

# MasterSeal<sup>®</sup> 555

Flexible, polymer cement waterproofing slurry

## DESCRIPTION

**MasterSeal 555** is a two component product, consisting of Part A (liquid) and Part B (powder) which when yields a flexible waterproofing coating with excellent weathering resistance and crack-bridging capability.

## RECOMMENDED USES

**MasterSeal 555** is recommended as a waterproofing membrane below concrete, mortar, tiles etc. Typical applications include:

- Flat and Pitched Roofs.
- Wet areas, Bathrooms and kitchens
- Terraces and balconies
- It is also suitable as a waterproofing coating to concrete structures such as:
- Bridge parapets, beams and pillars
- Reservoirs, sumps and tanks.
- foundations below and above ground

**MasterSeal 555** is not suitable as a trafficable membrane. For this application, it is advisable to protect the cured membrane by covering with concrete or tiles.

## FEATURES AND BENEFITS

- **Flexible** - Bridges cracks up to 2 mm when subject to normal movements.
- **Permeable to water vapours** - Allows surface to breath, preventing build-up of vapour pressure.

## PERFORMANCE DATA

Water vapor permeability, (ASTM E96:94)	<30 g/m <sup>2</sup> /day
Tensile strength (ASTM D412-92),	1.52 N/mm <sup>2</sup>
Elongation at break (ASTM D412-92)	250 %
Crack bridging (adopted from ASTM 836-89)	Up to 2mm.
Hardness (ASTM 2240 - 9), shore A	60
Flexibility test, magnification 10 X	no crack

## PROPERTIES

	Part A	Part B
Supply form	Liquid	Powder
Colour	White	Grey
Mixing proportions by weight (Part A: Part B)	: 1:1.25	
Density of mixed material	: 1.55 kg/L	
Application temperature	: 5°C-35°C	
Pot life @ 20°C	: 2 hrs.	
@ 30°C	: 1 hr.	
Working time @ 30°C	: 60 mins.	
Curing time @ 30°C touch dry	: 45 mins.	
recoating time	: Min.2½ hr.	
full cure	: 28 days	

## APPLICATION

### Surface Preparation

Surfaces should be structurally sound, clean, and free from cement laitance, loose particles. Oil, and grease, mold release agents curing compound, or any other contaminant shall be removed by wet grit blasting, high pressure water jetting (approx. 150 bars) or such other effective methods.

Fill surface irregularities such as blow holes, honeycombs etc., with a **MasterEmaco** repair mortar to achieve a smooth and level surface.

Saturate the prepared substrate with clean water before applying **MasterSeal 555**.

### Mixing

Mechanical mixing is necessary. A slow speed (300-600 rpm), heavy duty electric drill with a wing type paddle is recommended. Place half to two thirds of Part A (white liquid) in the clean container supplied. Keeping the mixer running, add Part B (powder component) slowly and steadily. Add the remaining liquid and mix for at least 2 minutes until a homogeneous lump free consistency is obtained.

### Placing

It is extremely important that the area being treated is shaded from direct sun and wind to prevent rapid drying of the coating.

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Apply **MasterSeal 555** evenly using a block brush, or by a notched trowel, onto the prepared surface, to give a continuous film. In case of large areas **MasterSeal 555** can be spray applied using a worm-gear type of spray equipment.

Apply at least two coats with an average wet film thickness of 1 mm each. To avoid pin holes, apply the second coat at right angles to the direction of first. Ensure that no air is entrapped in the membrane during application.

If during the application the mix stiffens, discard it and prepare a fresh mix for application. Do not apply on external surfaces if rain is anticipated within 2 hrs.

## Curing

Slow drying of **MasterSeal 555** membrane ensures homogenous curing and **MasterSeal 555** must be protected against rapid drying due to high temperatures or wind. No further curing treatment is required.

Any subsequent, compatible paint finish may be applied after 7 days.

## ESTIMATING DATA

The minimum recommended coverage of **MasterSeal 555** is 0.9-1.0 kg/m<sup>2</sup> per coat to get approx. 0.65-0.75 mm thick wet film build. Therefore, for two coats, the material requirement is 1.9-2.0 kg/m<sup>2</sup>. Actual coverage depends upon the method of application, the texture and porosity of the surface.

## PACKAGING

**MasterSeal 555** is supplied in:

Pack size	Part A	Part B
45 kg	20 kg	25 kg

## SHELF LIFE

**MasterSeal 555** has a shelf life of 12 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

## PRECAUTIONS

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.

## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

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