

# ACTIS REFLECTIVE INSULATION PRODUCTS

FOR WALLS, ROOFS, CEILINGS & FLOORS

HYBRID RANGE



## ACTIS

TOMORROW'S INSULATION TODAY



# HControl Hybrid



Use on the warm side of any insulation material, behind the internal finish in roofs, walls and ceilings.

**HCONTROL HYBRID is a thin multifoil insulation product with a built-in vapour control function and an unrivalled thermal performance.**

**HCONTROL HYBRID** provides dual performance within a single product: a vapour control layer and insulation, allowing a reduction in the number of installation steps whilst reducing the thickness of the main insulation to achieve the same required U-Value.

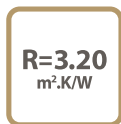
It can be used in conjunction with any type of insulation.



FLEXIBLE



VAPOUR  
BARRIER



2 AIR VOIDS  
OF 20MM



45MM +/-5MM



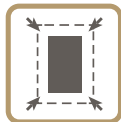
AIRTIGHT



LIGHT



AREA



SPACE SAVING



NO IRRITATING  
FIBRES

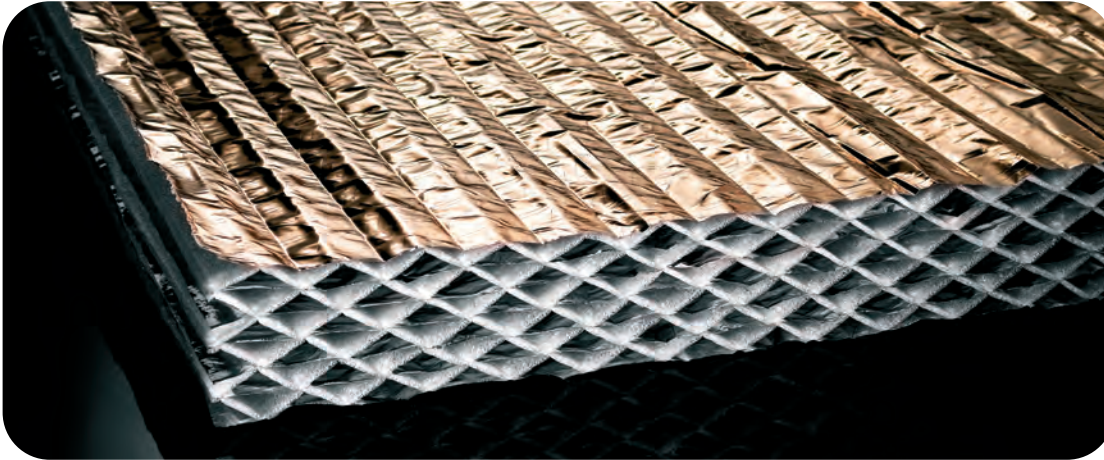
**UK  
CA**

**CE**  
COMPLIES WITH  
EN 13984

**LABC**  
CPD Partner  
2023/24

PROPERTY	TEST METHOD	DECLARED VALUE
Thickness	EN 823	45mm +/- 5mm
Weight/m²	EN 1849-2	880 g/m²
Length	EN 1848-2	6.25m
Width		1.6m
DECLARED THERMAL PERFORMANCE		
R Value of HCONTROL HYBRID + 2 air cavities after ageing	EN 16012	Horizontal Heat Flow <b>3.20 m²K/W</b> Upward Vertical Heat Flow <b>2.80 m²K/W</b>
Core R-value		<b>1.90 m²K/W</b>
Declared Emissivity after ageing		<b>0.06</b>
TENSILE STRENGTH		
Longitudinal direction	EN 12311-1 & EN 13859-1 Annex C	>300 N/50mm
Transversal direction		>200 N/50mm
Elongation (Longitudinal)		>20%
Elongation (Transversal)		>5%
RESISTANCE TO TEARING, NAIL SHANK		
Longitudinal direction	EN 12310-1 & EN 13589-1 Annex B	>150 N
Transversal direction		>150 N
JOINT STRENGTH	EN 12317 - 2	>50 N/50mm
WATER VAPOUR TRANSMISSION		
Permeability (W)	EN 1931 set C	7.51 10 <sup>-13</sup> Kg/m².s.Pa
Vapour Resistance (Z)		≥1000 MNs/g
Diffusion eq.air layer thickness (Sd)		≥200m
WATERTIGHTNESS	EN 1928 Method A	Watertight (W1) to 2 kPa
AIR PERMEABILITY	EN 12114	Airtight
DURABILITY AFTER AGEING	EN 13984	Test sucessful
REACTION TO FIRE	NPD (No performance determined)	

# Hybris



Use on timber frame or masonry walls, pitched roofs, ceilings and suspended timber floors.

