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PHASE 2 MODULE 2

WRITTEN OPENING STATEMENT ON BEHALF OF  
THE BRITISH BOARD OF AGREMENT

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**Introduction**

1. At the outset, the British Board of Agrément ('BBA') expresses its deepest sympathy to the bereaved, victims and survivors of the Grenfell Tower fire. The BBA is committed to helping to improve construction safety to prevent such a tragedy from occurring in the future.
2. Phase 2 of the Inquiry looks to the factors which may have led to the tragedy on 14 June 2017, with the aim of enabling recommendations to be made to ensure that this disastrous event never happens again.
3. Module 2 of Phase 2 focuses on the testing, certification, product marketing, and promotion of the insulation and cladding products used. The BBA has become a core participant for the purpose of this Module and Module 6.
4. The BBA has cooperated with the Metropolitan Police investigation, the Independent Review of Building Regulations and Fire Safety led by Dame Judith Hackitt, and with this Inquiry. The BBA has disclosed a number of documents and provided several witness statements to this end. It has been, and continues to be, ready to provide what assistance it can.
5. This Opening Statement sets out to place the role of the BBA in context, in respect of the construction industry more generally, and then in respect of the building materials used in the refurbishment of Grenfell Tower. It will then go on to highlight the proposals that the BBA has made in respect of the issues that have been identified.

## About the British Board of Agrément

### **Background**

6. The 'Agrément Board' was established by the Government in 1966 following building failures attributed to the inappropriate use of construction materials. The purpose of this organisation was to provide an independent, authoritative source of data on the performance of such products and their suitability for use in clearly defined applications.
7. The BBA now operates as a self-funding non-profit distributing company limited by guarantee with no formal government association. The Agrément Board became the BBA in 1982, coinciding with its change of legal status. It is one of a number of certification companies in the UK.
8. The purpose of the BBA is to provide reassurance to manufacturers, users, specifiers, insurers and regulators of construction products and systems. This is carried out through the assessment and certification of products and systems for the construction industry against relevant national requirements.<sup>1</sup>
9. The BBA issues Certificates in respect of building materials.<sup>2</sup> These Certificates state the BBA's opinion as to a product's compliance or contribution to compliance with the particular Building Regulations noted in the Certificate. Fire safety is only one part of the contents of a Certificate.
10. Towards the front of each Certificate is an account of the applicable Building Regulations that have been considered in the assessment. In England and Wales, the Building Regulations are themselves supported by Approved Documents. These documents provided guidance on measures which, if taken, will allow a construction to satisfy the relevant regulatory requirements, although there are other possible means of satisfying the Regulations.

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<sup>1</sup> See the Memorandum and Articles of Association of the BBA, at paragraph 3 (Exhibit JA/32).

<sup>2</sup> These are sometimes referred to as BBA or Agrément Certificates. The BBA also issues Certificates in respect of building systems.

11. A Certificate does define the generic situations where a product can be used, but this cannot extend to individual applications. Instead, the designer of a structure must make an informed decision based on the performance of that product. A BBA Certificate provides a summary of the information necessary to make that decision. Based on that, it is for the designer to ensure that the Certificate is applicable in respect of the product, combination with other materials, installation method and overall building system. It is not, nor could it be expected to be, a guide to all possible variants of a product, system or combination of building materials.
12. Certificates are issued pursuant to a contract between the supplier of the materials and the BBA. The supplier pays a fee to the BBA for initial assessment and, if appropriate, certification and subsequent inspections.<sup>3</sup> Pursuant to this contract, the supplier has obligations to make disclosure of any testing that has been carried out. Any changes to the composition of the material also have to be reported under the contract.
13. Certification is based on the documentary material that is provided by the supplier; the BBA does have a test laboratory, but may not be able to carry out all of the tests required for every assessment; in particular, it does not carry out fire testing.
14. A BBA Certificate certifies by reference to the prevailing standards as set down in the Building Regulations and, in the case of fire safety, by reference to Approved Document B. The BBA is not responsible for setting standards or testing methodology. Where the Building Regulations or Approved Document B allow for a pathway to fire classification to be used, the Certificate must reflect this.
15. Certification by the BBA or another certification company is voluntary. A product manufacturer is not obliged to seek certification. A Certificate holder will use it to demonstrate their product's fitness for its intended purpose. BBA Certificates are intended for specialist and trained designers and specifiers, who will use a Certificate in considering whether the requirements of the Building Regulations will be met in

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<sup>3</sup> Subsequent surveillance and re-issues are covered by separate, later, invoices.

their specific design, specification and installation of construction materials. It may also be used in support of satisfying other regulatory documents, such as the technical standards published by building warranty providers such as the National House Building Council ('NHBC').

### **Accreditation of the BBA**

16. The BBA is accredited by the United Kingdom Accreditation Service ('UKAS') as a product certification body.<sup>4</sup> Accreditation is not mandatory for certification bodies. It provides a further degree of assurance as to the quality of BBA Certificates.
17. The products for which the BBA can claim accreditation are defined by the UKAS Schedule of Accreditation.<sup>5</sup> This includes wall and cladding products and systems and insulation. This is further broken down in BBA Technical Specification 0012.<sup>6</sup>

### **The BBA's position**

18. The BBA is fully committed to improving the standards of UK construction. The BBA led evidence to the Hackitt Inquiry and to the Parliamentary committee set up to consider its findings. The BBA has agitated for the full adoption of the Hackitt Report's findings. The BBA has also provided evidence to the Metropolitan Police as part of their investigation.
19. The BBA's position in respect of a number of the issues that have been raised in the course of the Inquiry that touch upon certification is set out at the end of this Opening Statement. These remarks are made both looking back at what happened, but also looking forward to ensure that the overall regime of certification of construction products in the UK is improved.

