HYBRIS, AN INNOVATIVE REFLECTIVE INSULATION FOR ROOFS, WALLS AND CEILINGS
HYBRIS is intrinsically airtight, stopping air infiltration from the outside and heat loss through convection from the inside.

HYBRIS’ external copper-coloured layer is a certified vapour control layer (Sd > 90m, Z = 450 MNs/g) and is intrinsically resistant to vapour.

HYBRIS is resistant to air infiltration; it can effectively control noise and provide sound insulation. A masonry wall with 125mm HYBRIS installed can achieve Rw (C; Ctr)> = 67.7 (-2; -4) dB.

HYBRIS has been awarded LABC and LABSS registered details. HYBRIS is NHBC accepted when used in accordance with its certification.

HYBRIS is CE marked and has European Technical Approval N°13/0121.

HYBRIS has been fully certified by accredited bodies.

In addition to laboratory testing, HYBRIS has been in-situ tested according to ISO 9869.

HYBRIS is also easy to store and source with a nationwide distribution.
HYBRIS, A NEW GENERATION OF INSULATION

HYBRIS is an innovative insulation material for timber frame or masonry walls, pitched roofs, ceiling and suspended timber floor applications.

AN INNOVATIVE TECHNOLOGY

HYBRIS is a reflective insulation product based on a honeycomb structure made of shaped polyethylene foams glued to aluminium coated polyethylene foils. Its high thermal performance is provided by a special structure composed of a large number of low emissivity cavities, protected from dust and excessive air movement. Moreover, the low emissivity external films provide additional thermal resistance, when associated with air cavities.

HYBRIS is available in panels of 1145mm x 1200mm and in a range of thicknesses from 50mm to 205mm.

LIGHT, FLEXIBLE & DURABLE INSULATION

HYBRIS is easily installed between rafters, timber studs or within floor joists. It accurately fits all widths, held in place by compression. Hybris is also durable and doesn’t slump down over time.

HYBRIS is light weight, less than 9.5kg/m³, thus easy to store and transport.

Reflective vapour control layer
Reflective foils
Polyethylene foams
A HIGH THERMAL PERFORMANCE INSULATION

HYBRIS significantly reduces building energy consumption while providing maximum comfort. With a core declared thermal conductivity ($\lambda_c$) as low as $0.033 \text{ W/mK}$, HYBRIS provides a thermal resistance as high as $6.20 \text{ m}^2\text{K}/\text{W}$ for 205mm.

Easily recognisable HYBRIS has a copper-coloured internal face with a very low emissivity of 0.06 (external face e = 0.10). With an air gap on either side HYBRIS can reach a total thermal resistance as high as $7.05 \text{ m}^2\text{K}/\text{W}$ for 205mm in a roof application.

<table>
<thead>
<tr>
<th>THICKNESSES</th>
<th>CORE THERMAL RESISTANCE</th>
<th>ROOF WITH TWO AIR GAPS</th>
<th>WALL WITH ONE AIR GAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 mm</td>
<td>1.50</td>
<td>2.35</td>
<td>2.10</td>
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<tr>
<td>60 mm</td>
<td>1.80</td>
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<td>75 mm</td>
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<tr>
<td>205 mm</td>
<td>6.20</td>
<td>7.05</td>
<td>6.80</td>
</tr>
</tbody>
</table>
CLEAN, QUICK & EASY TO INSTALL

**HYBRIS** is classified A+ for internal air quality according to ISO 16000 and is clean to use so doesn’t generate dust or fibre while cutting or installing.

**HYBRIS** reduces the installation time without changing installation procedures.

For more info download the installation guideline on [www.insulation-actis.com](http://www.insulation-actis.com) or watch HYBRIS installation videos on [Youtube](https://www.youtube.com).

HYBRIS is easy to cut with an insulation saw, standard hand saw or an electric alligator saw if preferred.

HYBRIS will ‘friction fit’, no additional fixing is required.
HYBRID RANGE, A FABRIC FIRST SYSTEM OF THREE INNOVATIVE INSULATION PRODUCTS

HYBRIS can be combined with a vapour control layer, such as HCONTROL HYBRID and a breather membrane such as BOOST® HYBRID to provide a total insulation system in all applications.

HCONTROL HYBRID
R-value 3.20 m²K/W

HYBRIS
λ = 0.033 W/mK

BOOST® HYBRID
R-value 2.40 m²K/W

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

Example in a timber frame wall

Example in a warm pitched roof

U-value 0.14 W/m²K

U-value 0.18 W/m²K

For a more extensive list of solutions and for further technical support please visit:

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