



# METZ 4HB

## HIGH SOLIDS EPOXY COATING



### DESCRIPTION:

METZ 4HB is a 2-part epoxy resin based compound used as a chemical resistant protective coating for concrete. METZ 4HB is available with a fast setting hardener for use in cold conditions, or when faster setting time is required.

### FEATURES AND BENEFITS:

- **Chemical Resistance**  
Resistant to splash and spillage of mild acids, alkalis and salts.
- **Cost Effective**  
Relatively low material and application costs.
- **Self Priming**  
Does not require a special primer.
- **High Build**  
Increased protection against damage and abrasion.

### RECOMMENDED:

As a floor coating to protect against chemical attack in:

- Food and beverage manufacture
- Chemical plants
- Pulp and Paper Mills
- Bakeries

### PHYSICAL PROPERTIES:

Mix Ratio (by volume):	4.0 Liquid to 1.0 Hardener
Classification:	Amine Cured Epoxy
Finish:	Semi-gloss
Solids by volume:	85% approximately
Pot Life @ 25°C	2 hours
Finished Dry Film Thickness	250 microns

Drying time at 25°C and 50% Humidity		<u>Standard</u>	<u>Fast</u>
		5 hours min. 24 hours min. 48 hours max.	5 hours min. 13 hours min. 48 hours max.
	Light Foot Traffic	24 hours min.	14 hours min.
	Full cure	7 days	7 days

*Note:* Product may chalk in external applications.

### COVERAGE:

Theoretical quantities (allow for wastage)

Spreading rate of 3.4 square metres per 1 litre, corresponding to 300 microns wet film thickness or 250 microns dry film thickness. Practical spreading rates will vary depending on factors such as methods and conditions of application and surface roughness.

### APPLICATION TEMPERATURE:

The recommended temperature range for METZ 4HB is 10°C to 35°C.

At temperatures below 10°C, curing may be inhibited and final technical properties may be affected.

At temperatures above 35°C, consistency and pot life may be affected.

For temperatures below 20°, it is recommended that the fast hardener be used.

Application in direct sunlight and/or rising surface temperature may result in blistering of materials due to entrapped air, entrained air or moisture escaping from the substrate. When surface temperatures are rising, it may be necessary to delay installation, or apply materials during cooler hours.



CHEMICAL & CORROSION RESISTANT  
MATERIALS OF CONSTRUCTION





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### INSTRUCTIONS FOR USE

#### 1. Temperature of Working Area

For optimum results, maintain a temperature of between 10°C and 35°C on air, substrate and components during mixing, application and curing.

At temperatures below 10°C, the application becomes more difficult and curing is retarded.

At temperatures above 35°C initial set will take place too rapidly. This difficulty can be overcome by mixing in a cooler area or by cooling the components. For temperatures below 20°C, it is recommended that fast hardener be used.

#### 2. Surface Preparation

All surfaces must be clean, dry and free from oil, grease, water and other contaminants which may inhibit bond. Concrete on grade should utilise a waterproof barrier beneath the slab.

##### i) New Concrete

Surface must be free from laitance, form oils, curing compounds. The surface should have a fine wood float and be 28 days old.

##### ii) 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.

##### iii) Metal

Abrasive blast to AS1627.4 Class 3 for immersion conditions and to Class 2 ½ minimum for other surface conditions.

#### 3. Mixing

##### a) Mixing Equipment

Mechanical mixing is recommended. A low speed mixer or a heavy duty drill with an appropriate mixing paddle are suitable. Small quantities can be mixed by hand, using a trowel.

##### b) Mixing Proportions

METZ 4HB is supplied in pre-weighted kits. If small quantities are required, the mixing ratio by volume for both standard and fast setting is:

Liquid: 4 parts

Hardener: 1 part

Under no circumstances should the liquid to hardener ratio be altered.

##### c) Mixing Procedure

Thoroughly remix liquid and hardener components before combining.

Mix liquid and hardener together thoroughly, until a uniform colour and consistency is obtained. Allow to stand for 10 minutes before use. Do not add thinners or other additives to mixture.

##### d) Pot Life at 25°C

Approximately 2 hours.

##### e) Clean Up

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

#### 4. Installation

Apply mixed material to prepared surface by brush or roller. Finished thicknesses should be 300 microns wet film which can be built up in one or two coats.

##### Setting/Curing Time:

At 25°C	Standard	Fast Setting
Touch Dry:	5 hours min.	5 hours min.
Recoat:	24 hours min.	13 hours min.
	48 hours max.	48 hours max.
Light Foot Traffic:	24 hrs min.	14 hours min.
Full cure:	7 days	7 days

#### 5. Safety Precautions

##### Liquid and Hardener:

Avoid contact with skin and eyes.

Use chemical goggles, PVC gloves and barrier cream.

Flammable.

Avoid formation of flames or sparks.

No smoking or welding.

Avoid build-up of fumes.

Ensure adequate ventilation.

For full safety precautions refer to the Material Safety Data Sheet

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