INSUTECH
International Company For Insulation Technology

INSUSPRENE (PES)

INSUSPRENE (PES) is an elastomeric 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 a SBS elastomer-modified bitumen compound. The SBS modifiers 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

- Excellent U.V. resistance if finished with slated.
- Superior chemical resistance to alkaline solutions, light acidic solutions and bacteria
- Superior thermal resistance under a wide range of temperature fluctuation
- Absolute impermeability to water
- Outstanding performance at high temperature and good at low temperature
- Excellent adhesion to any surface
- Applicable for above and below grades usages.

APPLICATIONS

INSUSPRENE (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

INSUSPRENE (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.

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INSUSPRENE-SBS

TEST	UNIT	TEST METHOD	Tolerance	Nominal Values	الإختبار
Reinforcement Type	-	-	-	PES	نوع التسليح
Cold Temperature Flexibility	°C	ASTM D-5147, EN 1109	≤	-22 to -25	المرونة عند درجات الحرارة المنخفضة
Thickness	mm	EN 1849-1	± 5%	4	السمك
Roll Width	m	EN 1848-1	± 1%	1	العرض
Roll Length	m	EN 1848-1	± 1%	10	الطول
TENSILE STRENGHT (MAX)					مقاومة الشد القصوى
Longitudinal	N/5cm	EN 12311-1	± 20%	900	طولياً
Transverse	N/5cm	EN 12311-1	± 20%	700	عرضياً
ELONGATION @ BREAK					أقصى معدل للإستطالة
Longitudinal	%	EN 12311-1	± 15	50	طولياً
Transverse	%	EN 12311-1	± 15	55	عرضياً
TENSILE TEARING STRENGHT					مقاومة التمزق
Longitudinal	N	ASTM D5147 D-4073	± 20%	700	طولياً
Transverse	N	ASTM D5147 D-4073	± 20%	500	عرضياً
TEARING STRENGHT (NAIL SHANK)*					مقاومة التمزق
Longitudinal	N	EN 12310-1	± 20%	200	طولياً
Transverse	N	EN 12310-1	± 20%	220	عرضياً
Resistance to Static Loading	Kg	EN 12730	≤	25	مقاومة الإختراق الإستاتيكى
Resistance to Impact Loading	mm	EN 12691	≤	1250	مقاومة الإختراق الديناميكى
Flow Resistance @ Elevated Temperature	°C	ASTM D-5147 , EN 1110	-10	110	الثبات عند درجات الحرارة العالية
DIMENSIONAL STABILITY					ثبات الأبعاد
Longitudinal	%	EN 1107-1	≤	+0.5	طولياً
Transverse	%	EN 1107-1	≤	-0.5	عرضياً
Water Tightness	60 Kpa	EN 1928:2000	≤	Pass	مقاومة نفاذية الماء
Joints Tensile Strength Shear L/T	N/5cm	EN 12317	± 20%	900/700	مقاومة الشد عند مناطق التوصيل
Average Loss of Slates	%	EN 12039	≤	30	متوسط الفاقد من حبيبات المينرال

- 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
- Anti-Root Products Available Upon Request
- PES: Non-Woven Polyester
- * For Mechanically Fastened Systems

NATIONAL ROOFING CONTRACTORS ASSOCIATION MEMBER