

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

Aluthermo Optima®

Description of Product

This is an assessment of Aluthermo Optima® which is a combined reflective and insulating multi-foil. Aluthermo Optima® is a high performance insulation system with a reduced thickness that efficiently acts on all modes of heat and noise transfer.

Aluthermo Optima® is composed of two layers of pure 30 microns thick aluminium, polished and treated against oxidation, separated by two layers of air bubbles placed in a honeycomb structure and enclosed in self-extinguishing polyethylene film.

The core of the product is a fully stable, hydrophobic and self-extinguishing polyester fibre with high sound barrier characteristics.



Key Factors Assessed

- Mechanical Resistance & Stability
- Safety in case of Fire
- Health, Hygiene and Environmental
- Safety in Use
- Protection against noise
- Energy Economy and heat retention
- Durability serviceability and identification

Validity

This certificate was first issued on 9th January 2015 and is valid until 4th April 2019

Issue Dated 3rd March 2016

Scope of Registration

This product has been assessed for use in roof and walls in accordance with the literature detailed in the certificate and the certificate itself.

This does not cover the use of the product in flat roofs.

Counter battens should be a minimum of 40mm thick.

All joints must be sealed correctly in accordance with manufacturers recommendations.

It should be used with another complimentary insulation product.

It is not to be used above rafters.

This product can be used in conjunction with Roofreflex.

Conditions of Certificate

Whilst it is claimed to be sound reducing no details have been provided of any sound resistance testing carried out.

For Scotland purposes:

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 June 2016.

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.

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.

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

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.



LABC and LABSS consider that, Optima System, will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;

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 below in Conditions section.

AD C Site preparation and resistance to contaminants and moisture

Note: Subject to limitations detailed below in Conditions section.

AD L1B 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 of the roof structure.



The Building Regulations 2010 (as amended) England

AD L1A 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 of the roof structure.



The Building Regulations 2010 (as amended) Wales

AD L1A 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 of the roof structure



The Building (Scotland) Regulations 2004 (as amended)

Technical Handbooks - 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	3.10 Precipitation
3.10.1	General provisions
3.10.8	Roof constructions - pitched

Mandatory

Standard 3.15	Condensation (Domestic)
3.15.1	Condensation
3.15.3	Control of condensation in roofs
3.15.5	Interstitial condensation
3.15.7	Roof constructions (pitched)

Mandatory

Standard 6.2	Building insulation envelope
6.2.0	General
6.2.11	Alterations to the insulation envelope

Non-Regulatory Information



LABC Warranty

The use of the Optima System has not been assessed to meet the requirements of the LABC Warranty Technical Manual. If you would like to discuss a specific use please make an enquiry to technical.services@labcwarranty.co.uk

Supporting Documentation

Fraunhofer Test Report P5-121e/2014

Fraunhofer Test Report P15-054e.1/2014

Fraunhofer Test Report HoFM-08e/2014

DIBt test report Z-23-11-1906 for polyester fibre Aluthermo website information dated 13/11/2014

Product Aluthermo Optima®

Installation Instructions covering Aluthermo Quattro

Optima Aluthermo 21mm and 7mm and Aluphonic

Together is Better

Multifoil Template for Aluthermo Optima® and e-mail from Lambert Jakobs dated 17th September 2014

Thermal calculations carried out by Melin Consultants for updated Aluthermo Optima® Timber Frame and Lightweight Block U-Values 0.18 and 0.28

Updated Timber Frame and Brickwork U-values of 0.18 and 0.28 Timber Frame, Cavity, Timber Frame u-values of 0.18 and 0.28

Updated Timber Frame no Cavity u-values of 0.18 and 0.28

Updated Flat Roof timbers 400 ctrs U- value 0.13 and 0.18 and Flat Roof Timbers 600ctrs u-value 0.3 and 0.18

Updated Slate Roof PU 400 ctrs U- value 0.13 and 0.18 and Sloping Roof Timbers 600ctrs u-value 0.3 and 0.18

Updated slate roof timbers @ 400ctrs u-value 0.13 and 0.18 and timbers @ 600ctrs u-value 0.13 and 0.16

Contact Information

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