

MasterSeal[®] 379

Water-Based Polyurethane Hybrid Acrylic Coating for SRI Coating & Waterproofing membrane

DESCRIPTION

MasterSeal 379 is one component, water-based, liquid applied, polyurethane hybrid acrylic coating for waterproofing and Solar Reflective Coating (SRI).

The product can be easily applied and forms an elastic, seamless membrane that protect old and new structures efficiently.

It can be applied by brush or airless spray machine in two or more coats.

TYPICAL APPLICATION

MasterSeal 379 is used as Solar Reflective coating , waterproofing or damp-proofing for concrete substrate with crack bridging property and UV resistant property. It is suitable for both new and refurbishment projects and recommended for use in the following applications.

- Solar reflective to enhance energy efficiency with white color
- Waterproofing for domes , sloped roof
- Waterproofing for balconies, terraces, decks
- Light roofing made of fibrous cement

FEATURES AND BENEFITS

- **Water-based-** Low VOC
- **One component-** Ready to use
- **Simple application** - by brush or airless spray
- **Highly elastic-** Good Crack bridging
- **PU Based-** Good property under limited ponding water compared to acrylics
- **UV Stable-** Suitable for exposure
- **White color** - Reflects solar energy enhance reduce internal temperature of structure considerably
- **For Exposed Application** - Easy repair and maintenance in case of physical damage to membrane.

APPLICATION PROCEDURES

Surface Preparation

The surfaces shall be cleaned thoroughly of all contaminants like dust, traces of curing compound, oil and grease. All surface imperfections, protrusions, structurally unsound and friable concrete must be removed and repaired with MasterEmaco range of mortars.

Fill surface irregularities such as blowholes, honeycombs etc., with MasterEmaco range of repair mortar to achieve a smooth and level surface. Repair cracks either by resin injection (MasterInject or MasterBrace 2200, as appropriate) or by sealants depending on the nature of cracks. Expansion joints

and construction joints to be treated with Master Builders Solutions range of construction sealants (MasterSeal range of joint sealants - see separate data sheets). Consult Master Builders Solutions representatives for advice on repair methods and joint treatment.

Priming

Before applying the final membrane, the concrete substrate must be sealed by primer using **MasterSeal P 399**. Allow to dry until tack free (about 2 hours at 23°C) before applying next layer.

A porous substrate may require two coats to ensure pores are sealed for critical applications. Surfaces must be dry at the time of application.

Waterproofing Membrane

MasterSeal 379 is thixotropic and can be applied easily with a brush or spray equipment. One layer can reach 1.0mm without sagging, for better appearance not recommend to apply more than 0.6kg/m² per layer.

Stir **MasterSeal 379** using a slow speed hand-held mixing machine fitted with a mixing paddle. Premark the area based on consumption and DFT required. Apply **MasterSeal 379** onto the prepared, primed surface using a brush or Airless spray machine.

For waterproofing solution or for areas like wall-floor connections, pipes, chimneys, light domes, cracks etc it is required to apply with a layer of spun bonded non-woven geotextile (60~100g/sqm). In order to do that, apply on the still wet **MasterSeal 379** a correct cut piece of fabrics, press it to soak, and saturate again with enough **MasterSeal 379**.

After 24 hours apply final layer of **MasterSeal 379** along with other areas. For details please refer to **MasterSeal 379** application guideline.

SRI Coating

Stir **MasterSeal 379** using a slow speed hand-held mixing machine fitted with a mixing paddle. Premark the area based on 0.9-1Kg/m² consumption. Apply **MasterSeal 379** onto the prepared, primed surface using a brush or Airless spray machine.

Caution: Do not apply the **MasterSeal 379** in temperature below 5°C or when dew, rain or frost is imminent in the next 48 hours. For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity (fog or dew conditions) retard cure and affect the curing times and curing properties

MasterSeal[®] 379

TECHNICAL PROPERTIES

In liquid form:

Properties	Results
Supply form	Liquid
Colour	White
Viscosity at 23°C	10000-13000 mPa.s
Density, ASTM D1475, ISO 2811	~1.31 g/ml
Solid content	64~66%
Touch dry time (23°C/ 50%RH)	2 hours
Re-coating interval (23°C/ 50%RH)	5 hours
Full cure	7 days
Application temperature	5 °C to 35 °C

In cured sample (after 7 days curing)

Property	Results	Test method
Tensile strength	≥ 2 MPa	ASTM D412
Elongation	≥ 350%	ASTM D412
Tear strength	15 N/mm	ISO 34-1
Shore A hardness	70	ASTM C836
Adhesion (on MasterSeal P 399)	2.0 MPa	ASTM D7234

* Values are intended as a guide only and need to be defined individually referring to machine used

MasterSeal® 379

CONSUMPTION

For Solar Reflective Coating

First coat (MasterSeal P 399 Primer): 0.2~0.25 kg/m².

Second coat: 0.9-1.0 kg/m²

For best dirt-pickup resistant, apply MasterSeal TC 622 0.10 kg/m².

For Waterproofing with reinforcement

First coat (MasterSeal P 399 Primer): 0.2~0.25 kg/m².

First coat: ~0.8-1.0 kg/m²

spun bonded non-woven geotextile (60~100g/sqm).

Second coat: ~0.8-1.0 kg/m²

PACKAGING and Color

MasterSeal 379 is available in 20 kg pails;

Color is available at white

SHELF LIFE / STORAGE

MasterSeal 379 can be kept for 12 months from date

of manufacture if stored in original unopened packaging, in a dry and shaded area.

PRECAUTION

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website

TDS Ref No: MasterSeal379/01/10/2022

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NOTE

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