

# MasterSeal<sup>®</sup> 378

Acrylic waterproofing membrane for solar reflective membrane

## DESCRIPTION

**MasterSeal 378** is designed for use as an elastomeric membrane in solar radiation reflective waterproofing system. It can directly apply on new or old coated metal roofs. No primer is required for most of metal roof and is suitable for application on concrete substrate. The membrane is white in colour to provide a flexible, elastomeric waterproofing membrane. The cured membrane is tough, durable and totally seamless.

## RECOMMENDED USES

- New/aged coated or uncoated metal roofs
- Renovation of concrete roofs
- **MasterSeal 378** is recommended for Protection of metal roof – especially at joints to prevent ingress of rain and water borne contaminants.
- As the body coat of solar radiation reflective waterproofing membrane system, provides good bonding on most coated and uncoated metal roof and improves the total solar reflectance of system.
- **MasterSeal 378** is not recommended for use in submerged applications or in trafficable area.

## FEATURES AND BENEFITS

- High solid content
- Elastomeric with good tensile strength
- Good bonding to new or old coated metal
- Water based
- Sprayable
- Suitable for all climatic zones

## TECHNICAL DATA

|                         |                        |
|-------------------------|------------------------|
| Color                   | White                  |
| Weight solid            | 65 ± 1%                |
| Density                 | 13 ± 0.5               |
| Viscosity               | 14000 cps at 23°C      |
| Time being walked on    | 18hrs (23 °C & RH 50%) |
| Fully cured             | @7days                 |
| Elongation at break     | >100%                  |
| Tensile strength        | >1.5Mpa                |
| Bonding on coated metal | >350 N/m               |

## APPLICATION

### Surface preparation

All traces of oil, dust, rust; loose and peeling oxidized coatings as well as any other contaminant that could impair adhesion should be removed by washing with water plus common detergent. Thoroughly wash all detergent away and allow to dry in cool damp conditions rub surface dry with cloth.

### Mixing

**MasterSeal 378** is ready to use. Stir to ensure a uniform mixture before use.

### Joint Treatment

**MasterSeal 378** and non – woven polymer cloth are the materials to treat joints.

**Step 1:** Coat by brush along the joint 5cm on each side and allow to become tack free. (approximate consumption -.10 kg/m<sup>2</sup>)

**Step 2:** Apply a second layer with around 0.05kg/m and press the precut 8cm wide sections of polymer cloth into the still wet material. After this has been done apply another layer of approximate 0.05kg/m to fully encapsulate the polymer cloth. Actual consumptions of the **MasterSeal 378** will depend on the profile and size of the joint. All joints between the metal panels and other substrates should be treated in the same way. (Please consult Master Builders Solutions representative to determine if priming may be necessary).

**Step 3:** If joints are over 3mm, a sealant like MasterFlex 472 or MasterSeal NP 1 must be used to fill the gap before applying the joint system as above.

### Body coat application

**Step 1:** The prepared substrate must be dry before spraying with an airless spray machine.

**Step 2:** Apply **MasterSeal 378** by using airless spray machine can achieve up to 700µm wet film thickness in one layer with coverage consumption of around 0.8kg/m<sup>2</sup>.

**Step 3:** The membrane can be walked on after about 16-18 hrs @ 25°C for wet film thickness of around 600-800µm.

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**Note:** *MasterSeal 378 is not resistant to rain until the film is totally dried. The product should not be applied in rain. Rain should be avoided in 12 hours before and after application.*

**Application temperature:**

- Environmental temperature 5°C to 35°C
- Substrate temperature should be around 5°C to 50°C.

**Dilution**

**MasterSeal 378** could be diluted with 10-15% water to achieve smoother surface.

**Curing**

MasterSeal 378 is self-curing. Curing time is 7 days

**Equipment**

Airless spraying machine, brush.

**Cleaning**

Clean tools and equipment with water before **MasterSeal 378** dries.

**ESTIMATING DATA**

Generally, recommended consumption of application for **MasterSeal 378** is 0.82 kg/m<sup>2</sup>. Each pack of 20kg is sufficient for an area of 24 m<sup>2</sup> to achieve the recommended final dry film thickness of 400µm.

**PACKAGING**

**MasterSeal 378** is supplied in 20kg containers.

**SHELF LIFE**

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored out of direct sunlight. Shelf life is 12 months when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice please consult a Master Builders Solutions technical representative.

**PRECAUTIONS**

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable item. For further information refer to the material safety data sheet. MSDS available on demand.

**Note**

All Master Builders Solutions Technical Data Sheets are updated on Regular basis; it is the user's responsibility, to obtain the most recent issue. Field services where provided, does not constitute supervisory responsibility, for additional information contact your local representative.

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