cemseal®

Technical Data Sheet

CEMSEAL PVC

PVC PREFORMED WATERPROOFING MEMBRANE

DESCRIPTION

CEMSEAL PVC is a single-ply polymeric polyvinyl chloride membrane. The membrane has excellent tensile and elongation properties, hail resistance and excellent dimensional stability. Designed for use in all global climatic conditions.

FEATURES AND BENEFITS

- Consistent thickness
- Self-cleaning
- Excellent durability
- Water vapour permeable
- Root and rhizome resistant
- Hot-air weldable without any open flame

RECOMMENDED USE

- Flat roofs
- Inverted roofs
- Ballasted flat roofs
- Green roofs and planters
- Mechanically fastened roofs

PRODUCT PROPERTIES

Roll Size	2m (width) x 20m (length) Other sizes available on request
Appearance	Grey / White Other colours available on request
Thickness	1.2mm / 1.5mm / 2.0mm

SUBSTRATE REQUIREMENT AND PREPARATION

The substrate and supporting structure must be of sufficient structural strength for application of waterproofing build-up. The substrate shall be smooth, clean, free of dust, curing compound, mould release agent, laitance, loose particles and other contaminants. All joints shall be prepared and filled with suitable filler or sealant. Any honeycomb, crack or damage to the concrete substrate shall be repaired with suitable cement mortar. The acceptable concrete substrate shall be in accordance with ICRI Concrete Surface Profile 1 to 5.

APPLICATION

Alignment

Unroll, align and re-roll carefully before hot-air welding.
Side lap: min. 50 mm
End lap: min. 50 mm

Membrane Laying

CEMSEAL PVC can be loose laid, fully bonded or mechanically fastened. Carefully unroll the membrane onto substrate ensuring no entrapped air and crease free application. To release any entrapped air, use a rubber roller or broom and apply moderate pressure from the membrane centre towards the edges.

Ensure overlaps are clean, dry and free of any foreign matter prior to welding. Use a hand-held or automatic hot air equipment to weld the overlaps at a temperature between 470°C and 570°C. Overlaps can also be welded using THF solvent.

The overlap seams must be mechanically tested with a seam weld tester to ensure integrity. Any imperfections must be rectified by hot-air welding.

COMPATIBILITY

CEMSEAL PVC should not be in direct contact with bitumen, tar, oil, solvent containing materials, and other plastic materials e.g. Extruded Polystyrene (XPS), Expanded Polystyrene (EPS), Polyisocyanurate or Phenolic Foam. Use an approved separation layer between these materials and CEMSEAL PVC.

STORAGE AND SHELF LIFE

Storage

CEMSEAL PVC should be stored in original manufacturer's packaging and position, at room temperature between 5°C and 25°C in a shaded, cool, dry and away from direct sun exposure. It shall also be stored at least 2 metres away from direct heat source.

Shelf Life

Expected 24 months shelf life with the above-mentioned storage conditions.

HEALTH AND SAFETY

User must refer to Safety Data Sheet before usage of this product.

BASIS OF TECHNICAL DATA

All technical data provided in this Technical Data Sheet are based on laboratory tests. Actual performance may vary due to factors beyond our control.

TECHNICAL PROPERTIES

Properties	Test Method	Typical Value		
		PVC-H homogeneous	**PVC-V** polyester fleece backing	**PVC-P** polyester reinforced
Tensile Strength	EN 12311-2	≥ 20 N/mm² (long.) ≥ 18 N/mm² (trans.)		≥ 1700 N/50mm (long.) ≥ 1400 N/50mm (trans.)
Elongation at Break	EN 12311-2	≥ 330% (long.) ≥ 340% (trans.)		≥ 110% (long.) ≥ 130% (trans.)
Water Vapour Transmission	EN 1931	≥ 0.05g/m²/hr		
Watertightness	EN 1928	No leakage		
Shear Resistance of Joint	EN 12317-2	≥ 880 N/50mm		
Peel Resistance of Joint	EN 12316-2	≥ 230 N/50mm		
Resistance to Tearing	EN 12310-2	≥ 230 N		
Resistance to Static Loading - Soft Support - Hard Support	 EN 12730 Method A EN 12730 Method B	 ≥ 20kg ≥ 20kg		
Resistance to Impact - Hard Support - Soft Support	 EN 12691 Method A EN 12691 Method B	 ≥ 2000mm ≥ 2000mm		
Dimensional Stability	EN 1107-2	± 1.5%		
Foldability at Low Temperature	EN 495-5	≤ -25°C		
UV Resistant	EN 1297	Passed		
Hail Resistant	EN 13583	Passed		
Resistance to Root Penetration	FLL	Passed		

Disclaimer:
The information and any recommendations relating to the application and end-use of all CEMSEAL products are provided in good faith based on CEMSEAL's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by CEMSEAL. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions. All users should always refer to the most recent and up to date issue of the Technical Data Sheet for the product concerned, which is available on request. It is recommended that products should always be properly stored, handled and applied under tested and recommended conditions.

For More Information:

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