Certificate No: EWW491

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

Celotex Ltd - Celotex RS5000 Insulation Board (Rain screen application)

Description of Product

This is an assessment of a PIR insulation board by Celotex designed for use within rainscreen construction. Celotex RS5000 is a textured aluminium foil faced PIR board that comes in thicknesses of between 50mm and 150mm and allows buildings to achieve their aesthetic goals whilst utilising practical construction methods. It has been assessed by the BRE and complies with BR135 for use in rainscreen applications above 18 metres in height subject to the board being fixed to a non-combustible substrate *see conditions of certificate for more information.

Key Factors Assessed

- Mechanical Resistance & Stability - Approved Document A
- Safety in case of Fire
- Health, Hygiene and Environmental - Approved Document C
- Safety in Use - Approved Document A
- Energy Economy and heat retention - Approved Document L
- Durability serviceability and identification

Validity

This certificate was first issued on 21st August 2014 and is valid until 21st August 2015.
Issue Dated 13th August 2014

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Scope of Registration

Celotex has provided test reports undertaken by BRE and BBA to verify the product from both performance in fire and thermal properties. Celotex RS5000 is a premium performance PIR solution for use in rainscreen cladding applications and suitable for use in building above 18 metres in height *see conditions of certificate for more information. The board comes in various thicknesses and can be used with a variety of cladding systems (including masonry and rainscreen systems) and can be fixed back to a structural steel frame with a sheathing board or direct back to masonry.
Celotex RS5000 has been successfully tested to BS 8414:2 2005, meets the criteria set out in BR135: 2013 and therefore is acceptable for use in buildings with storeys above 18m in height (subject to matching the specification criteria of the BRE Classification Report 295255 carried out) as alternative compliance to AD B.
An appropriate classification report and/or supplementary report MUST evidence suitability of the proposed makeup.
It is important that the use of this product over 18m in height is agreed with Warranty providers prior to installation to ensure that its performance has been considered as part of the overall risk assessment of the finished building.
This is because Approved Document B makes no reference to the need to protect people from falling debris from a fire higher up the building, it is considered that, except in circumstances which are specific to the building, the 'Mechanical Performance' criterion of BR 135 is unlikely to feature as part of the Building Control approval process. However, it should be given due consideration by the specifier under any other applicable legislation, insurance or warranty requirements.
The product has a 'Class O' spread of flame classification as demonstrated in the test report provided by the BRE.
BBA testing shows that RS5000 achieves a super low lambda value of 0.021 W/m2. Celotex provide an online 'U' value calculator to determine the required thickness of board for use with varying types of construction.
Celotex foil faced PIR products are impermeable and this needs to be taken account when considering the form of construction.

Conditions of Certificate

For use in rainscreen wall construction including above 18 metres height.
The required thickness of board for a particular construction must be established with the use of the Celotex online calculator.
Celotex RS5000 can be used with a variety of cladding systems (including masonry or rainscreen systems) and can be fixed back to a structural steel frame with a sheathing board or direct back to masonry.
Celotex foil faced PIR products are impermeable and this needs to be taken account when considering the form of construction.
For use on buildings with a floor more than 18m above ground level, Celotex RS5000 has been successfully tested to BS 8414 part 2:2005 and meets the criteria set out in Annexe B of BR 135: 2013. This classification is only valid for the system specification and detailing outlined in section 2 of the BRE Classification report 295255 including the associated details found in section 4 test reports as an alternative compliance to AD B. A full copy of the report should be made available by Celotex Ltd.
The tested system comprised; 2 layers of 10mm wallboard on Simco EFS 100mm light steel frame system, 12mm magnesium oxide sheathing board with Aluminium helping hand brackets, L and T rails, Lamatherm CW RHS horizontal intumescent and CW RSV vertical non expanding fire breaks, 100mm Celotex RS5000 insulation board and 12mm Marley Eternit Natura decorative rain screen board.
Celotex RS5000 is suitable for use in all wind exposures provided the fixing specification meets the relevant British standards.

Regulations

LABC consider that, Celotex RS5000, 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:	Independent test data has shown Celotex RS 5000 to be suitable for the purpose for which it is approved. When installed in accordance with the manufacturers recommendations, no short term maintenance is required and the board can be expected to have a lifespan equal to that of the structure to which it is incorporated
AD B	Fire Safety
Note:	Thermosetting insulants (rigid polyurethane foam boards) do not meet the limited combustibility requirements of AD 82 Table A7 and so should not be accepted as meeting AD 82 paragraph 12.7. However, if they are included as part of a cladding system tested to BR135 & BS8414 for use above 18m, the complete assembly may ultimately prove to be acceptable. Where the substrate is a metal-framed wall system rather than masonry or concrete, , a sheathing board such as a cement bonded particle board or in some instances a more robust lining such as, but not limited to a non-combustible sheathing board may be required and will be fixed to the external face of the metal frame wall (Magnesium Oxide/ calcium silicate/Cement particle boards or similar performing can all potentially be used but suitability must be determined on a project specific basis)
AD C	Site preparation and resistance to contaminants and moisture
Note:	Subject to limitations detailed below 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 of the wall.

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 wall.

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 wall.

The Building (Scotland) Regulations 2004 (as amended)

If you would like to discuss a specific use of the product in Scotland it will require an additional assessment under the Scottish Building Regulations and accordingly you should contact the LABSS STAS Administrator at www.labss.org

Non-Regulatory Information

LABC Warranty

The use of the Celotex RS5000 Rainscreen Board is acceptable to warranty insurance schemes administered by MD Insurance Services Ltd including LABC Warranty subject to the cladding system being installed to meet the requirements of LABC technical manual.

Supporting Documentation

Celotex 18 metre product quality production extract
SGS ISO 14001:204 Certificate
SGS ISO 9001: Certificate
BBA letter FR5000 CG5000 21 Lambda classification
BBA spreadsheet for lambda data
Typical illustration for rain screen cladding
BRE letter 17th June 2014 RE BS8414 Test
BRE letter 14th July 2014 RE Class O classification
BRE Classification Report in accordance with requirements of BR135:2013 Ref 295255 Issue 2

Contact Information

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