

## IMPERDAN FP 4.0 MM GP

IMPERDAN FP 4.0 mm GP is a waterproofing bituminous sheet with self-protected surface of 4.0 mm.

Composed of a reinforced polyester felt reinforcement, covered on both sides with polymer modified bitumen (pliability -5°C) mastic. On the upper side of the sheet, slate in green colour is used as protective material. The anti-adhesive material used on the lower side is polyethylene film.

Tested according to standard EN test methods.



### TECHNICAL DATA

TECHNICAL DATA	VALUE	UNIT	STANDARD
External fire performance	Broof(t1)	-	UNE-EN 1187;UNE-EN 13501-5
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	20 ± 15	%	UNE-EN 12311-1
Transversal elongation at break	20 ± 15	%	UNE-EN 12311-1
Resistance to root penetration	No Pasa	-	EN 13984
Resistance to static loading	>15	kg	UNE-EN 12730
Resistance to impact	>1000	mm	UNE-EN 12691
Longitudinal resistance to tearing (nail shank)	NPD	N	UNE-EN 12310-1
Transversal resistance to tearing (nail shank)	NPD	N	UNE-EN 12310-1
Joint strength: peel resistance	NPD	-	UNE-EN 12316-1
Joint strength: shear resistance	450 ± 150	-	UNE-EN 12317-1
Flexibility at low temperature	< -5	°C	UNE-EN 1109
Humidity resistance factor	20.000	-	UNE-EN 1931
Dangerous substances	NPD	-	-
Flexibility at low temperature (pliability) after aging	+5 ± 5	°C	UNE-EN 1109
Flow resistance at elevated temperature after aging	120 ± 10	°C	UN-EN 1110

### ADDITIONAL TECHNICAL DATA

ADDITIONAL DATA	VALUE	UNIT	STANDARD
Nominal thickness	4.0	mm	-
Flow resistance at elevated temperature	>130	°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	< 30	%	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)	-	-
Solar Reflectance Index (SRI) with REVESTIDAN REIMPER WHITE	101	-	ASTM E1980-11
Volatile organic compounds (VOCs)	50 (A+)*	µg/m <sup>3</sup>	ISO 16000-6:2006

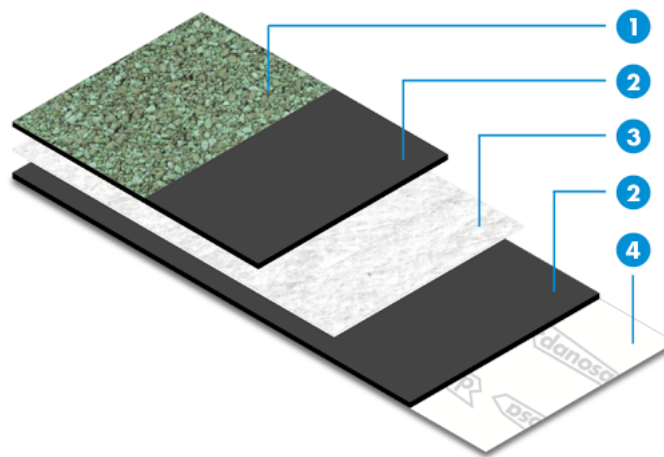
\* A+ classification according to Decree No. 2011-321 of 23 March 2011 the Ministry French Ecology, Sustainable Development, Transportation and Housing

## STANDARDS AND CERTIFICATION

UNE EN 13707.  
UNE EN 13969.

## PRESENTATION

PRESENTATION	VALUE	UNIT
Length	10	m
Width	1	m
Roll surface	10	m <sup>2</sup>
Rolls per pallet	20	rolls
Product Code	141735	-



1. slate
2. polymer modified bitumen (pliability -5°C)
3. reinforced polyester felt
4. polyethylene film

## 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](http://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. 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.

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