$\begin{array}{c} \textbf{Insulation} \\ \cup \mathsf{K} \end{array}$



19th January 2021

Mr Brian Martin
Head of Technical Policy
Building Regulation and Energy Performance Division
Ministry of Housing Communities & Local Government
2 Marsham Street
London
SW1P 4DF

Dear Mr Martin,

1 CORRECTION OF MISUNDERSTANDING DURING ORAL EVIDENCE PROVIDED TO THE GRENFELL TOWER PUBLIC INQUIRY

- 1.1 We anticipate that you will be closely following the evidence provided to the Inquiry and, given the serious nature of the matters under discussion, we are writing to draw your attention to a material factual misunderstanding that arose during Mr Adrian Pargeter's evidence to the Inquiry on 9 December 2020, which was widely reported in the media and which pertains to evidence provided by Kingspan Insulation Limited to the Select Committee in 2018.
- 1.2 This misunderstanding led to Counsel to the Inquiry suggesting to Mr Pargeter that Kingspan "engaged in a wholesale attempt to mislead" MHCLG Select Committee and its Chair, Mr Betts, and "a deliberate attempt to deceive Mr Betts and the select committee". This allegation was based on an assertion that Kingspan had submitted a test report on 6 July 2018 to Mr Betts and the Select Committee of a system which had been "designed to fail" and that Kingspan failed to inform the Select Committee of this fact. This is not accurate. We explain the misunderstanding and set out the true position in more detail below.

2 RELEVANT BACKGROUND

- As we have previously stated to the Select Committee, Kingspan's strong view is that large-scale system testing should be used to determine the safety of all cladding systems used in high-rise buildings. Further, Kingspan's view is that the current regulatory system permits the construction of unsafe cladding systems. The current system is based on the classification of individual products as "non-combustible" or "limited combustibility" via small scale tests and assumes that systems which only comprise such products will necessarily be safe, but this assumption is misplaced; some cladding systems can be constructed entirely out of such products and yet still be unsafe i.e. fail to meet the BR 135 criteria when they are tested to BS 8414.
- 2.2 In 2018 we were aware that certain large-scale cladding system tests which could have been legally built in the UK via the linear route to compliance (because they were constructed of only non-combustible or limited combustibility materials) had failed large scale fire safety tests; however, we had limited details of such tests as they had been commissioned by others. Kingspan wished to provide the detail to support the point that allowing only the linear route to compliance would not necessarily result in safe façade systems being specified and installed. To this end, Kingspan commissioned two large scale tests of systems comprising only materials rated as "non-combustible" or of "limited combustibility":