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<sup>4</sup> First Witness Statement of John Albon, paragraph 13.

<sup>5</sup> Exhibit JA/2.

<sup>6</sup> Exhibit JA/3.

## The certification process

### **Nature of the relationship between BBA and manufacturers**

20. The BBA's relationship with its Certificate holders is contractual. Building product manufacturers engage the BBA to provide certification services. The BBA is not a public body, and does not have any powers to compel any applicant product manufacturer to act or not to act beyond its contract with them. The effectiveness of the certification process is therefore based on Certificate holders observing the terms of their certification contract in good faith, both during the initial assessment process, and during ongoing surveillance, as well as the rigorousness of the BBA's own assessment, certification and inspection processes. It is particularly important that manufacturers disclose to the BBA all test results and other information that may be relevant to the assessment of the product.

21. The BBA is accredited by UKAS against BS EN ISO 17065: 2012 as a product certification body.<sup>7</sup> Impartiality is a key element of the system of certification. The scope of the standard includes "*requirements for the competence, consistent operation and impartiality of product, process and service certification bodies*".<sup>8</sup> Accreditation is not mandatory for certification bodies in the UK, but provides third party assurance of the quality of certificates issued by the BBA. A BBA certificate is an expression of the BBA's opinion of the fitness for purpose of a product for a defined purpose.

22. The standard certification process at the BBA has been set out in a number of the witness statements provided by the BBA. In particular, see the Witness Statement of Brian Haynes at paragraphs 15-35; First Witness Statement of John Albon at paragraphs 14-30; Second Witness Statement of John Albon at paragraphs 19-34; Witness Statement of Gayetree Ramkorun at paragraphs 22-33; Witness Statement

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<sup>7</sup> The BBA was first accredited to EN 45011 on 5 July 2000, which remained the case until accreditation was transferred to ISO 17065 (which replaced EN 45011 as the relevant Standard for Certification Bodies) on 27 July 2015. See Second Witness Statement of John Albon, paragraph 33.

<sup>8</sup> See the Second Witness statement of John Albon at [20].

of Jon Denyer at paragraphs 21-34; Witness Statement of Prayer Nkomo at paragraphs 8-28; and Witness Statement of Valentina Amoroso at paragraphs 12-39.

## **Application**

23. Prospective Certificate holders requesting a product assessment from the BBA are first required to fill in an application form, describing the product in detail, together with its proposed application (i.e. use).
24. Outline details of any available test and performance-in-service data are requested at this stage. This information is then passed to the appropriate BBA Technical Section, with a request for a Contract Offer.
25. The Section member (formerly called Product Assessors and then called Project Managers) concerned, in consultation with the Section Head, examines the submission and produces an estimate of the time and cost involved to make the assessment.

## **Contract**

26. The BBA will then submit a draft contract summarising the proposed work and the overall cost involved. The BBA holds an internal file with a detailed programme, including time and cost estimates.
27. The contract defines the product, its area of use and an overview of the work required to carry out the assessment. The contract also defines which of the parties is responsible for providing the various items required for the BBA to perform the necessary assessments (for example, testing may be carried out in-house by the BBA or contracted by the applicant to a third-party test laboratory). The contracts also make clear that any changes which may affect the accuracy of the BBA Certificate must be notified by the company to the BBA.
28. The contract with Alcoa Architectural Products (which later became Arconic) dated 23 March 2007 provided as follows:

“7. The Applicant shall:

*(a) Disclose to the BBA full particulars of and relating to the Subject including (but without prejudice to the generality of the foregoing) particulars of its physical or chemical composition, of any process or method of manufacture thereof, of the control of the quality of the composition or manufacture thereof, of any tests data already available and of the test procedures used to obtain the same provided that the BBA will not include in the Certificate, any details of the composition or method of manufacture of the Subject save as shall be mutually agreed between the Applicant and the BBA; ...*

*[...]*

*(g) immediately notify the BBA of any change in the particulars supplied to the BBA or any third parties and also of any new or additional information concerning the Subject or its suitability for the Specified Use including, without limitation to the generality of the foregoing, details of claims by users of the Subject that it is or may be unsatisfactory for the Specified Use...”*

29. If the prospective Certificate Holder wishes to go ahead, the contracts are then signed and the assessment fee is paid in advance.

### **Assessment**

30. The Product Assessor concerned begins the assessment by examining the submission in detail, requesting test samples, and commissioning tests either in the BBA laboratory or externally as necessary. Test samples need to be shown as representative of normal production. Any external testing is carried out by a UKAS-accredited source or from a source judged to be equivalent. Any existing test data is examined to ensure that it, too, is of the required quality and relevant to the particular

assessment in hand. The BBA might also seek the input of external bodies such as the Building Research Establishment (BRE) on particular topics.

31. In some cases, a process known as “*confirmation*” is used. The BBA is a member of the UEAtc (the European Union of Agrément). Confirmation is where a certificate is based on an approval issued by another UEAtc member, for example the Centre Scientifique et Technique du Bâtiment (‘CSTB’) in France.
32. The assessment process usually involves BBA inspectors visiting the manufacturing facility to ensure consistency of production, except where production can be shown to be already under surveillance by a body acceptable to the BBA. These visits would result in a “*Quality Plan*” being produced in relation to the manufacturing process for the product. This document is used as the basis for ongoing monitoring of the manufacturing conformity of the product, and any later factory visits, containing details of raw material inputs, suppliers, and so on.
33. The responsible Product Assessor/Project Manager compiles a Technical Dossier of all the relevant assessment results, with a summary of the results of each aspect.