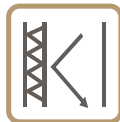
## HYBRIS is an innovative and unique insulation product providing an excellent thermal performance.

The only reflective insulation in Europe to achieve Bronze Cradle to Cradle certification for its sustainability credentials. HYBRIS is a reflective insulation product designed with a unique honeycomb structure made of shaped polyethylene foams glued to aluminium coated polyethylene foils. The large number of low emissivity cavities protect from dust and excessive air movement ensuring a high thermal performance. Moreover, the low emissivity external films provide additional thermal resistance, when associated with air cavities.

It can be used in conjunction with any type of insulation.



THERMAL  
PERFORMANCE



HIGH PERFORMANCE  
AIR GAP



THICKNESS  
50 - 185MM



AIRTIGHT



VAPOUR  
BARRIER



ACOUSTIC  
PERFORMANCE



LIGHT



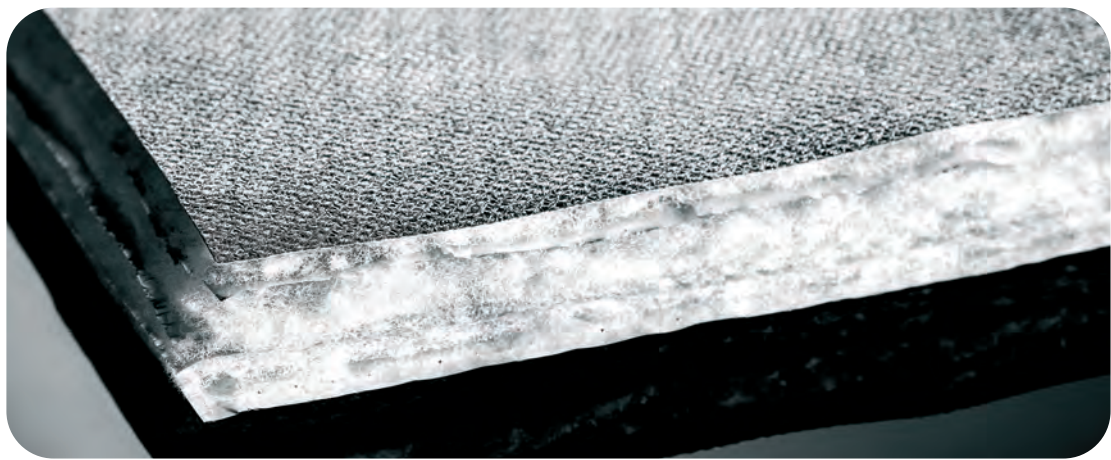
NO IRRITATING  
FIBRES

PROPERTY	TEST METHOD	DECLARED VALUE
Thickness	EN 823	50 to 185mm
Weight/m³	EN 1602	7.2 kg/m³
Length	EN 822	1200mm
Width		1145mm
DECLARED THERMAL PERFORMANCE		
Thermal conductivity $\lambda_D$	EN 16012	0.033 W/mK
Declared core thermal resistance		1.50 m²K/W (50mm) to 5.65 m²K/W (185mm)
Emissivity (inner/outer) after ageing		0.06/0.10
TENSILE STRENGTH (BEFORE AND AFTER AGEING)		
Longitudinal direction	EN 1608	>45 kPa
Transversal direction		>30 kPa
RESISTANCE TO TEARING, NAIL SHANK (BEFORE AND AFTER AGEING)		
Longitudinal direction	EN 12310-1 part 1	>150 N
Transversal direction		>150 N
WATER VAPOUR TRANSMISSION		
Permeability (W)	EN 1931	<2,3 E-12 Kg/m².s.Pa
Vapour Resistance (Z)		450 MNs/g
Diffusion eq.air layer thickness (Sd)		>90m
WATERTIGHTNESS	EN 1928 Method A	Watertight, W1
AIR PERMEABILITY	EN 12114	Airtight
HEAT CAPACITY	2065 J/kg K	
REACTION TO FIRE	Class F	



\* For more detailed product information on Hybris please refer to our Hybris leaflet.

