

Pratiko® P+V PARKING

APP distilled bitumen waterproofing membrane with dual reinforcement

Compound

Prefabricated modified polymer bitumen membrane composed of polyolefin thermoplastic stereospecific polymers with high molecular weight and special distilled bitumens, with excellent characteristics of resistance to ageing and phase inversion (type APP).

These built in elements, integrating themselves, enhance the excellent qualities of flexibility, lightness, adhesion, resistance to ageing and to UV rays of the PRATIKO P+V PARKING membrane.

PRATIKO P+V PARKING is specifically designed to be used for bridges, viaducts, parking decks, roof gardens and for all those applications where very high mechanical resistance and excellent adhesion to the substrate are required.

ANTI ROOT VERSION

On request a PRATIKO P+V PARKING ANTI ROOT version is available for green roof applications.

The compound has a special chemical additive (PREVENTOL B2 BAYER) which provides the membrane with high resistance to root penetration, aggressive chemical agents such as fertilizers, weedkillers, etc.

The anti root resistance of the product does not harm the health or life of the plants.

The anti root additive does not wash out with water, and remain permanently active.

Reinforcement

Dual reinforcement with a heavy weight woven non woven single strand polyester and rot proof fiber glass mat, which confer to the product high mechanical characteristics and excellent dimensional stability and static & dynamic puncture resistance.

Advantages in terms of sustainability

- Product ECO 100: product with re-generated raw materials and totally recyclable

Stratigraphy



1. Polypropylene mat
2. Waterproofing mass
3. Woven non woven single strand composite polyester reinforcement of heavy grammage
4. Waterproofing mass
5. Fibre glass reinforcement
6. Talc finish

Finishes

The PRATIKO P+V PARKING membrane is finished on the upper face with a special talc. On the application face, the membrane is finished with a woven non woven polypropylene mat, suitable for both application with adhesive cold bond glues, as well as on PLURA THERMO AD. PRATIKO P+V PARKING is a product specifically studied to be applied with an adhesive cold bond glue, without however impeding the application by torch or hot air, guaranteeing excellent results of durability and watertightness of the roof.

Advantages of the system

- The waterproofing membrane is protected by a pavement from the temperature changes and UV rays
- System with continuous roof sectors
- Secure system which eliminates fire risk
- System with low environmental impact
- System resistant to aging
- System with low maintenance in terms of sustainability



EN 13707

EN 13969

EN 14695

UNI 11235

Fields of use



EN13707 Continuous roofs (Certificate n° 0958-CPR-2045/1)

	N° layers				Method of application				Type of application			Type					
	Single layer	Double layer	Multilayer	Torch	Hot air	Mixed (Torch / Air)	Cold bond glue	Mechanical fixing	Thermo Adhesive / Self-adhesive	Fully bonded	Partially bonded	Loose laid	Complimentary layer	Top layer	Heavy protection	Anti-root	Other uses
PRATIKO P+V 5 MM PARKING	■	■	■	■			■	■	■	■	■			■	■		
PRATIKO P+V 5 MM PARKING ANTI-ROOT	■	■	■	■			■	■	■	■	■			■	■	■	

EN13969 Retaining Walls (Certificate n° 0958-CPR-2045/1)

PRATIKO P+V 5 MM PARKING	■	■	■	■			■	■	■	■	■			■	■		
PRATIKO P+V 5 MM PARKING ANTI-ROOT	■	■	■	■			■	■	■	■	■			■	■	■	

EN14695 Viaducts (Certificate n° 0958-CPR-2045/1)

PRATIKO P+V 5 MM PARKING	■	■	■	■			■	■	■	■	■			■	■		
PRATIKO P+V 5 MM PARKING ANTI-ROOT	■	■	■	■			■	■	■	■	■			■	■	■	

The waterproofing membrane based on distilled bitumen and polymers, as shown in this data sheet does not require the issue of a MSDS, because it does not contain dangerous substances. The information data sheet for the proper use of products is available.

Advantages of PRATIKO P+V PARKING

- Proven waterproofing membrane with excellent mechanical performance, dimensional stability and very high puncture resistance.
- Improvement of the walkability and resistance to external strain thanks to the particular architecture of the membrane.
- An excellent resistance to aging thanks to the particular reinforcement also without protection.
- Resistant to salts used on the roads. The coefficient of adhesion to the lower substrate is equal or superior to that of the road asphalt used.
- Sufficient resistance to support the load exerted during the compaction of the road asphalt and site traffic.
- Of simple application, allowing for a faster application, reducing the amount of time of road & parking closure to traffic.

