



### POLYDAN 60 TF ELAST

Heavy duty SBS elastomeric 6,0 kg/m<sup>2</sup> capsheet. Torch Applied.



BBA 10/4787 (1)



EPD S-P-01493

Heavy duty, self-protected 6 kg/m<sup>2</sup> SBS elastomeric bitumen waterproofing membrane. It's non-woven polyester reinforcement gives it the optimal performance for road, bridge and high speed rail structure waterproofing. The upper surface is finished with mineral chippings and the underside has a quick-melt thermofusible film.

#### Presentation

- Length (cm): 800
- Width (cm): 100
- Colour: Grey
- Thickness (mm): 4.2(SOLAPO)
- Product code: 141471

#### Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m <sup>2</sup> )	6	-
Water absorption (%)	<1	-
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

Concept	Value	Standard
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	UNE-EN 1109
Reaction to fire	E	UNE-EN 11925-2; UNE-EN 13501-1
Resistance to static loading (kg)	>25	UNE-EN 12730
Resistencia a la difusión (GPa.s.m²/kg)	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)	900 ± 250	UNE-EN 12311-1
Longitudinal resistance to tearing (nail shank) (N)	350 ±50	UNE-EN 12310-1
Transversal resistance to tearing (nail shank) (N)	350 ±50	UNE-EN 12310-1
Resistance to impact, A (mm)	>1000	UNE-EN 12691
Resistance to impact, B (mm)	>2000	UNE-EN 11925-2; UNE-EN 13501-1
Resistencia al pelado (N/mm²)	>0.15	-
Joint Strength: Welding Shear	750 ± 250	UNE-EN 12317-1
Water absorption by freeze-thaw cycling (Vol. %)	1	-
Hazardous substances	PND	-
Resistance to root penetration	No pasa	UNE-EN 13948

## Additional Technical Data

Concept	Value	Standard
Density (kg/m³)	1428	-
Adhesion of granules (%)	<30	UNE-EN 12039
Creep resistance at high temperatures (°C)	>100	UN-EN 1110
Durabilidad UV; calor y agua: Flexibilidad a baja temperatura (°C)	-5 ± 5	-

Concept	Value	Standard
Durabilidad UV; calor y agua: Fluencia a alta temperatura (°C)	100 ± 10	-

## Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) (µg/m³)	50 (A+)	ISO 16000-6:2006
Post-consumer recycled content (%)	35	-
Solar reflectance index (IRS) with WHITE REIMPER COATED	101	-
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

- Capsheet of two-layer membranes with mineral self-protection for waterproofing boards.
- Capsheet in multi-layer systems with heavy protection.
- Capsheet in multi-layer membranes with mineral self-protection or bonded self-protected single-ply membrane for waterproofing of railway decks.
- Capsheet membrane for waterproofing systems of carpark areas (parking roofs or rolling surfaces, etc.), where the agglomerate can poured directly on top of the membrane.
- Adhered self-protected single-layer membrane for civil works.

## Advantages & Benefits

- High resistance to static and dynamic piercing.
- Self-healing and rot-proof.
- Good absorption of structural movements.
- The mineral finish gives the membrane UV resistance.
- 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 asphalt agglomerate to be poured directly on the waterproofing.

## Support

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

## Instruction for Use

Preparation of the substrate:

-The surface of the base substrate shall be resistant, uniform, smooth, clean, dry and free of foreign bodies. In the case of thermal insulation, the boards shall be laid in a grid and with no gaps between boards greater than 0.5 cm.

- Top layer of multi-layer membranes with mineral self-protection. The sheet is laid in the same direction as the bottom sheet, with the overlap line offset by approximately half of the roll. The sheet is fully welded to the bottom sheet with a blowtorch. The overlaps are to be welded and are  $8\pm 1$  cm in the longitudinal direction and  $10\pm 1$  cm in the transverse direction. To join the transverse overlap at the ends of the rolls, it is necessary to heat the transverse edge of the lower sheet in a 10 cm strip, eliminating or embedding the protection aggregate in the bituminous mass and then weld the end of the following piece.
- Self-protected single-layer membrane, adhered system. The adhesion of the membrane to the substrate is done with a blowtorch. In the case of mortar or concrete substrates, a bituminous primer (Curidán, Impridán 100, Maxdán or Maxdán Caucho) must be applied beforehand. If the substrate is a weldable thermal insulation board, i.e. asphalt-finished (Rocdán A or Rocdán PIR VA), no primer is required. The overlaps must be welded, and shall be  $8\pm 1$  cm in the longitudinal direction and  $10\pm 1$  cm in the transverse direction. To join the transversal overlap at the ends of the rolls, it is necessary to previously heat the transversal edge of the lower sheet in a strip of 10 cm, eliminating or embedding the protection aggregate in the bituminous mass and then weld the end of the following piece.
- Waterproofing of walls. First apply a bituminous primer (Curidán, Impridán 100, Maxdán or Maxdán Caucho). For ease of installation, it is recommended to cut the rolls into smaller, more manageable dimensions, adjusting them to the width of the wall.

## Indications and Important Recommendations

- During the spreading process, low curvature turns and sudden braking of the spreader will be avoided, limiting its speed.
- 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.
- 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.

- 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.
- Self-protected sheets in coloured mineral or ceramic granules may have different colour shades depending on the different production batches. The mineral granule may darken naturally over time.
- 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 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

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