



# **BITUMODE - PAnti Root**

# **APP** MODIFIED BITUMEN PLASTOMERIC WATERPROOFING MEMBRANE REINFORCED WITH NON-WOVEN POLYESTER with PREVENTOL B2

### What is Bitumode?

Produced by Bitumode Qatar Waterproofing factory, Bitumode is a line of polymer modified bitumen waterproofing membrane of the highest quality.

**Bitumode -P Anti Root** membranes for the protection of planters and roof slabs under roof from damage by plant roots.

**Bitumode-P Anti root** is an APP type modified bituminous membrane reinforced with 180gsm,200 gsm and 250 gsm Polyester specially treated with root resistant properties according to CEN/TS 14416:2014. The special chemical treatment will not allow plant roots to pierce it and damage the waterproofing system.

#### **Description**

**Bitumode-P Anti root** APP Modified Bitumen treated with Preventol B2 to precautionary protection of concrete surfaces against root penetration by unwanted vegetation will give the membrane full root resistant against roots penetration properties according to CEN/TS 14416:2014

## **Advantages**

**Bitumode-P Anti Root** has been designed with special regard to providing clients with an excellent and versatile product.

Advantages of Bitumode-P Anti Root include:

- Easy to apply (by torch).
- Designed for roof gardens, planter, subways, land scope etc.
- Highly mechanical properties.
- Absolute impermeability to water.
- Flexibility at low temperature.
- Excellent high temperature performance.
- Excellent adhesion on any surface.
- High dimensional stability.
- Environmentally friendly.
- Resistant to soil chemicals and salts up to certain limits.

### Bitumode Qatar Waterproofing Factory

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## Quality Control

Bitumode Qatar Waterproofing Factory is ISO 9001:2015, ISO 45001:2018 and ISO 14001:2015 Certified. it applies a stringent quality control system utilizing its in-house laboratory. Occasional samples are analyzed by independent laboratories to ensure continued adherence to the highest standards (ASTM, EN etc.)

#### Product Range

Standard thickness available include 4mm. Upper surface finish choices include:

• Polyethylene Film (PE).

The nominal length of each roll is 10 meters, and the nominal width is one meter. Special specifications can be designed based on client's needs.



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### **APP** MODIFIED BITUMEN PLASTOMERIC WATERPROOFING MEMBRANE REINFORCED WITH NON-WOVEN POLYESTER with PREVENTOL B2

TECHNICAL DATA		UNIT	RESULT			TOLER.	TEST METHOD	الخواص الفنية	
Product		Roll	P-180	P -200	P -250				
Roll Length		m	10			1%	EN 1848-1	الطول	
Roll Width		m	1			1%	EN 1848-1	العرض	
Thickness		mm	4.0			(± 5%)	EN 1849-1	السمك لتشطيب السطح بولى ايثلين	
Cold Flexibility		°C	-5				EN 1109	المرونة عند درجات الحرارة المنخفضة	
Heat Resistance		°C	120				EN 1110	الثبات عند درجات الحرارة العالية	
Water impermeability at 100 Kpa		-	Absolutely impermeable				EN 1928:2000	مقاومة نفاذية الماء عند 100 كيلو بسكال	
Reinforcement		g/m²	NON-WOVEN POLYESTER					التسليح	
		9/11	180 200 250			-			
Tensile Strength	Long	N/5cm	750	850	1050	-20%	EN 12311-1	طولياً	مقاومة الشد
	Wide	N/5cm	650	700	850	-20%		عرضياً	القصوى
Elongation at break	Long	%	50	50	50	-15	EN 12311-1	طولياً	الاستطالة
	Wide	%	50	50	50	-15		عرضيأ	القصوى
Tear Resistance	Long	Ν	550	650	750	-10%	ASTM D-5147	طولياً	مقاومة التمزق
	Wide	Ν	450	550	600	-10%		عرضيأ	طبقا للمواصفات الامريكية
Joint Tensile Strength	Long	N	750	850	1050	-20%	EN 12317-1	طولياً	مقاومة الشد عند
	Wide	N	650	700	850	-20%		عرضيأ	اماكن الركوب
Dimensional	Long	%	± 0.5	± 0.3	± 0.2		EN 1107-1	طولياً	ثبات الأبعاد
stability	Wide	%	± 0.5	± 0.3	± 0.2			عرضياً	ببات الابعاد
Resistance to Impact		mm	700	800	900	-15%	EN 12691	مقاومة الاختراق الديناميكي	
Root Resistance after 42 days		-	The roots did not penetrate the specimen tested			-	CEN/TS 14416:2014	الـمقـاومـة الـجذر بـعد 42 يـومـا	

#### NOTES:

 APP Modified Bitumen treated with Preventol B2 to precautionary protection of concrete surfaces against root penetration by unwanted vegetation will give the membrane full root resistant against roots penetration properties according to CEN/TS 14416:2014.

#### STORAGE:

• BITUMODE membranes should be stored vertically in well closed and ventilated place not subject to direct sunlight.

• Bitumode Membrane has a shelf life of 12 months from the date of production.

#### APPLICATION INSTRUCTIONS:

BITUMODE membranes are installed by propane torch welding method, loose laid or fully bonded to the substrate depending on system requirements.

- While unloading from truck the rolls shall by no means allowed to fall or be thrown down from the truck.
- To avoid applying the membrane to corners with 90 °C angle, sand cement can't strip 5x5 cm should be executed at horizontal vertical intersections.
- Surface to be waterproofed should be clean, dry, free from dust and smooth, in case of irregular surface a sand cement screed is recommended.
- Before laying BITUMODE membranes, surface should be primed with cold applied bituminous primer (BITUMODE Primer SB).
- Membrane is unrolled and placed in aligned position.
- Each roll should overlap the next by 10cm side laps and 15cm staggered end laps.
  Then, membrane should be re-rolled about half of its length without changing its orientation.
- Using a propane gast orch, the membrane is un-rolled again slowly while applying the flame to the entire exposed lower face (For fully bonded system) -until the plastic cover film burns off and the bituminous mass starts melting, thus creating a heat weld between the membrane and the substrate.
- Then, torching of the seams takes place by heating the contact line at side and end laps by torch from above, pressing the upper membrane on to the lower one using a trowel, the torch has to be carefully used avoiding to keep the flame on the same point for too long.
- For sloping roofs start laying the membrane from the lower edge with longitudinal direction of rolls perpendicular to slope direction, side lap of next roll to be placed above the first one, etc

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