



## POLYDAN 180-40 P ELAST

High Performance SBS elastomeric 4 kg/m<sup>2</sup> underlay. Torch Applied.



BBA 10/4787 (PS1)



EPD S-P-01493

Bituminous SBS modified membrane reinforced with a heavy non-woven polyester felt. Finished in a quick-melt thermofusible film. Designed for torch-applied applications and Safe2Torch details using hot-air.

### Presentation

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

### Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m <sup>2</sup> )	4	-
Density (kg/m <sup>3</sup> )	1143	-
External fire behaviour	Broof(t1)	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
Watertightness at 10 kPa (Type A)	Pasa	UNE-EN 1928

Concept	Value	Standard
Watertightness at 60 kPa (Type A)	Pasa	UNE-EN 1928
Water vapour resistance factor ( $\mu$ )	20.000	UNE-EN 1931
Low temperature flexibility ( $^{\circ}\text{C}$ )	<-15	UNE-EN 1109
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 $\pm$ 250	UNE-EN 12311-1
Transverse tensile strength (N / 5cm)	650 $\pm$ 250	UNE-EN 12311-1
Longitudinal resistance to tearing (nail shank) (N)	NPD	UNE-EN 12310-1
Transversal resistance to tearing (nail shank) (N)	NPD	UNE-EN 12310-1
Resistance to impact, A (mm)	>1000	UNE-EN 12691
Resistance to impact, B (mm)	>1500	-
Joint Strength: Welding Shear	650 $\pm$ 250	UNE-EN 12317-1
Hazardous substances	PND	-

## Additional 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	UNE-EN 1107-1
Creep resistance at high temperatures ( $^{\circ}\text{C}$ )	>100	UN-EN 1110
UV, heat and water durability: Flexibility at low temperature ( $^{\circ}\text{C}$ )	-5 $\pm$ 5	-
UV, heat and water durability: Flow resistance at elevated temperature ( $^{\circ}\text{C}$ )	100 $\pm$ 10	-

## Environmental Information

Concept	Value	Standard
Radon diffusion coefficient (m <sup>2</sup> / s)	2.4, Exp -12	ISO/DTS 11665-13
Volatile organic compounds (COV's) (µg/m <sup>3</sup> )	50 (A+)	ISO 16000-6:2006
Post-consumer recycled content (%)	35	-
Manufactured in	Fontanar - Guadalajara (España)	-

## 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 'Flexible sheets for waterproofing - Reinforced bitumen sheets for roof waterproofing - Definitions and characteristics'.
- Complies with CE marking requirements.

## Scope

- Underlay 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.
- Radon gas barrier in slabs, sanitary slabs or walls.

## Advantages & Benefits

- High resistance to static and dynamic piercing.
- Self-healing and rot-proof.
- High 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

- Slab to wall joint
- Concrete substrates.
- Timber.
- Mortar substrates.

## 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. Substrate should be dry and clean from grease, dirt, debris or any other contaminants.
2. Where applicable, prime surface with CURIDAN or BITUMEN PRIMER+ in accordance with DANOSA instructions and allow to dry.
3. For field applications:
  4. Roll the membrane into position, allowing for 80mm side overlaps and 100mm head overlaps and cut to length. All overlaps and cross joints should be staggered by a minimum of 300mm.
  5. Using a length of 100mm  $\varnothing$  pipe (cut fractionally short of roll width) as an insert tube, roll back the membrane for a portion of the length (approximately 50%). Heat activate the membrane by torching in a vee area between the roll and substrate.
  6. Roll can be pushed forward by foot or by other suitable equipment. Apply downwards pressure when moving the roll to extrude a molten bead of bitumen from edges.
4. For detail applications
  7. Place the membrane into position, allowing for 80mm side overlaps and 100mm head overlaps and cut to length ensuring all overlaps and cross joints are staggered by a minimum of 300mm.
  8. Heat activate the membrane by torching between the membrane and substrate.
  9. Apply pressure and consolidate the bond to the substrate, ensuring a molten bead of bitumen is extruded from the edges.
10. Where specified, POLYDAN 180-40/P ELAST head laps should be mechanically fastened with DANOSA SUREFAST tubes or pressure plates and the appropriate mechanical fasteners at a minimum of 200mm centres in accordance with DANOSA instructions.

Where falls apply, membrane rolls should be rolled up the slope so that water drains over and not into membrane overlaps.

## 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 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.
- Not suitable as cap sheet on green roofs; use GARDEN variant.
- 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.
- 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 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**