METZ 44-SL
TWO-PART SELF-LEVELLING EPOXY FLOORING

DESCRIPTION:

Metz 44-SL is a 2-part 100% solids self-levelling monolithic epoxy flooring.
Metz 44-SL provides a smooth finish that is hygienic and easy to clean.
Metz 44-SL is resistant to a wide range of chemicals including dilute acids, alkalis, salts, fats and oils.
If extra abrasion resistance and/or colour stability is required, Metz 44-SL can be coated with Metz 97 Polyurethane.
In areas requiring a degree of slip resistance, Metz Slip Resistant Additive can be added to the Metz 97.

FEATURES AND BENEFITS:

- Ease of Application
  Two-part self-levelling formulation.
- Range of surface finishes available
  Standard finish smooth, gloss. Can be topcoated with Metz 97 Polyurethane. Anti-slip finish available with inclusion of Metz Slip Resistant additive.
- High bond- tensile and compressive strengths.
- Solventless
  100% solids formulation.
- Chemical Resistant
  Excellent resistance to a wide range of acids, alkalis, solvents, salts, oils and fats. Refer Metz Resistance Chart under "EPOXY A".
- Low Temperature Cure
  Cures at temperatures down to 5°C and high relative humidity.
- Quality Accreditation
  The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified.

RECOMMENDED:

As a self-levelling flooring system for:

- Pharmaceutical plants
- Laboratories
- Showrooms
- Clean rooms

NOT RECOMMENDED:

- For areas subject to heavy traffic, heavy loadings and impact. Refer Metz 33 or 93PU products.
- For areas subject to significant spillages of strong solvents or concentracted organic or oxidizing acids.
- For floors with falls greater than approximately 1 in 100.

PHYSICAL PROPERTIES: (Typical Values)

Density g/cm^3:	1.65 - 1.75
Compressive Strength, MPa:	100
Adhesion to concrete (ASTM C1583):	>1.5MPa (concrete failure)
Flexural Strength, MPa:	58
Coefficient of Thermal Expansion, per °C:	74 x 10^{-6}

COVERAGE: Theoretical quantities (allow for wastage)

Metz Epoxy Primer	0.2 - 0.3 kgs per sq metre, depending on absorbency and roughness of surface.
Metz 44-SL	3.4 kgs per sq metre at 2mm thickness
Metz 97	5.5 sq metres per litre at 180 micron wet film thickness (125 micron dry)

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.

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METZ®

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.

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.

2. Surface Preparation
All surfaces must be clean and free from oil, grease, water and other contaminants which may inhibit bond.

Remove all standing water. For best results surfaces should be dry.

(i) New Concrete
New concrete should have attained a compressive strength of 20 MPa minimum. Surface must be free from laitance, form oils and curing compounds. The surface should have a fine wood floated or lightly broomed finish and be 28 days old. Lightly abrasive blast, grind or high pressure water blast to remove laitance and provide a uniform, lightly textured surface.

Surface moisture content should be less than 10%.

(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, grind or high-pressure water blast to remove laitance and provide a uniform, textured surface.

All structural cracks should be repaired and all slopes re-established with approved repair material.

As Metz 44-SL is a thin coating, it will not mask any surface defects and will reflect irregularities in the substrate.

All surfaces must be vacuumed to remove any loose deposits and contamination.

3. Mixing
a) Mixing Equipment
Mechanical mixing is recommended. A special resinous cements mixer or mortar mixer are suitable. Smaller quantities can be mixed using a heavy duty drill with a suitable paddle. Consult Metz for details.

b) Mixing Proportions

Metz Epoxy Primer	By Weight	By Volume
Liquid	1.85	1.6
Hardener	1	1
Metz 44-SL	By Weight	By Volume
Liquid	7	4.2
Hardener	1	1
Metz 97 (if required)	By Weight	By Volume
Liquid	4.6	4
Hardener	1	1

Slip Resistant Additive (if required) - Add 1-2% by weight to Metz 97.

Note: The liquid to hardener ratios must not be altered under any circumstances.

c) Mixing Procedure
Remix all components prior to use.
For Metz Epoxy Primer, mix liquid and hardener together thoroughly for 1-2 minutes.

For Metz 44-SL, mix liquid and hardener together thoroughly for 3 minutes.

For Metz 97, mix liquid and hardener together thoroughly for 2-3 minutes. Allow to stand for 10 minutes, then remix.

At the end of the mixing period, all material should be wetted out and uniform in colour and consistency.

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.

d) Pot Life at 20°C

Metz Epoxy Primer	70 minutes
Metz 44-SL and Sealer	30 minutes
Metz 97	2 hours

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

Note: Ensure you have the latest mixing instructions, refer www.metz.net.au for most current data sheet version.

4. Installation
(i) Metz Epoxy Primer
Apply to concrete using roller or squeegee. Ensure total area is covered and surface is completely sealed. Allow primer to set overnight.

(ii) Metz 44-SL
It is recommended that the area to be coated is split into bays, so that the thickness can be monitored.

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 minutes, then pass spiked roller over surface. Complete rolling within 15 minutes of completion of mixing.

(iii) Metz 97
After 44-SL has set, apply Metz 97 with short nap roller.

5. Setting/Curing at 20°C

Metz 44-SL	Initial set	12 hours
	Full cure	7 days
Metz 97	Touch Dry	4 hours
	Hard dry	12 hours
	Full cure	7 days

Do not allow water, chemicals or traffic on the material surface for a minimum of 24 hours. For harsh chemical or physical environments, cure a minimum of 72 hours 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 Safety Data Sheets for all components.

Always ensure you have the latest data sheet version, refer www.metz.net.au

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METZ SPECIALTY MATERIALS PTY LTD
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