## **Drafting**

34. A successful assessment results in the preparation of a draft certificate. This work is done by the Product Assessor, in co-operation with the relevant Section Head, using information and conclusions from the Technical Dossier. A draft certificate may be produced either as a “*Leader*” (i.e. a certificate for a product type and application that has not been dealt with before) or a “*Follower*” (a certificate for which there is clearly a relevant precedent, upon which the new certificate can be based).
35. The initial draft of the certificate is then processed into standard format by the BBA Technical Writing department. However, the Technical Writers would not change the actual technical content of the draft.



36. Approval requires sign-off of the final accepted draft by an Authorised Signatory. The certificate would then be allocated a number, and formally signed by the BBA Chief Executive, before being issued by the BBA.

## Surveillance

37. Once the initial assessment has been completed, the BBA's focus is on ensuring consistency of production in line with the product as assessed. Following the initial assessment, factory visits are conducted by BBA product conformity inspectors, by reference to the assessment and the terms of the certification contract, and the agreed Quality Plan. The BBA's product conformity inspectors are a separate function to the Product Assessors/Project Managers who manage the initial certification process.
38. Surveillance inspections usually take place on a six-monthly basis. Where a BBA certificate is "confirmed", the inspection will usually be conducted by the foreign approval body concerned. The standard surveillance process is set out in detail in the Witness Statement of Shaun O'Neill (see in particular paragraphs 6-26. As Mr O'Neill describes it at paragraph 8:

*"The scope and purpose of a surveillance visit is to produce a snap shot in time at the time of the visit as to whether the product conforms or continues to conform to the BBA Quality Plan, which describes the manufacturing process for the product covered by a BBA Certificate. In essence, we choose key areas to investigate in order to identify any potential areas of non-conformity. If there were areas of non-conformity or non-performance from a previous surveillance visit then these were investigated as a matter of priority."*

39. Any areas of non-conformity are documented in a "Variation Report" and flagged to the Certificate Holder. The Certificate Holder will be required to sign this report, including any corrective actions required. The Quality Plan and Variation Report will then be sent to the Project Manager in charge of the overall certification of the product concerned. Non-compliance with corrective actions agreed as a result of variations identified in inspections could result in suspension of a Certificate.

## **Review and update of certificates / renewal etc**

40. Certificates are subject to a three-yearly review, designed to check the technical specification, manufacturing controls and site performance of the product to ensure the Certificate remains fit for purpose. If any areas of update are identified, the review may result in the Certificate requiring either a “*Technical*” or a “*Non-Technical*” reissue.
41. However, if any evidence comes to light of changes to the product specification or performance problems, e.g. as a result of factory surveillance or user complaints, an earlier review could be instituted, possibly resulting in Certificate suspension or withdrawal.

## **Sanctions**

42. In certain circumstances, the BBA might impose sanctions on Certificate holders. Certificate suspension is seen as a temporary or interim measure and takes place if the BBA became aware of problems in service of changes to the product not reported in advance by the Certificate holder. Suspension gives the Certificate holder the opportunity to respond to the issues raised.
43. A Certificate can be withdrawn if in-service problems are confirmed, if the product ceases to be manufactured, or if changes to the product cannot be accepted by the BBA. Certificate withdrawal can follow on from suspension if problems cannot be resolved to the BBA’s satisfaction.

## **The BBA certificates in issue**

44. The following BBA certificates are in issue in the Inquiry.

### **Kingspan Kooltherm K15**

45. There were five versions of the K15 certificate.

- (1) Certificate 08/4582 Issue 1 (27 October 2008)
- (2) Certificate 08/4582 Amended Issue 1 (6 April 2010)
- (3) Certificate 08/4582 Issue 2 (17 December 2013)
- (4) Certificate 14/5134 Issue 1 (8 October 2015)
- (5) Certificate 14/5134 Amended Issue 1 (16 November 2015)

### Reynobond 55 PF

46. Certificate 08/4510 dated 14 January 2008 in respect of Reynobond Architecture Wall Cladding Panels. This covered two grades of product: Standard and Fire Retardant.
47. The BBA understands that Arconic marketed the standard version as Reynobond 55 PF, although the Certificate does not cover a product named 'Reynobond 55 PF'.

### The certification of Kingspan K15

#### **Certificate 08/4582**

##### *Issue 1*

48. There were five versions of the Kingspan Kooltherm K15 certificate over time. Kingspan made an initial request for certification in October 2003. The steps taken in producing the first Certificate are contained in its Traveller Log.<sup>9</sup> The BBA Contract records that the product was intended "*for use as external thermal insulation on new and existing steel frame or masonry walls in conjunction with masonry or weathertight ventilated cladding systems, in domestic and non-domestic buildings up to 18m.*"<sup>10</sup>
49. Kingspan submitted a BS 8414 Test Report 220876 dated 8 December 2005 to the BBA. On this occasion, no initial assessment of the manufacturing of the product

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<sup>9</sup> Exhibit CH/5.

<sup>10</sup> The Certificate Contract (M134562) is exhibited at JA/33. The 'Product Scope and Summary of Certificate' at the Draft, pre-Certificate stage is in respect of "*domestic and non domestic buildings up to 18m*" (BBA00000205).

took place. This was because the factory had been approved already in relation to similar products and had showed satisfactory ongoing audit results, and so the BBA was satisfied that a further assessment was not necessary at this stage.<sup>11</sup>

50. Section 7.1 contained, in relation to a test to BS 8414-1:2002 on a system incorporating the K15, the following words: *“therefore displaying limited fire spread away from the fire source and that the product meets the criteria stated within BRE 135”*. Section 7.2 stated that: *“the product is classified as Class 0 or ‘low risk’ as defined in the documents supporting the national Building Regulations”*. The wording *“documents supporting”* was intended to refer to Approved Document B as well as the equivalent guidance documents covering the rest of the United Kingdom. The Certificate also contained wording directing that the Certificate holder/product manufacturer was to be contacted for advice with regard to use of the product in buildings with a floor more than 18m above ground level.

