POLYDAN 180-40 P ELAST

Waterproofing sheet of SBS modified bitumen with non-protected surface finished with polyethylene film.

BBA 10/4787 (1)

EPD S-P-01493

POLYDAN 180-40 P ELAST. is a waterproofing sheet made of SBS modified bitumen mastic. Composed of a non-woven polyester felt reinforcement and covered on both sides with a polyethylene film. Tested according to the standards EN tests methods.

Presentation

- Length (cm): 1000
- Width (cm): 100
- Thickness (mm): 3.5
- Product code: 141404

Technical Data

Concept	Value	Standard
External fire behaviour	Broof(t1)	UNE-EN 1187
Density (kg/m³)	1143	-
Durability flexibility	-5 ± 5	-
Creep durability (ºC)	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 (ºC)	<-15	UNE-EN 1109
Mass per unit area (nominal) (kg/m²)	4	-
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)	NPD	-
Transversal resistance to tearing (nail shank) (N)	NPD	-
Resistance to impact, B (mm)	>1500	-
Hazardous substances	PND	-

Addtitional Technical Data

Concept	Value	Standard
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	-
Creep resistance at high temperatures (ºC)	>100	UN-EN 1110

Environmental Information

Concept	Value	Standard
Radon diffusion coefficient (m² / s)	2.4, Exp -12	ISO/DTS 11665-13
Volatile organic compounds (COV's) (µg/m³)	50 (A+)	ISO 16000-6:2006
Recycled content afterword the consumer (%)	35	-
Manufactured in	Fontanar	-

Standards and Certification

- 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.

Scope

- Bottom sheet in self-protected two-layer bonded systems.
- Underlay in two-layer systems with bonded and unbonded or floating heavy duty protection.
- Underlay in multi-layer systems with mineral self-protection for waterproofing of railway decks.
- Single-layer membrane for waterproofing roofs with heavy bonded, unbonded or floating protection.

Advantages & Benefits

- High static and dynamic piercing resistance.
- Self-healing and Rot-proof.
- Great dimensional stability.
- High tensile strength and high elongation at break.
- High resistance to tearing.
- Total impermeability to water and water vapour.
- Very stable in the long term.
- Allows for adaptation to any type of geometry.

Support

- Stripping of walls.
- Concrete supports
- Wooden supports
- Mortar supports

Substrate preparation

- The support must be healthy, clean, flat, free of paint, crumbling or poorly adhered parts, release agents, etc. and in general without any substance or particle that may prevent correct adherence.

Instruction for Use

1. Ensure insulation board (or other roof substrate) is dry and clean from grease, dirt and other contaminants before applying adhesive.
2. Set up the Canister DANOBOND as instructed, attaching the appropriate tooling.
3. Mark out the area to be bonded, ensuring the fleece-backed DANOPOL HSF membrane is cut to size and in position.
4. Protect the edge/seam to be welded in order to prevent it becoming contaminated with adhesive.
5. Ensure the Canister DANOBOND is spraying correctly and the spray pattern is 300mm wide.
6. Secure the Canister DANOBOND in a suitable position and apply to the desired substrate. Only the

substrate to receive the fleece-backed membrane should be coated.
7. Apply a minimum of two coats of adhesive to the desired substrate, ensuring a two meter pass takes at least 10 seconds.
8. Walk backwards ensuring an even coat of adhesive is applied.
9. Allow the solvents to evaporate for a minimum of 5 minutes at 20°C. N.B: This time will vary depending on climatic conditions.
10. Roll the fleece-backed DANOPOL HSF membrane into the adhesive layer.
11. Consolidate the bond with either a suitable broom or 20kg water-filled roller, removing any air entrapment.
Canister Set-up Guide:
1. Remove the black cap from the canister valve.
2. Attach the braided-hose to the canister valve, using the small nut (image 1). Tighten with a spanner.
3. Attach the other end of the braided-hose to the gun-applicator using the large nut (image 2). Tighten with a spanner.
4. Fully open the valve on the canister.
5. Pull the trigger on the gun-applicator to apply the adhesive.
6. Adjust the bead width by turning the black valve on the gun-applicator anti-clockwise until you have a bead width of approximately 20-40mm (image 3).
Important Note: Set-up your DANOBOND canister adhesive correctly before use to ensure the best possible performance and to avoid leakage or system failure.

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.
- 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.
- 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**