ESTERDAN 25 P ELAST AUTOADHESIVE

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

ESTERDAN 25 P ELAST. AUTOADHESIVE is a waterproofing bituminous self-adhesive membrane. Composed of a non-woven polyester felt reinforcement, covered with SBS modified bitumen mastic, self-adhesive on the lower side. A polyethylene film is used as anti-adherent material on the top side and a siliconized releasable polypropylene film is used on the bottom side.

Presentation

- Length (cm): 1500
- Width (cm): 100
- Thickness (mm): 2.1
- Product code: 141810

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m²)	2.5	-
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	UNE-EN 12311-1
Water vapour resistance factor (µ)	>50.000	UNE-EN 1931
Low temperature flexibility (ºC)	<-15	UNE-EN 1109
Reaction to fire	E	UNE-EN 11925-2; UNE-EN 13501-1

Concept	Value	Standard
Resistance to static loading (kg)	>15	UNE-EN 12730
Resistencia a la difusión (GPa.s.m²/kg)	450 ± 50	-
Resistance to root penetration	No pasa	UNE-EN 13948
Longitudinal tensile strength (N / 5cm)	700 ± 200	UNE-EN 12311-1
Transverse tensile strength (N / 5cm)	450 ± 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)	>900	UNE-EN 12691
Joint Strength: Welding Shear	450 ±150	UNE-EN 12317-1
Hazardous substances	PND	-
Resistance to root penetration	No pasa	UNE-EN 13948

Addtitional Technical Data

Concept	Value	Standard
Adhesion of granules (%)	PND	UNE-EN 12039
Dimensional stability at elevated temperatures (longitudinal) (%)	<0.6	UNE-EN 1107-1
Dimensional stability at high temperatures (transversal) (%)	<0.6	UNE-EN 1107-1
Creep resistance at high temperatures (ºC)	>100	UN-EN 1110

Environmental Information

Concept	Value	Standard
Post-consumer recycled content (%)	35	-
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’.

- Complies with CE marking requirements.

Scope

- Tanking membrane.
- Bottom sheet in bilayer membranes for waterproofing roofs with semi-adhered heavy protection.
- Bottom sheet in bilayer membranes for waterproofing semi-adhered self-protected roofs.

Advantages & Benefits

- High movement capability.
- Modified with SBS polymers, it achieves much higher performance in behavior at high and low temperatures, elasticity and resistance to aging, which leads to improved durability of the membrane .
- Helps to increase the durability of the sheet.
- It retains its properties better over time.
- Good anti-piercing protection from mechanical damage.
- High tensile strength and high elongation at break.
- High resistance to tearing.
- High resistance to static and dynamic piercing.
- Rot-proof.
- Improves the performance of mechanically fastened sheets by providing a high wind suction resistance value and optimising the density of fastenings.
- Very stable in the long term.

Instruction for Use

Surface preparation:

- Concrete must be dry, clean and free from sharp projections such as nail heads and concrete nibs.
- Remove all surface imperfections, protrusions, cavities, structurally unsound and friable concrete and repair with a suitable repair mortar.
- Remove contaminants such as grease, oil, dust, dirt, loose stones, debris and wax from exposed concrete.
- Concrete must be properly dried.
- Substrate should be prepared using a primer either IMPRIDAN 100, CURIDAN, MAXDAN or MAXDAN CAUCHO, at the recommended rate (approximately 0,200-0,300 kg/m2) prior to installation of ESTERDAN 25 P ELAST. AUTOADHESIVO.
- Primer should be dry before the application of the membrane. Drying time depends of the temperature and humidity.
- In case that the support is a thermal insulation board, the suitability of the thermal insulation board with ESTERDAN 25 P ELAST.
  AUTOADHESIVO must be checked.
  Alignment:
- Start the installation of all membrane plies from the low point or drains, so the flow of water is over or parallel to the plies, but never against the laps. All overlaps at the membrane seams shall be installed so as to have “up” slope laps over “down” slope laps.
  Membrane installation:
  ESTERDAN 25 P ELAST. AUTOADHESIVO is achieved by removal of the backing release film while unrolling the membrane onto the substrate with side laps of 80 mm and end laps of 10 mm. The full work sequence should be as follows.
- Roll the bitumen membrane into position and cut to length.