#### *Amended Issue 1*

51. An amended version of the Certificate was issued on 6 April 2010. In this version of the Certificate, section 7.1 contained a new reference to paragraph 12.7 of Approved Document B Volume 2 as follows (with the additional wording underlined):

*“The product is classified as Class 0 or ‘low risk’ as defined in the documents supporting the national Building Regulations. The product, therefore, may be used in accordance with the provisions of: England and Wales Approved Document B, paragraphs 12.5, 12.6 and 12.7, Volume 2 (see also Diagram 40)”*

52. The following wording was removed from section 7.1, as against the previous version of the certificate: *“therefore displaying limited fire spread away from the fire source and that the product meets the criteria stated within BRE 135”*.

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<sup>11</sup> Third Witness Statement of John Albon, paragraph 74.

53. A second issue of the Certificate was issued on 17 December 2013. The reference in the previous version of the Certificate to the product satisfying paragraph 12.7 of Approved Document B was removed. Section 8.1 continued to state that “*the product is Class 0 or ‘low risk’*”. The wording at section 8.2 was amended to read: “*the following specific cladding construction met the criteria as stated in BRE 135*”. The direction in the previous versions of the certificate that the certificate holder/product manufacturer was to be contacted for advice with regard to use of the product in buildings with a floor more than 18m above ground level was removed. A restriction “*on other thicknesses of the insulation to go above 18m*” was also removed.
54. On 11 July 2014, Brian Martin of the DCI.G emailed John Albon and others at the BBA regarding Certificate 08/452. He noted that paragraph 12.7 of volume 2 of Approved Document B provided that insulation materials used in external walls should be materials of limited combustibility, and that the certified product was not such a material. He acknowledged that this reference had been removed, but he queried whether the original certificate had been issued in error.<sup>12</sup> This was actioned by Jon Denyer, the Senior Scientist at the BBA: he discusses the investigation in his Witness Statement at paragraphs 175 to 208. John Albon responded to Brian Martin in an email dated 23 July 2014.<sup>13</sup> John Albon discusses the BBA’s response in his Third Witness Statement at paragraphs 187 to 206, including the steps that the BBA had already taken to ensure that in the future wording that was capable of misinterpretation was not used on Certificates. This included individual briefings to the staff affected; new generic arrangements for the training of BBA Project Managers; the appointment of a new level of management (Team Managers); and training. The BBA’s position is that the wording in the Certificate was not incorrect, but was capable of misinterpretation, and that the steps the BBA put in place at the time have reduced the risk of a recurrence.

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<sup>12</sup> This email is at BBA000003246.

<sup>13</sup> The discussion preceding the email is in BBA00000167. The email as sent is at BBA00000178.

## **Certificate 14/5134**

### *Issue 1*

55. On 8 October 2015, the Kingspan Kooltherm K15 product was re-certified under a different certificate number, Certificate 14/5134. The wording in section 8 of the certificate remained the same as the last issue of Certificate 08/4582 in 2013, except that three more construction types were added on steel framed substrates, together with an extended footnote (compliance wording suggested by Kingspan). The certificate continued to state that the product was Class 0 or “*low risk*”.

56. On 5 November 2015, NHBC raised a query in respect of the wording of Certificate 14/5134. This related to the reference to Class 0 in respect of K15. This email led to a discussion inside the BBA as to the appropriateness of their wording and a meeting with the NHBC to explore their concerns.<sup>14</sup> This led to a meeting with the NHBC at their offices on 13 November 2015. The BBA agreed to review the wording on page 1 and in section 8 of the Certificate. This led to an amendment of the Certificate.<sup>15</sup>

### *Amended Issue 1*

57. An amended issue of the certificate was issued on 16 November 2015. This classified the product to BS EN 13501-1. The wording stating that the product is Class 0 or “*low risk*” was removed.

## **The certification of Arconic Revnobond 55 PE**

### **Application and contract**

58. The Certificate contract was issued on 22 August 2006, signed by the applicant on 21 February 2007 and signed by the BBA on 23 March 2007.<sup>16</sup> The contract

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<sup>14</sup> Exhibit GR/2, at page 79.

<sup>15</sup> See the Witness Statements of John Denyer, the Third Witness Statement of John Albon, and the Witness Statement of Gayetree Ramkorun.

<sup>16</sup> Exhibit JA/6.

(including the obligations included in clause 7(a) requiring disclosure of full particulars relating to the product including any test data already available) was therefore completed before the BBA specifically asked Alcoa to supplement its response in respect of fire test data. The proprietary name provided by Alcoa was *Reynobond Architecture Panels*. The contract refers to Assessment Specification reference S341014 dated 22 August 2006.<sup>17</sup> There the product is named as Reynobond 55.

59. The BBA requested reaction to fire test data on 15 May 2007.<sup>18</sup> Alcoa responded on 25 May 2007. Draft Certificates were produced and comments on the content sought and received from Alcoa. In the course of this, Alcoa did not correct the reaction to fire classification of the cassette fixing method.

### **Information provided with the application**

60. CSTB report RA05-005B, dated 7 January 2005, relating to the Reynobond 55 PE cassette version, was available to Arconic at the time of the product's initial assessment. The first time that the BBA were made aware of this report was when Appendix O of Dr Lane's report was first provided to the BBA by the Inquiry.

