

## LUX (PES)

LUX (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.

## KEY FEATURES

- 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.

## APPLICATION

LUX (PES) membranes are used for a wide variety of waterproofing requirements and in applications where the membrane is subject to constant movement and high mechanical stresses, such as:

- Roofing or re-roofing for covered single layer systems or base layer for multi-layer systems, sloped and flat roofs
- Wet areas, swimming pools and toilets
- Slab on grade

## 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 aluminum foil, sand and different colored slates such as red, green, grey and polyethylene film.

## STORAGE

All Modified Bitumen Waterproofing Membrane should be stored in upright position in dry, flat, ventilated and away from direct sun light storage area.

TEST	UNIT	TEST METHOD	RESULTS	الإختبار
Cold Temperature Flexibility	°C	ASTM D-5147, EN 1109	0 → +2	المرونة عند درجات الحرارة المنخفضة
Thickness	mm	EN 1849-1	4 (± 5%)	السمك
Roll Width	m	EN 1848-1	1 (±1%)	العرض
Roll Length	m	EN 1848-1	10 (±1%)	الطول
Straightness	mm	EN 1848-1	± 10	الإستقامة
Softening Point (R&B)	°C	ASTM D -36	≥ 150	درجة الليونة
Penetration @ 25 °C	dmm	ASTM D -5	25 (±5)	درجة الغرز عند 25 ° مئوية
Penetration @ 60 °C	dmm	ASTM D -5	75 (±20)	درجة الغرز عند 60 ° مئوية
<b>TENSILE STRENGTH (MAX)</b>				<b>مقاومة الشد القصوى</b>
Longitudinal	N/5cm	EN 12311-1	550 (±20%)	طولي
Transverse	N/5cm	EN 12311-1	300 (±20%)	عرضي
<b>ELONGATION @ BREAK</b>				<b>أقصى معدل للإستطالة</b>
Longitudinal	%	EN 12311-1	25 (± 15)	طولي
Transverse	%	EN 12311-1	40 (± 15)	عرضي
<b>TEARING STRENGTH (NAIL-SHANK)</b>				<b>مقاومة التمزق</b>
Longitudinal	N	EN 12310-1	≥ 120	طولي
Transverse	N	EN 12310-1	≥ 140	عرضي
Resistance To Static Loading	KG	EN 12730	≥ 10	مقاومة الإختراق الإستاتيكي
Resistance To Impact Loading	mm	EN 12691	≥ 900	مقاومة الإختراق الديناميكي
Flow resistance @ Elevated Temperature	°C	ASTM D-5147, EN 1110	110 (-10)	الثبات عند درجات الحرارة العالية
<b>DIMENSIONAL STABILITY</b>				<b>ثبات الأبعاد</b>
Longitudinal	%	EN 1107-1	-0.5	طولي
Transverse	%	EN 1107-1	+0.5	عرضي
Water Tightness	60 Kpa	EN 1928:2000	PASS	مقاومة نفاذية الماء
Water Absorption	%	ASTM D- 5147, UNI - 8202/22	≤1	درجة إمتصاص الماء
Vapour Permeability	μ	EN 1931	40 000	درجة نفاذية بخار الماء
Joints Tensile Strength Shear L/T	N/5cm	EN 12317	550/300 (±20%)	مقاومة الشد عند مناطق التوصليل
Thermal Ageing in air (in oven at 70 ± 2 °C)	-	EN 1296	4 WEEKS PASSED	الإهتراء نتيجة التسخين

- Given test results based on 4mm thick specimens.

- Due to continues product development, INSUTECH reserves the right to modify technical specifications without prior notice

- This product does not contain any dangerous substances

- This publication revokes any previous one. Issue. 2 / © 2018