# Boost'R Hybrid



Use on the cold side of the building fabric in roofs, walls and suspended timber floors.

**BOOST'R HYBRID is a thin multifoil insulation product with a built-in breather membrane function and an exceptional thermal performance.**

BOOST'R HYBRID provides dual properties within a single product: A breathable membrane and insulation, allowing a reduction in the number of installation steps whilst reducing the thickness of the main insulation to achieve the same required U-Value. It can be used in conjunction with any type of insulation.

FLEXIBLE

VAPOUR RESISTANCE  
 $Z = 0.55 \text{ MN.s/g}$

**R=2.4**  
 $\text{m}^2\text{K/W}$

2 AIR VOIDS  
OF 20MM

35MM +/-5MM

AIRTIGHT

LIGHT

**16M<sup>2</sup>**

SPACE SAVING

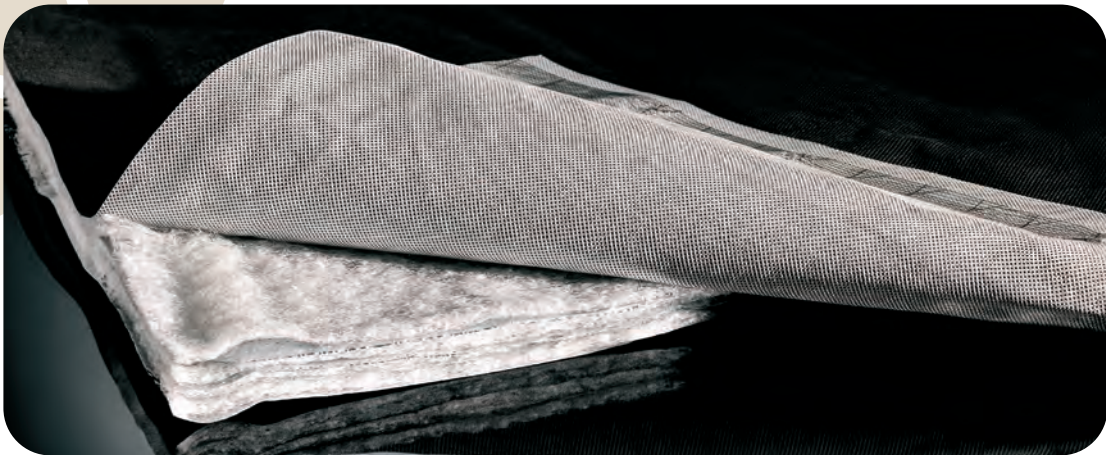
NO IRRITATING  
FIBRES

PROPERTY	TEST METHOD	DECLARED VALUE
Thickness	EN 1849-2 under 50 Pa load	35mm +/- 5mm
Weight/m²	EN 1849-2	650 g/m²
Length	EN 1848-2	10.67m
Width		1.5m
DECLARED THERMAL PERFORMANCE (INNER/OUTER SIDE)		
R Value of BOOST <sup>TM</sup> HYBRID + 2 air cavities after ageing	EN 16012	Horizontal Heat Flow <b>2.40 m²K/W</b> Upward Vertical Heat Flow <b>2.10 m²K/W</b>
Core R-Value		<b>1.35 m²K/W</b>
Declared Emissivity (inner/outer side) after ageing		<b>0.05 / 0.31</b>
TENSILE STRENGTH		
Longitudinal direction	EN 12311-1 & EN 13859-1/2 Annex A	>300 N/50mm
Transversal direction		>150 N/50mm
Elongation (Longitudinal)		>15%
Elongation (Transversal)		>10%
RESISTANCE TO TEARING, NAIL SHANK		
Longitudinal direction	EN 12310-1 & EN 13859-1/2 Annex B	>150 N
Transversal direction		>150 N
WATER VAPOUR TRANSMISSION		
Vapour Resistance (Z)	EN 12572 set C	0,55 MNs/g
Vapour Resistance of external layer		0.25 MNs/g
Diffusion eq.air layer thickness (Sd)		≤ 0,11m
WATERTIGHTNESS	EN 1928 Method A	Watertight, W1
AIR PERMEABILITY	EN 12114	< 0.030 m³/ (m² x h x 50Pa)
FLEXIBILITY AT LOW TEMP	EN 1109	-30/30 °C/ ø30mm
DIMENSIONAL STABILITY	EN 1107	+80°C/6h < 1%
REACTION TO FIRE	NPD (No Performance Determined)	
WIND UPLIFT RESISTANCE	BS5534	Suitable for all wind zones (1-5) throughout the UK





