

# MasterLife WP 88

Elastomeric waterproof brushable or sprayable membrane

## Material Description

This is an elastomeric waterproof coating forming a brushable or sprayable membrane for concrete and masonry. MasterLife WP 88 comes as two-part, powder and liquid component. When the two components are mixed together to form MasterLife WP 88, it forms a brushable waterproof slurry, which cures to a flexible elastomeric membrane. It is applied to a minimum 2 mm thickness in two coats by stiff brush, broom, or spray.

## Areas of Application

- Water retaining structures which may be subject to movement
- As part of the basement waterproofing system, in areas sensitive to movement, vibration and settlement
- To protect concrete from water of low pH or soft quality, carbonation, and de-icing salts
- Suitable for internal and external use, against positive and negative water pressure
- As a resilient coating to protect concrete on bridge parapets, columns, piers, on land and in marine environments
- Waterproofing of new structures where movement is expected from drying shrinkage
- Once cured, a 2mm thick MasterLife WP 88 membrane will accommodate up to 0.5mm, or 1.5mm of movement when reinforced with FX Mesh.

Note: MasterLife WP 88 is not suitable for prolonged contact with hydrocarbons such as petrol, fuel oil, etc.

## Features and Benefits

- Retains flexibility when submerged
- Good chemical resistance against soft water, domestic and sewage wastewater, and other liquids moderately aggressive to mineral substrates
- Resistant to occasional foot traffic
- 2mm of cured coating equivalent to 500mm of concrete cover
- Freeze/thaw resistant

- Water vapour permeable (contact Master Builders Solutions UK Limited if you require more specific advice)
- Non-solvented – safe to handle and use: environmentally friendly

## Application Method

For tanking applications refer to the Basement Waterproofing Guide.

## Substrate Quality

Substrates to be treated must be completely clean, structurally sound, and mechanically keyed. All surface coatings, defective renders, foreign matter, formwork treatments and other contaminants that may affect the bond adversely should be removed.

### (a) Surface Preparation

Substrates should be prepared by abrasive blasting or high-pressure water treatment. Do not use scabbling or any other aggressive method.

All mortar joints to be flush-pointed, repair with MasterLife WP 89.

All wall/floor intersections to be prepared by cutting a 20mm by 20mm chase along the junctions and filling with MasterLife WP 89, finishing in an angle fillet to "round out" the junction.

Water infiltration through the substrate to be treated should be either diverted by drainage or concentrated at weepholes, which will be plugged with MasterLife WP 89 after the application of the final coat of MasterLife WP 88.

Basements in areas containing high levels of soil or ground water sulphates may require a pre-treatment render. Consult Master Builders Solutions UK Ltd for details.

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## (b) Mixing

Liquid content

10 litres of MasterLife WP 88 liquid per 25 kg bag of MasterLife WP 88 powder.

## Mechanical Mixing

Blend the powder into the mixing liquid. Use a suitable mixing paddle in a slow speed drill (400 - 600rpm). Mix until a lump-free, slightly viscous slurry is obtained. This should be achieved within 2 minutes. Do not over mix.

Allow the mixed material to stand for 10 minutes for full saturation to take place. If applying by spray add 0.4 litre of MasterLife WP 88 liquid. Re-mix for 10 - 20 seconds before use.

Mixed material must be used within 60 minutes from the start of mixing, or less under hot weather conditions.

Do not re-temper the mix.

## Application Method

MasterLife WP 88 can be applied by \*brush, broom, or spray. MasterLife WP 88 must not be applied by trowel.

\* A suitable brush will be 6" (150mm) in width and have a short pile comprising stiff nylon bristles of 3" (80mm) in length.

The first coat MUST be worked into the substrate with a stiff brush, while still wet, to ensure an intimate bond to the substrate, even when applied by spray.

## Finishing and Cleaning

Tools, equipment, and spillages should be cleaned immediately with clean water.

## Curing

Damp cure for 24 hours after which time the MasterLife WP 88 must be allowed to air dry.

In cold, humid, or unventilated areas it may be necessary to leave the application for a longer curing period or to introduce forced air movement. NEVER use dehumidifiers during curing periods.

## Working Time

45 minutes in 20 °C ambient and substrate temperature.

## Packaging

MasterLife WP 88 powder is available in 25kg bags.

MasterLife WP 88 liquid is supplied in 10ltr plastic containers.

## Coverage

Approximately 2 l m<sup>2</sup> per pack at 1 mm thickness in one coat.

Apply 2 coats.

Coverage is influenced by the roughness of the substrate. On rough substrates the quantities required will increase significantly.

## Watchpoints

If MasterLife WP 88 is used to waterproof fish tanks, it should be washed down after curing is complete with salt water and rinsed with clean water. Repeat the rinsing until the required pH conditions are obtained. Failure to do this and to monitor the pH of the water until stable can lead to the death of fish.

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Product Data			
Property	Standard	Unit	Data
Density of mixed material	EN 1015-6	kg/m <sup>3</sup>	approx. 1680
Maximum particle size	-	mm	0.6
Mixing time	-	minutes	Approx. 2
Maturing time	-	minutes	10 Maximum
Workability time	-	minutes	Within 60 (+20°C)
Total application thickness	-	mm	2
Application temperature (substrate and material)	-	°C	from +5 to +30
Water vapour permeability	-	μ	985
Resistance to chloride ion penetration	-	%	0.001
Tensile strength 28 days	-	MPa	0.64
Adhesive strength 28 days	-	Mpa	1.0
Freeze/thaw resistance	ISO/DIS 4846.2)	-	No scaling after 50 cycles
Water absorption	(Astm 642C)	%	1.5
Positive side waterproofing	-	bar	1.5
Negative side waterproofing	-	bar	1.0
Static crack bridging:	EN 1062-7	mm	0.5 (+20°C)
			Reinforced with mesh 1.5 (20°C)
CO <sub>2</sub> permeability	-	μ	100,000
Equivalent concrete cover to 2mm of coating	-	mm	500 (P35 grade concrete)

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Logistics	
Shelf life:	12 months if stored according to manufacturer's instructions in unopened container.
Storage conditions:	Store in original sealed containers and at temperatures between 5°C and 30°C. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Handling and transportation:	Refer to MasterLife WP 88 Safety Data Sheet
Disposal:	Refer to MasterLife WP 88 Safety Data Sheet

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## DISCLAIMER

MasterLife WP 88, Master Builders Solutions UK Ltd, Version 1

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

**Health and Safety:** \*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

**Spillage:** Chemical products can cause damage; clean spillage immediately.

### DISCLAIMER:

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