



The Chemical Company

MASTERSEAL® 378

Acrylic waterproofing membrane for solar reflective membrane system

DESCRIPTION

Masterseal 378 is designed for use as an elastomeric membrane in solar radiation reflective waterproofing system. It can directly be applied on new or old coated metal roofs. No primer is required for most of metal roof and is suitable for application on concrete substrates. The membrane is white in colour to provide the optimum base for the solar reflective topcoats. It is water based and formulated with high performance dispersions to provide a flexible, elastomeric waterproofing membrane. The cured membrane is tough, durable and totally seamless.

RECOMMENDED FOR

- 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 areas.

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	1.3±0.05 kg/liter
Viscosity	14000 cps at 23 °C
Time being walked on	18h (23 °C and RH 50%)
Fully cured	@ 7 days
Elongation at Break	≥100%
Tensile strength	>1.5Mpa
Bonding on coated metal	>350N/m

SPECIFICATION CLAUSE

Elastomeric membrane of solar radiation reflective waterproofing system for metal roof shall be **Masterseal 378**, applied at an average thickness of 400 microns DFT in one coat. At joints, an average is DFT should be 1.2mm-1.5mm.

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 5 cm on each side and allow to become tack free. (approximate consumption 0.10Kg/m)

Step 2. Apply a second layer with around 0.05kg/m and press the precut 8 cm 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 you **BASF** Representative to determine if priming may be necessary.)

Step 3. If joints are over 3mm, a sealant like Masterflex 472 or Sonolastic NP1 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/m².

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

*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-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.



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MASTERSEAL[®] 378

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/m². Each pack of 20kg is sufficient for an area of 24 m² to achieve the recommended final dry film thickness of 400µm.

PACKAGE

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 **BASF** 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 vapor 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 BASF 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 **BASF** representative.

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NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by **BASF** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **BASF Construction Chemicals**, are responsible for carrying out procedures appropriate to a specific application.

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