# Boost'R Hybrid Roof



Use on the cold side of the building fabric in roofs and suspended timber floors.

**BOOST'R HYBRID ROOF is a multifoil insulation product with a built-in breather membrane function and an exceptional thermal performance.**

BOOST'R HYBRID ROOF is a variant of BOOST'R HYBRID providing all the same features and benefits, but has been specifically designed for use on roofs. The water vapour permeable roofing underlay also acts as a wind barrier and has been created with a built in self-adhesive lap, facilitating the sealing of joints between adjacent sheets.

It can be used in conjunction with any type of insulation.



FLEXIBLE



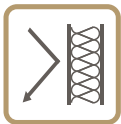
VAPOUR  
RESISTANCE



AIRTIGHT



35MM +/-5MM



REFLECTIVE



NO IRRITATING  
FIBRES

PROPERTY	TEST METHOD	DECLARED VALUE
Thickness	EN 1849-2 under 50 Pa load	35mm +/- 5mm
Weight/m²	EN 1849-2	650 g/m²
Length	EN 1848-2	10m
Width		1.5m
DECLARED THERMAL PERFORMANCE (INNER/OUTER SIDE)		
R Value of BOOST <sup>®</sup> R HYBRID ROOF + 2 air cavities after ageing	EN 16012	Horizontal Heat Flow <b>2.15 m²K/W</b>
Core R-Value		<b>1.35 m²K/W</b>
Declared Emissivity (inner/outer side) after ageing		<b>0.05 / 0.9</b>
TENSILE STRENGTH		
Longitudinal direction	EN 12311-1 & EN 13859-1/2 Annex A	>300 N/50mm
Transversal direction		>150 N/50mm
Elongation (Longitudinal)		>15%
Elongation (Transversal)		>10%
RESISTANCE TO TEARING, NAIL SHANK		
Longitudinal direction	EN 12310-1 & EN 13859-1/2 Annex B	>150 N
Transversal direction		>150 N
WATER VAPOUR TRANSMISSION		
Vapour Resistance (Z)	EN 12572 set C	0.55 MNs/g
Vapour Resistance of external layer		0.25 MNs/g
Diffusion eq.air layer thickness (Sd)		≤ 0.11m
WATERTIGHTNESS	EN 1928 Method A	Watertight, W1
AIR PERMEABILITY	EN 12114	< 0.030 m³/ (m² x h x 50Pa)
FLEXIBILITY AT LOW TEMP	EN 1109	-30/30 °C/ ø30mm
DIMENSIONAL STABILITY	EN 1107	+80°C/6h < 1%
REACTION TO FIRE	NPD (No Performance Determined)	
WIND UPLIFT RESISTANCE	BS5534	Suitable for all wind zones (1-5) throughout the UK



# BENEFITS OF THE HYBRID PRODUCTS

## DUAL PERFORMANCE



- Each Hybrid product combines insulation, air tightness, moisture resistance and reflective properties.
- ACTIS Hybrid products are resistant to air infiltration and create a barrier to thermal losses through convection.
- All components are moisture resistant.
- They take advantage of radiation effects due to the very low emissivity of their external films.
- High thermal performance insulation - suitable for all climate conditions, providing both summer & winter comfort.

