# OVER-FOIL 311<sup>+</sup>

Over-foil 311<sup>+</sup> is the eco-friendly, certified **pure aluminium** reflective insulation. Consisting of **7 layers** in total, it has the 2 outer faces of **pure aluminium** protected and reinforced with net; the 5 inner layers are additional reflective films, wadding layers and PE foam film. Tested according to the new **UNI EN 22097** standard, it has a reduced thickness but offers good performance in terms of insulation.

### + eco-friendly

**Over-foil 311**<sup>+</sup> is produced with a focus on sustainability. Being made of materials suitable for recycling and manufactured with a high percentage of recycled material reduces environmental impact. Thanks to the volume of Over-foil rolls, **transport is also reduced by more than 6 times** compared to times that of a rigid panel insulation with the same performance.

## + made in italy

**Over-foil 311**<sup>+</sup> is produced in the new Over-all factory in Arese (Mi) and the raw materials used for its manufacture come from companies in northern Italy.







## **ADVANTAGES**



#### GOOD THERMAL INSULATION

Efficient in both summer and winter and with vapour barrier function.



#### LOW ENVIRONMENTAL IMPACT

Almost km 0 production and high percentage of recycled material



#### **REDUCED VOLUMES**

Reduced transport volumes and optimised storage space.



#### QUICK AND EASY INSTALLATION

Clean, easy to work with, rot-proof and lightweight



#### REDUCED THICKNESSES

Larger walkable area



Number of layers	7
Roll height	150 cm*
Roll length	20 m*
Roll length	30 m <sup>2</sup>
Roll diameter	approx. 45 cm
Weight	430 g/m <sup>2</sup>
Roll weight	approx. 13 Kg
Nominal material thickness	14 mm
Thermal resistance of "Core" material only (UNI EN 22097 - 12667)	0,457 m <sup>2</sup> K/W
Emissivity of external faces after ageing (UNI EN 22097)	0,05
Thermal resistance in wall:	
- single layer in single cavity	1,12 m <sup>2</sup> K/W
- single layer in double cavity	1,79 m <sup>2</sup> K/W
Thermal resistance in the roof:	
- single layer in single cavity	0,91 m <sup>2</sup> K/W
- single layer in double cavity	1,36 m <sup>2</sup> K/W
Thermal resistance in false ceiling on the cold side (e.g. on pilotis (piers) floor, cellars, etc.):	
- single layer in single cavity	1,38 m <sup>2</sup> K/W
- single layer in double cavity	2,29 m <sup>2</sup> K/W
Vapour diffusion coefficient "µ"	90.000
Fire reaction class	under certification
* tolerance ±2%	

In order to correctly enter both Over-foil 311+ and the air cavities in contact with the Over-foil low-emissivity foil into the calculation software, please request the technical data of ex-law 10 by sending an email to <code>info@over-all.com</code>.

#### SPECIFICATION ITEM

A reflective insulation material consisting of 7 layers in total type Over-all Over-foil 311 $^+$ . The material has the 2 outer faces of pure aluminium protected and reinforced with net; the 5 inner layers are additional reflective films, wadding layers and PE foam film. The material is stitched at the edges and has a layer sealing system with plastic threads that prevents excessive opening during cutting, thus ensuring uniform thickness and a consequent reduction in thermal bridges. The material has a nominal thickness of 14 mm and has the following technical characteristics certified in accordance with the new UNI EN 22097 standard: Thermal resistance of the 'Core' material alone equal to 0.457 m²K/W, emissivity of external faces equal to 0.05 and vapour diffusion coefficient  $\mu$  equal to 90,000.