61. Alcoa was aware at the time of the original assessment that the Cassette version should have been classified as E at the time of the initial BBA assessment. Alcoa also had a report at the same time, RA05-0005A, that showed that the rivetted version of the product was Class B. Only the latter report was submitted to the BBA.

### **Fire performance**

62. Section 6 of the Certificate deals with fire performance. It differentiates between the Standard and the FR product, and between different colours. This was based on the

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<sup>17</sup> Exhibit JA/7.

<sup>18</sup> Email from Ilamo Gregorian to Claude Wehrhe, 15 May 2007, Exhibit JA/8.

scope of the individual fire reports and was BBA policy for its Certificates at the time that the relevant Certificate was issued, and thereafter.<sup>19</sup>

63. It was stated that a metallic grey FR product achieved a fire propagation index of 0 when tested to BS 476-6: 1989 and a Class 1 result to BS 476-7: 1997. Taken together the BBA stated that this equated to Class 0.

64. The BBA had no data showing a Class 0 classification for the Standard product. This is clear from the Certificate.

65. The matter is complicated by Approved Document B. For situations where Class 0 is required, Diagram 40 also accepts a Classification of B-s3, d2 or better under EN 13501:2002. As defined in the Approved Document, a product achieving Class B-s2, d0 (such as the fire test result provided to the BBA indicated in respect of the Standard Reynobond product) could be used in all situations where a Class 0 result was deemed to be appropriate. The Reynobond Certificate states that, in relation to the Building Regulations for reaction to fire, the Standard panels may be regarded as having a Class 0 surface, as in respect of its permissible areas of use defined by Diagram 40, both versions of the product met the requirements for situations where Diagram 40 accepts the use of a Class 0 material.<sup>20</sup>

### **Cassette and rivetted installation**

66. The original Alcoa application form states that fire reports to BS 476-6 and BS 476-7 showed that “Reynobond 55” would achieve a Class 0 result. It does not differentiate between the cassette and rivetted versions of the product.

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<sup>19</sup> See the internal BBA email of John Albon to Hamo Gregorian dated 17 October 2007, “*I don't know what statement you are making on fire performance but it is now our policy that reaction to fire testing is colour specific (ie that if you have a fire test report for a particular colour then the results only apply to that colour, not the full range. You can't say that the whole range is Class 0 / Low risk, for example).*” (BBA document BBA00010696).

<sup>20</sup> Second Witness Statement of John Albon, paragraphs 63-73.



67. As referred to above, at the time of the application, Alcoa had fire reports showing that the cassette version had been classified as E. Alcoa subsequently only provided a fire report for the rivetted version, to Class B.
68. The BBA was not provided with any information that the fire performance of Reynobond was different depending on the installation method. This is despite this information being in Alcoa's possession.
69. Had this test data been in the BBA's possession, it would have had a material effect on certification.

### **Colour and colour changes**

70. The BBA understands that the Reynobond cladding had a smoke silver / pure white Duragloss surface coating. As noted in Section 6.1 of the Certificate, the fire test carried out was in respect of a grey / green Duragloss 5000 coating; at Section 6.4, it was confirmed that, *"These performances may not be achieved by other colours of the product and the designations of a particular colour should be confirmed by: England and Wales - Test or assessment in accordance with Approved Document B, Appendix A, Clause 7"*. The Reynobond cladding used in the refurbishment of Grenfell tower was not covered by a BBA Certificate as it did not cover the colours of the product used on the building.
71. There were colour changes to the core of Arconic Reynobond. These were not notified to the BBA.

### **Review of the Certificate**

72. The BBA was not advised in advance of any significant changes to the specification of the product during the lifetime of Certificate 08/4510.
73. On 16 February 2011, the BBA sent a letter to Alcoa asking for confirmation that there had been no changes to the composition of the product and a copy of the latest technical specification. No response was received relating to the composition.

74. As part of the second review, a letter was sent on 8 October 2013, asking more specifically about any changes to the “*design, specification context of use or other details that would invalidate the Certificate*”. No response was received to this.
75. A further request was made on 2 October 2014, and again, no reply was received.
76. Arconic was carrying out further fire testing around this time. The PE Rivetted product was tested and found to be Class C, not Class B (as stated in the BBA Certificate) on 22 September 2015. The BBA were not informed of this.
77. As for the third review, correspondence sent on 12 October 2016 asked for details of any changes to the composition of the product. Arconic responded, giving details of minor changes to the production process.
78. Between Arconic’s initial submission of information as part of the process leading to the issue of Certificate 08/4510 and June 2017, the BBA was never made aware of the existence of any additional fire reports relating to either the PE or FR products, or any variance between the cassette and rivetted versions of the products.

## **Surveillance**

79. The CSTB was already undertaking surveillance at the Merxheim manufacturing location. The BBA asked the CSTB to notify the BBA of any non-conformances. CSTB confirmed that they would inform the BBA of any major non-compliances.<sup>21</sup> It was noticed by the BBA, however, that the CSTB had not communicated with the BBA in respect of factory surveillance.<sup>22</sup> The BBA decided to take over surveillance arrangements in April 2015, which took place in 2016, 2017 and 2018. This was part of a general change of policy for ‘confirmation’ Certificates to use BBA inspection services.

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<sup>21</sup> Exhibit JA/15.

<sup>22</sup> See the Witness Statement of Valentina Amoroso at paragraph 51, and also BBA00008112.

## **Reissue Contract**

80. At the third review (SI60286), it was decided to re-issue the Certificate. Clause 10(a) of Reissue Contract S160903 dated 24 November 2016 required Arconic to disclose full particulars of and relating to the Subject including any test data or other relevant data.<sup>23</sup> This was signed by Arconic.<sup>24</sup> On 12 October 2016, Arconic was asked to provide details of any changes to the composition of the product. Arconic gave details of minor changes to the product process but did not provide the BBA with available fire test results that were in its possession that it had not provided to the BBA.<sup>25</sup> The draft Certificate was prepared and subsequently issued.

