

NOVATOP MINERAL

WPBIT0071.e

DESCRIPTION	<p>NOVATOP MINERAL is a plastomeric modified bitumen waterproofing membrane (APP), industrially manufactured by impregnation of the reinforcement with the waterproofing compound based on distilled bitumen modified with polyolefin polymers of the latest generation, which gives to the compound superior technical characteristics.</p> <p>The composite reinforcement, made of nonwoven spunbond polyester in combination with fiberglass, conveys high mechanical characteristics, excellent dimensional stability, isotropic behaviour and elastic performance.</p> <p>Shaping of sheets, straightness, dimensional and surface uniformity are accomplished by hot calendaring of the mass at hot melt fluid state.</p> <p>It is a self-protected membrane. The upper surface is coated with coloured slate chips and selvedge slate free at one side for easy welding overlap. Upon request and only for the version with 4 mm thickness on the selvedge, the coating of the upper surface can be made with special REFLECTA white slate flakes with high solar reflectance (SR 0.699 / SRI 84.8%). The high reflection property combined with a high emissivity allows the covering which the membrane is applied, on a lower heat absorption during the day and subsequently to transmit and emit such thermal energy in the infrared field. This determines a lowering of the operating temperature of the waterproofing system and consequently of the indoor environments underneath the roof, with benefits in terms of energy saving and longer membrane lifespan.</p> <p>On the upper face there is a selvedge free of self-protection and covered with a polycarbonate film, that can be torched to facilitate overlap welding. The lower face is coated with a thermofusible polyolefin film.</p>
FIELD OF APPLICATION	<p>NOVATOP MINERAL is a high performance membrane. It is particularly suitable as top layer in multi-layer waterproofing systems, with compatible membranes or as underlayers for discontinuous roofing. General roofing, vehicles parking roofs, foundations, on or under floors or ground slabs, wall constructions, water tanks, tunnels, as protection from acid and basic solutions are valid examples of the design application of this product. It is not suitable for roof gardens. It can be applied onto every substrate (concrete, masonry, steel, wood, insulation panel, membrane, etc.) and under heavy protection.</p> <p>The excellent mechanical characteristics and high level thermo-dynamic stability make it suitable for any climate conditions and all the situations where a barrier against water is required.</p>
METHOD OF INSTALLATION	<p>The excellent thermoplastic properties of the waterproofing compound allow the application with torch-on system or hot air generator. In particular situations, it could be applied with appropriate sealants or mechanical fastenings.</p> <p>The application of the membrane must be carried in good weather conditions and after the substrate has been adequately cleaned and prepared.</p>
PACKING AND STORAGE	<p>The product is packed as standing rolls on wooden pallets wrapped with thermoshrinking protective hoods. Rolls must be stored in the upright position, without stacking the pallets to avoid deformations which can compromise the correct application of the membrane. The product must be stored indoor, protected from heat and frost.</p>
INTENDED USE OR USES	<p>Flexible sheets for waterproofing. Reinforced bitumen sheets for roof waterproofing</p> <p>Flexible sheets for waterproofing. Bitumen damp proof sheets including bitumen basement tanking sheets</p> <p>Flexible sheets for waterproofing. Underlays for discontinuous roofing</p>

1. Selvedge
2. Mineral protection
3. Waterproofing mass
4. Reinforcement
5. Waterproofing mass
6. Torch-off film



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TECHNICAL DATA

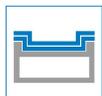
	Norm	Value		Unit	Tolerance
Thickness	EN1849-1	4 (on selvedge)	-	(mm)	
Weight	EN1849-1	-	4,5	(kg/m ²)	±10%
Roll length	EN1848-1	7,5	10	(m)	-1%
Roll width	EN1848-1	1	1	(m)	-1%
Straightness	EN1848-1	PASSED		-	20 mm / 10 m
Flexibility at low temperature (pliability)	EN1109	-20		(°C)	≤
Heat flow resistance	EN1110	140		(°C)	≥
Watertightness	EN1928-B	60		(kPa)	≥
Watertightness	EN1928-A W1	PASSED		(kPa)	2 kPa/24h
Water vapour transmission properties	EN1931	20.000		(μ)	-
M.d. C.d.					
Tensile properties: maximum tensile strength	EN12311-1	850 / 750		(N/50 mm)	-20%
Tensile properties: elongation at break	EN12311-1	45 / 45		(%)	-15
Resistance to tearing (nail shank)	EN12310-1	250 / 250		(N)	-30%
Dimensional stability	EN1107-1	±0,3 / ±0,3		(%)	≤
Peel resistance of joints	EN12316-1	50 / 50		(N/50 mm)	-20
Shear resistance of joints	EN12317-1	850 / 750		(N/50 mm)	-20%
Resistance to static puncture	EN12730-A	15		(kg)	≥
Resistance to impact	EN12691-A	1250		(mm)	≥
External fire performance (note 1)	EN1187/EN13501-5+A1	Froof		Class	-
Reaction to fire	EN11925-2/EN13501-1+A1	E		Class	-
Root resistance	EN13948	NPD			
Determination of adhesion of granules (Loss)	EN12039	PASSED		(%)	<30
Visible defects	EN1850-1	PASSED		-	-
Durability: Flexibility at low temperature after artificial ageing	EN1296/EN1109	-20		(°C)	+15
Durability: Flow resistance at elevated temperature after artificial ageing	EN1296/EN1110	130		(°C)	-10
Durability: Watertightness after artificial ageing	EN1296/EN1928-B	PASSED		(kPa)	≥ 60
Artificial ageing by long term exposure to the combination of UV radiation and elevated temperature and heat: Watertightness	EN1296/EN1928-A	W1		Class	-
Solar Reflectance (SR)	ASTM C1549	0,699 *		-	± 0,009
Solar Reflectance Index (SRI) at medium wind hc= 12 W/m ² *K	ASTM E1980	84,8 *		(%)	
Infrared emittance (IE)	EN15976	0,911 *		-	± 0,020

WARNINGS

* values refer to the coating of the upper surface with REFLECTA white slate flakes

NORMS

EN13707; EN13969; EN13859-1



Top layer in multi-layer systems



Under layers for discontinuous roofing



Cool Roof