

MasterSeal[®] 730 UVS

Pre-applied fully bonded HDPE waterproofing membrane for below grade waterproofing

DESCRIPTION

MasterSeal 730 UVS is an HDPE membrane with pressure sensitive adhesive 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 under 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.

TYPICAL APPLICATIONS

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.

ADVANTAGES

- **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

PACKAGING

MasterSeal 730 UVS comes with opaque silicone-based release (removal) liner and available in White color.

MasterSeal 936 UVS is a double-sided sticky tape used for specialized detailing and overlaps.

MasterSeal 937 UVS is a single-sided sticky tape used for repair and termination of membrane.

Product	Width	Length	Thickness
Membrane			
MasterSeal 730 UVS	1.0 m	20 m	1.2 mm
Accessories			
MasterSeal 936 UVS	80 mm	20 m	0.8 mm
MasterSeal 937 UVS	120 mm	20 m	0.8 mm

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TYPICAL PROPERTIES*

Elongation ASTM D412	≥ 300%
Tensile strength ASTM D412	≥ 25 MPa
Puncture resistance ASTM E154 modified	≥ 1000 N
Low temperature flexibility, -25°C ASTM D1970	Pass
Peel adhesion to concrete Peel adhesion, heat aged surface 50°C ASTM D903 modified	1.8 N/mm 1.5 N/mm
Nail shank resistant EN 12310-1	≥ 500 N
Tensile retention upon heat aging ASTM D412	90%
Elongation retention upon heat aging ASTM D412	80%
Resistance to hydrostatic head ASTM D5385 modified	≥ 50 m
Lateral water migration resistance at 23°C ASTM D5385 modified	71 m
Lap peel adhesion at 23°C Lap peel adhesion, after immersing in water at 23°C ASTM D1876 modified	≥ 0.8 N/mm ≥ 0.8 N/mm
Dimensional stability SS 374-1994	≤ 0.5%
Tape: MasterSeal 936 UVS / MasterSeal 937 UVS	
Lap peel to HDPE sheet at 23°C	≥ 0.8 N/mm
Lap peel to HDPE sheet at 4°C	≥ 0.8 N/mm

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.

APPLICATION GUIDELINES

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.

PLACING / APPLICATION

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 subbase (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.

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STORAGE AND SHELF LIFE

Stored in original containers, under dry conditions and at temperature between 10-30°C. 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 consult Master Builders Solutions Technical Services Department.

HEALTH AND SAFETY

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.

QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

® = Registered trademark of the MBCC Group in many countries.

* Properties listed are based laboratory controlled tests.

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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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