## **Events after the Grenfell Tower fire**

### **Arconic**

81. The BBA's dealings with Arconic after the Grenfell Tower fire are set out in the Witness Statement of Brian Moore.

82. It was, in fact, a BBC journalist who alerted the BBA to the fact that the core to the Reynobond PE product had been changed in 2015. Mr Moore therefore made contact with Arconic. Mr Wehrle of Arconic advised Mr Moore on 19 February 2018 that there had been a change in the colour of the PE core in May 2015 (para 16). On 28 February 2018, Mr Claude Schmidt of Arconic emailed Mr Moore. He wrote that the BBA auditor in September 2017 had been provided with binders containing the fire classification reports and test data for Reynobond PE and FR but that he was not interested in them.

83. After a number of emails between the BBA and Arconic, as well as a meeting between Mr Moore and the solicitor for Arconic at a train station followed up by further telephone calls, Arconic produced six fire classification documents relating

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<sup>23</sup> See email of Chris Maxey of the BBA to Nicolas Remy of Arconic, attaching the Reissue Contract, dated 24 November 2016: BBA00008181, BBA00008182, BBA00008183, and BBA00008189. See also the Second Witness Statement of John Albon at paragraph 98.

<sup>24</sup> Email of 25 November 2016: BBA00008187.

<sup>25</sup> See the email chain at BBA00008147 from October 2016.

to the FR version of Reynobond on 27 April 2018, but declined to provide documents relating to the PE version as it no longer formed part of the BBA Certificate. The BBA notes that these six fire classification reports were not referenced in Dr Lane's initial report at Appendix O.

84. The BBA Assessor in question who was referred to by Arconic was Mr Shaun O'Neill, who has provided a witness statement to the Inquiry after he provided a witness statement to the Metropolitan Police. He has also provided a witness statement addressing a number of the Inquiry's questions.<sup>26</sup> He denies that he was provided with documents relating to the fire performance of the products covered by Certificate 08/4510.

85. The BBA is very concerned by the significant discrepancy in the information about Reynobond's reaction to fire provided to it by Arconic before and after initial certification, and the information that was apparently in that company's possession at the relevant time.

### **Suspension of the Certificate**

86. Once the BBA became aware of the existence of additional technical information that had been withheld, it entered into a series of correspondence seeking clarification. As Arconic were unable to explain the failure to provide this information to the BBA's satisfaction, the Certificate was Suspended on 16 November 2018 and subsequently Withdrawn on 28 February 2019.

87. The BBA reiterates that if the information available to Dr Lane was made available to it either during the application process or afterwards, it would have been either issued or amended to reflect the distinction between the FR and PE core and the rivetted and cassette forms of the product.

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<sup>26</sup> 6 December 2019.

### **Subsequent audit of the BBA's processes**

88. Following the Grenfell Tower fire, the BBA was audited twice by UKAS, on 12 July 2017 and 15 August 2017. The first UKAS audit dealt solely with Certificate 08/4510. It comprised a review of the records associated with initial certification and Reviews. The second dealt with the processes leading to the reissue of Certificate 08/4510. Both reviews were successfully completed. Improvement actions which had been raised were confirmed in the next scheduled UKAS assessment visit between 15 and 23 January 2018.<sup>27</sup>

### **Initial expert evidence provided to the Inquiry**

89. In November 2018, the BBA was provided with advance disclosure of Appendix O of Dr Lane's report approximately a month before publication. The BBA was concerned about the discrepancy between the information that Dr Lane was provided with by Arconic, and the information that it was provided with by Arconic during the certification process. Dr Lane referred to a number of documents relevant to certification that the BBA has not seen. At the same time, the BBA had further documents that Dr Lane had apparently not seen.

90. In short, the BBA were not provided with relevant fire test results by Arconic either when Reynobond was originally certified or when its certificate was subsequently reviewed. These reports listed at paragraph 39 of the First Witness Statement of John Albon are:

RA05-005B for 55 PE Cassette  
RAI 1-0032 for 55 PE Rivetted  
RAI 1-0244 for Architecture PE Cassette  
RAI 3-0333 for 55 PE  
RAI3-0333 for 55 PE Cassette  
RAI 4-0339 for 55 PE Rivetted

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<sup>27</sup> The reports are exhibited at Exhibit JA/5.

RAI5-0200 for 55 PE Riveted translucent core  
RAI5-0200 for 55 PE Rivetted black core  
RAI5-0201 for 55 PE Cassette  
RAI5-0201 for 55 PE black core.

91. Following the early release of Appendix O, the BBA produced two witness statements, from Brian Moore and John Albon. These discuss the BBA's reaction to the discovery that there were further certificates that the BBA was not aware of.

### **Changes adopted by the BBA**

#### **The wording of BBA certificates**

##### The front page

92. Dr Lane has criticised the generality of the wording on the front page of the Arconic Reynobond Certificate and its subsequent re-issues: in summary, it is suggested that the wording on the first page of the Certificate is inaccurate without reading in detail the actual contents of the Certificate.

93. The front page of the Certificate references the more detailed content within the body of the Certificate itself. As noted above, a Certificate is intended for designers as opposed for general consumption. The front page references the detailed content inside. It would not be expected that a designer or specifier would rely on the front page material alone and the statements on the front page specifically direct the reader to the more detailed sections within the Certificate.

