UNISOL

MADE IN ITALY

DATA SHEET CE

VIAPOL UNISOL

APP ELASTOPLASTOMERIC MEMBRANE | **FLEX °C** | **-20**

Compound	ELASTOPLASTOMERIC (BPP) Polymer Bitumen membrane, compound in distilled bitumen modified with synthesis polyolefin copolymers of APAO (Polyalphaolefin) high molecular weight and low crystallinity index obtained by metallocene catalysis polymerization. These features give to the membrane an high anti-ageing capacity and the particular compound also ensures considerable advantages in the application process, thanks to the high adhesive capacity of the compound. Membranes produced with regenerated raw materials, does not contain any dangerous substance such as oxydized bitumen, tar or asbestos.
Reinforcement	Membranes of this range are reinforced with a rot-proof spunbond nonwoven polyester. This nonwoven polyester guarantees an excellent mechanical strength, tear and puncture resistance.
Finish	Membranes of this range have an underside surface finish made with a thermofusible polyethylene PE film while the top side surface finish in anti-adherent sand. MINERAL version has the top side surface finish protected with natural or colored slate granules on request. Mineral protected rolls are provided with side selvedges, that are not covered with slate chippings but with plain PE film to promote the connection and sealing of the overlaps. It is possible to request also an head selvedge (15 cm width)

FIELDS OF APPLICATIONS

	EN 13707 NON CONTINUOUS ROOFS							EN 13859-1 UNDERTILES		EN 13970 VAPOUR CONTROL LAYER		EN 13969 BASEMENTS		EN 14995 UNDER ASPHALT	
- Single layer ▪ Milti layer	EXPOSED			GARDEN		UNDER HEAVY PROTECTION									
	–	≡		–	≡	–	≡	–	≡	–	≡	–	≡	–	≡
Products		CAPSHEET	UNDERLAY				CAPSHEET								
VIAPOL UNISOL 4mm		X	X				X					X			
VIAPOL UNISOL MINERAL		X													

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CE

UNI EN ISO 9001:2000 CERTIQUALITY SISTEMA DI GESTIONE QUALITÀ CERTIFICATO CERTIFICATO N.7846

CERTIFIED IQNet MANAGEMENT SYSTEM

TECHNICAL DATA SHEET

	Unit	Standard	VIAPOL UNISOL	VIAPOL UNISOL MINERAL	Tolerance
VISIBLE DEFECTS		EN 1850-1	**pass**		-
WIDTH	m	EN 1848-1	**1**		-1%
LENGHT	m	EN 1841-1	**10**	**10**	-1%
THICKNESS	mm	EN 1849-1	**4** **5**		-10%
AREIC MASS	Kg/m^2	EN 1849-1		**4.5** **5**	-10%
STRAIGHTNESS	mm	EN1848-1	**max 20**		pass
MAX TENSILE FORCE L/T	N/5cm	EN 12311-1	**750/550**		-20%
ELONGATION L/T	%	EN 12311-1	**40/40**		-15 ass.
RESISTANCE TO TEARING L /T	N	EN 12310-1	**150/150**		pass
RESISTANCE TO STATIC LOADING	Kg	EN 12730-A	**15**		pass
RESISTANCE TO IMPACT	mm	EN 12691	**900**		pass
JOINT STRENGHT L/T	N/5cm	EN 12317-1	**650/450**		-20%
PEEL RESISTANCE OF JOINT L/T	N/5cm	EN 12316-1			npd
PLIABILITY (COLD FLEXIBILITY)	°C	EN 1109	**-20**		pass
PLIABILITY (AGED)	°C	EN 1296 EN 1109			npd
U.V. AGEING (VISIBLE DEFECTS)	-	EN 1297 EN 1850-1			npd
WATERTIGHTNESS	kPa	EN 1928	**60**		pass
WATER VAPOUR PERMEABILITY	μ x 1.000	EN 1931	**20 (default)**		pass
WATER VAPOUR PERMEABILITY (AGED)	μ x 1.000	EN 1296 EN 1931			npd
FLOW RESISTANCE	°C	EN 1110	**130**		pass
FLOW RESISTANCE (AGED)	°C	EN 1110 EN 1110			npd
DIMENSIONAL STABILITY L/T	%	EN 1107-1	**-0,25/+0,15**		pass
EXTERNAL FIRE PERFORMANCE	class	EN 13501-5	**npd**		
REACTION TO FIRE	class	EN 13501-1	**npd**		
ADHESION OF GRANULES	%	EN 12039		**< 30**	pass
SPECIFIC CHARACTERISTICS					
ROOT RESISTANCE	-	EN 13948			npd
EXTERNAL FIRE PERFORMANCE FIRE RESISTANT version		EN 13501-5 ENV 1187			npd
REACTION TO FIRE FIRE REISTANT version		EN 13501-1 EN 11925-2			npd
MINERAL WHITE FLASH VERSIONS					
SOLAR REFLECTANCE	%	ASTM C 1549			npd
INFRARED EMISSIVITY	%	EN 15976			npd
SRI Solar Reflectance Index	%	ASTM C 1980			npd
OTHER VALUES					
SPECIFIC HEAT			**3 mm**	**4 mm** **5 mm**	
	KJ/°K		**3.9**	**5.2** **6.5**	
THERMAL CONDUCTIVITY	W/m°K (λ)		**0.2**		

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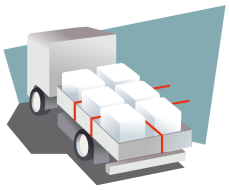
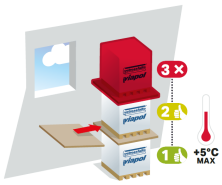
Warnings



Transport of polymer-bitumen membranes
The transport of the polymer-bitumen membranes requires the use of a suitable means of transport, of adequate capacity, provided with a continuous planar platform and removable sides.
In order to prevent dangerous displacements of the goods due to sudden deceleration of the vehicle or sudden braking, the truck must be provided with safety containment ropes.
Be sure that the safety ropes do not harm the integrity of the rolls.

