Certificate No: EWWS463

This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

Actis Ltd – Boost'R Hybrid / Boost'R Hybrid Roof

Description of Product

Boost'R Hybrid / Boost'R Hybrid Roof is a thin multifoil insulation with built-in breather membrane for use on the cold side of the building fabric usually in roofs, walls and floors. It can be used in conjunction with any type of other insulation. Boost'R Hybrid / Boost'R Hybrid Roof is 35mm thick and is available in rolls covering approximately 10m2 (1500mm wide).

Key Factors Assessed

- Mechanical Resistance & Stability
- Safety in case of Fire
- Health, Hygiene and Environmental
- Safety in Use
- Energy Economy and heat retention

Validity

This certificate was first issued on 26th June 2014 and is valid until 4th April 2020

Issue Dated 18th February 2019

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Scope of Registration

Boost'R Hybrid / Boost'R Hybrid Roof is watertight, but allows for water vapour diffusion through the structure. Boost'R Hybrid / Boost'R Hybrid Roof is installed on the outside of any insulation product and can be in direct contact with it.

- Boost'R Hybrid / Boost'R Hybrid Roof is suitable for all wind zones (1-5) throughout the UK in accordance with Annex A of BS5534
- To ensure maximum thermal efficiency, it is recommended to leave an air gap either side of Boost'R Hybrid / Boost'R Hybrid Roof, between it and any other parts of the structure (e.g. additional thermal insulation).
- Boost'R Hybrid / Boost'R Hybrid Roof is installed with the perforated copper coloured film facing inwards and the watertight breather membrane facing outwards.
- Can be installed horizontally over rafters as a breathable roof underlay, or as a breathable sheathing membrane in a wall construction.
- The product is fixed using corrosion-resistant staples or nails. In the case of installation on a metal frame, double-sided tape is recommended.
- Boost'R Hybrid / Boost'R Hybrid Roof is available with or without a built in self-adhesive flap, which facilitates sealing of joints between adjacent sheets. Where there is no flap, joints are to be lapped by at least 100mm and sealed with ACTIS Multidhesif tape recommended for the product.
- Boost'R Hybrid / Boost'R Hybrid Roof may also be used under tiles supported on OSB sarking boards, provided that a specific condensation risk calculation is carried out to confirm that there is no significant risk of condensation forming within the roof structure.

Test Standard	EN 16012	
Insulation Product Type	3	
Test Method	EN ISO 8990:1996	
Thermal conductivity (λ)	0.026	W/mK
Emissivity	0.31/ 0.05	
Water vapour resistance	0.25/0.55	MNs/g
Fire performance	NPD	
Product Thickness	35	mm
Core RD value (thermal resistance)	1.35	M2K/W
RD value with 1 or 2 air spaces	2.4	M2K/W
Air space thickness	20	mm
Direction of heat flow when tested	Horizontal	
Width	1.5	m
Weight	650	g/m2
Roll length	6.7	m

Note: Boost'R Hybrid / Boost'R Hybrid Roof may also be available with alternative CE marked outer membranes, having different emissivity values to those shown in the table. This may affect the thermal performance of the outer air cavity and the Declaration of Performance for the outer membrane should be consulted in this case. Boost'R Hybrid Roof has a black breather membrane component with an emissivity of e=0.9.

When compressed between rafters / studs and battens, the compressed nominal thickness of Boost'R Hybrid / Boost'R Hybrid Roof has been determined as 7mm. The related R-value of the 7mm compressed product is 0.22 m2K/W.

For Scotland purposes:

Actis Hybrid products have been tested according to BS EN16012 and have a declared thermal performance of the core and with associated air spaces. Whilst low-emissivity cavities enhance the thermal performance of the overall build-up, they are not a requirement for the products to perform.

BR443 dedicates a whole section to reflective foil products (3.10) multifoil insulation (3.10.2) and airspace resistances (4.8). R-values of airspaces can be calculated according to BS EN ISO 6946.

BBA IB3: 'Reflective foil insulation – Conventions for U-value calculations' - Actis adheres to this convention and recommends batten sizes accordingly with regards to sagging and residual air cavities.

The insulation must not be carried over junctions between roofs and walls, required to provide a minimum period of fire resistance, including around cavity barriers in roof or wall elements. The continuity of fire resistance must be maintained.

Actis does provide project specific condensation risk analysis alongside U-value calculations to verify viability of solutions in accordance with EN 13788, i.e. Glaser method as laid out in BS5250. Some applications may require a specialist vapour control layer, to avoid potential interstitial condensation.

Actis Hybrid products have been independently tested according to BS EN16012.

The products HControl Hybrid and Boost'^{R} Hybrid / Boost'^{R} Hybrid Roof have been tested with two air cavities and horizontal heat flow. Accordingly the declared R-value of the product with associated air cavities can only be used for applications with horizontal heat flow direction i.e. wall applications. For other applications, the R-value of associated air cavities is calculated according to EN6946 and in line with BR443.

Actis have commissioned an independent assessment (carried out by BM Trada and BRS) of typical construction details utilising the Hybrid range of products. These thermal model junctions quantify the thermal performance of each specific thermal bridge, including temperature factors fRsi and thermal transmittance values ψ (psi-values) in accordance with BR 497 and BS EN ISO 10211: 2007, which can be applied in energy assessments (e.g. SAP calculations).

Hybrid model junctions use different configurations of Actis' Hybrid range of products and confirm that the products HControl Hybrid and Boost'^{R} Hybrid act as thermal blankets and counteract thermal bridging.

