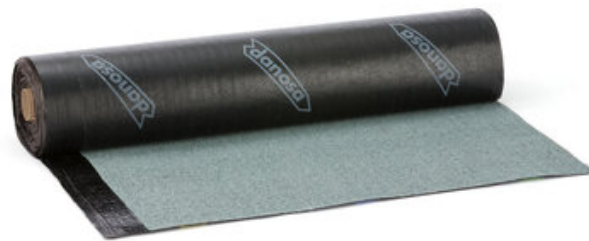




ESTERDAN PLUS 40/GP ELAST

SBS elastomeric 4 kg/m² capping sheet. Torch Applied.



BBA 10/4787 (PS1)

EPD[®]



EPD S-P-01493



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): 600
- Width (cm): 100
- Thickness (mm): 2.5(SOLAPO)
- Surface (m²): 6
- Product code: 142031

Technical Data

| Concept | Value | Standard |
|--------------------------------------|-----------|-----------------------------|
| 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 |
|-----------------------------------------------------|---------------|----------------|
| Watertightness at 10 kPa (Type A) | Pasa | UNE-EN 1928 |
| Water vapour resistance factor (μ) | 20.000 | UNE-EN 1931 |
| Low temperature flexibility ($^{\circ}\text{C}$) | <-15 | UNE-EN 1109 |
| 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) | PND | UNE-EN 12310-1 |
| Transversal resistance to tearing (nail shank) (N) | PND | UNE-EN 12310-1 |
| Resistance to impact, A (mm) | >1000 | UNE-EN 12691 |
| Joint Strength: Welding Shear | 450 \pm 150 | UNE-EN 12317-1 |

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 | UNE-EN 1107-1 |
| Creep resistance at high temperatures ($^{\circ}\text{C}$) | >100 | UN-EN 1110 |

Environmental Information

| Concept | Value | Standard |
|------------------------------------|---------------------------------|----------|
| 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'.

- 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'.
- Complies with CE marking requirements.
- DTA 5/09-2088 "Glasdan ELAST-Esterdan ELAST-Polydan ELAST".
- Application Document DA39/2013.
- ETE 06/0062 "ESTERDAN Plus FM Bilayer".

Scope

- Anti-capillary barrier in walls.
- Capsheet in multi-layer waterproofing systems.
- Top sheet in two-layer membranes for waterproofing of roofs with heavy bonded, unbonded or floating protection.

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 without gaps of more than 0.5 cm between boards.

- 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 will be 8 cm in both the longitudinal and transverse directions. 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 strip of 8-10 cm beforehand, removing or embedding the protective aggregate in the bituminous mass and then welding the end of the next piece.
- Waterproofing under tiles on pitched roofs. The adhesion of the sheet 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 cm in both longitudinal and transverse directions. 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 8-10 cm, eliminating or embedding the protection aggregate in the bituminous mass and then weld the end of the following piece. The mechanical fastening is carried out at 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.
- The design and installation of the roof structure and finishes shall be in accordance with the falls prescribed in BS 6229. Ponding of water on the surface of the waterproofing is to be avoided through effective design of roof falls and drainage systems. Throughout the life of the roof, periodic maintenance inspections should be conducted in line with the manufacturer's recommendations.
- This product is 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 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.
- Not suitable as cap sheet on green roofs; use GARDEN variant.
- Do not use as a single-ply membrane, except for waterproofing under tiles on pitched 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.
- 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**