Storage of polymer-bitumen membranes
The rolls must be stores indoor, in a ventilated environment, away from bad weather and solar radiation, at a room temperatures no lower than +5 ° C.
The rolls, both loose and palletized, must always be positioned vertically to avoid ovalizations and possible consequences such as breakage, abnormal tension, unrolling difficulty, displanarity on the laying surfaces.



Double stacking of the pallets
Avoid, as far as possible, the double stacking of the pallets which, however, must not be stacked for more than two courses.
If double stacking is unavoidable it is strongly recommended to interpose between the pallets a rigid separation layer (such as multilayer plywood) to ensure load distribution.

General warnings
It is very important to rationalize the storage of membranes and their use according to a time-consuming stock picking logic that avoids the use of too-dated rolls.
Make sure, during the distribution phase that the full integrity of the rolls must be assured; and even check that the structure where the material is needed must be ready to stock it in a proper way.

Material handling (lifting and moving)
The handling of the membranes during the operations of loading, unloading, lifting to the laying surfaces, and handling on the site, must be carried out in conditions of full safety, avoiding the triggering of anomalous stresses in the material or any damage, so as not to compromise the mechanical / physical characteristics or reliability of the material.
If the pallets must necessarily be stored outdoors, in conditions of high room temperature ,in any case even for short periods, openings must be made in the heat-shrinkable polyethylene packaging to facilitate air circulation between the rolls, thus minimizing harmful overheating due to to solar radiation and the phenomenon of the greenhouse effect.
This practice is particularly important with respect to the elastomeric type membranes which, by virtue of their compound, possess a lower stability of hot form.

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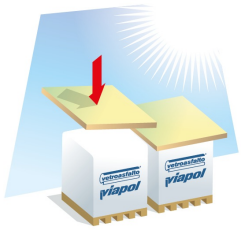
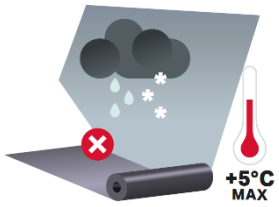


Pallets protection for outdoor storage
The upper face of the pallet, more engaged by the incident solar heating, must be adequately protected with covering insulating panels, wooden boards.
During the winter season: store the products at a temperature above +5 ° C, avoiding exposure to night-time thermal losses (radiation towards the sky). Transfer to the worksite only the material necessary for daily activities, this practice is also valid for all other periods of the year.



Reference Temperatures
It is strongly not recommended the application of polymer-bitumen membranes at room temperatures below +5 ° C, in particular after their overnight stay outdoors. In fact, the loss of heat by night radiation towards the sky can cause the membranes (and also the support deck) to assume a lower temperature than the surrounding air. We can estimate this delta in 2 ÷ 3 ° C. Before starting the laying operations it is necessary to make sure that the atmospheric conditions are not such as to compromise their effectiveness.
Do not operate or suspend work in rain, snow, intense fog, abnormal winds, low room temperature. The stagnation of humidity on the membranes jeopardizes the mutual adhesion of the membranes to the support deck. The condensation of humidity between the sheets or that between the sheets and the laying surfaces can, in the summer period, give rise to uncontrolled evaporations and steam overpressures, thus causing bubbles, swelling and tensioning in the sealing system.
Always pay the utmost attention to the installation of membranes made with seasonal compound outside the foreseen environmental conditions.
In winter, store the material that is not strictly necessary for the current laying operations in a protected environment, avoid sudden unwinding on the laying surfaces of the membranes which, if necessary, must be previously heated slightly and uniformly using a propane torch.
In summer, store the material not strictly necessary for the current laying operations in a protected/shaded environment, avoid the application in the sunniest hours of the day, use light footwear, burn only as needed
These warnings and procedures are for information only and are not exhaustive. For more detailed information, visit www.vetroasfalto.com.

All **VIAPOL** membranes partly use recycled raw materials, such as production waste that is reconditioned and reused instead of being sent to landfills. Furthermore, **VIAPOL** membranes do not contain dangerous substances and are 100% recyclable.

ADDITIONAL INFORMATIONS								
Pallet composition	**Thickness**	**3**	**4**	**5**				
	Weight				**4,0**	**4,5**	**5,0**	
	Rolls per pallet		25	20		25	20	
Packaging	Shrinkable polyetylene film on pallet							
Safety data sheet	Download from our website or request the latest version							
Application	Download from our website or request the document "Application of the Viapol membranes"							
Maintenence	Download from our website or request the document "Scheduled Maintenence"							
Certification CE	0546-CPR-16876							
Certificazione ISO	9001:2015							
Revisione	02/2020							

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