

## ESTERDAN PLUS 50/GP ELAST

SBS elastomeric 5 kg/m<sup>2</sup> capping sheet. Torch Applied.



BBA 10/4787 (1)



ETE 06/0062

Bituminous SBS modified capsheet reinforced with a non-woven polyester felt. The upper surface is finished with mineral chippings. The underside has a quick-melt thermofusible film. Designed for torch-applied applications and Safe2Torch details using hot-air.

### Presentation

- Length (cm): 800
- Width (cm): 100
- Colour: Black
- Thickness (mm): 3.5 (Overlap)
- Weight (g): 40
- Product code: 141015

### Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m <sup>2</sup> )	5	-
Density (kg/m <sup>3</sup> )	1428	-
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

Concept	Value	Standard
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)	>15	UNE-EN 12730
Resistance to root penetration	No Pasa	UNE-EN 13948
Longitudinal tensile strength (N / 5cm)	700 $\pm$ 200	UNE-EN 12311-1
Transverse tensile strength (N / 5cm)	450 $\pm$ 150	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)	>900	UNE-EN 12691
Resistance to impact, B (mm)	>1000	-
Joint Strength: Welding Shear	450 $\pm$ 150	UNE-EN 12317-1
Hazardous substances	NPD	-

## Additional Technical Data

Concept	Value	Standard
Adhesion of granules (%)	<30	UNE-EN 12039
Dimensional stability at elevated temperatures (longitudinal) (%)	<0.3	UNE-EN 1107-1
Dimensional stability at high temperatures (transversal) (%)	<0.3	UNE-EN 1107-1
Creep resistance at high temperatures ( $^{\circ}\text{C}$ )	>100	UN-EN 1110
Durabilidad UV; calor y agua: Flexibilidad a baja temperatura ( $^{\circ}\text{C}$ )	-5 $\pm$ 5	-
Durabilidad UV; calor y agua: Fluencia a alta temperatura ( $^{\circ}\text{C}$ )	100 $\pm$ 10	-

## Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) ( $\mu\text{g}/\text{m}^3$ )	50 (A+)	ISO 16000-6:2006

Concept	Value	Standard
Post-consumer recycled content (%)	35	-
Manufactured in	Fontanar - Guadalajara (España)	-

## Standards and Certification

- DTA "Polydan monocouche ".
- 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.
- DIT 550R/16 "ESTERDAN PENDIENTE ZERO".
- DTA 5/09-2088 "Glasdan ELAST-Esterdan ELAST-Polydan ELAST".
- DTA "ESTERDAN FM".
- DTA 5/15-2483 "Polydan Plus FM".
- ETE 06/0062 "ESTERDAN Plus FM Bilayer".
- EOTA Guide 006.

## Scope

- Waterproofing under tiles on pitched roofs, both for its thickness and its mechanical resistance.
- Capsheet in multi-layer roof waterproofing systems with mineral self-protection.
- Capsheet in single-layer waterproofing systems.

## Advantages & Benefits

- High resistance to static and dynamic piercing.
- Self-healing and rot-proof.
- The mineral finish gives the membrane UV resistance.
- 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

- Old bitumen membranes.
- Compatible thermal insulation products.
- 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), the primer is not necessary. The overlaps are to 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 under tiles on pitched roofs. Proceed as described above, but mechanically fasten the 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.
- 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. The mineral granule may darken naturally over time.
- 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**