



# Esha GUM ANTIROOT B2

PLASTOMERIC BITUMINOUS ANTIROOT WATERPROOFING MEMBRANE

Ultimate waterproofing and antiroot protection in 1 product

### GENERAL DESCRIPTION

Plastomeric waterproofing membrane **ESHAGUM ANTIROOT B2** is a part of **EshaOxygen Green Roof System**, developed by Esha.

It is a plastomeric bituminous membrane with extremely effective antiroot properties. The latter are achieved with the addition and homogeneous dispersion of Preventol B2, a special antiroot component, in the modified bituminous binder during production.

Once it is welded on the substrate **ESHAGUM ANTIROOT B2** creates a continuous barrier against plant roots, also along the membrane overlapping areas. Preventol B2 remains active throughout the life span of the waterproofing system, and stays remarkably stable even at relatively high or low temperatures.

EshaGum Antiroot B2 is produced from special types of bitumen and selected polymer materials based on propylene (APP).

This special composition grants the membrane excellent elasticity in low temperatures and high resistance to ageing.

Applications of **ESHAGUM ANTIROOT B2**:

- Waterproofing and Antiroot protection of flat and inclined roofs
- Waterproofing and Antiroot protection of underground works / Foundations



### CHARACTERISTICS/ADVANTAGES

- Antiroot protection and waterproofing in one product
- Excellent resistance to ultraviolet radiation
- Increased resistance to ageing
- Increased resistance to high temperatures
- Flexibility at low temperatures
- Wide temperature application window
- Very good behavior in a corrosive environment (acids, inorganic salts, air pollutants, ozone, etc.)
- Improved endurance to mechanical deformation
- Advanced weldability to all substrates

### NORMS/CERTIFICATIONS

Esha Bituminous membranes comply with EN 13707, EN 13969 and are certified with CE No. 1020-CPR-010021423

Application to roofs according to EN 13707 and underground structures according to EN 13969.

For all available certificates and certifications please contact Esha Sales Department.



Bituminous Waterproofing membrane without and with antiroot additive **Preventol B5**.

### STORAGE

Membrane rolls should be stored in their original package, in vertical position, protected from direct sunlight, rain, snow and ice.



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### APPLICATION PROCEDURE

#### Surface preparation

Before application of the membrane it is necessary to prepare properly the substrate surface.

- The substrate surface must be thoroughly cleaned so as to remove all dust, loose matter and remaining oils, and be smooth and dry.
- Recommended surface slope: 1.8% minimum.
- The surface must be primed with **ESHAROOFCOAT No10** elastomeric bituminous varnish at a consumption of 0,4-0,5 kg/m<sup>2</sup>, or **ESHALAC 50S** bituminous primer at a consumption of 0,3 kg/m<sup>2</sup>.
- Hot oxidized bitumen (consumption: 1,5 - 3 kg/m<sup>2</sup>) can be used as an alternative binder onto primed with **ESHALAC 50S** substrate.
- As soon as the surface is dry, the bituminous membrane can be torch applied.

#### Application of the bituminous membrane

- Membrane application starts from the lowest point of slopes in order to secure unobstructed water flow, when membranes are torched one in parallel to the other.
- The membrane is then rolled and positioned parallel to its adjacent one. It is then rerolled half-way without shifting.

- The bottom surface of the re-rolled part is heated with a propane torch until the bitumen becomes fluid and the membrane is unrolled again to apply evenly on the substrate.
- Longitudinal overlaps must be at least 8 cm while transversal ones must be kept to a minimum of 12 cm.
- Overlapping joints are treated with a metallic lap-joint cylinder in order to apply the optimal pressure in these demanding areas.

In multiple layer waterproofing, application of the successive layers follows the same procedure and is done in the same direction as the previous ones. Care is taken so that overlaps do not coincide with those of the previous layer.

EshaGum membranes are suitable to apply on mechanical fixation systems (e.g. metal desks or inclined roofs).

#### Application notes

- Application temperature should be higher than 5 °C.
- The waterproofing should be carried out by technicians, properly trained and certified in the bituminous membranes application.

*For a more detailed description of bituminous waterproofing membranes' application please contact the Esha Sales Department.*





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### TECHNICAL CHARACTERISTICS

Characteristics	Standard	T	Nominal values			Unit
			Glass mat combined with polyester	Polyester combined with reinforcing glass yarns	Spun Bond Polyester (SP)	
Length	EN 1849-1		10	10	10	m
Width	EN 1849-1		1	1	1	m
Upper surface covering	-		PE film/mineral granules	PE film/mineral granules	PE film/mineral granules	---
Bottom surface covering	-		PE film	PE film	PE film	---
Thickness	EN 1849-1	±0,2	2.5-5	2.5-5	2.5-5	mm
Weight	EN 1849-1	±10%	3-6	3-6	3-6	kg/m <sup>2</sup>
Type	-		Plastomeric (APP)	Plastomeric (APP)	Plastomeric (APP)	---
Softening Point	EN 1427	≥	150	150	150	°C
Penetration at 25 °C	EN 1426	± 5	25	25	25	dmm
Antiroot Agent			Bayer Preventol® B5	Bayer Preventol® B5	Bayer Preventol® B5	
Root Resistance	EN13948	--	pass	pass	pass	
Tensile strength L/T	EN 12311-1	± 20%	600/600	550/420	900/650	N/50mm
Elongation L/T	EN 12311-1	± 15%	4/4	40/55	50/60	%
Tear resistance L/T	ASTM D4073-94	± 15%	300/300	300/400	350/450	N
Static puncture resistance (concrete)	EN 12730/UEAtc MOAT27		L2 (7-15 kg)	L3 (15-25 kg)	L3 (15-25 kg)	
Dynamic puncture resistance (concrete)	EN 12691/UEAtc MOAT27		I3 (Φ10mm)	I3 (Φ8mm)	I3 (Φ8mm)	
Flexibility to low temperatures	EN 1109	±3	-10	-10	-10	°C
Water tightness (72h)	UEAtc/EN 1928		Passed	Passed	Passed	
Vapor permeability coefficient	EN 1931	≥	20000	20000	20000	---
Heat resistance	EN 1110	<	130	130	130	°C
Reaction to fire	EN 13501-1		F	F	F	---
Dimensional stability L/T	EN 1107-1	≤	-0.1/+0.1	-0.2/+0.1	-0.4/+0.3	%
Thermal conductivity			0.2	0.2	0.2	W/mK

Tolerances in the nominal values are in accordance with respective standards. Producer reserves the right to modify the properties of his products.

*The information contained in this leaflet is, to the best of our knowledge, true and reliable and is supported by the present state of our knowledge. According to the care taken and the method of application, upon which we have no influence, the values are subject to divergence. Therefore for best results, prior to use, an application test should be made by the user under his own processing conditions.*

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