

## DANOPOL HS 1.2 LIGHT GREY

DANOPOL HS 1.2 LIGHT GREY is a synthetic PVC plasticized membrane, reinforced with polyester net carrier. Designed for flat roof waterproofing, U.V. resistant.



### TECHNICAL DATA

Characteristics	Declared Value	Units	Norm
External fire performance	Broof (t1) - Broof (t3) - Broof (t4)	-	EN 13501-5
Reaction to fire	E	-	EN 13501-1
Longitudinal & transversal tensile strength	> 1000	N/50mm	EN 12311-2 Método A
Longitudinal elongation at break	> 15	%	EN 12311-2 Método A
Transversal elongation at break	> 15	%	EN 12311-2 Método A
Longitudinal resistance to tearing (nail shank)	> 200	N	EN 12310-2
Transversal resistance to tearing (nail shank)	> 200	N	EN 12310-2
Overlaps resistance (Peeling of overlap)	> 250	N/50mm	EN 12316-2
Overlaps resistance (Shear of overlaps)	> 800	N/50mm	EN 12317-2
Resistance to impact	> 500	mm	EN 12691
Resistance to static loading	> 50	Kg	EN 12730 Método B
Flexibility at low temperature	< -30	°C	EN 495-5
Resistance to root penetration	Pasa	Pasa/No Pasa	EN 13948
Humidity resistance factor	20.000 ± 30%	(m <sup>2</sup> .s.Pa)/Kg	EN 1931
Heat and water durability 60 Kpa	PASA	Pasa/No Pasa	EN 1296
Chemical products and water durability, 60 Kpa	PASA	Pasa/No Pasa	EN 1847

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

### ADDITIONAL TECHNICAL DATA

ADDITIONAL DATA	Declared Value	Units	Norm
Straightness	< 50	mm	EN 1848-2
Flatness	< 10	mm	EN 1848-2
Visible defects	Pasa	Pasa/No Pasa	EN 1850-2
Length	20	m	EN 1848-2
Width	180	cm	EN 1848-2
Nominal minimum thickness	1.2 (-5%; +10%)	mm	EN 1849-2
Mass	1,5 (-5%; +10%)	kg/m <sup>2</sup>	EN 1849-2
Longitudinal & transversal dimensional stability	< 0.3	%	EN 1107-2
Loss of plasticizers (mass change at 30 days)	< 4.5	%	EN ISO 177
Loss of elongation at break (UV 5000 h)	< 10	%	EN 1297, EN 12311-2

### STANDARDS & CERTIFICATION

The membrane DANOPOL HS 1.2 LIGHT GREY, complies with EN 13956; EN 13967; EN 13361; EN 13491. EN 13362.

The membrane DANOPOL HS 1.2 LIGHT GREY, meets CE requirements.

The membrane DANOPOL HS 1.2 LIGHT GREY, has Environmental Product Declaration EPD No.S-P-00691.

The membrane DANOPOL HS 1.2 LIGHT GREY, has mechanical fixing systems BBA Agrément Certificate 14/5118.

The membrane DANOPOL HS 1.2 LIGHT GREY, has European Technical Approval (ETA) for mechanical fixing systems DANOPOL HS FM N° 10/0054.

## SCOPE

Waterproofing solutions, for new and existing buildings:

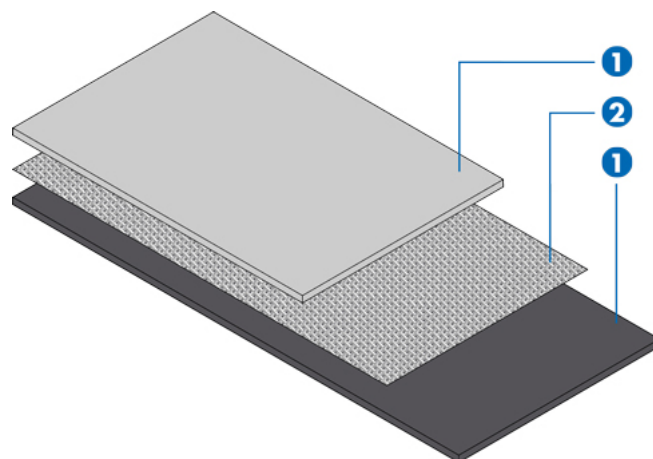
- Mechanically fixed flat roof waterproofing systems, commercial or industrial projects (EN 13956).

