Certificate No: EWS680A

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

Alumasc Facade Systems - Alumasc Ventilated System with Silicone Render

Description of Product

The Alumasc Ventilated System (AVS) consists of back-ventilated external cladding which is mechanically fixed to either treated timber battens or galvanised rails which is designed for use in conjunction with timber framed substrates. The system includes a carrier board on which a render base coat is bonded. Different render finishes may then be applied; this assessment is for the Silicone Finish.
The product is manufactured and controlled under a Quality Management system (ISO 9001:2008).

Key Factors Assessed

- Mechanical Resistance & Stability
- Safety in case of Fire
- Health, Hygiene and Environmental
- Safety in Use
- Durability serviceability and identification

Validity

This certificate was first issued on 10th November 2016 and is valid until 10th November 2020

Issue Dated 3rd January 2018

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Scope of Registration

The AVS is fixed to a timber frame substrate via galvanised top hats or timber battens.
The Alumasc Render Carrier Board is fixed to the metal top hats or timber battens with the appropriate fixings;
Ejot JT3 6.0 mm diameter self-drilling screws for metal top hats only
Ejot SH3 5.0 mm diameter self-tapping screws for timber battens only.
These should only be fixed into a substrate that is structurally sound.

This registration is limited to the cladding system from the fixing timber batten or galvanized steel top hat out (does not include the substrate).

Structural calculations confirm that the system will resist a wind pressure of 10.5 KN/m2 and a negative wind pressure of 5 KN/m2 (pull through failure). These figures are subject to adequacy of the substrate.

No effect on external flame spread or unprotected areas. Fire test reports provided demonstrate the systems achieve European class A2-s1, d0.

The system resists the passage of moisture. Any water collecting in the cavity will be removed by drainage and ventilation.

Conditions of Certificate

Site survey, specific construction details and structural calculations for fixing to the substrate will be required.

The product must be installed in accordance with the Alumasc specifications by Registered Contractors.

Cavity barriers must be provided in accordance with Building Regulations but should not block essential pathways.

Surface and interstitial condensation risk analysis provided with the example U Value calculation; this will need to be verified for alternative constructions.

The system can form part of an external wall construction to meet Part L, however, its thermal contribution is negligible.

The system is suitable for installations up to 18m in height.

The system can also be used with Light Gauge Steel Frames. However, this is outside the scope of this Registration and any Building Regulation Approval would be subject to demonstrating site specific requirements can be complied with.

For Scotland purposes:

The system is independently assessed and tested to ensure complete resistance to wind loading. All high-rise projects are assessed by independent structural engineers and bespoke fixing patterns established where required. The system when installed with standard fixing pattern can withstand a factored wind load of 5Kn/m2. Should this load be exceeded on a site-specific project then an independent structural report and SER Certificate should be provided for the site-specific installation.

The system is only for timber frame buildings up to 18m in height.

The products used as components of the system shall be manufactured and installed strictly in accordance with the manufacturer's instructions, in accordance with the certificate holder's instructions and fully in accordance with the accredited certification and supporting test reports.

The specifications and materials referred to have been assessed and approved 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 not be changed without first gaining approval so to do. Failure to do so will invalidate the registered detail.

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. It supports the site specific building warrant submission required in every case.

Regulations

LABC and LABSS consider that, the Silicone Finish 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 product is acceptable.
AD A	Loading
Note:	The product is acceptable as detailed under the scope of registration and conditions sections.
AD B	Fire Safety
Note:	The product is acceptable as detailed under the scope of registration and conditions sections.
AD C	Site Preparation and Resistance to Contaminants and Moisture
Note:	The product is acceptable as detailed under the scope of registration and conditions sections.

The Building Regulations 2010 (as amended) England

AD B	Fire
Note:	The product is acceptable as detailed under the scope of registration and conditions sections.

The Building Regulations 2010 (as amended) Wales

AD B	Fire
Note:	The product is acceptable as detailed under the scope of registration and conditions sections.

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 1.1	Structure
1.1.0	Introduction
	General
	Loading
	Design and construction
Note:	This standard is subject to site specific assessments and is therefore not covered by this Registered Detail The acceptance of the registered detail for any given project must remain conditional on the wider suitability of the existing building to receive the external wall insulation system. This suitability must be established by carrying out a thorough assessment of the building. This assessment must form part of the design and specification process to be carried out by Alumasc Exterior Building Products Limited or their approved contractors for the project, and if it identifies that the building is not suitable to receive the Alumasc Façade Systems, then this Registered Detail should not be considered applicable. The system when installed with standard fixing pattern can withstand a factored wind load of 5Kn/m2. Should this load be exceeded on a site-specific project then an independent structural report and SER Certificate should be provided for the site-specific installation.
Mandatory	
Standard 2.1:	Compartmentation
Mandatory	
Standard 2.2:	Separation
Mandatory	
Standard 2.3:	Structural Protection
Mandatory	
Standard 2.9:	Means of Escape
Note:	This certificate requires that cognisance is taken of the maintenance of fire resistant integrity at all separating / compartment wall / floor junctions and at protected zones around escape routes within buildings to meet the above Mandatory Standards.
Mandatory	
Standard 2.4	Cavities
2.4.1	Cavity barriers
Note:	This certificate requires that cognisance is taken of the unseen spread of smoke and fire in the cavities and maintenance of fire resistant integrity at all separating / compartment wall / floor junctions and at protected zones around escape routes within buildings to meet the above Mandatory Standards.
Mandatory	
Standard 2.6	Spread to neighbouring buildings
Mandatory	
Standard 2.7	External cladding

Note:	This system has achieved a classification of A2-s1, d0 when tested in accordance with Classification of Reaction to Fire Performance BS EN 13501-1:2007+A1 2009 and classified A2-s1, d0 (reference Annex 2.B reaction to fire). This will meet the requirements of Mandatory Standard 2.6: Spread to Neighbouring Buildings and Mandatory Standard 2.7: External Cladding.
Mandatory	
Standard 3.4	Moisture from the ground
3.4.1	Treatment of building elements adjacent to the ground
Mandatory	
Standard 3.10	Precipitation
3.10.1	General provisions
3.10.2	Wall constructions - solid
3.10.3	Wall constructions - cavity
Mandatory	
Standard 3.15	Condensation (Domestic)
3.15.1	Condensation
3.15.5	Interstitial condensation
Mandatory	
Standard 4.1	Access to Buildings
4.1.6	Width of accessible entrances
Mandatory	
Standard 6.2	Building insulation envelope
6.2.0	General
6.2.11	Alterations to the insulation envelope

Non-Regulatory Information

LABC Warranty

Pending assessment

Supporting Documentation

EN 13501-1:2007 + A1 2009 Report No 350908 - Swistherm April 8th 2015 Exova Warringtonfire

EN 13501-1 2007 Report 336720 - Swistherm - Silicone (Exova Warringtonfire)

BBA Agrément Certificate 15-5211

Ceram 132612 Ref 1 - Supp1 - Load Testing

Structural Performance Report W84238 - L28 Rev 0 (Pell Frischmann)

AVS Testing Matrix

U-values and Condensation check 20160518

AVS Drawing & Image Pack

AVS Technical Component Guide

AVS Specification on Timber Battens

Alumasc Facades AVS Brochure

Coverage and Consumption Rates

Silicone Render and Paint ColourChart - 2014

Contact Information

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