- Roll back the membrane for a portion of its length (approximately 50%).
- Carefully cut across the backing release film and peel the film off the roll.
- Peel the leading edge of the backing film up and tuck it under the roll to enable release of the remainder when unreeling.
- Roll the membrane forward, pressing downward and outward, ensuring that no air pockets are trapped.
- Roll back the other portion of the membrane to the leading edge of release film.
- Peel the remainder of the film away while pushing the roll forward, pressing downward and outward, ensuring that no air pockets are trapped.
- On completion, use a soft broom or roller to apply pressure over the total area.
- The second layer or the top layer/cap sheet is laid over ESTERDAN 25 P ELAST. AUTOADHESIVO in the same direction, and fully bonded. Laps between top layer/cap sheet and ESTERDAN 25 P ELAST. AUTOADHESIVO should be offset by a minimum of 300 mm.

Indications and Important Recommendations

- Store in a dry place, protected from rain, sun, high and low temperatures.
- It should be kept in the sun for as short a time as possible to protect it from UV rays.
- 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.
- Not suitable on flat roofs as permanent waterproofing layer.
- In case the substrate is a thermal insulation board, the compatibility between the two materials shall be verified.
- During cold weather, the substrate, if uncombustible, can be heated with the torch or other means.
- 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.
- Exposure to the sun can make it difficult to remove the release film. The temperature of the membraneduring installation must not exceed 45°C.
- It must not be installed when the ambient, product or substrate temperature is below +10°C.
- There is no chemical incompatibility between the Danosa range of SBS elastomeric bitumen and plastomeric bitumen sheets.
- Not suitable as cap sheet on green roofs; use GARDEN variant.
- To join the transverse overlap at the ends of the rolls, it is necessary to preheat the transverse edge of the bottom sheet in a strip of 8-10 cm, remove the protective polyethylene film in the bituminous mass and then adhere the end of the next piece.
- Possible incompatibility between thermal insulation and waterproofing shall be checked.
- A separating layer (DANOFELT or DANODREN) must be laid before laying the heavy protection (paving, gravel, topsoil, etc.), except in the case of waterproofing under tiles.
- 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 separating layer shall be used between the sheet and the extruded polystyrene insulation boards, so that each product expands independently.

Maintenance Recommendations

- Please refer to DANOSA UK Technical Statement ‘Flat Roof Waterproofing – Cleaning and Maintenance Recommendations’

Handling, storage and preservation

- Before moving the pallet, check the condition of the shrink-wrap and reinforce if necessary.
- The product should be kept in the sun for the shortest time possible to protect it from UV rays
- The product must be stored in a dry place protected from rain, sun, heat and low temperatures.
- The product must be stored horizontally.
- The product will be used on a first-come, first-served basis.
- In cold weather, it is advisable to slightly heat the support with the blowtorch.
- This product should not be installed when the ambient, product or support temperature is below +10ºC.
- This product is not toxic or flammable.
- Exposure to the sun can make it difficult to remove the release film. The temperature of the sheet during installation must not exceed 50ºC.
- Waterproofing work must not be carried out when weather conditions may be detrimental, in particular when it is snowing or there is snow or ice on the roof, when it is raining or the roof is wet, surface dampness >8% according to NTE QAT, or when a strong wind is blowing.
- Pallets shall not be stacked on top of each other.
- For high storage, the racks must have three cross members, or braces under the wooden pallet skids.
- For handling with a crane, use a protective net as indicated on the pallet label.
- Danosa recommends consulting the safety data sheet for this product, which is permanently available at danosa.com, Knowlegde Portal, or it can be requested from our Technical Department.
- In all cases, the Occupational Safety and Hygiene standards, as well as the standards of good construction practice, must be taken into account.
- For further information, please contact our Technical Department.

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