Civil work waterproofing:

- Basement waterproofing (EN 13967).
- Waterproofing fluid barrier in the construction of tunnels and associated underground structures (EN 13491).
- Reservoirs and dams waterproofing (EN 13361).
- Canals waterproofing (EN 13362).

## PRESENTATION

PRESENTATION	VALUE	UNIT
Reinforcement type	Polyester net	-
Thickness	1.2	mm
Width	1.80	m
Length	20	m
Roll surface	36	m <sup>2</sup>
Color	Light grey	-
Product Code	210032	-



1. Plasticized PVC
2. polyester net

## ADVANTAGES AND BENEFITS

### ADVANTAGES:

- Excellent resistance to tearing.
- High dimensional stability.
- High tensile strength
- High puncture resistance
- Very good resistance to micro-organisms, putrefaction, mechanical impact, root penetration, natural aging, weathering, UV radiation and swollen.
- Excellent flexibility

### BENEFITS:

- Improves performance in mechanically fastened sheets, assuming a high value of resistance to wind suction, optimizing the fixation density.
- Limits strains and tensions in the waterproofing membrane caused by high temperatures and temperature changes, very common in flat roofs.
- Absorbs structural movements.
- Presents good puncture protection to mechanical damage, derived from pedestrian transit, common in flat roofs.
- Very high durability to possible degradation related to chemical cases.
- High adaptability to different kind of supports.

## INSTRUCTION FOR USE

### Substrate preparation:

- The base support surface must be durable, uniform, smooth, be clean, dry and free from foreign bodies.
- As a separating layer or protective polyester geotextiles are used, type Danofelt PY 300 or higher.

### Placement waterproofing layer:

- DANOPOL HS 1.2 LIGHT GREY Waterproofing membrane can be welded by hot air or by chemical THF bonding (Tetrahydrofuran)
- During the installation, the membrane's serigraphed face must remain in sight.

## INDICATIONS AND IMPORTANT RECOMMENDATIONS

- Incompatible materials in direct contact with DANOPOL HS 1.2 LIGHT GREY waterproofing membrane: Bituminous products, XPS, EPS, EPDM, PU. DANOFELT PY300 or higher must be placed between both materials to avoid chemical incompatibility or smooth any coarse surface.
- Make sure the chemical compatibility of DANOPOL HS 1.2 LIGHT GREY with other materials.
- Weldability and weld quality depends on atmospheric conditions (temperature, humidity), welding conditions (temperature, velocity, pressure, cleanliness) and by the state of the membrane surface (cleanliness, humidity). Therefore must meet the hot air machine for the correct assembling
- Once the surface has been cooled, a strict welding control should be made using a blunt needle.
  
- This product is part of a waterproofing system, please pay attention to all DANOSA documents and all rules and mandatory law in this regard.
- Special attention should be paid to the implementation of the singular points and special details.

## HANDLING, STORAGE AND CONSERVATION

- DANOPOL HS 1.2 LIGHT GREY is not toxic or flammable.
- DANOPOL HS 1.2 LIGHT GREY should be stored in a dry place protected from rain, sun, heat and low temperatures. It should remain in its original packaging, horizontal and parallel (never crossed) on a flat and smooth support.
- DANOPOL HS 1.2 LIGHT GREY will be used as soon as it arrives at the building construction.
- DANOPOL HS 1.2 LIGHT GREY is easy to cut in order to adapt it to the work's geometry.
- No waterproofing works should be performed when weather conditions may be harmful, particularly when it is snowing or there is snow or ice on the deck, neither when the roof is covered by raindrops, surface moisture > 8%, or strong wind.
- No waterproofing works should be performed when the ambient temperature is less than -5 ° C for hot air welding.
- In all cases, please keep Health and Safety standards at work, and good construction practice.
- Danosa recommends to consult this product TDS, which is available permanently at [www.danosa.com](http://www.danosa.com) or can be obtained by writing to our Technical Department.
- For any further clarification, please do not hesitate to contact 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. April 2017 .

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