Conditions of Certificate

Boost'^{R} Hybrid / Boost'^{R} Hybrid Roof must be used in accordance with the installation guidelines and the guidance in the BM Trada Certification. See sections 4.3 and 9 of BM Trada Q Mark Certificate and sections 6 and Appendix A of VTT certificate.

The product should be used in a prescribed manner and location as indicated by the manufacturer and installed according to their instructions and manuals.

All products of Actis' Hybrid range can be used separately or together to provide a total insulation system in roofs, walls and loft applications.

Boost'^{R} Hybrid / Boost'^{R} Hybrid Roof underlay is not intended to be used alone without weather protection (e.g. roof tiles).

Boost'^{R} Hybrid / Boost'^{R} Hybrid Roof must not be in contact with a chimney. The product must be isolated from a chimney with a fire resistant material.

The installation of Boost® Hybrid must not be carried over the junctions of compartment walls or floors.
Boost'^{R} Hybrid / Boost'^{R} Hybrid Roof underlay is a non-load bearing product. It will resist normal loads associated with installation and use, although cannot be walked on.

For Scotland purposes:

That the specifications and materials referred to have been assessed in accordance with the Building (Scotland) Regulations 2004 and in accordance with the supporting guidance in the Domestic Technical Handbooks which came into force with effect from 1 October 2015.

That where reference is made on a plan or specification document to any Code of Practice, British or European Standard or manufacturer's instruction it shall be construed as a reference to such publication in the form in which it is in force at the date of this Registered Detail.

That the materials specified shall be for purposes of this Registered Detail and should not be changed without first gaining approval so to do from Local Authority Building Standards Scotland [LABSS]. Failure to do so will invalidate the Registered Detail.

That the Registered Detail shall be valid for a period of 12 months from the date of issue or until otherwise invalidated by formal notice by LABSS. The Registered Detail may be re-validated after 12 months following a request and payment of an annual renewal fee from the Registered Detail Holder.

This Registered Detail should not be regarded as a formal approval under the building warrant process prescribed by the Building (Scotland) Act 2003 enacted from 1 May 2005

That this Registered Detail shall contribute to compliance with relevant Mandatory Standards specified under the Building (Scotland) Regulations 2004 as amended when read with the scope, conditions and regulations sections to this Registered Detail.

For LABC Warranty purposes:

This Product Approval is based on the details and limitations of use described in the current Exova BM TRADA Certification Limited Q-Mark Scheme, Certificate Number CPS-014.

LABC Warranty product approval is based on the current Exova BM TRADA Certification Limited Q-Mark Scheme, Certificate Number CPS-014, remaining in place. Should this lapse, the Warranty Product Approval will be withdrawn.

LABC Warranty accepts the use of Actis Boost'^{R} Hybrid, provided it is installed, used and maintained in accordance with Chapter 7 of our Technical Manual.

Regulations

LABC and LABSS consider that, Boost'R Hybrid / Boost'R Hybrid Roof, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements of the following Building Regulations:

The Building Regulations 2010 (as amended) England & Wales

Regulation 7	Materials and workmanship
Note:	The products are acceptable.
AD B	Fire Safety
Note:	Subject to limitations detailed in Conditions section.
AD C	Site preparation and resistance to contaminants and moisture
Note:	Subject to limitations detailed in Conditions section.
AD L	Conservation of fuel and power
Note:	The thermal insulation performance of this system should be considered in the context of the contribution made to the overall performance.

The Building Regulations 2010 (as amended) England

AD L	Conservation of fuel and power
Note:	The thermal insulation performance of this system should be considered in the context of the contribution made to the overall performance.

The Building Regulations 2010 (as amended) Wales

AD L	Conservation of fuel and power
Note:	The thermal insulation performance of this system should be considered in the context of the contribution made to the overall performance.

The Building (Scotland) Regulations 2004 (as amended)

Technical Handbooks Domestic and Non-Domestic

Regulation 8	Durability, workmanship and fitness of materials
0.8.5:	Ways of establishing the fitness of materials
Regulation 9	Building Standards applicable to construction
Note:	Construction shall be carried out so that the work complies with the applicable requirements of schedule 5.

Mandatory

Standard 3.15 Condensation

Note: As per section 10.2.3.1 of the BM Trada certification, compliance with this standard will be demonstrated through the submission of a site specific condensation analysis

Mandatory

Standard 6.1(b) Carbon dioxide emissions

Note: The thermal insulation performance of this product should be considered in the context of the contribution made to the overall performance of the building.

Mandatory

Standard 6.2 Building insulation envelope

Note: The thermal insulation performance of this product should be considered in the context of the contribution made to the overall performance of the building.

Non-Regulatory Information

LABC Warranty

LABC Warranty conditionally accepts the use of Boost'R Hybrid / Boost'R Hybrid Roof when installed and used in accordance with the Scope and Conditions of this Certificate. Visit www.labcwarranty.co.uk for our LABC Warranty Technical Manual requirements and Warranty conditions of acceptance.

Supporting Documentation

Approved Document L
EN 16012: 2012
Actis, Technical Documentation Issue 10/07/2013 EN 13859-1 and EN 13859-2
Actis Boost R Hybrid installation guidelines
VTT certificate no VTT-C 9328-13 dated 14/02/2013 UPDATED under Eurofins 14/12/2018
BM Trada Q mark certificate no CPS-014 date 04/03/2013
Exova BM Trada Q-Mark Registration Schedule dated 12/04/2017 Issue No 2
Multifoil template dated 18/04/2013
Declaration of Performances version 001-EN

In addition for Scottish purposes:
Details - Pitched roof build up – DRW no TE 426, 431, 432

Contact Information

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