



METZ 92

FLEXIBLE SELF-LEVELLING POLYURETHANE FLOORING



DESCRIPTION:

METZ 92 is a polyurethane based self levelling coating. It is tough but flexible, solvent-free and resistant to a wide range of chemicals including dilute acids, alkalis and salts. Metz 91 can be applied as a topcoat if required to improve surface finish, abrasion resistance or colour stability when exposed to sunlight.

FEATURES AND BENEFITS:

- **Chemical Resistance**
Excellent resistance to a wide range of dilute acids, alkalis, oils and salts. Refer to METZ for details.
- **Flexibility**
Able to bridge small cracks in the substrate.
- **Toughness**
Able to absorb impact.
- **Non Tainting**
Does not give off objectionable odours during application and curing.
- **Smooth Finish**
Hygienic. Easy to clean.
- **Ease of Application**
Self-levelling formulation. Quick and easy to install.

RECOMMENDED:

As a self levelling flooring system for:

- Food Processing plants
- Laboratories and Hospitals
- Showrooms
- Pharmaceutical plants
- Assembly plants
- Confectionery plants

NOT RECOMMENDED:

- For areas subject to strong solvents or acids. Refer Metz 93PU or Metz 33 products.
- For areas exposed to heavy traffic. Refer Metz 93PU or Metz 33 products.
- For floors with falls greater than approx. 1 in 100.

PHYSICAL PROPERTIES:

(Typical Values)

Density:	1.4 -1.5 g/cm ³
Elongation at break:	90%
Shore Hardness, D:	50
Tensile Strength:	16 MPa
Colours:	Refer to METZ for available colours. Note that light colours are not UV colourfast.

COVERAGE: Theoretical quantities (allow for wastage)

METZ Epoxy Primer	0.2-0.3 kgs per sq metre, depending on absorbency of surface
METZ 92	3 kgs per sq metre at 2mm thickness

If colour stability is required in areas exposed to sunlight, apply Metz 91 as a top coat.

APPLICATION TEMPERATURE:

For optimum results, maintain a temperature of 10°C to 30°C on air and substrate and components during mixing, application and curing.

Note: The material temperature should be between 18° and 25°C to ensure proper self-levelling and adequate pot life.



CHEMICAL & CORROSION RESISTANT
MATERIALS OF CONSTRUCTION





METZ 92



FLEXIBLE SELF-LEVELLING POLYURETHANE FLOORING

INSTRUCTIONS FOR USE

1. Temperature of Working Area

For optimum results, maintain a temperature of 10°C to 30°C on air and substrate and components during application and curing. The material temperature should be between 18°C and 25°C to ensure proper self levelling and adequate pot life.

At temperatures below 10°C, the application becomes more difficult and curing is retarded. At temperatures above 30°C, the working time decreases.

Application in direct sunlight and rising surface temperatures may result in blistering of the coating due to expansion of entrapped air or moisture in the substrate.

Application should also be done when the substrate temperature is at least 3°C above the dew point.

2. Surface Preparation

All surfaces must be clean, dry and free from oil, grease, water and other contaminants which may inhibit bond. Surface should have a moisture content of less than 10%. Concrete on grade should utilise a waterproof barrier beneath the slab.

(i) New Concrete

New concrete should have attained a compressive strength of 20 MPa minimum and be at least 14 days old. Surface must be free from laitance, form oils and curing compounds. Abrasive blast or high-pressure water blast to remove laitance and provide a uniform, textured surface.

(ii) Old Concrete

Concrete must be sound. Remove laitance, old paints, protective 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. All structural cracks should be repaired and all slopes reestablished as Metz 92 will not mask surface defects. Smaller voids should be filled with a scratch coat of Metz Epoxy Primer filled with silica powder. All surfaces must be vacuumed to remove any loose deposits and contamination.

(iii) Mild Steel

Abrasive blast to AS1627.4, Class 2.5 minimum.

3. Mixing

a) Mixing Equipment

The correct mixing equipment is essential. A Festo mixer or slow speed heavy duty drill fitted with a rectangular paddle can be used. High speed mixers must not be used, as they will entrap air. Proper mixing is essential for a successful installation.

b) Mixing Proportions - Liquid to Hardener ratios must not be altered.

METZ Epoxy Primer	By Weight	By Volume
Liquid	1.86	1.6
Hardener	1	1
METZ 92	By Weight	By Volume
Liquid	4.88	4.15
Hardener	1	1

c) Mixing Procedure - Always avoid entrapment of air

For METZ Epoxy Primer:

Mix liquid and hardener slowly and thoroughly for 2-3 minutes.

For METZ 92:

Remix METZ 92 liquid prior to use. Mix liquid and hardener slowly and thoroughly for at least 3 minutes.

After mixing, transfer contents to a different container and mix again for 1-2 minutes. This is very important as it will prevent small pockets of incompletely mixed material being used. Inadequate mixing can result in blistering, colour variation etc. in finished floor.

Any material which has begun to set must be discarded. Do not add any solvent, additive or adulterant to any component, or to the mixed material. Scrape out and discard residue from mixing container prior to commencing next mix.

d) Pot Life at 20°C

METZ Epoxy Primer 70 minutes
METZ 92 30 minutes

Note: Increase in temperature will decrease pot life, as will leaving mixed material in a large mass. Spread out material in a thin layer as soon as possible after mixing.

e) Clean Up

Mixing equipment, tools, etc., can be cleaned with Metz Cleaner, xylene, acetone or MEK prior to initial set of cement.

Note: Splashing solvent on freshly laid material will result in discolouration.

4. Installation

(i) METZ Epoxy Primer

Apply to prepared surface using roller or squeegee. Ensure total area is covered and surface is completely sealed. Allow primer to dry overnight. (Drying time: 10-12 hrs at 20°C). Apply more primer if necessary to seal surface.

(ii) METZ 92

It is recommended that the area to be coated is split into bays, so thickness can be monitored. Locate mixing equipment as close to the working area as possible.

Immediately after mixing, discharge material onto floor. Apply with notched trowel or squeegee to a thickness of 1.5 to 2mm.

Leave material for 5-10 minutes then pass spiked roller over surface. Complete rolling within 15 minutes of application. While a wet edge remains, lay the next mix, and so on in a continuous operation to ensure good marrying of the mixes.

(iii) Topcoat (Metz 91)

If required, Metz 91 can be applied as a top coat to improve surface finish and/or colour stability. Metz 91 should be applied within 24 hours of laying Metz 92. Consult Metz 91 Data Sheet.

5. Setting/Curing:

Initial set at 20°C: overnight
Full cure at 20°C: 3-5 days

Do not allow water, chemicals or traffic on the material surface for a minimum of 48 hours. For harsh chemical or physical environments, cure a minimum of 5 days at 20°C prior to exposure.

6. Safety Precautions

Use chemical goggles, PVC gloves and barrier cream. Avoid contact with skin and eyes.

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

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METZ PTY LTD

A.C.N. 069 454 075

12 Turbo Road, Kings Park, NSW 2148

Facsimile: (02) 9671 4292

Phone: (02) 9671 1311

6 University Place, Clayton North, VIC 3168

Facsimile: (03) 9561 6944

Phone: (03) 9561 6144

Distributor ENGECON SPECIAL PRODUCTS CO., LTD.

125/7 Moo.5 Jangwattana Rd. Prakkret
Nonthaburi 11120 Thailand

Tel: (662) 962-1171-4 , (662) 962-2581-4

Fax : (662) 962-1175 , (662) 962-2585

E-mail : info@engecon.com www.engecon.com