# Kooltherm® K15 Rainscreen Board Fire Ratings - Scotland

## TECHNICAL NOTE - INTERNAL USE ONLY

This guidance note provides an explanation and historic information regarding the fire ratings for Kingspan Kooltherm K15 Rainscreen Board in Scotland.

## Kingspan Kooltherm K15 Rainscreen Board Rating Summary

Kingspan Kooltherm K15 Rainscreen Board is classified as Euroclass C-s1, d0 in accordance with BS EN 13501-1: 2007 + A1: 2009 (Fire classification of construction products and building elements. Classification using test data from reaction to fire tests). Therefore, it achieves Medium Risk, as defined in the Technical Handbook in Scotland.

#### Product literature 9th Issue March 2011

In this March 2011 literature, it was stated that the "rigid thermoset insulation core" of Kingspan Kooltherm K15 Rainscreen Board achieved Low Risk, as defined by the Building Standards in Scotland. This was, and is, supported by test reports held by Kingspan.

Although not referenced in this March 2011 literature, during the lifetime of this literature, testing of Kooltherm K15 Rainscreen Board to BS 476-7: 1997 and BS 476-6: 1989 +A1: 2009 demonstrated that the product was Low Risk, as defined by the Technical Handbook in Scotland.

#### Product literature 10th Issue July 2016

Kingspan Insulation periodically repeats product testing, this may be ahead of product development or as a result of changes in regulations or market conditions. Testing to BS 476-6: 1989 +A1: 2009 of the complete product was therefore repeated. The test results did not consistently repeat the results shown in the earlier testing, potentially due to inherent variability in test conditions.

Prior to the re-issue of product literature, the BBA (British Board of Agrément) also made the decision that all new or reissued BBA certificates would no longer include National classifications for lining materials and, instead, adopted the Euroclass system. BBA certificate number 14/5134, for Kingspan Kooltherm K15 Rainscreen Board, was re-issued in October 2015. It classifies the product as Euroclass C-s1, d0 in accordance with BS EN 13501-1: 2007.

Given the aforementioned test results and BBA's policy changes, Kingspan opted to err on the side of caution and not to make the specific claim of Low Risk for the complete product. As Kingspan Kooltherm K15 Rainscreen Board achieves a Euroclass of C-s1, d0, when tested as a complete product, it is classified as Medium Risk.

The product literature for Kingspan Kooltherm K15 Rainscreen Board was updated and reissued in July 2016 and stated the product was "Class 0, as defined by the Building Regulations". This related to the Building Regulations for England and Wales, Approved Documents B, not the Scottish Technical Handbook.

#### Product literature 11th Issue October 2017

In this October 2017 literature, Kingspan Insulation decided to make the position even clearer, by using the wording below: "Kooltherm K15 Rainscreen Board achieves Class 0 Rating, as defined by Approved Document B in England and Wales, and Technical Booklet E in Northern Ireland. It also achieves Medium Risk, as defined in the Technical Handbook in Scotland".

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### Large scale testing

Reaction to Fire and National linings classifications as outlined in the Scottish Technical Handbook and Building Regulations for England and Wales are achieved via small scale testing. These tests were designed to evaluate the performance of linings of products, most commonly in the application of an internal lining to a building and therefore are not a suitable approach to assess the performance of facades systems.

Kingspan Insulation believes in large scale system testing to assess the complete performance of its products in their intended applications. Kingspan Kooltherm K15 Rainscreen Board has featured in number of large scale BS 8414 fire tests, which met the performance criteria laid down in BR 135.

The Scottish Technical Handbook outlines the option to achieve compliance for high rise buildings through the alternative guidance methods using large scale testing to BS8414 or the use of a fire engineering approach.

#### **Contact Details**

We hope the information outlined in this Technical Note proves to be of use. If you have any queries or questions please don't hesitate to contact us on the below details:

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