## DUAL TESTING, IN A LABORATORY & IN-SITU



Hybrid is a range of innovative insulation products that are fully tested both under laboratory and real conditions of use, so their performance is guaranteed.

- Laboratory testing according to **EN 16012**
- Real life testing according to **ISO 9869**

## A UNIQUE PATTERN

Easy to recognise, each hybrid product has a copper coloured film with a very low emissivity, **as low as 0.05**.

Their additional resistance value can be gained from the air voids facing these highly reflective films.

- The foils' low emissivity is protected from degrading by surface lacquering.
- The foils reflect **up to 95%** of the solar thermal radiation outside the building, contributing to summer comfort.

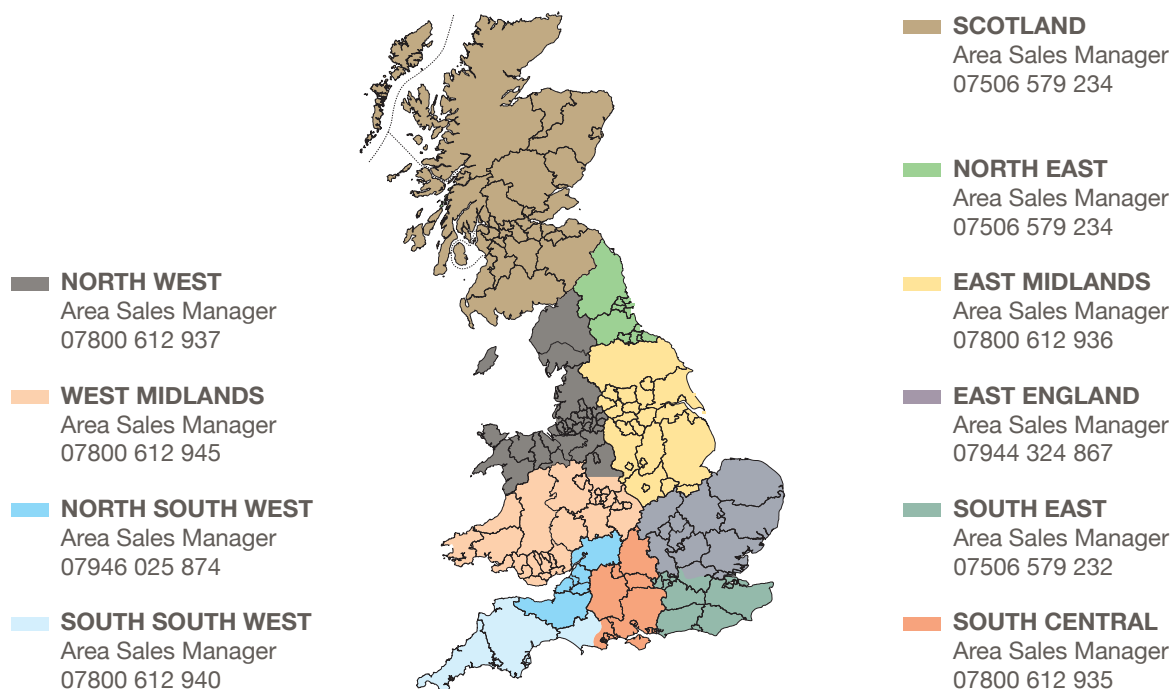
## USE SEPARATELY OR AS A SYSTEM

All Hybrid products can be used separately or together to provide a total insulation system in roofs, walls and ceiling applications.

Together, they can achieve the best U-Value requirements with a minimal thickness compared to standard solutions.

For more detailed information on how our products work together as a system please refer to our Solutions & Systems brochure.

ACTIS Hybrid products, if used in accordance with certification, are accepted by major insurance providers such as NHBC.



## U-VALUE SIMULATOR

Discover a unique tool to get a quick simulation of your project by visiting [Hybrid.insulation-actis.com](http://Hybrid.insulation-actis.com)

## CPD

Find out more about the CPDs we offer and how to book by visiting our website or following us on our social networks.

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## VISIT OUR WEBSITE

Please visit [www.insulation-actis.com](http://www.insulation-actis.com) for more details.