# **MIPRO-CRETE MF**

# A SEAMLESS, HEAVY DUTY, SELF-SMOOTHENING POLYURETHANE TOPPING

## **DESCRIPTION**

A flow applied, self-smoothening 3 component polyurethane topping in thickness from 3-6mm for industrial application aid repairing system in matt finish offering versatility in performance, aesthetics and economics.

#### **USES**

- Hygienic floor for kitchen, wet food, beverage processing and packaging plants.
- Chemical resistance floor for chemical process, containment area and wash down rooms.
- Thermal shock resistance floor for freezers, refrigerators, and oven installed spaces.
- Mechanically durable floor for loading docks and warehouses.

#### **ADVANTAGES**

- Seamless without joints for optimum sanitation and hygienic finish.
- Resists bacterial growth; fungi, mould and mildew.
- High-density systems with maximum wear, abrasion and impact resistance.
- High temperature resistance upto 60°C at 6mm thickness.
- Excellent chemical resistance.
- User-friendly, NO solvent odor during installation.
- One of the fastest trims around time for polymer modified products reduces cost
- easily cleaned and maintained smooth surface.

# **SPECIFICATION**

TECHNICAL DATA	
Density, kg/mm/m2	1.85
Compressive strength, N/mm2	55
Tensile strength, N/mm2	10
Flexural strength, N/mm2 7 days	30
Dynamic elastic modulus, N/mm2	14500
Adhesive strength, N/mm	Concrete
	failure
Thermal conductivity, W/m°C	0.9
Taber abrasion resistance, mg loss	1210
Coefficient of thermal expansion,	3.5x10 <sup>-5</sup>
℃	
Impact resistance, mm	<0.5
Water absorption, ml	0
Temperature resistance, <sup>o</sup> C	60
Coverage, kg/m <sup>2</sup>	5.75 kgs for
	3mm



#### **CHEMICAL RESISTANCE**

MIPROCRERE MF will resist spillages to

- Dilute acid concentrated acids: hydrochloric, nitric, phosphoric and sulphuric.
- Dilute and concentrated alkalis, including sodium hydroxide to 50% concentration.
- Most dilute acid concentrated organic acids.
- Fats, oil and sugar.
- Mineral oils, kerosene, gasoline and brake fluids.
- Most organic solvents.

Resistance is maintained in many cases to 60°C, which should be regarded as the maximum service temperature. Detailed test data available on request

# **APPUCATION PROCEDURE**

Surface Requirement& Preparation

- Substrate will normally be concrete or polymer modified screeds with minimum compressive strength 25N/mm<sup>2</sup> and pull-off strength 1.5N/mm<sup>2</sup>.
- Substrate moisture should not exceeds 4%
- For floor in need of repair above 10mm use MIPRO-E mortar.
- Preferably vacuum shot blast the surface with nonimpact method, Concrete surface planer, grit blasting and surface grinding or other mechanical means until a profile is evident can be satisfactory.
- Substrate must be clean, free from dust, oil, water, paint residues, loose constituents or any contaminants.
- Prepare grooves, 5mm wide X 5mm deep, at all edges, bay joints columns, doorways, and drains for anchoring purpose.

# **CHEMIPROTECT ENGINEERS**

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**IMPORTANT**: Old floor needs thorough inspection for its integrity providing an ideal substrate for maximum adhesion. It has to be free from all contaminants. Grooves 5mm wide and 5mm deep have to be created diagonally into the floor every 1m2 areas of the floor to facilitate mechanical bonding.

All MIPRO-Crete MF floor should be applied onto cured epoxy (water base) primer, which has been broadcasted with silica sand. Add part A, Polyol, to a clean mixing drum. Add Pat B, isocynate. to the drum and mix for 1 minute until uniform using a helical spinner. Add the pigmented Part C powder and further mix for 1 minute to achieve a fully homogenized consistent mortar. Scrape out residue of previous mix from the sides & the drum and discard before the next Back.

## COLOURS

Standard colors floor system is functionally formulated to withstand severe chemical, mechanical, and thermal damages. As a direct result slight living of the floor surface exposed to UV may occur especially in light colors without affecting its functionality.

# **Application**

Spread the composite matrix to thickness 3-6mm and consolidate with pin rake or notched squeegee set to the correct depth. Immediately release air by spike rolling.

#### COVING

Coving can be formed with MIPROCRERE MF Coving in conjunction with our MIPRO-E (WBP) on vertical surfaces.

CURING	25 <sup>0</sup> C	35 <sup>0</sup> C
Pot life, Min.	22	15-18
Foot Traffic, hr	10	8
Light traffic, hr	24	18
Full traffic, hr	48	24
Full cure, days	7	5

#### **TEMPERATURE**

MIPROCRERE MF should not be applied on material or floor temperatures below 10°C. Temperatures should not fall below 5°C in the 24 hours after application. Service temperature depending on thickness but may be upto 60°C on intermittent splash.

Not for immersion.

## **Service TEMPERATURE**

At 6mm: 60°C Max. & -5°C At 3mm: 50° C Max. & -5°C

## **SUBSTRATE MOVEMENT**

All moving joints must be carried through the MIPROCRERE MF and properly sealed. Construction joints and cracks may be covered but if substrate movement occurs, the MIPROCRERE MF will reflect the crack.

#### **CLEANING**

Clean all tools with acetone, xylene or other solvents prior to material taking a hard set Small unreacted Part B in container to be decontaminated with a 5% solution of washing soda (sodium carbonate) prior to disposal. After material has set it is virtually impossible to get off and must wear off over time.

## **MAINTENANCE**

Regular cleaning and maintenance will prolong the life of all resin floors, enhance the appearance and reduce the tendency o retain dirt

#### **PACKAGING**

20 kg packs, consisting of Base A, Hardener B & Filter C.

## **STORAGE**

All parts of MIPROCRERE MF should be stored properly in original (unopened) packaging in dry conditions at *10-32°C*. Shelf life 6 months minimum. Exaggerated temperature & humidity can adversely affect shelf life.

#### **HEALTH & SAFETY**

Some of the components of this may be hazardous during mixing and application. Please consult the relevant health & safety department.