

# BITUMINOUS WATERPROOFING

# ESTERDAN 30 P ELAST, AUTOADHESIVO

ESTERDAN 30 P ELAST. AUTOADHESIVO 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.



### TECHNICAL DATA

TECHNICAL DATA	VALUE	UNIT	STANDARD
Reaction to fire	E	-	UNE-EN 11925-2;
			UNE-EN 13501-1
Watertightness	Pasa	-	UNE-EN 1928
Longitudinal tensile strength	$700 \pm 200$	N/5cm	UNE-EN 12311-1
Transversal tensile strength	$450 \pm 150$	N/5cm	UNE-EN 12311-1
Longitudinal elongation at break	45 ±15	%	UNE-EN 12311-1
Transversal elongation at break	45 ±15	%	UNE-EN 12311-1
Resistance to root penetration	No Pasa	-	UNE-EN 13948
Resistance to static loading	>15	kg	UNE-EN 12730
Resistance to impact	>900	mm	UNE-EN 12691
Longitudinal resistance to tearing (nail shank)	PND	N	UNE-EN 12310-1
Transversal resistance to tearing (nail shank)	PND	N	UNE-EN 12310-1
Joint strength: peel resistance	PND	-	UNE-EN 12316-1
Joint strength: shear resistance	450 ±150	-	UNE-EN 12317-1
Flexibility at low temperature	< -15	°C	UNE-EN 1109
Humidity resistance factor	20.000	-	UNE-EN 1931
Dangerous substances	PND	-	-
Flexibility at low temperature (pliability) after aging	-5 ± 5	°C	UNE-EN 1109
Flow resistance at elevated temperature after aging	100 ±10	°C	UN-EN 1110

Pasa = Positive or correct No pasa = Negative PND = No performance determined - = Not necessary

# ADDTITIONAL TECHNICAL DATA

ADDITIONAL DATA	VALUE	UNIT	STANDARD
Mass per unit area (nominal)	3.0	kg/m²	-
Nominal thickness	2.5	mm	-
Flow resistance at elevated temperature	>100	°C	UN-EN 1110
Dimensional stability at elevated temperature (longitudinal)	< 0.6	%	UNE-EN 1107-1
Dimensional stability at elevated temperature (transversal)	< 0.6	%	UNE-EN 1107-1
Adhesion of granules	PND	%	UNE-EN 12039

Membranes thickness tolerance: = -0,3 mm, apart from membranes with thickness 2 and 2,4 mm whose tolerance is = -0,2 mm. Membranes mass per unit area tolerance: -5% (mini) and +10% (maxi) from nominal value.

### ENVIRONMENTAL INFORMATION

Environmental Information	Declared Value	Units	Norm
Pre-consumer Recycled Content	0	%	-
Post-consumer Recycled Content	35	%	-
Manufacturing Location	Fontanar, Guadalajara (España)	-	-
Volatile organic compounds (VOCs)	50 (A+)*	μg/m³	ISO 16000-6:2006

<sup>\*</sup> A+ classification according to Decree No. 2011-321 of 23 March 2011 the Ministry French Ecology, Sustainable Development, Transportation and Housing



# STANDARDS AND CERTIFICATION

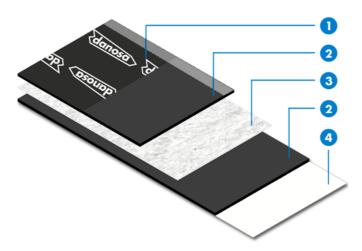
Meets the requirements of the UNE EN 13707 norm. Meets the requirements of the UNE EN 13969 norm. Meets the requirements of the CE marking.

### SCOPE

- Self-adhesive underlay.

