

Waterproofing

POLYDAN 48 P PARKING.

Heavy duty SBS elastomeric 4,8 kg/m² membrane. Fleece finishing. Torch Applied.







EPD S-P-01493

POLYDAN 48 P PARKING is a bituminous waterproofing sheet of 4,8 kg/m², LBM (SBS)-48-FP type. Composed of a non-woven great heavyweight polyester felt reinforcement and covered on both sides with SBS modified bitumen mastic. Membrane with an upper surface geotextile finished and a lower surface in polyethylene film. Tested according to standard EN test methods.

Presentation

Length (cm): 800Width (cm): 100Thickness (mm): 4.4Product code: 141151

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m²)	4.8	-
Water absorption (%)	1,2	-
External fire behaviour	PND	UNE-EN 1187; UNE-EN 13501-5
Durability flexibility	-5 ± 5	-
Creep durability (°C)	100 ±10	UN-EN 1110
Elongation at break longitudinal (%)	45 ±15	UNE-EN 12311-1
Elongation at transverse break (%)	45 ±15	UNE-EN 12311-1
Water vapour resistance factor (μ)	20.000	UNE-EN 1931

Low temperature flexibility (°C)<-15	Concept	Value	Standard
Resistance to static loading (kg) >25 UNE-EN 12730 Resistance to root penetration No pasa UNE-EN 13948 Longitudinal tensile strength (N / 5cm) 1000 ± 250 UNE-EN 12311-1 Transverse tensile strength (N / 5cm) 800 ± 250 UNE-EN 12311-1 Longitudinal resistance to tearing (nail shank) (N) 500 ± 100 UNE-EN 12310-1 Transversal resistance to tearing (nail shank) (N) 500 ± 100 UNE-EN 12310-1 Resistance to impact, A (mm) >2000 UNE-EN 12691 Resistencia al pelado (N/mm²) >0.15 - Joint Strength: Welding Shear 650 ± 250 UNE-EN 12317-1 Hazardous substances PND -	Low temperature flexibility (°C)	<-15	UNE-EN 1109
Resistance to root penetration No pasa UNE-EN 13948 Longitudinal tensile strength (N / 5cm) 1000 ± 250 UNE-EN 12311-1 Transverse tensile strength (N / 5cm) 800 ± 250 UNE-EN 12311-1 Longitudinal resistance to tearing (nail shank) (N) 500 ± 100 UNE-EN 12310-1 Transversal resistance to tearing (nail shank) (N) 500 ± 100 UNE-EN 12310-1 Resistance to impact, A (mm) >2000 UNE-EN 12691 Resistencia al pelado (N/mm²) >0.15 - Joint Strength: Welding Shear 650 ± 250 UNE-EN 12317-1 Hazardous substances PND -	Reaction to fire	Е	UNE-EN 11925-2; UNE-EN 13501-1
Longitudinal tensile strength (N / 5cm) 1000 ± 250 UNE-EN 12311-1 Transverse tensile strength (N / 5cm) 800 ± 250 UNE-EN 12311-1 Longitudinal resistance to tearing (nail shank) (N) 500 ± 100 UNE-EN 12310-1 Transversal resistance to tearing (nail shank) (N) 500 ± 100 UNE-EN 12310-1 Resistance to impact, A (mm) >2000 UNE-EN 12691 Resistencia al pelado (N/mm²) >0.15 - Joint Strength: Welding Shear 650 ± 250 UNE-EN 12317-1 Hazardous substances PND -	Resistance to static loading (kg)	>25	UNE-EN 12730
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Joint Strength: Welding Shear 650 ± 250 UNE-EN 12317-1 Hazardous substances PND -	Resistance to impact, A (mm)	>2000	UNE-EN 12691
Hazardous substances PND -	Resistencia al pelado (N/mm²)	>0.15	-
	Joint Strength: Welding Shear	650 ± 250	UNE-EN 12317-1
Resistance to root penetration No pasa UNE-EN 13948	Hazardous substances	PND	-
	Resistance to root penetration	No pasa	UNE-EN 13948

Addtitional Technical Data

Concept	Value	Standard
Density (kg/m³)	1075	-
Adhesion of granules (%)	NPD	UNE-EN 12039
Dimensional stability at elevated temperatures (longitudinal) (%)	<0.5	UNE-EN 1107-1
Dimensional stability at high temperatures (transversal) (%)	<0.5	UNE-EN 1107-1
Creep resistance at high temperatures (°C)	>100	UN-EN 1110
Durabilidad UV; calor y agua: Flexibilidad a baja temperatura (ºC)	NPD	-
Durabilidad UV; calor y agua: Fluencia a alta temperatura (ºC)	NPD	-

Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) (μg/m³)	50 (A+)	ISO 16000-6:2006
Post-consumer recycled content (%)	35	-
Manufactured in	Fontanar - Guadalajara (España)	-

Standards and Certification

- In accordance with the UNE-EN 13707 standard 'Flexible sheets for waterproofing Reinforced bitumen sheets for roof waterproofing Definitions and characteristics'.
- In accordance with the UNE-EN 13969 standard for 'Flexible sheets for waterproofing Bitumen damp proof sheets including bitumen basement tanking sheets Definitions and characteristics'.
- In accordance with the UNE-EN 14695 standard for flexible sheets for waterproofing. Reinforced bitumen sheets for the waterproofing of concrete bridge decks and other concrete surfaces for vehicular traffic. Definitions and characteristics.
- Complies with CE marking requirements.
- DIT 567R/16 "ESTERDAN SELF DAN POLYDAN UNDERGROUND STRUCTURES".
- DIT 569R/16 "POLYDAN TRAFFIC ROLLED".

Scope

- Waterproofing of slabs, foundation slabs, road boards, parking ramps, buried walls, wet rooms and roofs finished in artificial grass.
- Multilayer membrane top sheet for waterproofing carpark roofs.
- Capsheet in multi-layer systems with heavy protection.
- Bonded single-layer membrane for waterproofing carpark roofs.
- Single-layer membrane for waterproofing roofs with heavy bonded protection.
- Restoration of roofs with cement-glue screed.

Advantages & Benefits

- High resistance to static and dynamic piercing.
- Self-healing and rot-proof.
- Good absorption of structural movements.
- High dimensional stability.
- High tensile strength and high elongation at break.
- High resistance to tearing.
- Total impermeability to water and water vapour.
- Allows for adaptation to any type of geometry.
- Allows for the use of direct asphalt agglomerate on the sheet.
- Allows for the direct laying of pavement using glue cement.

Support

- Roofs with heavy bonded protection.
- Concrete subsrates.
- Mortar subsrates.

Instruction for Use

Deck surfaces must be dry, clean and free from sharp projections such as nail heads and concrete nibs. When bonding the substrate should be prepared using a primer either Impridan 100, CURIDAN, MAXDAN or MAXDAN CAUCHO at the recommended rate prior to installation of the waterproofing system. Where the membranes are adhered to insulation boards, the resistance to wind uplift will be dependent on the cohesive strength of the insulation and the method by which it is secured to the roof deck. This should be taken into account when the insulation material is selected. At falls in excess of 5º (1:11) precautions against slippage, and requirements for mechanical fixing should be observed. The membrane may be laid in conditions normal to roofing work and must not be laid in rain, snow or heavy fog, nor if the temperature falls below 5°C, unless precautions against condensation have been taken.r- The roofing layers must always be installed with staggered overlaps and in such a manner that no counter-seams in the direction of the outlets are made. Attachment of reinforced bituminous membrane roofing maybe achieved by full bonding, by partial bonding or loose laid (ballasted); the choice should depend upon the type of substrate and the required resistance to wind uplift pressure. The first layer is installed over the substrate, full bonded, partially bonded, or loose laid (ballasted). Fully bonded torch-applied membranes should only be used with non-combustible substrates and with surfaces designed to enable the torch application of subsequent layers. It is possible to install a torch-receivable first layer in hot bitumen, and then torch apply the second or capping sheet, which should be specifically designed for torching. Bonding is achieved by melting the lower surface by torching and pressing the membrane down. Care must be taken not to overheat the membrane. The first layer is installed with side laps of 60 mm and end laps of 75 mm. The top layer/cap sheet is laid over the first layer in the same direction, and fully bonded. The top layer/cap sheets are installed with side laps for the mineral surfaced membranes determined by the selvedge edge and for sanded or plastified top layers a minimum of 75 mm and end laps 100 mm wide. When partially bonded either a layer of GLASDAN 800 P PERFORADO or other suitable venting layer is loose-laid across the substrate edge to edge. The first layer is fully bonded over the venting layer in the direction with side laps of 80 mm and end laps of 75 mm. The top layer/cap sheet is laid over the first layer in the same direction, and fully bonded. The top layer/cap sheets are installed with side laps for the mineral surfaced membranes determined by the selvedge edge and for sanded or plastified top layers a minimum of 75 mm and end laps 100 mm wide. Loose-laid is possible in ballasted systems. A separating layer is loose-laid over the substrate to act with overlaps of 100 mm. The first layer is loose-laid over the separation layer with side laps of 60 mm and end laps of 80 mm wide. The laps are sealed by torch welding. The top layer is laid over the first layer in the same direction, and fully bonded. The top layer/cap sheets are installed with side laps for the mineral surfaced membranes determined by the selvedge edge and for sanded or plastified top layers a minimum of 75 mm and end laps 100 mm wide. The waterproofing system is ballasted with a proper finishes. In all systems, laps between the membrane and any base sheets should be offset by a minimum of 300 mm.

