cemseal®

Technical Data Sheet

CEMSEAL EPDM

EPDM PREFORMED WATERPROOFING MEMBRANE

DESCRIPTION

CEMSEAL EPDM is a synthetic rubber homogeneous membrane. The membrane has excellent elasticity, tensile and elongation properties and very long service life. Designed for use in all global climatic conditions.

FEATURES AND BENEFITS

- Consistent thickness
- Excellent durability
- Customisable size to suit project design
- Hot-air weldable without any open flame
- Wide range of temperature resistance -40°C to 160°C

RECOMMENDED USE

- Flat roofs
- Inverted roofs
- Ballasted flat roofs
- Green roofs and planters
- Water retaining structures such as reservoirs, dams and ponds

PRODUCT PROPERTIES

Roll Size	2m (width) x 20m (length) Other sizes available on request
Appearance	Black / White / Blue
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

Priming

Apply CEMSEAL P100SL solvent-free epoxy primer or equivalent either by roller or airless spray at 0.20 - 0.30 kg/m² (0.18 - 0.30 l/m²). Allow primer to dry tack-free prior to application of membrane. Where substrate is porous, it may be necessary to re-prime the substrate. Re-prime is required should there be more than a 24-hour gap between primer and application of CEMSEAL EPDM.

APPLICATION

Alignment

Unroll, align and re-roll carefully before hot-air welding.
Side lap: min. 80 mm
End lap: min. 80 mm

Membrane Laying

CEMSEAL EPDM can be loose laid, self-adhesive or bonded with adhesive.
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.

On upturns, CEMSEAL EPDM should extend to the coping of the parapet wall and secured with a metal termination bar. The edges of the termination bar should be sealed with weather resistant polyurethane or silicone sealant.

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 450°C and 500°C.

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 EPDM should not be in direct contact with petroleum products, mineral and vegetable oils, greases, animal fats, solvents such as ketones, esters and aromatic hydrocarbons.

STORAGE AND SHELF LIFE

Storage

CEMSEAL EPDM 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 12 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	
		EPDM	EPDM-SA self-adhesive
Tensile Strength	EN 12311-2	≥ 15 N/mm² (long.) ≥ 15 N/mm² (trans.)	
Elongation at Break	EN 12311-2	≥ 1000% (long.) ≥ 1000% (trans.)	
Water Vapour Transmission	EN 1931	≥ 0.03g/m²/hr	
Watertightness	EN 1928	No leakage	
Shear Resistance of Joint	EN 12317-2	≥ 150 N/50mm	
Peel Resistance of Joint	EN 12316-2	≥ 300 N/50mm	
Resistance to Tearing	EN 12310-2	≥ 100 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	± 0.8%	
Foldability at Low Temperature	EN 495-5	≤ -25°C	

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:

CEMSEAL SINGAPORE PTE. LTD. (202405420H)
Singapore Office: 1 One-north Crescent, Level 7, Singapore 138538

CEMSEAL INDUSTRIES SDN. BHD. (884153-T)
Corporate Office: No. 10, Jalan Emas 29, Taman Sri Putri, 81300 Skudai, Johor, Malaysia.
Factory: No. 68, Jalan Perniagaan Setia 6, Taman Perniagaan Setia, Setia Business Park II, 81100 Johor Bahru, Malaysia.

Website: www.cemseal.com
Email: info@cemseal.com

QMS - 005 100 19013
EMS - 005 104 19005
QMS - 44 100 19 92 0012
EMS - 44 104 19 92 0012