

21/01/2022

Dear Customer

## Supply of Kooltherm K15 Rainscreen Board

We are writing to tell you about three separate matters surrounding Kooltherm K15 Rainscreen Board, which may affect product we have supplied to you.

1. We regularly test all our products, including K15, and in doing so we have identified an anomaly in respect of specific batches of Kooltherm K15 manufactured between 24th August 2021 and 11th September 2021. Samples of a 100mm batch of K15 have achieved a Euroclass D-s1,d0 classification result in some SBI tests instead of the declared Euroclass C-S2, d0. Samples from the same batch have also received a Euroclass C-S2,d0 in tests conducted by independent testing house Afiti. An additional, more rigorous test, using EU Guidance Paper G and EN14390/ISO 9705-1, has also been conducted by another independent testing house, Efectis has also returned results consistent with a C. The cause of the anomaly has been identified and addressed.

We have already contacted those customers who, via our traceability system have received product from the batches referred to above. If you have already been contacted by us, there is no need for further action on your part.

2. One other batch of 50mm K15 manufactured between 1<sup>st</sup> August 2021 and 18<sup>th</sup> October 2021 returned a Euroclass D classification in test conducted by Trading Standards. Our internal results indicated a clear Euroclass C classification, we therefore commissioned further tests from independent testing houses Afiti and Efectis. The results from both confirm a Euroclass C.
3. Kooltherm K15 produced after 18<sup>th</sup> October 2021 used an improved foil facer. This action was part of an unrelated product improvement project. Independent SBI tests demonstrated that this upgrade means the product achieves the Euroclass C or better rating. The existing Declaration of Performance carries a Euroclass C classification, however the OPSS (Office for Product Safety and

Standards) wrote to us on 23<sup>rd</sup> December saying that the facer change required a new Declaration of Performance using an enhanced verification approach (AVCP System 1 rather than System 3).

We believe, based on the independent tests referred to above, that K15 achieves the declared classification of C-S2,d0. We also believe that K15 with the improved facer is properly covered by the existing Declaration of Performance. Nevertheless, we have been required by the OPSS to:

1. Halt supply for the time being of all K15 covered by the Declaration of Performance dated 2 August 2021 (even with the new facer); and
2. Use reasonable endeavours to seek the return of any K15 which has not yet been installed.  
PLEASE NOTE - This action only impacts situations where Kooltherm K15 has NOT been installed on buildings.

We are fully engaged with the OPSS on this matter as integrity of product testing and safety is treated with the utmost seriousness by Kingspan Insulation. We are in the process of completing a new Declaration of Performance to satisfy the OPSS's requirements, which we are very confident we will meet, and pending the OPSS's approval we expect to resume distribution of K15 in Q1 2022.

Please let us know if you have any questions or need further assistance. Attached is a list of FAQs and further background information for your reference.

Yours faithfully,  
Ralph O Mannion  
Managing Director  
For Kingspan Insulation Ltd

Supplementary information

## **Kooltherm K15 Rainscreen Board restriction of supply FAQs**

### **1. Kingspan Kooltherm K15 is already installed on a building I am involved with. Do I need to take any action?**

*No further action is required as per the instruction from the OPSS (Office for Product Safety and Standards).*

### **2. Where can I obtain further assistance?**

*Please contact [Technical-K15@kingspaninsulation.co.uk](mailto:Technical-K15@kingspaninsulation.co.uk)*

### **3. Which projects are affected?**

*All customers who are affected have been contacted. However, if you would like any further clarity, please contact [Technical-K15@kingspaninsulation.co.uk](mailto:Technical-K15@kingspaninsulation.co.uk).*

### **4. Does this issue cover the whole K15 thickness range?**

*Yes, the notice applies to all thicknesses*

### **5. Are there any issues around claimed Thermal Performance/ Lambda?**

*Thermal performance is not affected.*

### **6. Will any stock that may be in branches need to be returned?**

*If the stock is related to those projects supplied with affected batches, please contact us.*

### **7. Will you credit in full any product which is collected from site or stock?**

*Yes, once date of manufacture is confirmed as falling within the relevant period, i.e. after 2<sup>nd</sup> August 2021.*

### **8. Does the return only apply to products that haven't been installed or should contractors strip and return product already installed?**

*There is no need to strip out any product, the OPSS only require the collection of product which has not been installed. Separate advice has already been supplied concerning projects where the product supplied was from those batches identified that achieved a Euroclass D-s1, d0 classification as opposed to a Euroclass C-S2, d0.*

