

POLYDAN PRO 50/GP.

Waterproofing sheet of SBS modified bitumen with mineral self-protection.



BBA 10/4787 (1)

Bituminous sheet with a self-protected surface type LBM(SBS)-50/G-FP. It is composed of a heavyweight non-woven polyester felt reinforcement, coated on both sides with a highly durable elastomer-modified bitumen mastic (SBS), finished on the outside with black slate granules. On its inner side, as an anti-adherent material, it incorporates a plastic finishing film.

Presentation

- Length (cm): 800
- Width (cm): 100
- Colour: Black
- Thickness (mm): 3.5
- Product code: 141084

Technical Data

Concept	Value	Standard
External fire behaviour	Broof(t1)	UNE-EN 1187
Density (kg/m ³)	1428	-
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	-
Humidity resistance factor	20.000	UNE-EN 1931

Concept	Value	Standard
Low temperature flexibility (°C)	<-25	UNE-EN 1109
Mass per unit area (nominal) (kg/m ²)	5	-
Reaction to fire	E	UNE-EN 11925-2; UNE-EN 13501-1
Resistance to static loading (kg)	>20	UNE-EN 12730
Resistance to root penetration	No pasa	UNE-EN 13948
Longitudinal tensile strength (N / 5cm)	900 ± 250	-
Transverse tensile strength (N / 5cm)	650 ± 250	-
Longitudinal resistance to tearing (nail shank) (N)	PND	-
Transversal resistance to tearing (nail shank) (N)	PND	-
Hazardous substances	NPD	-

Additional Technical Data

Concept	Value	Standard
Adhesion of granules (%)	<30	UNE-EN 12039
Dimensional stability at elevated temperatures (longitudinal) (%)	<0.5	UNE-EN 1107-1
Dimensional stability at high temperatures (transversal) (%)	<0.5	-
Creep resistance at high temperatures (°C)	>100	UN-EN 1110

Environmental Information

Concept	Value	Standard
Recycled content afterword the consumer (%)	35	-
Manufactured in	Fontanar - Guadalajara (España)	-

Standards and Certification

- Avis Technique 5/09-2090 "Polydan monocouche apparent".
- BBA 10/4787 Product Sheet 1 "GLASDAN ELAST, ESTERDAN ELAST AND POLYDAN ELAST ROOF WATERPROOFING MEMBRANES".
- In accordance with the UNE-EN 13707 standard for flexible sheets for waterproofing. Reinforced bituminous sheets for roof waterproofing. Definitions and characteristics.
- It complies with the requirements of the Technical Building Code (CTE).

- Complies with CE marking requirements.
- DTA 5/09-2088 "Glasdan ELAST-Esterdan ELAST-Polydan ELAST".
- DTA 5/09-2089 "Esterdan FM".
- ETE 06/0062 "Esterdan Plus FM Bilayer".
- EOTA Guide 006.

Scope

- Multilayer membrane top sheet for roof waterproofing with mineral self-protection.
- Top sheet in two-ply membranes with heavy bonded protection.
- Single-layer membrane for waterproofing bonded self-protected roofs.

Advantages & Benefits

- Great durability.
- Great dimensional stability.
- High tensile strength and high elongation at break.
- High resistance to tearing.
- High resistance to static and dynamic piercing.
- Total impermeability to water and water vapour.
- Rot-proof.
- Very stable in the long term.

Support

- Roofs with heavy bonded, unbonded or floating and self-protected bonded protection.
- Over compatible thermal insulation.
- Concrete supports
- Mortar supports

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 5° (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. 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 can 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

- In case of new construction and renovation, possible chemical incompatibilities with APP plastomer-modified bitumen sheets shall be taken into account.
- In case of renovation, chemical incompatibilities with old waterproofing consisting of flexible PVC sheets, 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 (geotextiles, mortar layer, polyethylene film, etc).
- 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.
- On exposed self-protected roofs, occasional water retention that could lead to sediment accumulation and damage to the waterproofing membrane shall be avoided.
- 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.
- Self-protected sheets finished in light colours perform better thermally.
- Self-protected sheets in coloured mineral or ceramic granules may have different colour shades depending on the different production batches.
- Self-protected sheets are exposed sheets, so care must be taken when installing them.
- NOTE: For more information on the Danosa systems in which this product is used, please see the document "Waterproofing Solutions".
- Do not use as a top sheet on green roofs.
- Possible incompatibility between thermal insulation and waterproofing shall be checked.
- 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.

Maintenance Recommendations

- Maintenance requirements for Danosa Roofing Products The following maintenance checks must be adhered to: - A general examination on the condition of the waterproofing and surrounding roof components. - An inspection of all functional roofing elements including skylights, outlets, upstands, penetrations and any other visible roofing components. - Clean outlets, drains, gutters and remove any debris from the roof. - Periodic removal of mildew, moss, herbs or any other kind of vegetation that has been accumulation on the waterproofing. - Periodic removal of possible sediments accumulated on the deck (silt, sledges, slate granules, etc) by occasional water accumulation. - Periodic removal of debris and small objects that may have accumulated on the roof. - Ensure surrounding structural elements are sound such as eaves, flashings, slate tiles and brickwork. - Ensure that the waterproofing is in good condition and there are no blisters, damage or separation. - Review the condition of the waterproofing (adherence to upstands, condition of overlaps, visual appearance, etc) and repair the defects observed. These operations must be carried out twice a year, preferably at the beginning of spring or autumn and must be increased in case of decks or valleys with zero falls. It is also necessary to perform additional maintenance depending on the type of roof, location and proximity of roofs to areas with trees or in areas with high levels of pollution. More details on the document Maintenance and repair recommendations for flat roofs waterproofed with modified bitumen sheets

Warning

- Do not apply on icy or wet surfaces.

Handling, storage and preservation

- Before moving the pallet, the condition of the shrink-wrap is checked in order to reinforce it if necessary.
- The product must be stored in a dry place protected from rain, sun, heat and low temperatures.
- The product will 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 made. In case of changes in the parameters of the application, or in case of a different application, consult the DANOSA Technical Service before using the DANOSA products. The information contained herein does not exonerate the responsibility of the building agents to test the products for the application and intended use, as well as their correct application in accordance with current legal regulations. The product images used in our communications are indicative and may differ slightly in color and aesthetic appearance in relation to the final product. Orders are accepted in accordance with the terms of our current General Sales Conditions. DANOSA reserves the right to

modify, without prior notice, the data reflected in this
documentation. Website: **www.danosa.com** E-mail: **info@danosa.com** Telephone: **+34 949 88
82 10**