

BITUGRADE

BITUGRADE APP Modified

Complies with the requirements of ASTM D 6222 Type I & II, Grade S & G
APP Modified Bituminous Waterproofing Membrane

DESCRIPTION

High performance polymer modified bituminous 10 m per layer / roll for flat surface membranes, reinforced with non-woven polyester mat or fiberglass roofing tissue. The polyester combines high tensile strength and an elongation above 40%. The special polymer modifier used has great resistance to Ultra-Violet radiation

FEATURES

- Durable and easy to apply
- High flexibility at low temperatures and stability at high temperatures
- Remarkable resistance to aggressive attack of salts and chemicals
- High tensile strength and elongation
- Excellent puncture resistance



FUNCTIONS

Used as double layer for tanking in basements or single layer for waterproofing of roofs. A single layer followed by layer of mineral surfaced BITUGRAD can be used for exposed roofs

INSTRUCTIONS FOR APPLICATION

These membranes can be installed fully bonded or loose-laid by torch welding. The substrate should be cleaned and primed with BITUGRADE PRIMER D41 and allowed to dry. Torching should be done by skilled labor and should be controlled so that only the PE film is melted and the asphalt coating is sufficiently softened to bond the membrane. All lap joints should be smoothed and sealed using a heated round-nosed trowel. The heat of the gas flame should be applied to the trowel. In loose-laid applications, only the lap joints, areas around penetrations (pipes etc.), upstands and a 30 cm wide strip around the perimeter of the work should be installed using 1m wide pieces cut from the length of the roll. (The overlap joints should be 10 cm at the (.sides and 15 cm at the end

COVERAGE

Flat areas: 1.15 m²/m² per layer assuming 10 cm side laps and 15 cm end laps

Base flashing: 0.40 m²/ l.m. for base size 100x35 cm with 15 cm end laps

Wastage: 3 - 5 % (Approx)

HEALTH & SAFETY

All safety measures should be observed during application. Fire extinguishers should be available at the site. Protective gear, such as gloves and goggles, should be worn by personnel during application

PRECAUTIONS

No special precautions are needed

PACKAGING

- 3mm - 28 Rolls / Pallet •
 - 4mm - 23 Rolls / Pallet •
- All palletized and shrink-wrapped

SURFACING

BITUGRADE is available in two basic finishes:

- Black design finish with polyethylene surfaces for covered applications
- Granule surfacing for exposed applications

STORAGE & MATERIAL HANDLING

Rolls should always be stored vertically in a shaded area. Normally, pallets should not be stored one over the other



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GENERAL TECHNICAL DATA

S. No.	Properties	Typical Result									Test Method
		BG 2/120	BG 3/120	BG 3/140	BG 4/100	BG 4/120	BG 4/140	BG 4/160	BG 4/180	BG 4/200	
1	Roll Length (l.m.) \pm 1%	20	10	10	10	10	10	10	10	10	ASTM D5147
2	Thickness (mm) \pm 0.2 mm	2	3	3	4	4	4	4	4	4	ASTM D5147
3	Unit Weight (kg/m ²) (Plain)	2.5	3.4	3.4	4.4	4.4	4.4	4.4	4.4	4.4	ASTM D5147
4	Unit Weight (kg/m ²) (Granular)	-	-	-	-	-	4.8	4.8	4.8	4.8	ASTM D5147
5	Carrier Polyester (g/m ²)	120	120	140	100	120	140	160	180	200	UEAtc,M.O.A.T.30
6	Coating Asphalt	Atactic Polypropylene Polymer Modified Bitument (APP Modified)									
7	Softning Point (°C)	150 \pm 10									ASTM D 36
8	Penetration at 25° C, dmm	15-30									ASTM D 5
9	Cold Flexibility, °C	0 to -2									ASTM D5147
10	Tensile Strength @23 \pm2 °C, N/5cm (KN/m)										
	Longitudinal	500	500	600	350	500	600	700	850	900	ASTM D5147
	Transverse	350	350	500	300	350	500	550	650	700	
11	Elongation, % @23 °C										
	Longitudinal	40	40	40	40	40	40	40	45	45	ASTM D5147
	Transverse	45	45	45	45	45	45	45	50	50	
12	Tear Strength (N)										
	Longitudinal	300	325	350	250	300	375	400	450	500	ASTM D4073
	Transverse	250	250	300	220	250	300	350	400	400	
13	Lap Joint Strength (N)										
	Longitudinal	500	500	600	350	500	600	700	850	900	ASTM D5147
	Transverse	350	350	500	300	350	500	550	650	700	
14	Puncture Resistance (N)	350	350	400	300	350	400	600	700	800	ASTM E 154
15	Heat Resistance at 110° C	No Flowing									ASTM D5147
16	Resistance of Water Pressure	No Leakage									DIN 52123
17	Water Absorption %	<0.2									ASTM D5147
18	Resistance to Aging	No Deterioration									ASTM D4799

*All values given are subject to 20% tolerance.

*As a manufacturer we may modify the above technical data sheet without prior notification.