ADEVERTISMENT: Attachment of reinforced bituminous membrane roofing san also be achieved by mechanical fastening with screws and stress plates or by nailing. Mechanical fastening of membranes is possible by installing a specially manufactured membrane mechanically fastened with screws and stress plates along the lap, with joints then sealed by torching, with subsequent layers fully bonded. Nailing fastening of membranes is possible by installing a sacrificial specially manufactured layer mechanically fastened with screws and stress plates, or alternatively nails, with subsequent layers fully bonded.

Indications and Important Recommendations

- When the tile adhesive is applied directly to the sheet, the tile adhesive shall be applied according to the manufacturer's instructions.
- In case of new construction and renovation, possible chemical incompatibilities with APP plastomermodified bitumen sheets shall be taken into account.
- In case of refurbishment, chemical incompatibilities with old waterproofing systems consisting of PVC membranes, modified tar-based mastics or any other, shall be taken into account, and it may be necessary to remove them completely or to use suitable separating layers.

- If it is necessary to adhere to metallic or slightly porous elements, a bituminous primer (IMPRIDAN 100) shall be applied to the entire surface to be welded beforehand.
- This product may form part of a waterproofing system, so all the documents referred to in the Danosa Solutions Manual must be taken into account, as well as all the regulations and legislation that must be complied with in this respect.
- Certain precautions must be taken when pouring the asphalt agglomerate if it is poured directly on top of the waterproofing.
- The asphalt paver shall be wheeled and, if tracked, shall be fitted with rubber pads.
- The asphalt agglomerate shall be laid at temperatures between 130°C and 180°C.
- There is no chemical incompatibility between the Danosa range of SBS elastomeric bitumen and APP plastomeric bitumen membranes.
- Access walkway membranes are available for roof areas with heavy foot traffic.
- Not suitable as cap sheet on green roofs; use GARDEN variant.
- Possible incompatibility between thermal insulation and waterproofing shall be checked.
- A separating layer (DANOFELT or DANODREN) shall be laid before laying the heavy protection (paving, gravel, topsoil, etc.), except in the case of asphalt paving which is poured directly on the waterproofing.
- Special attention must be paid to the execution of the singular points, such as parapets (meetings with vertical and emergent elements), drains, expansion joints, etc.
- Polyurethane foam shall not be sprayed directly on top of the waterproofing without the use of a suitable separating layer (geotextiles, mortar layers, polyethylene film, etc).
- If expansion that could affect the sheet is expected, a geotextile separating layer (Danofelt PY 200) shall be used between the sheet and the extruded polystyrene insulation panels, so that each product expands independently.
- NOTE: For more information on the Danosa systems in which this product is used, please see the document "Waterproofing Solutions".

Maintenance Recommendations

 Please refer to DANOSA UK Technical Statement 'Flat Roof Waterproofing - Cleaning and Maintenance Recommendations'

Warning

• Do not apply on wet or frozen surfaces.

Handling, storage and preservation

- Before moving the pallet, check the condition of the shrink-wrap and reinforce if necessary.
- The product must be stored in a dry place protected from rain, sun, heat and low temperatures.
- The product must be stored in an upright position.
- Handle with a crane with a protective net.
- Pallets shall not be stacked on top of each other.

Notice

• The information contained in this document and any other advice provided, are given in good faith, based on DANOSA's current knowledge and experience when products are properly stored, handled and applied, in normal situations and in accordance with the recommendations of DANOSA. The information applies only to the application (s) and the product (s) to which reference is expressly

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