#### PRESENTATION

PRESENTATION	VALUE	UNIT
Length	12	m
Width	1	m
Roll surface	12	m <sup>2</sup>
Rolls per pallet	28	rolls
Rolls per pallet Product Code	141801	-



- 1. polyethylene film
- 2. SBS modified bitumen self-adhesive on the lower side
- 3. non-woven polyester felt
- 4. releasable polyethylene film

# ADVANTAGES AND BENEFITS

- Self-adhesive, this will allow to accommodate movements in the building structure.
- Excellent mechanical properties in all directions (tear strength and tensile strength) due to the polyester felt reinforcement.
- Excellent dimensional stability properties in all directions due to the polyester felt reinforcement.
- Excellent puncture and impact resistance due to the polyester felt reinforcement.
- Easy to apply at complex geometries.
- Total flexibility of the material, and perfect accommodation to the support.
- Controlled thickness in factory ensuring constant error-free site application.
- Excellent adhesion to different types of the supports.
- Preserve its properties in long term due to SBS compound.
- High durability of the waterproofing due to the SBS elastomer compound of the membrane.





# 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 30 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 30 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 30 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 30 P ELAST. AUTOADHESIVO in the same direction, and fully bonded. Laps between top layer/cap sheet and ESTERDAN 30 P ELAST. AUTOADHESIVO should be offset by a minimum of 300 mm.

# INDICATIONS AND IMPORTANT RECOMMENDATIONS

- ESTERDAN 30 P ELAST. AUTOADHESIVO must be stored in a dry place protected from rain, sun, heat and cold temperatures.
- ESTERDAN 30 P ELAST. AUTOADHESIVO should not be applied with temperature below +10°. In cold weather, the stickiness of the adhesive compound is reactivated by welding the second layer.
- Sun exposure of the product may difficult the removal of the polyethylene releasable film. In service, maximum temperature should be below 45°C.
- For the application of the transversal overlap of the edges of the rolls, it is necessary to warm up the overlap polyethylene film in a section of 10-12 cm and then bond the contiguous roll.
- ESTERDAN 30 P ELAST. AUTOADHESIVO should be kept exposed to the sun for the minimum possible time in order to prevent from U.V. rays damage. It is recommended to cover ESTERDAN 30 P ELAST. AUTOADHESIVO within few hours after application.
- In case that the support is a thermal insulation board, the suitability of the thermal insulation board with ESTERDAN 30 P ELAST. AUTOADHESIVO must be checked.





# MAINTENANCE RECOMMENDATIONS

Maintenance requirements for Danosa Roofing Products

The following maintenance checks must be adhered to:

- A general examination on the condition of the waterproofing and surrounding roof components.
- An inspection of all functional roofing elements including skylights, outlets, upstands, penetrations and any other visible roofing components.
- Clean outlets, drains, gutters and remove any debris from the roof.
- Periodic removal of mildew, moss, herbs or any other kind of vegetation that has been accumulation on the waterproofing.
- Periodic removal of possible sediments accumulated on the deck (silt, sledges, slate granules, etc) by occasional water accumulation.
- Periodic removal of debris and small objects that may have accumulated on the roof.
- Ensure surrounding structural elements are sound such as eaves, flashings, slate tiles and brickwork.
- Ensure that the waterproofing is in good condition and there are no blisters, damage or separation.
- Review the condition of the waterproofing (adherence to upstands, condition of overlaps, visual appearance, etc) and repair the defects observed.

These operations must be carried out twice a year, preferably at the beginning of spring or autumn and must be increased in case of decks or valleys with zero falls. It is also necessary to perform additional maintenance depending on the type of roof, location and proximity of roofs to areas with trees or in areas with high levels of pollution.

More details on the document Maintenance and repair recommendations for flat roofs waterproofed with modified bitumen sheets

#### HANDLING, STORAGE AND CONSERVATION

- This product is not toxic or flammable.
- It must be stored dry and protected from rain, sun, heat and low temperatures.
- It must be stored upright.
- Don't store two pallets high.
- You must use the oldest batch of products first.
- No waterproofing works should be performed when weather conditions may be unsuitable. These include snow or ice on the roof, heavy rain, moisture, when there are strong winds.
- In all cases, the rules of health and safety at work and the rules of good construction practice should be considered.
- To store in racking at height the shelves must have three stringers or beams under the wooden pallet.
- Before handling the pallet you must check the status of the pallet and reinforce if necessary.
- If you are using a crane for handling purposes, you must ensure protection for others as stated on our packaging.
- Danosa advise you to consult the MSDS for this product which is available at www.danosa.com or may be obtained by writing to our Technical Department.

### WARNING

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.

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.

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