

## W-S AIR

**DESCRIPTION:** Waterproof and vapour-permeable membrane for waterproofing pitched roofs and ventilated façades. Composed of a microporous polypropylene film with a non-woven fabric fleece on both sides.

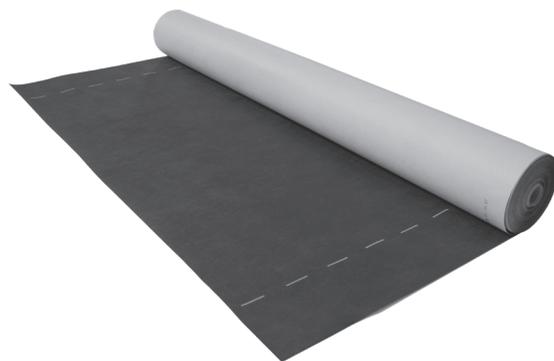
**INSTALLATION:** Nailed onto the structural deck or thermal insulation. Used under timber structures and protected beneath tiles.

**STANDARD:** UNE EN 13859-1, UNE EN 13859-2

**MANUFACTURER:** ESTIL GURU S.L.U.

### REFERENCES:

REFS.	DESCRIPTION	DIMENSION
IH70001	W-S AIR	1,5 x 50 m



### TEST TABLE:

CARACTERÍSTICAS	MÉTODO	UNIT	TOLERANCE	VALUE
Length	EN 1848-2	m	-0 y +5%	50
Width	EN 1848-2	m	-0,5 y +1%	1,5
Mass per unit area	EN 1849-2	g/m <sup>2</sup>	-10 y +10	140
Straightness	EN 1848-2	mm	-	Pasa
Visible defects	EN 1850-2	-	-	Pasa
Reaction to fire	EN 13501-1 EN 11925-2	Euroclass	-	E
Water penetration resistance	EN 1928 A	Class	-	W1
Vapour diffusion (Sd value)	EN 1931	m	-0,01 y +0,015	0,02
Tensile strength: L / T *1	EN 12311-1 *2	N/50 mm	-30 y +50 / -30 y +45	290 / 205
Elongation: L / T		%	-15 y +35 / -25 y +40	45 / 80
Tear resistance by nail: L / T	EN 12310-1 *3	N	-40 y +70 / -50 y +70	150 / 180
Dimensional stability	EN 1107-2	%	-	<2
Flexibility at low temperature	EN 1109	°C	-	-40
Air penetration resistance	EN 12114 *4	m <sup>3</sup> /m <sup>2</sup> ·h·100Pa	-	<0,02
Variation after artificial ageing *5				
Water penetration resistance	EN 1928 A	Class	-	W1
Tensile strength: L / T	EN 12311-1 *2	N/50 mm	-40 y +60 / -35 y +65	260 / 180
Elongation: L / T		%	-15 y +40 / -30 y +45	35 / 65

\*1 Test direction: L - longitudinal / T - transverse \*2 According to EN 13859-1 Annex A \*3 According to EN 13859-1 Annex B  
\*4 According to EN 13859-2 section 5.2.6 \*5 According to EN 13859-1 Annex C

## ADDITIONAL INFORMATION:

CHARACTERISTICS	METHOD	UNIT	TOLERANCE	VALUE
Overlap strength	EN 1850-2	N/50 mm	-	PND
Hydrostatic pressure resistance	EN 20811	cm	-	>280
Water vapour permeability	EN 12572 B EN 12572 C	g/m <sup>2</sup> · d	≥	1700
Service temperature range	EN 1109 EN 1107-2	°C	-	860
Thickness	EN 1849-2	mm	-5 y +10%	0,4

## RELEVANT INFORMATION:

### » Regarding product presentation:

Supplied in rolls individually wrapped in polyethylene film and labelled. Pallet of 40 rolls covering a total area of 3,500 m <sup>2</sup> .				
Surface area per roll		m <sup>2</sup>	-0,5 y +5%	75
Weight per roll		kg	-0,5 y +5%	11
Multilayer structure composed of: non-woven fabric / microporous film / non-woven fabric				
Microporous film composition	-	-	100 % polypropylene	
Outer non-woven composition	-	-	100 % polypropylene	
Fully recyclable material. Rot-proof and resistant to fungi and insects.				
This product contains no hazardous substances.				

### » Regarding the controls carried out during production and/or on the finished product:

Conformity assessment system 3 in accordance with Directive 89/106/EEC, Annex III.2(ii), second option

Verification for each production batch:

- Mass per unit area
- Length, width, and straightness
- Visible defects
- Water penetration resistance
- Tensile properties: strength and elongation
- Tear resistance.

» **Use, Handling and Transport:**

- During transport, storage, and installation, it must be handled with care, avoiding exposure to sharp or pointed objects that may cause punctures, cuts, or tears.
- The WATER-STOP AIR membrane must always be protected from exposure to UV rays.
- Before beginning the installation of WATER-STOP AIR, it is essential to ensure that the substrate meets the required conditions. The surface must be firm, dry, smooth, and clean.
- WATER-STOP AIR can be installed directly over thermal insulation.
- To secure WATER-STOP AIR to the structure or boarding, use flat-headed stainless steel nails. **Do not use staples.**
- If the membrane is installed stretched between rafters or battens, the spacing between them must not exceed **90 cm**.
- For correct installation of WATER-STOP AIR, lay the membrane horizontally without tension, starting from the lowest point. Extend the successive layers overlapping the lower one, observing the minimum overlap line (15 cm) marked on the membrane. At the ridge, the overlap must be between 30 and 40 cm.
- Ensure that an air cavity of at least 20 mm is maintained above the WATER-STOP AIR membrane.
- Overlaps can be sealed by bonding the membranes together using double-sided adhesive tape or duct tape.
- Pay particular attention to avoiding any blockages that may obstruct free water drainage.
- WATER-STOP AIR is not intended to support the roof tiles and they must not be adhered directly to the membrane. Tiles that require fixing must be secured to the structural base through the membrane using nails, whether with mortar or foam.
- WATER-STOP AIR is a membrane recommended for pitched roofs with a slope greater than 6%, in accordance with standard EN 13859-1. It enhances the effectiveness of thermal insulation and prevents the infiltration of dust and insects.