixing, application and cure.  
At temperatures below 5°C, METZ 95M may not cure fully.  
At temperatures above 40°C, working time will be greatly reduced.  
The material temperature should be below 35°C.  
Application in direct sunlight and rising surface temperatures may result in blistering of the coating due to expansion of trapped air or moisture in the substrate.

#### 2. Surface Preparation

All surfaces must be clean, smooth and dry. Remove all oil, grease and other contaminants that may inhibit bond. Concrete on grade should utilise a waterproof barrier beneath the slab.

##### a) New Concrete

Surface must be free from laitance, form oils and curing compounds. Surface should have a fine wood float finish and be 14 days old.  
Any laitance should be removed by grinding or light abrasive blasting.

##### b) Old Concrete

Concrete must be sound. Remove laitance, old coatings and attacked or deteriorated concrete. Chemically clean surface to remove any contaminants. Abrasive blast or high-pressure water blast to remove laitance and provide a uniform, textured surface.

##### c) Metals

All surfaces must be clean and dry. Remove oil, paint, corrosion and scale. Abrasive blast to AS 1627.4 class 2½ minimum.

#### 3. Mixing

##### a) Mixing Equipment

Mechanical mixing is recommended. A low speed mixer or a heavy duty drill with an appropriate mixing paddle should be used.

##### b) Mixing Proportions

Metz Epoxy Primer:	By weight	By volume
Liquid	1.85	1.6
Hardener	1	1
Metz 95M:	By weight	By volume
Liquid	4.2	4.5
Hardener	1	1

##### c) Mixing Procedure

Metz Epoxy Primer

Mix liquid and hardener together thoroughly for 1-2 minutes.

Metz 95M

Mix liquid and hardener together thoroughly, until a uniform colour and consistency is obtained. Mix for a minimum of 2 minutes.

Do not add any solvent, additive or adulterant to either component, or to the mixed material.

After mixing, transfer contents to a different container and mix again for 1-2 minutes.

##### d) Pot Life at 20°C:

Metz Epoxy Primer 70 minutes

Metz 95M 30 minutes

##### e) Clean Up

Mixing equipment, brushes, rollers etc can be cleaned with Metz Cleaner, xylene, acetone or MEK prior to initial set.

Note: Ensure you have the latest mixing instructions, refer [www.metz.net.au](http://www.metz.net.au) for most current data sheet version.

#### 4. Installation

Metz Epoxy Primer:

Apply to surface using squeegee, then back-roll with short nap roller. Metz 95M can be applied after primer has become tacky. Primer can be left for up to 24 hours before applying Metz 95M.

Metz 95M

Apply mixed material to prepared substrate by trowel or squeegee at a nominal thickness of 1.5mm.

#### 5. Setting/Curing

Setting Time: Overnight at 20°C

Full Cure: 7 days at 20°C.

#### 6. Storage

Store in sealed containers in a cool, dry environment. Under these conditions, minimum shelf life is 6 months.

#### 7. Safety Precautions

Liquid and Hardener:

- Use chemical goggles, PVC gloves and barrier cream. - Avoid contact with skin and eyes.
- Ensure adequate ventilation.

For full safety precautions refer to the Safety Data Sheets for each component.

**Always ensure you have the latest data sheet version, refer [www.metz.net.au](http://www.metz.net.au)**

- The customer must comply strictly with the instructions contained in this product data sheet. Metz is not responsible for any advice or variations to this data sheet which are not confirmed in writing.
- If the customer has a claim against Metz in respect of any product supplied to the customer by Metz whether due to a fault in the product or the negligence or breach of contract by Metz or for any other reason:
  - Metz shall not be liable for any loss or damage including consequential loss or damage or loss of profits arising thereby;
  - Metz may at its option replace the defective product free of charge to the customer or refund all payments made to it by the buyer in respect of the defective product; and the maximum liability of Metz shall be the cost of replacing the defective product.