

# Metal, Concrete, Wood, Polymer, and Tile Substrates

#### Product Description

Metroflex Primer is a low viscosity, colourless, two (2) component reactive resin based on methyl methacrylate (MMA). It is part of an innovative waterproofing system that supports tight completion timelines of projects and ensures long- term performance and resilience.

#### Basic Uses

Metroflex Primer is applied before a Metroflex membrane, providing excellent bonding to metal (iron, aluminum, stainless steel), concrete, wood, fiber-reinforced polymers and ceramic tile substrates. Curing and adhesion tests conducted on the applicable substrate are strongly recommended prior to general use on site.

#### **Features and Benefits**

- Rapid cure times allow for base coat application within 45 minutes.
- Acceptable for use at temperatures as low as -4 °F (-20 °C), offering continuation of projects in colder months.
- Initiator volume adjustments allow for 20 to 45 minutes cure time between applications independent of temperature.
- Unique chemistry allows for easy repairs and adhesion of subsequent coats.
- Exhibits excellent adhesion to many types of substrates.
- Easy to mix and apply.

# **Physical Properties\***

Property	Test Method	Value
Viscosity @ 77 °F (25 °C)	DIN 53019	100 – 130 mPa*s
Density @ 77 °F (25 °C)	ISO 2811	0.99 g/ml
Pot Life @ 68 °F (20 °C)		approx. 15 minutes
Curing Time @ 68 °F (20 °C)		approx. 30 minutes

\*Please note that an objective comparison with other data is only possible if norms and parameters are identical.

## Packaging

- 20kg / pail
- 180kg / drum

## **Installation Substrate**

## Preparation

- All substrates must be dry, firm, solid and free of dust, grease and oil. Laitance and loose particles must be thoroughly removed, usually by shot or sand blasting to attain correct surface profile. Newly poured concretemust have reached adequate strength to receive Metroflex system.
- Prepare surface structure for the correct application of the primer. Mechanical preparation should expose concrete aggregate. Fill visible pin holes and crates using filled primer or suitable cement mortar.
  - $\circ$  Substrate tensile strength = min 1.5 MPa.

# Installation

Mixing

- Prior to use, Metroflex Primer must be carefully stirred to achieve uniform distribution of the paraffin in the product, normally a minimum of three (3) minutes.
- Metroflex Primer is thoroughly mixed together with Metroflex Reactive Filler (25% dibenzoyl peroxide) or Metroflex Catalyst (50% dibenzoyl peroxide), in accordance with the following guidelines. The amount of initiator powder to be added depends on the substrate temperature.

Temp F	Temp C	Metroflex Reactive Filler	Metroflex Catalyst	Metroflex Accelerator
86 °F	30 °C	2.2% by weight of resin	1% by weight of resin	n/a
68 °F	20 °C	4% by weight of resin	2% by weight of resin	n/a
50 °F	10 °C	8% by weight of resin	4% by weight of resin	n/a
32 °F	0 °C	10% by weight of resin	5% by weight of resin	n/a
<32 °F	<0 °C	12% by weight of resin	6% by weight of resin	1-3% by weight of resin

Note: For safety reasons, Metroflex Accelerator must be added to reactive resin PRIOR to adding any initiator. See TDS Metroflex Accelerator for more details.

## Application

- After the initiator has been stirred in, the primer is poured on to the substrate in stripes and distributed with a short- pile paint roller. A notched rubber squeegee may be used for fast distribution of large quantities; this may consume more material.
- Apply at a rate of between 0.3 to 0.5 kg/m<sup>2</sup>, depending on density and porosity of the substrate. Continue applying primer until saturation occurs to obtain a continuous resin film. On porous substrates, a second prime coatmay be required.
- When a continuous resin film is obtained, broadcast fire-dried quartz sand (particle size 0.7 to 1.2 mm or 0.3 to 0.7 mm) into the still wet primer (consumption of broadcast sand; approximately 0.3 kg/m<sup>2</sup>).
- Do not apply when surface temperature is above 104°F (40°C) and/or rapidly rising. Special care must be observed if area is exposed to direct sunlight.
- Substrate temperature must be at least 3° over actual dew point and rising.

The techniques involved may require modification to adjust to job-site specific conditions. Consult your CFSNET Ltd Sales Representative for site conditions and requirements. For further installation details, see our General Preparation and Application Guidelines for "Metroflex GRP Roofing System".

## Limitations/ Shelf Life

One (1) year when stored in a dry place in original, closed containers. Optimal storage temperature: 60 to 70°F (15 to 20°C)

## Warranty

CFSNET Ltd warrants its Products to be free of defects in materials but makes no warranty as to appearance or colour. Since methods of application and on-site conditions are beyond our control and can affect performance, CFSNET Ltd makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to CFSNET Ltd. CFSNET Ltd's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of CFSNET Ltd Products proven to be defective, and CFSNET Ltd shall not be liable for any loss or damage.

Please refer to our website at www.cfsnet.co.uk for the most up-to-date Product Data Sheets.

NOTE: All CFSNET Ltd Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.