# MC-Proof DF 8

Acrylic based waterproofing membrane for exposed surfaces

BE SURE. BUILD SURE.

## Description

Ready to use, highly flexible, UV resistant liquid applied waterproofing membrane & protection coating for non-trafficked roofs and building facades.

## Areas of application

MC-Proof DF 8 is suitable for

- Concrete roof slabs – flat & pitched
- External facades – concrete & masonry
- cementitious waterproofing and acrylic coatings
- Brick-bat-coba / concrete screed / tiled roof
- Roof with existing bitumen membranes
- Asbestos roof sheet
- Heat reflective coating on metal & bitumen sheets

## Benefits

- Ready to use
- Low consumption
- UV & weathering resistance
- Crack-bridging
- Reduce heat absorption
- Over paintable
- Waterproofing & protection coating

## Product data

**Chemical base:** Acrylic copolymer dispersion

**Colour:** White

**Pack Size:** 12 Kg

**Interval between coats:** 2- 4 hrs

(at 25$^0$C and 65% relative humidity)

**Rain resistant:** 2 hrs

**Storage:** In cool and dry conditions for 12 months in original unopened packs.

## Technical data

| Properties | Values |
|---|---|
| Density | 1.4 kg/L |
| Solid content | 60% |
| Elongation at break<br>EN ISO 527-1 | 250% |
| Tensile strength<br>EN ISO 527-1 | 1.8 MPa<br>(for free film) |
| Adhesion to peel<br>EN 1542 | 1.5 MPa<br>(on concrete substrate) |
| Crack bridging ability<br>EN 14891 | 1.2mm |
| Water vapor transmission | 0.34 |
| Solar Reflective Index (SRI)<br>ASTM E1980 | 82 |
| VOC content | <15 g/L |
| Artificial weathering<br>EN 1062-11 | Pass |

## System information

### For roof without reinforcement

| *Coat* | *Product* | *Consumption* |
|---|---|---|
| *Primer coat* | MC-Proof DF 8<br>+ dilution with 10% water | 0.2 – 0.3 kg/m² |
| *1st Coat* | MC-Proof DF 8 | 0.5 kg/m² |
| *2nd Coat* | MC Proof DF 8 | 0.7 kg/m² |

### For roof with reinforcement

| *Coat* | *Product* | *Consumption* |
|---|---|---|
| *Primer coat* | MC-Proof DF 8<br>+ dilution with 10% water | 0.2 – 0.3 kg/m² |
| *1st Coat* | MC-Proof DF 8 | 0.7 kg/m² |
| *Reinforcement* | Glass fiber fabric | 1m² |
| *2nd Coat* | MC Proof DF 8 | 0.7 kg/m² |

### For wall

| *Coat* | *Product* | *Consumption* |
|---|---|---|
| *Base coat* | MC-Proof DF 8 | 0.2 – 0.3 kg/m² |
| *Top Coat* | MC-Proof DF 8 | 0.2 – 0.3 kg/m² |

*Total consumption depends on the substrate quality and flatness.* Additional material required due to surface porosity, surface profile, variations in level and materials wastage etc.

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## Application method

### Application conditions

Ambient air temperature +8°C to 40°C
Relative humidity: 80% Max
Substrate temperature +8°C to 40°C

*Beware of condensation. Surface temperature during application must be at least +3 °C above dew point.*
*Surface moisture: < 6 % moisture content. No rising moisture according to ASTM (Polyethylene-sheet). No water/ moisture/ condensation on the substrate.*

### Surface preparation

**Concrete & Cement substrate:**

- New concrete should be cured for at least 28 days and should have a pull-off strength ≥ 1.5 N/mm2.
- All substrates, whether they are new or old, must be solid, clean, dry and free from all traces of oil, grease, mold and any other materials which could compromise the bond with the substrate.
- All surface defects such as static cracks, blowholes and voids must be fully exposed. Filling of joints, blowholes/voids and surface levelling must be carried out using the appropriate MC materials.
- Must be dry with no raising dampness.
- The roof must have a minimum gradient in order to avoid water ponding on the waterproof membrane.
- Existing coatings/membranes have to be inspected, cleaned and mechanically grind to achieve sound and gripping substrate.

**Brick and masonry:**

- Mortar joints must be sound and flush pointed.
- Use localised reinforcement over connection joints

**Existing tiled roof:**

- Roughed the surface by grinding to improve the roughness

**Existing Bitumen membrane:**

- Ensure that Bituminous felt is firmly adhered to the substrate.
- Overlap joints are inspected and resealed properly.

**Metal roof:**

- Jet wash cleaning followed by wire brushing or abrasive blasting to remove all the rusts, flaky paints etc.
- Use localized reinforcement with MC-Proof DF8 over joints and fixings

**Application:**

MC-Proof DF8 is applied in 2 – 3 coats depending on substrate and system requirement. Indicated waiting times must be followed before application of each coat. Please note, always begin with detailing works prior to waterproofing the horizontal surface.

In drains or points where the material has changed, it is advisable to do a punctual sealing with the flexible sealant MC-Flex PU 25/40.

**Priming:**

Prime the prepared concrete or cement substrate by using MC-Proof DF8 diluted with 10% (by wt.) clean water. Allow the primer coat to dry before application of 1st coat. This usually takes approx. 45 -60 min. at 30$^0$C.
For the non-absorbent surfaces like tiles or metal roof an epoxy primer such as MC D1 Speed primer can be used as an adhesion promoter.
Within 2-4 hrs of priming, apply 1st coat of MC-Proof DF 8 by roller, brush or airless spray. Place glass fiber reinforcement when 1st coat is still fresh for the high fragile areas corner junctions, wider cracks, joints and seams. Wait 2-4 hrs until the 1st coat is dry in a normal ambient condition of 300c and 80% humidity.
Apply 2nd coat in perpendicular direction of 1st coat and allow it to air cure for 7 days.

Note: Times are approximate and will be affected by coating thickness and changing ambient conditions particularly temperature and relative humidity. Low temperature and high humidity retard curing, while high temperatures and low humidity accelerate curing progression.

## Precautions

- MC-Proof DF8 is to be used mainly in exposed applications and is not for inverted buried systems.
- Cementitious substrates shall be > 28 days old prior to application of MC-Proof DF8
- A minimum of two coats of undiluted must be applied as a waterproof coating.

- Any partial and badly degraded membrane is to be replaced with new membrane pieces. Flaking PE layer and granules must be removed and cleaned properly
- MC-Proof DF8 should not be used in permanent contact with water or in areas where flooding or condensation may occur.
- Do not place sharp objects on floor treated with MC-Proof DF8.
- In cold climatic zones for roofing structures with a pitch of less than 3 % appropriate drainage measures must be considered MC-Proof DF8 is designed for non-trafficked roofs. If frequent foot traffic is unavoidable, it is advised to cover the walking pathway with appropriate paving materials.
- Pre-test on overpaint ability and compatibility if unsure about existing paints type.
- MC-Proof DF8 may be flood tested when fully cured using 50mm depth of water for a maximum period of 24 hours.

## Cleaning of tools

Clean all the tools and application equipment with clean water immediately after use. Hardened/cured materials can only be removed mechanically.

**Packaging disposal**Make sure single-use containers are completely empty. Ensure compliance with our information leaflet “Return of Emptied Transportation and Sale Packaging”. We will be glad to send you this on request.

## Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets.

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC’s specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may dif fer. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website