Application advantages with cold bond glue PRATIKO ADHESIVE

- The application by means of a cold bituminous glue obtains a total adhesion to the substrate, with the guarantee of traceability of any accidental infiltrations, creating continuous roof sectors.
- Furthermore there is the possibility to eliminate the roughness of the substrate, saturating all the irregularities and creating a first waterproof layer suitable to receive the waterproofing membrane.
- The waterproofing membrane is installed on a bed of bituminous cold bond glue, which remains continuously plastic, therefore it does not sustain any tensions or alterations derived from eventual movements of the substrate.
- The reduction of use of open flame at the job sites eliminating the risk of fire, heat and acoustic pollution.
- Therefore the integrity of the membrane is assured, by not having to torch and use the compound for the adhesion.
- The PRATIKO membrane does not sustain any overheating during application, eliminating any thermal settlement during cooling: the membrane remains perfectly integral.

Other applications

When waterproofing road infrastructures, the application must be fully bonded to the substrate by use of a torch and the asphalt will be applied hot and directly on the membrane surface, without any separation layer. The thickness of the binder course must be minimum 6 cm with a granulometry of 0-15 mm, while for the surface course the thickness must be minimum 4 cm and granulometry of 0-12 mm. When applying on compacted earth dams, the sheets must be properly anchored to the embankment and on the slope to assure the stability of the waterproofing itself.

Areas of use

Due to their characteristics, the membranes of the PRATIKO P+V PARKING series can be used with success in a wide range of waterproofing applications in civil and industrial works, particularly those applications which require high resistance to mechanical stress and static and/or dynamic puncture resistance such as: bridges, viaducts, water dams, foundations, parking decks, green roofs, etc.

The particular formulation of the membranes of the PRATIKO P+V PARKING series makes them compatible with all PLUVITEC membranes, be they either APP or SBS based.

PRATIKO P+V PARKING can be used, based on the type of construction and project, either single layer or in multi-layer systems and especially in those applications where an exceptionally high dimensional stability is required.

In the applications with cold bond adhesives PRATIKO P+V PARKING is used as a single layer, prior to having applied suitable bituminous adhesive glue (PRATIKO ADHESIVE) and, where necessary, bituminous mastic (PRATIKO MASTIC).

PRATIKO P+V PARKING has been specifically developed to be successfully used in systems with MASTIC ASPHALT (GUSSASPHALT).

Technical data

Technical Characteristics	Measure units	Reference norm	P + V	Tolerances
Type of reinforcement			Single strand polyester + Fibreglass	
Upper face finish			Talc	
Lower face finish			Polypropylene mat	
Length	m	EN 1848-1	7,27 -1%	≥
Width	m	EN 1848-1	1,1 -1%	≥
Thickness	mm	EN 1849-1	5	-5%
Artificial U.V. ageing		EN 1297	Pass	
Cold flexibility	°C	EN 1109	-20	≤
Cold flexibility after aging	°C	EN 1296 EN 1109	-15	+15°C
Flow resistance	°C	EN 1110	140	≥
Flow resistance after aging	°C	EN 1296 EN 1110	140	-10°C
Shear resistance L / T	N/5 cm	EN 12317-1	1100 / 900	-20%
Peel resistance of joints L / T	N/5 cm	EN 12316-1	50 / 50	-20N
Tensile strength L / T	N/5 cm	EN 12311-1	1200 / 1000	-20%
Elongation at break L / T	%	EN 12311-1	50 / 50	-15 var. ass.
Tearing resistance L / T	N	EN 12310-1	250 / 250	-30%
Static puncture resistance	kg	EN 12730	25	≥
Dynamic puncture resistance	mm	EN 12691-B	1500	≥
Dimensional stability	%	EN 1107-1	-0,2	≤
Fire resistance		EN 13501-5	F R00F	
Fire reaction		EN 13501-1	F	
Watertightness	kPa	EN 1928-B	60	≥
Watertightness after aging	kPa	EN 1296 EN 1928-B	60	≥
Vapour transmission	μ	EN 1931	20000	≥
Root resistance		EN 13948	Pass	
Bond strenght	N/mm ²	EN 13596	0,42	≥
Shear strenght	N/mm ²	EN 13653	0,24	≥
Compatibility by heat conditioning	%	EN 14691	165	≥
Crack Bridging Ability	°C	EN 14224	-20	≥
Resistance to dynamic water pressure		EN 14694	Pass	
Resistance to compaction of an asphalt layer		EN 14692	Pass	
Behaviour of bitumen sheets during application of mastic asphalt	%, mm, %	EN 14693	0 / -0,79 / 0	

