

OPUS 2

INTERNATIONAL

Grenfell Tower Inquiry

Day 67

November 9, 2020

Opus 2 International - Official Court Reporters

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1 Monday, 9 November 2020
 2 (10.00 am)
 3 SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to
 4 today's hearing. Today we're going to hear further
 5 opening statements, beginning with counsel for some of
 6 the bereaved, survivors and residents.
 7 So I'm going to ask, without further ado, to hear
 8 from Mr Stein on behalf of his clients. Or is it
 9 Mr Williamson going first?
 10 MR WILLIAMSON: Mr Williamson, please, if I may.
 11 SIR MARTIN MOORE-BICK: Yes, of course. I'm sorry,
 12 Mr Williamson, I had both you and Mr Stein down on my
 13 running order and his name happened to come first, but
 14 I'm very happy that we should hear from you.
 15 MR WILLIAMSON: I thank you, sir. That's the alphabetical
 16 discrimination which those with W surnames always
 17 suffer, I'm afraid. Such is life.
 18 SIR MARTIN MOORE-BICK: I'm afraid you're right.
 19 Opening statement on behalf of BSRs Team 2 by MR WILLIAMSON
 20 MR WILLIAMSON: Good morning, sir, Ms Istefhan and Mr Akbor.
 21 In these oral submissions, I will be dealing broadly
 22 speaking with what went wrong with the production,
 23 marketing, testing and certification of the relevant
 24 products, and Mr Stein will discuss the broader context.
 25 The fundamental issue for Module 2 is how unsafe and

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1 dangerous products came to be used by those concerned
 2 with the Grenfell Tower refurbishment. The evidence of
 3 how dangerous those combustible cladding materials were
 4 is irresistible. Indeed, since the fire at Grenfell, we
 5 continue to see images of buildings engulfed in flames,
 6 such as the November 2019 fire which overwhelmed
 7 The Cube, a hall of residence at Bolton University.
 8 Any assertion that such products could ever have
 9 been appropriate for use at Grenfell must be scrutinised
 10 against the weight of the evidence. This reveals
 11 an industry in which Arconic, Celotex and Kingspan were
 12 content to push hazardous products into the marketplace
 13 and sought to market them dishonestly. These products
 14 should have been safe, they should have been tested and
 15 certified rigorously, and they should have been marketed
 16 in an honest and transparent fashion. None of that
 17 happened. The testing and certifying bodies, such as
 18 the BRE and the BBA, were quite happy to go along with
 19 this process.
 20 The marketplace was itself a place of astounding
 21 ignorance. In particular, many of those involved did
 22 not seem to know or care what was meant by terms such as
 23 "limited combustibility" or "class 0". The
 24 manufacturers were of course only too happy to exploit
 25 this ignorance for their own commercial gain. At all

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1 times they concentrated on the route to market, not the
 2 route to safety.
 3 As early as 2004, Arconic were well aware that their
 4 Reynobond PE cassette product had failed a CSTB test.
 5 Could I please have up {ARC00000536/7}, please. One
 6 sees there the report that at 630 seconds there was
 7 ignition inside the cassette, by 700 seconds there was
 8 large ignition, and that the tests were stopped after
 9 850 seconds, with the results not being usable. It
 10 should be noted that this cassette product should be
 11 contrasted with the riveted Reynobond PE product, which
 12 did achieve Euro class B.
 13 Thank you, that's all I need with that document.
 14 Two years after that, Kingspan began to market their
 15 K15 product. However, their test experience was as
 16 disastrous as Arconic's. A 2008 test reported as
 17 follows, and that's {KIN00020713/3}, please. One sees
 18 there the report that the phenolic was burning on its
 19 own steam, that the BRE had to extinguish the test early
 20 because it was endangering setting fire to the
 21 laboratory, it burnt very ferociously and gave the top
 22 cavity barrier a serious hammering, and there was a slim
 23 chance that it may have held up long enough for the crib
 24 to start burning down and that this test would have been
 25 successful.

