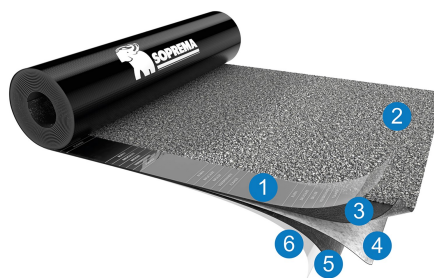


NOVAGUM HP MINERAL

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DESCRIPTION	<p>NOVAGUM-HP MINERAL is a (SBS) elastomers modified bitumen waterproofing membrane. The industrial manufacturing process consists in soaking the reinforcement into the waterproofing compound based on distilled bitumen modified with elastomeric polymers, thermal stability and resistance to natural oxidative degradation; essential features to guarantee excellent adhesion to the laying surface, absorb impact from impact and hail and maintain performance over time.</p> <p>A composite reinforcement, made of nonwoven polyester in combination with fibreglass delivers excellent mechanical characteristics, good dimensional stability, elastic performance, excellent resistance to perforation and to static and dynamic loads.</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 selvage slate free on one side for easy welding overlap. Lower surface is coated with a thermo-fusible polyolefin film.</p>
FIELD OF APPLICATION	<p>The very high mechanical characteristics and cold flexibility, combined with a high resistance to atmospheric agents and high thickness, allow the application of the membrane also in monolayer, in the case of conservative renovations, without compromising the requirement of resistance to shocks and perforation, or as a finishing layer in multilayer systems, coupled with compatible membranes. The membrane is suitable for waterproofing roofs in general, walls, and in all situations where it must be a barrier to water, and is particularly suitable where the ability to absorb considerable structural stresses (metal roofing, tensile structures, etc.) is required.) and confer excellent resistance to hail. The characteristics make it suitable for all climates even where the outdoor temperature conditions are particularly harsh. It is not suitable for use on garden roofs. The membrane has high hail resistance values on both rigid and soft substrates, according to the UNI EN 13583: 2012 standard, confirmed by the Test Report no. 347237 issued by the Ist. Giordano S.p.A.</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. 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 thermoshrink 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>

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



NOVAGUM HP MINERAL

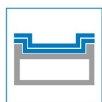
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TECHNICAL DATA

	Norm	Value	Unit	Tolerance
Weight	EN1849-1	5,5	(kg/m ²)	±10%
Roll length	EN1848-1	7,5	(m)	-1%
Roll width	EN1848-1	1	(m)	-1%
Straightness	EN1848-1	PASSED	-	20 mm / 10 m
Flexibility at low temperature (pliability)	EN1109	-25	(°C)	≤
Heat flow resistance	EN1110	100	(°C)	≥
Watertightness	EN1928-B	60	(kPa)	≥
Water vapour transmission properties	EN1931	20.000	(μ)	-
M.d. C.d.				
Tensile properties: maximum tensile strength	EN12311-1	1200 / 1000	(N/50 mm)	-20%
Tensile properties: elongation at break	EN12311-1	45 / 45	(%)	-15
Resistance to tearing (nail shank)	EN12310-1	350 / 350	(N)	-30%
Dimensional stability	EN1107-1	±0,3 / ±0,3	(%)	≤
Peal resistance of joints	EN12316-1	200 / 200	(N/50 mm)	-20
Shear resistance of joints	EN12317-1	1200 / 1000	(N/50 mm)	-20%
Resistance to static puncture	EN12730-A	25	(kg)	≥
Resistance to impact	EN12691-A	1500	(mm)	≥
External fire performance (note 1)	EN1187/EN13501-5+A1	Froof	Class	-
Reaction to fire	EN11925-2/EN13501-1+A1	NPD		
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	-25	(°C)	+15
Durability: Flow resistance at elevated temperature after artificial ageing	EN1296/EN1110	90	(°C)	-10
Durability: Watertightness after artificial ageing	EN1296/EN1928-B	PASSED	(kPa)	≥ 60
Durability: Watertightness against chemicals	EN1296/EN1847	NPD		
Watertightness	EN1928-A W1	PASSED	(kPa)	2 kPa/24 h
Determination of hail resistance (on rigid support)	EN13583	57	(m/s)	-
Determination of hail resistance (on soft support)	EN13583	19	(m/s)	-

NORMS

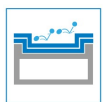
EN13707; EN13969



Top layer in
multi-layer
systems



Under layers
for
discontinuou
s roofing



Hail
Resistance