##### References to Class 0

94. The wording of the BBA certificate reflects the approach adopted in Approved Document B, which allows for different pathways to be adopted for a material to be considered appropriate for use on a dwellinghouse above 18m in height. This is discussed by John Albon in his First Witness Statement at paragraph 20. Approved Document B refers throughout to both national and European frameworks for testing,

without stating which one takes precedence. This duality exists within the context of Diagram 40 in Approved Document B. In Appendix F to her Phase 1 Report dated 12 April 2018, Dr Lane criticises the existence of “*differing performances in the statutory guidance*” as a “*critical problem*”: F1.1.4. She notes at F5.1.1 that “*there are multiple methods in the National framework and again in the European framework for classifying materials as either Class A 1, A2, Class B, Class C, Class 0, Index I is less than 20, or better*”.

## **Surveillance**

95. The BBA had asked the CSTB to inform them of any major non-conformities. In 2015, the BBA decided to carry out its own surveillance. This was a general policy across all products. Shaun O’Neill’s witness statement discusses the findings of such surveillance.

## **Training**

96. The BBA has always employed suitably qualified and experienced individuals. There is a process of initial induction followed by on the job training. A new member of staff is assigned a more experienced Project Manager to guide them, alongside the supervision of their line manager. The BBA also provides formal training by way of presentations by experienced staff. A significant amount of technical staffs’ time is devoted to building technical knowledge. The effectiveness of the BBA’s training and competence of the staff involved is examined by UKAS.<sup>28</sup> The BBA’s witness evidence shows that this training and continuing development has evolved over time.

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<sup>28</sup> Third Witness Statement of John Albon, paragraphs 1-14.

## **Responses to proposals and the BBA's own suggestions for legislative change**

### **Should the fire test data and classification reports for a product be provided as part of a certificate?**

97. A Certificate is intended to be a standalone document. It should contain the information required by the designer using it without requiring recourse to further documents. It is important that a potential user of a Certificate reads and understand the Certificate in full. The BBA's concern is that supplying the underlying data with the Certificate may make them overly long, difficult to use and confusing. The BBA also believes that most specifiers will not understand the full content of a fire test report. Fire data is a key section, but it is only one part of a Certificate. The BBA does now reference fire test reports on which the Certificate content is based. This enables a specifier to make their own assessment of the results.<sup>29</sup>

### **Should there be more than a contractual obligation on product manufacturers to provide accurate and full information that is not misleading?**

98. As part of its submissions to the Independent Review of Building Regulations and Fire Safety led by Dame Judith Hackitt, the BBA highlighted the importance of industry whistle-blowers and the lack of an effective mechanism for whistle-blowers to raise their concerns about building safety. The BBA has also set out in correspondence with the Ministry of Housing, Communities and Local Government its proposals to strengthen reporting obligations through legislative changes.

99. The relationship between the BBA and a product manufacturer is contractual. The obligation on the manufacturer to provide accurate information to the BBA that is not misleading either by its content or by omission is contained in the contract. This relevant part of the contract with Alcoa dated 23 March 2007 is included in this Written Statement above.<sup>30</sup>

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<sup>29</sup> See the Third Witness Statement of John Albon, paragraphs 94 to 98.

<sup>30</sup> Paragraph 28 above.



100. The history of non-disclosure by Arconic has triggered a review of the BBA's contracts. The BBA's contracts have procedures for suspension or withdrawal of the Certificate, or reduction of the scope of the Certificate. The Certificate in respect of Reynobond was initially suspended before being withdrawn by the BBA.

101. The BBA has previously proposed that there is a need for legislative change in order to bolster the obligation of a product manufacturer to provide accurate and up to date information. The follow three issues should be addressed by any legislative proposal.

- (1) There should be an obligation that the third-party certification provider is provided with accurate or comprehensive information during the application by the product manufacturer.
- (2) The third-party certification provider should be updated with new and additional information concerning the subject of certification and its suitability for use, if a change has taken place.
- (3) Whistle-blowers should be free to raise their concerns about building safety without the concern that they will lose their jobs.

#### Obligation to provide accurate information

102. The first proposal is to consider enhancing the contractual obligation of disclosure during the application process to one analogous with a policy of insurance. The Insurance Act 2015 requires a duty of disclosure before the contract is entered into that covers "*every material circumstance which the insured knows or ought to know.*"<sup>31</sup> A proposed new legal duty would require the manufacturer to disclose to the certification body all information that the manufacturer knows or ought to know that may relate to the fire or structural performance or other safety critical elements of a relevant product. It could also impose a duty analogous to that of fair presentation.<sup>32</sup>

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<sup>31</sup> Section 3(4) of the Insurance Act 2015.

<sup>32</sup> Section 3 of the Insurance Act 2015. Section 3(5) of the Insurance Act 2015 should not be applicable in this setting due to the safety-essential nature of the certification exercise.

103. The second proposal for consideration is to impose a criminal sanction on a company which has failed to provide information or which has provided false or misleading information. One option would be to introduce a new criminal offence of failing to disclose information that is relevant to a product certificate, by analogy with section 3(a) of the Fraud Act 2006,<sup>33</sup> that is, fraud by failing to disclose information. The obligation to provide this information could as well be modified by a provision “*so far as is reasonably practicable*”, as found in other health and safety legislation such as section 2 of the Health and Safety at Work Act 1974. Whether dishonesty should be an element of this offence is a matter for consideration.

#### Ongoing obligations in respect of certified products

104. The BBA proposes that a duty should be imposed on the product manufacturer to disclose information as to any changes to the certified product that might affect the accuracy or veracity of any of the information on the Certificate. This would be subject to the same “*so far as is reasonably practicable*” obligation referred to above. As set out above, it is a question for consideration whether this duty should be subject to criminal sanctions if it is breached.

