

INSUSOL (PES)

INSUSOL (PES) is a Plastomeric Modified Bitumen Membrane used for various waterproofing applications. It is manufactured in a high-tech calendaring process, which involves the saturation and coating of a polyester carrier with an APP polymer modified bitumen compound. The polymer additives are used to improve the thermal, chemical and ageing properties of the bitumen compound. Meanwhile, the mechanical characteristics such as tensile strength, elongation and tear resistance are boosted by the non-woven polyester carrier, which acts as a reinforcement to the product.

SURFACE FINISH

The lower surface of the membrane is laminated with a thin thermo-fusible polyethylene 'burn-off' film. The membrane is available with a wide range of upper surface finish options including different colored slates, aluminum foil, sand and polyethylene film.

KEY FEATURES

- Absolute impermeability to water
- Thermal resistance under a wide range of temperature fluctuation
- Ease of adhesion to a wide variety of surfaces
- Applicable for above and below grade usages

APPLICATIONS

INSUSOL (PES) membranes are used for a wide variety of waterproofing requirements and in applications subject to high mechanical stresses, such as:

- roofing or re-roofing for single or multi-layer systems
- sloped and flat roofs
- tunnels, wet areas, swimming pools and toilets
- foundations and underground structures
- slab on grade

STORAGE

INSUSOL (PES) should be stored in an upright position in a dry, flat and ventilated storage area away from direct sunlight.

INSTALLATION

Please refer to the INSUTECH Applicator Guide for complete instructions on the application of the product.

TEST	UNIT	TOLERANCE	TEST METHOD	RESULTS
Cold Temperature Flexibility	° C	-	EN 1109	0 : -2
Weight	Kg/m ²	MDV ± 5%	EN 1849-1	4.5 or 4
Roll Width	m	MDV ± 1%	EN 1848-1	1
Roll Length	m	MDV ± 1%	EN 1848-1	10
TENSILE STRENGHT (MAX)				
Longitudinal	N/5cm	MDV ± 20%	EN 12311-1	700
Transverse	N/5cm	MDV ± 20%	EN 12311-1	450
ELONGATION @ BREAK				
Longitudinal	%	MDV ± 15	EN 12311-1	30
Transverse	%	MDV ± 15	EN 12311-1	35
Resistance to Static Loading	Kg	MLV ≤	EN 12730	15
Resistance to Impact Loading	mm	MLV ≤	EN 12691	1000
Dimension Stability	%	-	EN 1107-1	± 0.5
Flow Resistance at Elevated Temperature	° C	MDV - 10	EN 1110	120
Thermal Ageing in air: Flow Resistance at Elevated Temperature (4weeks)	° C	-10	EN 1296/1110	110
External Fire Performance	-	-	EN 13501-5	F _{Roof}
Reaction To Fire	-	-	EN 13501-1	F
Water Tightness Method A	60 Kpa	-	EN 1928:2000	PASS
Average Loss of Slates	%	MLV ≤	EN 12039	30

- Due to continuous product development, INSUTECH reserves the right to modify technical specifications without prior notice.
- This publication revokes any previous one. Issue. 1 / © 2023
- Membranes with a color slated surface finish may notice a change of color variations in form of oily marks, caused by migration of natural bitumen oils and exposure to atmospheric agents. This occurrence has no effect on the product's performance what so ever and becomes uniform gradually by time.
- PES: Non-Woven Polyester Reinforcement.
- The Product does not contain any dangerous substance.