



SINCE 1934

TECHNObit

TECHNOLOGY OF INSULATING MATERIALS



Xtra-Seal

APP BITUMEN MEMBRANE

APP MODIFIED WATERPROOFING
MEMBRANE WITH NON-WOVEN
REINFORCED POLYESTER

THE WISE CHOICE



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DESCRIPTION

XTRA-SEAL PET is a plastomeric waterproofing membrane manufactured in an advanced continuous calendaring process by saturating and coating a synthetic carrier a waterproofing compound made of special grade of bitumen, modified with APP polymers. While the modifiers enhance the thermal, mechanical, and aging properties of membrane compound, the mechanical characteristics of **XTRA-SEAL** is produced using the non-woven continuous filament spun-bond Polyester carrier which acts as the reinforcement that provides the membrane with its particular tensile strength, tear resistance, puncture resistance and elongation properties.

MAJOR FEATURES

- Perfect U.V. resistance.
- Improved chemical resistance to acidic and alkaline solutions.
- Enhanced thermal resistance under a wide range of temperature fluctuation.
- Adequate isotropic mechanical properties.
- Absolute impermeability to water.

USES

XTRA-SEAL membranes are used in general purposes as general purpose waterproofing membranes in applications subject to moderate mechanical stresses in single or multi-layer systems for a variety of waterproofing requirements. **XTRA-SEAL** membranes are particularly recommended for the following Areas of Applications :

- Roofing or re-roofing works for sloped and flat protected roofs.
- Waterproofing of wet areas, mechanical rooms and terraces.
- Waterproofing of underground structures.

SURFACE FINISH

The lower surface of **XTRA-SEAL** is laminated with a thin Polyolefinic film (Sacrifice Layer) while the upper surface is covered with Polyethylene film or Mineral Slates or Sand.



METHOD OF APPLICATION

XTRA-SEAL membranes are applied by using a propane torch or by mechanical fastening. The substrate surface must be clean, dry, smooth, and free of any irregularities. According to the surface conditions, a coat of water base primers may be required, prior to the applications of the membranes. **XTRA-SEAL** can be applied to the substrate fully bonded, semi bonded or loose lay, and the method of adhesion to the substrate shall be decided according to the waterproofing system design. Side laps should be from 12 – 15 cm. For more information on application refer to the **TECHNOBIT** Application Guide.

STORAGE & HANDLING

XTRA-SEAL rolls should be kept in an upright position in a flat, properly ventilated and sheltered storage area.

Properties الخصائص	Test الإختبار	Unit وحدة القياس	Test Method طريقة الإختبار	Tolerance السماحية	Typical Values القيم النموذجية	
Dimensional Properties خصائص الأبعاد	Thickness السمك	mm	EN-1849-1	± 5 %	3	4
	Width العرض	m	EN-1848-1	± 1 %	1	
	Length الطول	m	EN-1848-1	± 1 %	10	
Compound Properties خصائص الخليط البتوميني	Straightness درجة إستواء السطح (الإستقامة)	mm	EN-1848-1	-	± 10	
	Softening point (R&B) درجة اللبونة	° C	ASTM D-36	≥	150	
	Penetration @25 °C درجة القرز عند 25 ° مئوية	dmm	ASTM D-5	± 5	25	
Mechanical Properties الخصائص الميكانيكية	Penetration @60 °C درجة القرز عند 60 ° مئوية	dmm	ASTM D-5	± 15	70	
	Tensile Strength (MAX) مقاومة الشد القصوى					
	Longitudinal "طوليا"	N/5cm	EN-12311-1	± 20 %	650	
	Transverse "عرضيا"	N/5cm	EN-12311-1	± 20 %	450	
	Elongation @ Break أقصى معدل للإستطالة					
	Longitudinal "طوليا"	%	EN-12311-1	± 15	32	
	Transverse "عرضيا"	%	EN-12311-1	± 15	32	
	Tearing Strength (Nail-Shank) مقاومة التمزق					
	Longitudinal "طوليا"	N	EN-12310-1	≥	200	
	Transverse "عرضيا"	N	EN-12310-1	≥	250	
	Tensile-Tear Resistance مقاومة التمزق - بطريقة الشد					
	Longitudinal "طوليا"	N	ASTM D- 5147 . D 4073	± 30 %	300	
	Transverse "عرضيا"	N	ASTM D- 5147 . D 4073	± 30 %	250	
	Resistance to static loading مقاومة الإختراق الإستاتيكي	KG	EN12730	≥	10	
	Resistance to impact loading مقاومة الإختراق الديناميكي	mm	EN12691	≥	900	
Thermal Properties الخصائص الحرارية	Flow resistance @ Elevated Temperature الثبات عند درجات الحرارة العالية	° C	ASTM D-5147, EN-1110	± 10	120	
	Cold Temperature Flexibility المرونة عند درجات الحرارة المنخفضة	° C	ASTM D-5147, EN-1109	-	-2 to -5	
	Dimensional Stability ثبات الأبعاد					
	Longitudinal "طوليا"	%	EN-1107-1	-	- 0.4	
Transverse "عرضيا"	%	EN-1107-1	-	+ 0.4		
Miscellaneous Properties خصائص أخرى	Tightness Water مقاومة تفتت الماء	60 Kpa	EN-1928:2000	-	Pass	
	Water Absorption درجة امتصاص الماء	%	ASTM D-5147, UNI 8202/22	≤	0.15	
	Vapour Permeability تفاديه بخار الماء	μ	UNI 8202/23 , EN1931	-	60000	
	Fatigue resistance on cracks مقاومة الكلال فوق الشقوق	500 cycles 200 cycles	UNI 8202/13	- -	- Passed	
	Joints Tensile Strength مقاومة الشد عند مناطق التراكيب					
	Longitudinal "طوليا"	N/5cm	EN-12317, UNI 8202/30	-	Equal to membrane	
	Transverse "عرضيا"	N/5cm	EN-12317, UNI 8202/30	-	Equal to membrane	
	Thermal Ageing in air (in oven 28 days at 70 ± 2°C) الإهتراد نتيجة لتعرض لدرجات الحرارة المختلفة (28يوماً عند درجة حرارة 70 ± 2 °م)	-	EN1296, UNI 8202 /26	-	Passed	
	Ageing Due To Atmospheric Agents الإهتراد نتيجة للعوامل المناخية (Q.U.V Test)	-	ASTM G 53 UNI 8202/29	-	Passed	
	Fatigue resistance at Joints مقاومة الكلال عند الفواصل	500 cycles 200 cycles	UNI 8202/32	- -	- Passed	
	Adhesion To Concrete (Torch Applied) قوة الالتصاق بالأسطح الخرسانية (تسخين بالهتوروي)	N/5cm	EN-12316	-	20	
	Fire Classification - External Fire Performance تصنيف الحريق - أداء الحريق الخارجي	Class	EN 13501-5/ ENV 1187	-	F Roof	
Reaction to fire التعامل مع الحريق	Class	EN 13501-1	-	E		

- Tolerances for the above values if not mentioned are according to the UEAtc directives.
 - Exact value depends on thickness of the product.
 - Product Technical specifications may be updated by TechnoBit without prior notice.
 - Issue Date of this Technical Data Sheet is **NOV / 2022**
- The Information Provided by This Issue Cancels Any Previous Issues.



ISO 9001



OHSAS 18001



ISO 14001