#### Whistle-blower protection

105. The businesses involved in the manufacturing and distribution of products are the primary source of information on product safety. Reporting by whistle-blowers from within companies is especially important given their proximity to the manufacturing process. It is already a very important source of information for the BBA in ensuring that its Certificates are, and remain, accurate.

106. A number of disclosures by employees are already protected under the Employment Rights Act 1996, which protects employees for a range of qualifying disclosures under section 43B(d).<sup>34</sup> Already, the disclosure of information, in the reasonable belief of the worker making the disclosure, that could show “*that a person has failed,*

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<sup>33</sup> “*dishonestly fails to disclose to another person information which he is under a legal duty to disclose*”.

<sup>34</sup> This provision was inserted by the Public Interest Disclosure Act 1998.

*is failing or is likely to fail to comply with any legal obligation to which he is subject”, “that the health or safety of any individual has been, is being or is likely to be endangered” or that information is being “deliberately concealed” is protected.<sup>35</sup> This protection can be explicitly extended to employees disclosing information to third-party certifiers.*

107. Whistle-blower legislation has an important role in promoting compliance with product safety requirements.<sup>36</sup> One consequence of these provisions is that workers are encouraged to report concerns internally without fear of reprisal. This can help to promote the change in culture in the construction industry that the Hackitt Final Report recommended. Overall, the implementation of whistle-blowing provisions in the Employment Rights Act 1996 has been positive in moving towards responsible governance in organisations.<sup>37</sup>

#### **Can certification companies rely on older fire safety certificates?**

108. One of the suggestions that Dr Lane has made is that certification companies such as the BBA should not rely on fire safety test results and certificates that are more than five years old.

109. The BBA operates a system of surveillance to ensure that the manufacturing process and the composition of a material that has received a certificate has not materially changed.

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<sup>35</sup> Employment Rights Act 1996, section 43B(1)(b), (d), (f).

<sup>36</sup> See, for example, EU Directive 2019/1937 which will afford whistle-blower protection in respect of breaches of EU law relating to product safety. At (8) in the preamble to this Directive, it is noted that, “*As regards the safety of products placed on the internal market, businesses involved in the manufacturing and distribution chain are the primary source of evidence, with the result that reporting by whistleblowers in such businesses has a high added value, since they are much closer to information about possible unfair and illicit manufacturing, import or distribution practices regarding unsafe products.*”

<sup>37</sup> Jeanette Ashton, ‘15 years of whistleblowing protection under the Public Interest Disclosure Act 1998: Are we still shooting the messenger?’ (2015) *Industrial Law Journal* 44(1), 29-52; David Lewis, ‘Ten Years of Public Interest Disclosure Act 1998 Claims: What Can We Learn from the Statistics and Recent Research?’ (2010) *Industrial Law Journal* 39(3), 325–328.

110. Where the regulatory and / or testing requirements have not changed and the composition and manufacturing process of a product has not changed, the relevant performance of a product can be expected to be unaltered.
111. The BBA does have a policy, however, of not normally accepting test reports for new assessment which are more than five years old.

**Should ‘unsuccessful’ fire tests be provided by product manufacturers?**

112. A fire test does not, by itself, show if a product is ‘unsuccessful’: it is only in relation to the relevant standard that it can be said that the product does not meet that standard. Testing on developmental versions of a product have no relevance to classification. If a particular product has failed to meet a testing standard, but the design is amended so that the product then meets that standard following a further test, the original ‘failed’ test may not be relevant. A product manufacturer may test a product even though it is aware that the product will fail the test so as to understand better its properties for the purpose of further development. Further, if a product fails to meet a certain standard, there is no benefit in giving the details of where that product has failed on the face of the Certificate: it is sufficient to confirm that the product does not meet those requirements.
113. In the specific case of full-scale fire tests to BS 8414, the results are specific to the precise construction tested. In this context, a failed result has no significance to Certification, as the construction in question may not be used above 18m.
114. If a final version of a product has been tested a number of times with different results, the BBA would expect to be provided with these tests under clause 7 of its contract with the applicant product manufacturer, as being “*test data already available*” or “*new or additional information concerning the Subject or its suitability for the Specified Use*”.

**Do fire test results properly reflect real world conditions?**

115. This is a question that Dr Lane has posed and no doubt the Inquiry will consider very carefully. The BBA notes the differences in the testing regimes.
  
116. Ultimately, however, this is not altogether a matter for the BBA. The BBA interprets fire test results applying the Building Regulations and relevant guidance so as to render appropriate Certificates. It is outside the remit of the BBA, as an independent certifier, to provide a value judgment on the respective merits or worth of the testing methods.

## **Conclusion**

117. The BBA has engaged with the Hackitt review and with government and industry initiatives to improve the flow of intelligence about malpractice to regulators and law enforcement. It has also advanced its own proposals as to how to improve the regime of construction product certification so as to reinforce the obligations on product manufacturers to give full and continuing disclosure of information that might affect the content of a product Certificate. The BBA has carefully considered the Phase 1 Report and has made a number of changes to the processes and Certification wording as a result.
118. The BBA has considered the proposals made by Dr Lane and has attempted to respond constructively to them. The way in which product certification by the BBA takes place has changed since 2007, and the BBA will continue to improve its processes. If there are any specific areas that the Inquiry want the BBA to consider and to respond to, then the BBA will do so.
119. There must not be another tragedy like the fire at Grenfell Tower. The BBA will do what it can to assist the Inquiry.

**TAYLOR WALTON LLP**

**DAVID SAWTELL  
TOM VAN DER KLUGT  
39 ESSEX CHAMBERS  
81 Chancery Lane  
London  
WC2A 1DD**

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