

## INTRODUCTION

- MVX 6000 is a Contact Voltage Isolation and Waterproof Membrane (CVIM) specifically formulated to prevent the transfer of static electrical current through concrete slabs and walls in both dry and wet conditions. Whilst suitable for a wide range of uses, MVX 6000 helps protect passengers and workers boarding or working on electrified rail systems. It is a vital component in protecting passengers from static discharge where platform screen doors are installed.
- With a thickness of 2.5mm the MVX 6000 has a volume resistivity of  $6.17 \times 10^{14}$  ohm-cm and out performs all other known voltage isolation membranes of the same thickness..
- Comprising a specially formulated butyl rubber membrane which contains neither bitumen nor bentonite, the MVX 6000 has a self-adhesive base layer for bonding the membrane to differing substrates such as concrete slabs and metalwork. This self-adhesive side of the membrane provides an instant high-strength bond to the surface of most major construction substrates.
- The upper layer of MVX 6000 incorporates a non-woven polyester fleece surface layer. This layer allows the application of a variety of finishing materials including concrete and screed toppings as well as chemical and fire proof cement based materials. Through this fleece layer, the concrete and screed toppings will form a high-strength bond to the membrane and indirectly through the membrane's self-adhesive layer to the underlying slab or other substrate.
- Similarly a high-strength bond will be formed with plaster, render, cementitious coatings, resins, paints, tile adhesive and other similar materials applied in vertical and overhead planes.
- This fully bonded system prevents delamination between the substrate and the topping which helps maintain the integrity of the floor, wall, column and ceiling finishes.
- MVX 6000 also helps isolate finishes zones from movements in underlying substrates as it offers high crack-bridging characteristics up to 3mm. The flexibility of the butyl core absorbs these deflections and helps prevent substrate cracking from transferring through to fragile applied finishes.



## PACKAGING & DIMENSIONS

- 2.5mm (thick) x 500mm (wide) x 10 metre (length)

## ADVANTAGES

- Fast installation just peel and stick application
- No torch-on or hot air needed for installation
- Excellent adhesive properties over a variety of surfaces with the use of MVX WB Primer
- Readily conforms to irregular surface profiles
- Does not contain bitumen making it more environment friendly
- Does not contain bentonite which is liable to dissolve in entrapped water and reduce the effectiveness of the isolation membrane
- Excellent double bond to substrate and toppings

## APPLICATION

- Electrified rail depots
- Platform screen doors at railway station platforms, walls and columns
- Viaducts and bridges
- Power stations, electrical sub-stations and other utilities
- Electrical riser rooms
- Location where embedded electrical conduits are installed
- Electrical isolation of metalwork such as expansion joints, control joints and other conductive materials that pass through electrically isolated areas
- Petrol chemical plants and holding tank areas

## TECHNICAL DATA

Specification	Test method	Requirement	MVX 6000
Electrical Resistivity	ASTM D257	$5.0 \times 10^{14}$ ohm-cm	$6.17 \times 10^{14}$ ohm-cm ohm-cm Peel
Adhesion	ASTM D903	> 900 kPa	No Adhesion Failure
Adhesion Pull of Strength	ASTM D4541	-	No Adhesion Failure
Specific Gravity	ASTM C-990	1.15-1.50	1.20-1.25