3

1 Thank you for that.
 2 Despite this, Kingspan managed to persuade the LABC
 3 to issue a document signifying its approval of K15
 4 Kooltherm in March 2008. However, it should be noted
 5 that this approval was, read carefully, limited in its
 6 ambit, stating that, when used as part of an overall
 7 wall construction in line with the above and reflecting
 8 the standards set out below, Kooltherm K15 can be deemed
 9 acceptable as the insulation element of the system,
 10 subject to any limits set out or referred to within the
 11 certificate. Kingspan were delighted with this
 12 certification, and decided to stop testing. What
 13 mattered was not safe products or thorough
 14 certification, but getting ahead of their rivals in the
 15 marketplace.
 16 Could I please have up {KIN00005382}. That's
 17 an internal report by Mr Heath of Kingspan, where he
 18 notes that, following the success of achieving the LABC
 19 accreditation, K15 could now be installed above
 20 18 metres, but they should cease further tests, and that
 21 they were now putting pressure on what was described as
 22 "other component suppliers" of this method of
 23 construction, that is to say their rivals in the field.
 24 Thank you for that. That can go down now.
 25 Those other component suppliers were up to the same

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1 tricks and pulling the wool over the eyes of their
2 supposed guardians in the same way. Arconic had
3 approached the BBA in 2007 to obtain a certificate for
4 its Reynobond product, providing only the riveted system
5 test report at Euro class B. In failing to disclose the
6 cassette system test report, Arconic set out to mislead
7 the BBA. This led to the 2008 BBA certificate stating
8 that a "standard sample of the product" achieved Euro
9 class B and that the product might be regarded as having
10 a class 0 surface. This classification was based upon
11 the BBA mistakenly equating the Euro norm with the
12 British national class 0, in circumstances where Arconic
13 submitted no test reports at all to prove that Reynobond
14 PE achieved this class.

15 Arconic were well aware that this certificate should
16 never have been issued. Mr Wehrle knew the 2004 test on
17 Reynobond PE cassette was not a rogue result but
18 reflected the product's fire performance. In
19 an internal email in March 2010, he commented -- and
20 could I please have up [MET00064988/125]. One sees
21 there Mr Wehrle saying that Larson had based themselves
22 on the cassette tests. He said:

23 "Contrariwise to what might be expected, the above
24 type of test is much less favourable for the composite
25 than for riveted products.

5

1 "And Reynobond PE in cassette form doesn't obtain
2 level 'B' either!

3 "Having said that, this shortfall in relation to
4 this standard is something that we have to keep as VERY
5 CONFIDENTIAL!!!!"

6 Thank you.

7 Arconic persisted in this deception for the next
8 decade, covering the period in which its products were
9 specified for and used at Grenfell. For example, in
10 a 2016 internal email, Mr Remy emailed Mr Wehrle:

11 "I really feel like I'm dealing with something
12 that's not clear cut. They're coming to do a review and
13 I'm informing them that what they're coming to review
14 has been completely modified without them knowing
15 anything about it."

16 To which Wehrle responded:

17 "We'll talk about the situation before distribution
18 in order to alleviate this bad impression for you
19 [smiley face]."

20 Arconic's abuse of the testing and certification
21 regime extended beyond their conduct with the BBA. They
22 manipulated the testing regime to obtain high
23 classifications for their products, prioritising sales
24 over safety.

25 Moreover, Arconic were well aware that their product

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1 was dangerous -- their own word -- on high-rise
2 buildings. In July 2009, Wehrle emailed Arconic
3 management regarding a high-rise fire which had occurred
4 in Bucharest. Flames had spread along the façade made
5 up of ACM PE panels. He said:

6 "Here are some pictures to show you how dangerous PE
7 can be when it comes to architecture."

8 Mr Scheidecker, then marketing and sales director,
9 commented it was clear it was ACM in PE.

10 Likewise, in 2016, just 18 months before the
11 Grenfell fire, Wehrle emailed the French sales team
12 about a news story to say:

13 "We were very lucky ... The Wolleck Tower [where
14 a fire had occurred] is in Reynobond PE 10 metres from
15 a fire ... fortunately, the wind didn't change
16 direction, but ... we really need to stop proposing PE
17 in architecture! We are in the 'know', and I think it
18 is up to us to be proactive ... AT LAST."

