



SINCE 1934

TECHNObit

TECHNOLOGY OF INSULATING MATERIALS



Xtra-Seal

APP BITUMEN MEMBRANE

APP MODIFIED WATERPROOFING
MEMBRANE WITH NON-WOVEN
REINFORCED POLYESTER

THE WISE CHOICE



+20 222 394 167 / +2 010 0691 9330



sales@technogroup-egypt.com
admin@technogroup-egypt.com



+2 010 0817 4331 / +2 010 0340 7776



FACTORY

Zero/ 157 A , Kilo17 - Misr / Bilbis road
El-Mohandsen El-Arab Association,
Al Sharqia, Egypt.



HEAD OFFICE

60-Mahmasha Street Al-Shrabya,
Cairo - Egypt.

MADE IN EGYPT

WWW.TECHNOGROUP-EGYPT.COM

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.

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.

XTRA-SEAL

APP MODIFIED WATERPROOFING MEMBRANE
WITH NON-WOVEN RENIFORCED POLYESTER

إكسترا سيل

شرائح عازلة من البتومين المعدل
بال APP مسلحة بألياف البولي إستر غير المنسوج

Properties	Test	Unit وحدة القياس	Test Method طريقة الاختبار	Tolerance السمحية	Typical Values القيم النموذجية	الاختبار	الخصائص
Dimensional Properties	Thickness	mm	EN-1849-1	± 5 %	3 4	السماك	خصائص الأبعاد
	Width	m	EN-1848-1	± 1 %	1	العرض	
	Length	m	EN-1848-1	± 1 %	10	الطول	
	Straightness	mm	EN-1848-1	-	± 10	درجة استواء السطح (الاستقامة)	
Compound Properties	Softening point (R&B)	° C	ASTM D- 36	≥	150	درجة اللينة	خصائص الخليط البتوميني
	Penetration @25 °C	dmm	ASTM D-5	± 5	25	درجة الغرز عند 25 ° مئوية	
	Penetration @60 °C	dmm	ASTM D-5	± 15	70	درجة الغرز عند 60 ° مئوية	
Membrane Properties	Tensile Strength (MAX)					مقاومة الشد القصوى	خصائص الميكانيكية
	Longitudinal	N/5cm	EN-12311-1	± 20 %	800	طولياً	
	Transverse	N/5cm	EN-12311-1	± 20 %	600	عرضياً	
	Elongation @ Break					أقصى معدل للإستطالة	
	Longitudinal	%	EN-12311-1	± 15	40	طولياً	
	Transverse	%	EN-12311-1	± 15	45	عرضياً	
	Tearing Strength (Nail-Shank)					مقاومة التمزق	
	Longitudinal	N	EN-12310-1	≥	400	طولياً	
	Transverse	N	EN-12310-1	≥	300	عرضياً	
	Tensile-Tear Resistance					مقاومة التمزق - بطريقة الشد	
	Longitudinal	N	ASTM D- 5147 . D 4073	± 20 %	650	طولياً	خصائص الحرارية
	Transverse	N	ASTM D- 5147 . D 4073	± 20 %	530	عرضياً	
	Resistance to static loading	KG	EN12730	≥	10	مقاومة الإختراق الإستاتيكي	
	Resistance to Impact loading	mm	EN12691	≥	900	مقاومة الإختراق الديناميكي	
	Flow resistance @ Elevated Temperature	° C	ASTM D-5147, EN-1110	± 10	120	الثبات عند درجات الحرارة العالية	
	Cold Temperature Flexibility	° C	ASTM D-5147, EN-1109	-	-2 to -5	المرونة عند درجات الحرارة المنخفضة	
	Dimensional Stability					ثبات الأبعاد	
	Longitudinal	%	EN-1107-1	-	-0.4	طولياً	
	Transverse	%	EN-1107-1	-	+0.4	عرضياً	
	Miscellaneous Properties	Tightness Water	60 Kpa	EN-1928:2000	-	Pass	
Water Absorption		%	ASTM D-5147, UNI 8202/22	≤	0.15	درجة امتصاص الماء	
Vapour Permeability		µ	UNI 8202/23 , EN1931	-	60000	نفاذية بخار الماء	
Fatigue resistance on cracks		500 cycles 200 cycles	UNI 8202/13	-	-	مقاومة الكلال فوق الشقوق	
Joints Tensile Strength						مقاومة الشد عند مناطق التراكب	
Longitudinal		N/5cm	EN-12317, UNI 8202/30	-	Equal to membrane	طولياً	
Transverse		N/5cm	EN-12317, UNI 8202/30	-	Equal to membrane	عرضياً	
Thermal Ageing in air (in oven 28 days at 70 ± 2°C)		-	EN1296, UNI 8202 /26	-	Passed	الإهتراء نتيجة للتعرض لدرجات الحرارة المختلفة (28 يوماً عند درجة حرارة 70 ± 2 °م)	
Ageing Due To Atmospheric Agents (Q.U.V Test)		-	ASTM G 53 UNI 8202/29	-	Passed	الإهتراء نتيجة للعوامل المناخية	
Fatigue resistance at Joints		500 cycles 200 cycles	UNI 8202/32	-	-	مقاومة الكلال عند الفواصل	
Adhesion To Concrete (Torch Applied)	N/5cm	EN-12316	-	20	قوة الإلتصاق بالأسطح الخرسانية (تسخين بالهشوروي)		
Fire Classification - External Fire Performance	Class	EN 13501-5/ ENV 1187	-	F Roof	تصنيف الحريق - أداء الحريق الخارجي		
Reaction to fire	Class	EN 13501-1	-	E	التعامل مع الحريق		

- 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 **6 / 2020**
The Information Provided by This Issue Cancels Any Previous Issues.



ISO 9001



OHSAS 18001



ISO 14001