

METZ 21

WATER BASED EPOXY PRIMER



DESCRIPTION:

Metz 21 is a high performance 2-part water-based epoxy primer that can be used for both damp and dry surfaces for floor and wall applications. It can be used under epoxy coatings, linings, toppings, renders and other membranes. It can be used as part of a waterproofing system applications.

FEATURES AND BENEFITS:

- Easy to use with convenient mixing ratio of 1:1
- Low VOC
- High bond strength to a wide range of coatings and toppings/ screeds
- Can be applied to green/fresh concrete – contact Metz for details
- Low water vapour permeability tested per ASTM E96
- Complies with AS/NZS 4020:2005 Testing of products for use with Potable water
- Can withstand water head up to 20 m or 200 kPa hydrostatic pressure
- Long pot-life with short recoat time.
- Can be brush and roller applied
- Can be easily cleaned with water during application
- Quality Accreditation - The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified.

RECOMMENDED:

- Primer for dry and damp surfaces with good adhesion to various over-coatings and screeds – contact Metz for details
- Primer for Metz 27M waterproofing membrane

To the following substrates:

- Concrete
- Sand/cement screeds and renders
- Fibre cement sheet

NOT RECOMMENDED:

- For steel or metal surfaces - as corrosion will occur.
- For trafficable areas – must be covered with floor toppings or coatings before introduction of foot or vehicular traffic.
- For areas exposed to UV light – can discolour when exposed to UV light.
- As a standalone waterproofing membrane, overcoat with Metz 27M.

PHYSICAL PROPERTIES: (Typical Values)

Density g/cm ³	1.25 (25°C, 50% RH)
Appearance when mixed	Grey coloured liquid
Characteristics:	
Wet film thickness	200 microns per coat
Dry film thickness	100 microns per coat
Recoat time (25°C, 50% RH)	3 to 4 hours, dependent on concrete porosity and coat thickness
Application of coverings (25°C, 50% RH)	after drying for minimum 24 hours
Full Cure (25°C, 50% RH)	5 to 7 days
Tensile adhesion strength to dry concrete (25°C, 50% RH)	≥ 1.5 N/mm ²

COVERAGE:

Metz 21 is a minimum 2 coat system applied at minimum dry film total thickness of 200 microns.

Theoretical quantities (allow for wastage): 4 to 5 m² per litre per coat of mixed material

This is subject to surface porosity and substrate conditions

Note: Metz has a fully detailed specification covering use of this material as part of a full system for permanent immersion conditions such as swimming pools. Refer to Metz for a copy for any such project and ensure compliance with its more specific instructions..



INSTRUCTIONS FOR USE

1. Temperature of Working Area

Maintain temperature between 10°C and 35°C on Metz 21 materials, substrate and air during mixing, application, and cure.

At temperatures below 10°C, Metz 21 may not dry and cure fully. When the temperature is below 20°C then recoat times should be preferably overnight.

At temperatures above 35°C, pot life and cure time will be greatly reduced.

Before use all materials must be stored in dry conditions overnight between 20°C to 25°C.

Metz 21 curing rates will be drastically affected when relative humidity is more than 80%. Do not apply when substrate temperature <10°C.

2. Surface Preparation

Do not apply over substrates contaminated by curing compounds, bonding agents, acrylic coatings etc or over efflorescence or laitance. These must be mechanically removed.

New concrete is ideally prepared to CSP2 (ICRI Guideline No. 310.2R-2013). Remove loose concrete. Holes, non structural cracks should be filled with an appropriate material. Protruberance are best removed.

Concrete, screed, render or repair materials must be cured and dry before application of Metz 21.

Minimum cure times:

	Swimming Pools	General Construction
Concrete	42 days	28 days
Cement screeds	21 days	7 days
Metz PR1 Render	7 days	4 days

Ensure surface is clean and excess water is removed. Before application, test concrete substrate for moisture per relevant standards eg: ASTM F2659 and/or ASTM F2170.

Allow minimum of 24 hours before applying any product over it.

3. Mixing

a) Equipment

Mechanical mixing using electric mixer with a high shear drill paddle is recommended.

b) Mixing Proportions

Part A and Part B are to be mixed in 1:1 by volume.

c) Mixing Procedure

Pre-mix each of the components Part A (Liquid) and B (Hardener) separately. The sides of the container should be scraped to ensure all the material is incorporated and mixed.

Then combine the entire contents of Part B with Part A using an electric mixer with a high shear paddle for 3 minutes until a homogenous blend is obtained. Only mix what can be used in the pot life of the mixed product. Do not over-mix as this may incorporate air bubbles causing pinholes during application.

d) Pot Life

2 to 3 hours at 25°C, 50% RH.

1 hour at 35°C.

4. Application

Apply using brush or roller in a crosshatch manner ensuring surface area is fully covered. Ensure to work the material into the substrate surface to fill voids and eliminate pin holing. Using proper wet film thickness gauge ensure minimum wet film thickness per coat is 200 microns. Apply minimum 2 coats. This is to ensure transmission barrier and low permeability is obtained. Very porous or 'boney' concrete may require three coats. The first coat acts as a primer, penetrating the pores of the concrete. Do not dilute with water. Ensure a minimum of 200 microns DFT is achieved.

Metz 21 is not trafficable and must be covered with floor toppings, coatings or conventional coverings prior to foot or vehicle traffic introduction. In enclosed areas, ventilation should be provided during curing cycle to enable adequate evaporation of the coating. Allow to cure for a minimum of 24 hours at 25°C/50% RH before applying adhesives, mortars, membranes, coatings, or other surface treatments.

Discard any material that has exceeded the pot life of the product. Before overcoating with any material, it is recommended to trial or test in a small area or contact Metz for details.

5. Setting/Curing

Setting Time: 24 hours at 25°C, 50% RH

Full cure 5 to 7 days at 25°C, 50% RH

6. Storage

Keep product sealed and stored at 25°C, 50% RH in a dry environment. Under these conditions, minimum shelf life is 12 months.

7. Standard Pack Size

Part A 10L

Part B 10L

8. Safety Precautions

Avoid contact with skin and eyes. 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

- 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.