19 Selling the product was all that mattered to
20 Arconic, and they were more than happy to mislead their
21 customers. Information was only to be supplied in
22 a selective form, and then only to customers who
23 specifically pressed for it. For example, in July 2010,
24 Wehrle assured a customer that he could rely on the
25 European certificate for the Reynobond PE riveted

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1 system, class B at that time, as applicable to the
2 cassette system also, because the riveted system
3 performed worse than the cassette system in terms of
4 fire performance. Wehrle was clearly lying about the
5 fire performance of the Reynobond PE cassettes.

6 In 2013, an internal Arconic email stated that:

7 "After talking with Claude [Wehrle], we ... agreed
8 that we must not write anything relating to fire
9 regulations which has not been validated or issued by
10 [Arconic] technical [department].

11 "Why that? After showing ... documents that they
12 sent to specifiers and customers ... [Wehrle] advised me
13 not to do the same since these docs involve too much our
14 responsibility on a 'touchy' subject.

15 "So I pass this info to the whole French sales dream
16 team so as to avoid potential mistakes!"

17 What might those potential mistakes have been?
18 Well, again, Arconic knew internally that something was
19 very wrong, but certainly did not let that knowledge
20 escape from their company. Only a month after this
21 internal email, Ms French, Arconic's UK sales manager,
22 informed her colleagues -- could I please have up
23 [MET00053158_P10/153]. She told them:

24 "Just to make you aware I sent this link over to
25 Claude W [Wehrle] last week concerning a BBC report

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1 covering a fire in UAE using ACM.
 2 "Richard Geater - Alucobond Rep in the UK is
 3 emailing all fabricators explaining that Alucobond is
 4 now using a fire core only as [standard]."
 5 The attached email [MET00053158_P10/153] from
 6 Mr Geater dealt in graphic terms with the situation in
 7 the UAE, and said that:
 8 "The trouble is that the cladding system here in
 9 particular but all over in general, using PE, is like
 10 a chimney which transports the fire from bottom to top
 11 or vice versa within shortest time ...
 12 "... We have taken random samples and done a live
 13 test in Bangkok in front of architects, they almost
 14 fainted. Indeed, this panel is a whole cheat and burns
 15 fiercely."
 16 Thank you.
 17 Ms French, however, was at pains to reassure
 18 Arconic's UK customers that there was nothing to worry
 19 about, telling them soothingly in May 2013 -- and could
 20 I please have up {CEP00049717}, she told them:
 21 "As you may be aware there had been some reports via
 22 BBC concerning a fire on a building in UAE regarding
 23 ACM.
 24 "As a business we are aware of this report and our
 25 technical team are following the details, but in the

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1 meantime I wanted to add some thoughts that may help if
 2 you get questions ...
 3 "Regarding the supply of Reynobond in the UK, as you
 4 know we supply both PE and FR core and can control and
 5 understand what core is being used in all projects due
 6 to the controlled supply route we have. By only
 7 supplying Reynobond to a very small group of Approved
 8 Fabricators and working very closely with them on all
 9 projects we are able to follow what type of project is
 10 being designed/developed and then offer the right
 11 Reynobond specification including the core.
 12 "At this stage we will continue to offer both PE &
 13 FR core ..."
 14 Arconic, however, were well aware of the distinction
 15 in performance between Reynobond PE and FR and their
 16 suitability, or lack of it, for high-rise buildings.
 17 In October 2015, for example, Wehrle replied to
 18 photos shared with him by a colleague of the aftermath
 19 of a fire at a building in China with FR panelling. He
 20 said:
 21 "FR showed a very good behaviour. In PE, the fire
 22 would have spread over the entire height of the tower,
 23 while in this case only the area near the fire is
 24 affected. Long Live FR [smiley face]."
 25 Despite this, Ms French never proposed that FR

