

MasterSeal[®] 730 UVS

Pre-Applied Fully Bonded HDPE Waterproofing Membrane for below grade waterproofing

DESCRIPTION

MasterSeal 730 UVS is an HDPE membrane with unique pressure sensitive adhesive and a state of the arts top film which enable good chemical adhesion with concrete surface.

MasterSeal 730 UVS forms a unique integral seal around the concrete poured against it, prevents water ingress even under high hydrostatic pressure and prevents lateral water migration as well.

MasterSeal 730 UVS remains fully adhered to concrete (i.e. monolithic) helping retain its performance even when there is ground settlement beneath the slabs

RECOMMENDED USES

MasterSeal 730 UVS is intended for use in below grade waterproofing applications such as basements rafts and confined retaining walls with high water table and cut & cover structures (e.g, tunnels) and allows efficient use of confined sections.

FEATURES AND BENEFITS

- **Fully Adhered to Poured Concrete** – Prevents later water migration between concrete and membrane
- **Unaffected by hydrostatic pressure** – Can be used in high water table areas
- **Unaffected by Contamination** – Does not require any special protection during construction – can be easily cleaned with water and high-pressure air
- **Simple and Easy to Install** – Does not require special tools and welding techniques
- **Chemically resistant** – Can be used in all soil and sub-soil conditions, even if contaminated with salts.
- **Fully adhered watertight laps** – Ensures water tightness.

PERFORMANCE DATA

Elongation (%) ASTM D 412	500
Tensile Strength (MPa) ASTM D 412	25.0
Puncture Resistance(N) ASTM E 154 modified	1000
Low Temperature Flexibility, -25°C ASTM D 1970	Pass

Peel Adhesion to Concrete (N/mm)	1.8
Peel Adhesion, heat aged Surface (50°C) (N/mm) ASTM D 903 modified	1.5
Nail Shank Resistant (N) EN12310-1	500
Tensile retention upon heat aging (%), ASTM D 412	90
Elongation retention upon heat aging (%), ASTM D 412	80
Resistance to Hydrostatic Head (m) ASTM D 5385 modified	71
Lateral water migration resistance (m), 23°C, ASTM D 5385 modified	71
Lap Peel Adhesion, (N/mm,23°C) Lap Peel Adhesion, after immersing in water(N/mm,23°C) ASTM D1876 modified	1.0 1.0
Dimensional Stability SS 374-1994	≤ 0.5
Tape	
Lap peel to HDPE sheet (N/mm, 23°C)	≥ 1.0
Lap peel to HDPE sheet (N/mm,4 °C)	≥ 1.0

The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions

PROPERTIES

MasterSeal 730 UVS (acrylic finished)	
Release (removal) liner is silicone based with better UV stability before removing liner	
Thickness* Width	1.2 mm *1.0 m
Color	White
MasterSeal 936 UVS¹	
Thickness* Width	0.8mm*80 mm
MasterSeal 937 UVS²	
Thickness* Width	0.8mm*120 mm

MasterSeal[®] 730 UVS

1. **MasterSeal 936 UVS** is a double side sticky tape used for specialized detailing and overlaps.
2. **MasterSeal 937 UVS** is a single side sticky tape used for repair and termination of membrane.

APPLICATION

Surface Preparation

It is essential to create a sound and solid substrate to eliminate movement during the concrete pour. Substrates must be regular and smooth with no gaps or voids. Grout around all penetrations for stability.

Horizontal Blinding – The blinding must be free of loose aggregate, voids, surface irregularities and sharp protrusions. The surface needs to be in a touch dry condition. SSD condition (no standing water) is also acceptable

Vertical Surfaces – The vertical surfaces should have proper levelled brickwork, blockwork, or formwork without any irregularities. For the case of sheet piles, the substrate should be made regular with a smooth finished shotcrete or sacrificial formwork to be installed

Installation

Please contact our Master Builders Solutions representative for further support for detailed installation guidelines **Membrane Repair**

Generally, the membrane is very tough, and the execution should not encounter any repair. In the most extreme cases, if for some site issues, there is any reason to do a patch work, then please contact our Master Builders Solutions representative for the rectification procedure.

Pouring of Concrete

Kindly ensure that the plastic liner of the membrane is removed prior to placement of reinforcement. It is recommended that concrete is poured within 5 weeks after the HDPE membrane has been laid on the sub-base (e.g. PCC). Care should be taken to avoid any damage to the membrane during laying steel reinforcement, consolidation, and compaction of concrete.

Additionally, during placement of concrete, the vibrator needle should not touch the placed HDPE membrane. For best results use Master Builders Solutions Smart Dynamic Concrete

PACKAGING

MasterSeal 730 UVS is supplied in Rolls of 20 m length and width of 1.0 m. Each Roll consists of 20 Sq. of membrane

MasterSeal 936 UVS is supplied in rolls of 20 m length and 80 mm width.

MasterSeal 937 UVS is supplied in rolls of 20 m length and 120 mm width.

SHELF LIFE

Twelve months if stored in original containers under dry conditions at a temperature between 10-30° C.

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.

NOTE

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