Other performance data

Technical Characteristics	Measure units	P + V
Specific heat capacity		1.70 KJ/kg°K
Thermal conductivity	λ	0.170 W/m°K

Sizes & packing

Description	P+V 5 mm
Rolls size [m]	7,27 x 1,1
Rolls per pallet	24
Square meters per pallet [m ²]	192

Sizes & packing may vary depending on the type of transportation. The technical data given is based on average values obtained during production. We reserve the rights to change or modify the nominal values without prior notice or advice. The information contained in this data sheet are based on our experience. We cannot take any responsibility for a possible incorrect use of the products. The customer has to choose under their own responsibility a product fit for the intended use.

Application & Recommendations

- On cementitious substrates or similar apply by roller or airless the bituminous primer PRIMERTEC AD, approx. consumption 300 g/m² (drawing 1).
- Apply by torch application in correspondence to the verticals, a 25 cm wide strip of PRATIKO P+V PARKING membrane.
- Position the membrane starting from the lowest point in order to have all the overlaps with the slope.
- Cut at 45° the angles of the membrane which will overlap with next sheet (10 x 10 cm).
- Fold or re-roll the membrane halfway, leaving the substrate exposed on which the cold bond glue will be applied (drawing 2).
- Pour the bituminous cold bond glue PRATIKO ADESHIVE based on the absorption of the substrate (from 0.8 to 1.5 kg/m²) (drawing 3). To avoid spillage along the pails, scrape the edge with the squeegee.
- Pour and uniformly spread in a homogeneous fashion the cold adhesive glue with a metal/rubber squeegee. Cover with the membrane the cold adhesive glue and fold back the other half.
- Carry out the same procedure as described above with the remaining area.
- Weld the side (10 cm) and head laps (15 cm) by torching with suitable overlap torch or hot air gun. During this operation, apply pressure to the overlap with a metal roller (15 kg); a bead of bitumen compound must come out from the overlap. For this it is not necessary to iron the overlaps (drawing 4).
- Apply the vertical membrane sheet having the same characteristics of the waterproofing membrane and dimensions equal to the width of the roll, making sure that it overlaps the horizontal one by at least 10 cm, heating it with a gas torch and squeezing it with a trowel until a bead of compound appears from underneath (drawing 5).
- The height of the verticals must be equal or superior to 15 cm of the superior finished layer of the roof.
- In the presence of pavements, the reinforcing strip must be sufficiently wide enough to be able to go up the verticals by at least 10 cm beyond the level of the pavement itself.
- With slopes superior to 15%, the application of the membrane must be by torch directly onto the PRIMERTEC AD, without applying PRATIKO ADHESIVE.
- During application by torch, it is necessary to fully bond the entire lower surface to the substrate, avoiding to torch the overlaps which will be welded afterwards.
- During the application a mass of compound must be present in front of the roll in order to saturate the porosity of the substrate.

To best use the technical characteristics of bituminous membranes and guarantee the maximum performance and durability of the jobs where they are used, some simple but fundamental rules must be respected.

- The rolls are to be stored in an upright position, preferably indoors in a dry and ventilated area, away from heat sources and avoiding to stack them one on top of the other to avoid possible deformations which may compromise the application. When storing with original packaging, these should not be stacked more than two plts high using appropriate wooden spacers.



- The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls. The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather.
- The application surface must be smooth dry & clean.
- The application surface must be previously treated with a suitable bituminous primer, to eliminate dust and enhance the adhesion of the membrane.
- **The application surface must not have any depressions to avoid the risk of ponding water, the slope must be at least 1.5% on concrete decks and 3% for steel or wooden ones, this to guarantee a proper run off of rainwater.**
- The application must be done at temperature higher than + 5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.).
- The pallets on which the rolls are packaged are intended for normal warehouse use.
- The materials on stock should be rotated following a first in first out rotation.

28/09/2016 - This version supersedes all previous ones.