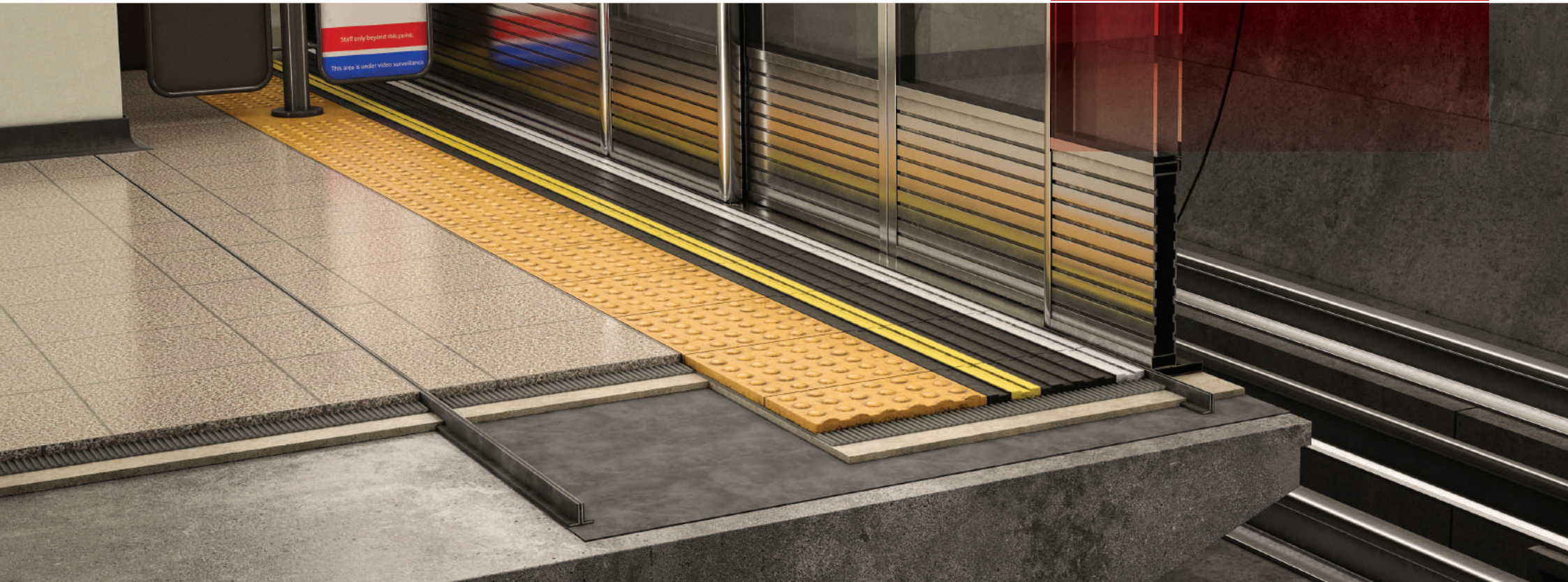


contact voltage isolation membrane



CONTACT VOLTAGE ISOLATION AND WATERPROOFING MEMBRANE

isolatec CVIM



Isolatec CVIM

Product Specification

Packaging:

Product roll length - 10 metres
Product roll width - 500 mm
Product thickness - 2.5 mm

Weight (ASTM D37760):	68 g/m ²
Volume resistivity (ASTM D257):	5.73 x 10 ¹⁴ ohm-cm
Tensile strength (ASTM D257):	3N/mm ²
Hydrostatic resistance at 2 Bar (DIN16726):	No leaks
Peel adhesion strength to concrete (ASTM D903):	>800N/m ²
Lap peel adhesion (ASTM D1876):	0.81N/mm ²

Product Applications

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

Overview

Isolatec CVIM 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, Isolatec CIM 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 Isolatec CVIM has a volume resistivity of 5.73 x 10¹⁴ 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 Isolatec CVIM 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 Isolatec CVIM 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.

Isolatec CVIM 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.

Isolatec CVIM

Product 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 Isolatec water-based 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

Suitable Substrates

Isolatec CVIM will adhere to most building surfaces including concrete, timber, structural sheeting, gypsum boards, masonry surfaces, polycarbonate, PVC pipes and most metals (including steel and aluminium) when installed with Isolatec-P water-based primer.

Surface Preparation

1. Surfaces must be dry, relatively smooth, clean and dust free
2. Rough surfaces must be levelled or smoothed
3. All metals must be free of oils, grease and other contaminants. Use degreaser to ensure surfaces are free of residues before application

Installation

Installation should be undertaken by an Isolatec CVIM approved installer

1. Apply one coat of Isolatec-P Primer using roller and brush and allow to touch-dry (approximately 30 mins)
2. Unroll Isolatec CVIM and measure the required length. Cut tape using scissors or box cutter
3. Remove the release paper from butyl rubber side and position the Isolatec CVIM in place with fabric face exposed upwards
4. Press in place ensuring air pockets and creases are eliminated
5. Over-lapping between different rolls of membrane is approximately 50mm
6. Finishes can be applied immediately after Isolatec CVIM is installed

Storage

Shelf life is normally 24 months when stored in clean, dry conditions within the temperature range of -5°C to +35°C and away from direct sunlight and heat sources.