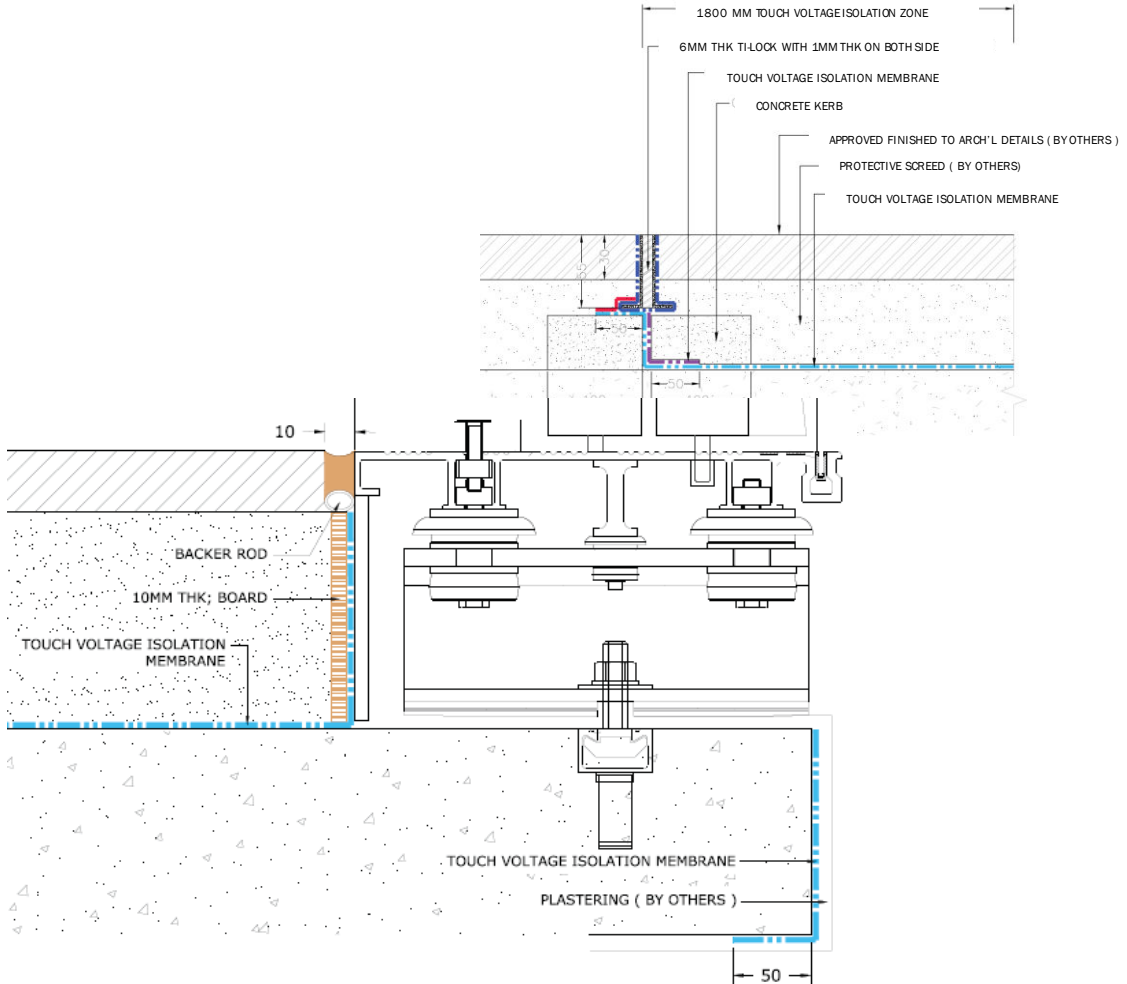
## TECHNICAL DATA

Characteristics	UOM	Average Value	Test Method
Weight	g/m2	68	ASTM
Tensile Strength M.D.	lb/in	22.04	ASTM
Tensile Strength C.D.	lb/in	14.27	ASTM
Elongation M.D.	%	110	ASTM
Elongation C.D.	%	110	ASTM
Thickness	mils	16.9	ASTM

## INSTALLATION PROCEDURES

- Clean the surface using a brush and remove any dirt, debris or high points in the concrete which may prevent the MVX 6000 from properly adhering to the surface.
- Apply one layer of MVX Primer Adhesive (water based primer) using a roller or brush. Allow MVX Primer Adhesive to become touch-dry before installing the MVX 6000 membrane (approximate drying time is 10-20 minutes).
- Remove the release paper from the adhesive side of the MVX 6000 and apply the MVX 6000 membrane onto the primed surface.
- Firmly press the entire surface of MVX 6000 into place using a medium or hard surface roller to ensure proper bonding of the membrane is achieved and that all air pockets are removed.
- Where the overlap sections of MVX 6000 membrane meet, provide an overlap of the membrane to the other of not less than 50mm (follow the red indicator line) and firmly press the overlapping piece together with the underlying piece to seal the seam.

## TECHNICAL DATA



**Disclaimer:** The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or fitness for particular purpose, nor any liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and all risks and liability in connection therewith. The information contained in the brochure may change at any time without notice.