

ESTERDAN FM 30 P ELAST.

ESTERDAN FM 30 P ELAST. is a waterproofing bituminous sheet with non self-protected surface of 3.0 kg/m².

Composed of a reinforced polyester felt reinforcement and covered on both sides with SBS modified bitumen mastic. A polyethylene film is used as anti-adherent material on both sides.

Tested according to standard EN test methods.



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 ± 200	N/5cm	UNE-EN 12311-1
Transversal tensile strength	450 ± 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)	220 ± 40	N	UNE-EN 12310-1
Transversal resistance to tearing (nail shank)	220 ± 40	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

ADDITIONAL TECHNICAL DATA

ADDITIONAL DATA	VALUE	UNIT	STANDARD
Mass per unit area (nominal)	3.0	kg/m ²	-
Mass per unit area (minimum)	2.85	kg/m ²	-
Nominal thickness	2.5	mm	-
Flow resistance at elevated temperature	> 100	°C	UN-EN 1110
Dimensional stability at elevated temperature (longitudinal)	< 0.3	%	UNE-EN 1107-1
Dimensional stability at elevated temperature (transversal)	< 0.3	%	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.

STANDARDS AND CERTIFICATION

UNE EN 13707 standard.

UNE EN 13969 standard.

CE marking.

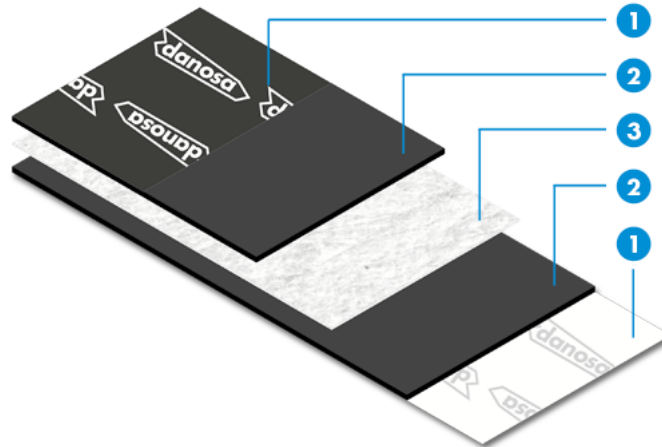
ATE 06/0062 "Esterdan Plus FM Bicapa".

EOTA 006 Guide.

DTA 5/09-2089 " Esterdan FM ".

PRESENTATION

PRESENTATION	VALUE	UNIT
Length	12	m
Width	1	m
Roll surface	12	m ²
Rolls per pallet	28	rolls
Product Code	141171	-



1. polyethylene film
2. SBS modified bitumen
3. reinforced polyester felt

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 that appears in the following document makes reference to the uses and utilities of danosa's products and systems, and it is based on the knowledge that have been learnt until present, by Danosa. This is only possible if products have been stored and used in an appropriate way.

Nevertheless, Danosa is not responsible for unsuitable uses of the products neither any other facts, such as meteorological facts. So Danosa is just responsible for the quality related to the provided products. Danosa reserves the right to carry out modifications without previous notice.

The values that appear in the technical sheet are the results of the tests that have been performed in our laboratory. June 2012.

Web site: www.danosa.com E-mail: export@danosa.com Phone number: +34 949 888 210