Insulation



- (a) The "May 2018 Test" took place on 22 May 2018 at Exova, Dubai: The system incorporated limited combustibility Alucobond A2 cladding and Rockwool DuoSlab non-combustible synthetic mineral fibre insulation. The intention was to test a system which might realistically be specified to be used on a building in the UK in accordance with the linear route to compliance, but which nevertheless contained certain design "imperfections", which might be seen in practice and lead to a less robust fire performance than an optimally designed system. In fact, the system passed the test i.e. the design imperfections did not adversely affect the performance of the system such as to result in a failure to meet the BR 1.35 criteria.
- (b) The "July 2018 Test" took place on 2 July 2018 at Exova, Dubai: The system which was tested closely replicated the Department for Communities and Local Government ("DCLG") post-fire tests #2, 4 & 6 (which set the benchmark by which the UK Government was determining national building safety) but incorporated Vitracore G2 cladding panels and Rockwool DuoSlab non-combustible synthetic mineral fibre insulation. At the time of the July 2018 Test, Vitracore G2 cladding panels were rated as of limited combustibility/A2 and available in the UK market. This system did not contain any deliberate design imperfections. Indeed, if anything, the tested construction was more robust than the DCLG tests. It was therefore (i) a very robust construction and (ii) a system which would have been compliant under the linear route. The system failed the test (i.e. it failed to satisfy the BR 135 criteria).
- Subsequently, Kingspan provided Mr Betts and the Select Committee with a copy of the July 2018 Test result (and a compilation of supporting documents), along with two other third party test results which had not been commissioned by Kingspan but had come to Kingspan's attention, as examples of systems which would meet the linear route to compliance but which, nevertheless, failed to meet the BR135 criteria when tested to BS 8414. The May 2018 Test was not shared with the Select Committee because it was not relevant as it did not illustrate the public safety point that Kingspan was seeking to explain: it is not in doubt that some systems comprising only A1/A2 materials will meet BR 135 requirements when tested to BS 8414, the point of public safety is that not all such systems will meet those requirements.
- 3 THE MISUNDERSTANDING CONCERNING THE BS 8414 TESTING OF SYSTEMS INCORPORATING MINERAL FIBRE INSULATION IN 2018
- 3.1 During the course of Mr Pargeter's oral evidence on 9 December 2020:
 - (a) Counsel to the Inquiry took Mr Pargeter to an email chain from April 2018 which had referred to a proposed BS 8414 test of a system which Counsel suggested was being "deliberately designed to fail" ("the April emails"). The April emails related to what would be the May 2018 Test and contained details of the deliberate design imperfections explained above.
 - (b) Mr Pargeter was then referred to a letter from Richard Burnley to Mr Betts on 6 July 2018 which provided details of three BS 8414 tested systems, each of which comprised A1/A2 cladding and insulation and each of which failed. One of these systems was the July 2018 Test.
 - (c) It was implicit in the subsequent questioning that Counsel to the Inquiry had understood that the April emails related to the July 2018 Test when they did not. This, in turn, led to the line of questioning in which it was contended that Kingspan was "engaged in a wholesale attempt to mislead" Mr Betts and the Select Committee. The premise of the questioning was that Kingspan should have informed the Committee that the July 2018 test had contained deliberate design imperfections (or that it was "designed to fail" in the words of Counsel). In fact, the system tested in July 2018 had been robustly constructed and contained no such design imperfections; there was therefore nothing to draw to the Committee's attention in this regard. It follows that Kingspan did not in fact mislead the Select Committee (and most certainly had no intention to do so).
- 3.2 As explained above, the July 2018 Test report provided to Mr Betts was of a realistic cladding system composed of non-combustible and limited combustibility cladding / insulation which had been robustly constructed and which closely replicated the DCLG tests (which tests set the benchmark by which the UK Government has determined national building safety).

Insulation



- 3.3 Kingspan considers that the three tests provided to Mr Betts with the 6 July 2018 letter illustrate the reality that some systems which meet the linear route to compliance for use over 18 metres (and which are therefore permitted to be used without any testing of the system), could nonetheless fail to meet the BR 135 requirements when tested to BS 8414.
- 3.4 We hope it is clear from the above that a misunderstanding on the part of Counsel to the Inquiry has occurred. This has led to a false impression being created, and widely reported, that Kingspan misled Mr Betts and the Select Committee in respect of the July 2018 Test. This is wrong. The July 2018 test powerfully illustrates the very important public safety points that Kingspan was making to the Select Committee, namely that large-scale testing of the whole cladding system is the best way to determine fire safety, and that the current regulatory regime permits the construction of *unsafe* cladding systems despite their using only non-combustible and limited combustibility materials. The regulatory regime's failing is to rely on small scale testing of individual components rather than testing how they perform in combination or when subjected to the much greater fire load of a large scale test.
- 3.5 We trust that this explanation clarifies the position. We have also written to Mr Betts and the Grenfell Tower Inquiry to correct the misunderstanding.

Yours sincerely

Ralph Mannion Managing Director

Kingspan Insulation UK & Ireland

T: +44 (0) 1544 388 601

In other words, the intention was to introduce deliberate design issues/imperfections of a type which might be seen in practice, rather than "gross" design failings which ought not to be capable of being specified or built in practice. For example, the tested system used fire barriers which, although they were compliant with the requirements of Approved Document B, were considered likely to provide a less robust performance than alternatives; conversely, the omission of fire barriers entirely would have been an example of a gross design failing which would not (or, certainly should not) be built in practice.

There were some minor differences, such as an extra panel joints and therefore gaps in the wing wall, but the system was more robust than that tested by the DCLG in key respects, as explained further below.

If was more robust in that the Vitracore G2 panel edges were folded over to protect the core of the panels from the fire - an additional step which was not taken in the DCLG tests.

Whilst Mt Pargeter had been asked to respond to hundreds of questions in writing from the Inquiry before giving oral evidence, no questions had been asked about the April emails and so he had had no reason prior to giving his oral testimony to review the relevant documents and remind himself of the facts. It is therefore understandable that Mr Pargeter was unable, without prior notice of the line of questioning, to recall the fact that there had been two separate tests in May and July 2018 and so was unable to rebut the misunderstanding put to him in cross-examination.