### **9. Will you supply replacement product?**

*Please contact us, so that we can discuss your particular requirements.*

## Background

### **Kooltherm K15 Rainscreen Insulation Board (“K15”)**

#### **Test Results on certain samples of K15**

- 1 The current Declaration of Performance for K15 is dated 2 August 2021 and it records the reaction to fire classification for K15 as C-S2,d0. The classification is based on results from independent testing houses.
- 2 As part of Kingspan’s internal testing procedures conducted by the Kingspan Group’s fire engineering and research centre (“FERC”) in Holywell, samples of K15 are tested regularly. Those tests include testing the cumulative heat release (THR) and the Fire Growth Rate (FIGRA).
- 3 The results are usually consistent and in alignment with the Declaration of Performance, but certain batches of K15 manufactured between 24 August 2021 and 11 September 2021 produced unusually high FIGRA 0.4 results exceeding 250, although the THR results were still comfortably below the threshold of 15.
- 4 Immediately on receipt of the first of these uncharacteristic results, Kingspan quarantined K15 of any thickness manufactured on the same date as the sample tested and commenced an investigation. The investigation has ruled out any concerns in respect of core foam, product density, operating procedures or process and has narrowed the issue to specific rolls of the foil facer, supplied to us by a third party and applied to K15 during manufacture. We are confident that the unusually high FIGRA 0.4 results were caused by an issue with rolls of foil facer manufactured on two days in July 2021 only, but we are still investigating this. K15 otherwise achieves a C,S2-d0 classification.
- 5 Nevertheless, on 12 October 2021, Kingspan quarantined all K15 100mm product, over and above K15 with the affected foil facer. Further, on 18 October 2021, Kingspan implemented a change to the adhesive in the foil facer on all K15 products, following receipt of approval from the BBA. There is now no stock which pre-dates the change.
- 6 The improved facer was not caused or precipitated by the discovery of the facer issue. We had been developing it since the middle of 2018 (as to which test data and a BRE report had been submitted to the BBA in 2019). The improved facer removed any remaining cause for concern because the FIGRA 0.4 values returned on all tests undertaken by independent accredited testing house Efectis on the K15 product with the improved facer have all been well within the limit for Euroclass C classification. The upper limit of FIGRA 0.4 values for Euroclass C is 250, and the results show a range of between 17 and 81.4 with an average of 36.

#### **Measures Taken by the OPSS**

- 7 In October 2021, Kingspan notified Trading Standards of the first anomalous result, returned on a sample of K15 100mm. Further information was sought by the Office for Product Safety and Standards (“OPSS”).

- 8 Trading Standards and OPSS also conducted testing and through that process one batch of 50mm K15 (without the affected foil facer) returned test results of a Euroclass D. However, Kingspan's internal results indicate a clear Euroclass C which has also been independently confirmed recently by tests conducted on the same batch by Afiti and Efectis, as further explained below.
- 9 Regarding the improved facer, the OPSS is concerned that its application causes K15 to be a new product, which would trigger a requirement for Kingspan Insulation to adopt AVCP1 instead of AVCP3 because of its improved fire performance and that either or both of these matters meant Kingspan should have issued a new Declaration of Performance. Kingspan strongly disagrees, believing that K15 is the same K15 product and there is no change to the declared fire performance so no need to change to AVCP1. Accordingly, there was no requirement for a new Declaration of Performance to be issued. The Declaration of Performance dated 2 August 2021 is appropriate for K15 with the improved facer. Kingspan notes the BBA did not raise either of these issues when approving the change to the facer.

### Further Testing

- 10 Faced with anomalous results, Kingspan has arranged for additional testing to be carried out on samples of the same 100mm and 50mm batches as the OPSS. The results have been received in January 2022 and are as follows.
  - 10.1 Independent testing house Efectis has conducted tests on the 50mm samples and returned a Euroclass C result.
  - 10.2 Independent testing house Afiti has returned results of SBI tests for both samples, showing a Euroclass C.
  - 10.3 Independent testing house Efectis, has conducted a larger-scale test using EU Guidance Paper G and EN14390/ISO 9705-1 roomcorner test. This is a more stringent test, from which the SBI test derives. The results for both the 50mm and 100mm samples were a C classification.
- 11 Accordingly, Kingspan believes that the declared C classification for K15 is correct.