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1 should be used at Grenfell. In fact, in these
 2 negotiations, she appears not to have discussed the core
 3 of the product at all. Nor did Arconic change its
 4 policy of selling Reynobond PE for high-rise
 5 architectural applications except in countries where the
 6 regulatory regime required it. Arconic therefore
 7 exploited weaknesses in national regulations to continue
 8 selling products for applications it knew would be
 9 dangerous. Thus the minutes of a meeting in 2011
 10 between Wehrle and representatives of a company called
 11 3A record:
 12 "For the moment, even if we know that PE material in
 13 cassette has a bad behaviour exposed to fire, we can
 14 still work with national regulations who are not as
 15 restrictive."
 16 In 2013, Celotex decided that they wished to sell
 17 their products into this market. They also were well
 18 aware of the fire safety problems to which this would
 19 give rise above 18 metres, and as to the weakness of the
 20 testing and certification system. In November 2013,
 21 Mr Roper sent an internal email outlining a possible
 22 strategy, and could I please have up {CEL00000716}.
 23 He asked:
 24 "... do we take the view that our product
 25 realistically shouldn't be used behind most cladding

11

1 panels because in the event of a fire it would burn?
 2 "What [Kingspan] have done extremely well is say
 3 very little but build confidence if challenged by having
 4 fire barrier manufacturers showing tests with K15,
 5 achieve BBA validation and subsequently gain LABC
 6 approval. There is always the chance they do have the
 7 piece of paper in the top drawer from somebody that
 8 states for use with any system but I doubt it."
 9 Thank you.
 10 These companies therefore both competed with each
 11 other, but also built upon what others were doing.
 12 Where Kingspan led, others followed. Indeed, Celotex
 13 emulated Kingspan assiduously when it came to testing
 14 and marketing their product.
 15 In February 2014, the first BS 8414 test was carried
 16 out for the Celotex product, as to which Mr Clark of the
 17 BRE comments in his witness statement that the test was
 18 terminated early due to excessive flaming and
 19 flame spread. As such, the test was terminated on the
 20 grounds of safety.
 21 In May 2014, Celotex managed to secure a pass on
 22 a second BS 8414 test, and the way ahead was clear: to
 23 sell their product into an unsuspecting market.
 24 According to the Celotex witness evidence,
 25 a 6-millimetre magnesium oxide board was placed behind

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1 the cladding, and this was used in conjunction with
 2 a 12-millimetre thick layer of the cladding. In
 3 a chilling PowerPoint presentation entitled "Above
 4 18 metres", in May 2014, the results of the BS 8414 test
 5 and re-test of FR5000 were recorded, together with what
 6 was said to be market research which had been carried
 7 out, showing that nobody understood the test
 8 requirements, architects asked if it could be used above
 9 18 metres, to which the answer was going to be yes, and
 10 that building control had hugely differing levels of
 11 understanding of the subject.

12 Shortly after this, Celotex issued their datasheet
 13 for RS5000, which asserted that, with this product, you
 14 were specifying an insulation board that, and could
 15 I please have up CEL000 ...

16 SIR MARTIN MOORE-BICK: Mr Williamson, I'm sorry to say we
 17 have lost your sound. Oh, we have lost you altogether
 18 now. I will suggest that we pause there until we can
 19 resume on the usual footing.

20 MR WILLIAMSON: Sir, I'm here.

21 SIR MARTIN MOORE-BICK: Oh, good. Now, you had just --

22 MR WILLIAMSON: I was just about to take you to document --

23 SIR MARTIN MOORE-BICK: RS5000.

24 MR WILLIAMSON: Exactly right.

25 SIR MARTIN MOORE-BICK: We have got you back, so would you

13

1 like to pick it up there.

2 MR WILLIAMSON: Yes, indeed. I'm sorry about that, sir.

3 SIR MARTIN MOORE-BICK: Thank you very much.

4 MR WILLIAMSON: So the document is {CEL00000411}, which
 5 recorded that this was the first PIR insulation board to
 6 successfully test to 8414, to meet the criteria set out
 7 in BR 135, and therefore is acceptable for use in
 8 buildings above 18 metres, and was also said to have
 9 class 0 performance throughout the entire product.

10 Thank you.

11 There was no suggestion in this document of the
 12 failed test or of any of the other uncertainties of
 13 which Celotex were well aware. Moreover, the assertion
 14 of class 0 fire performance throughout the entire
 15 product was itself misleading, as it was not class 0
 16 throughout, since class 0 only related to the spread of
 17 fire on the surface.

18 Furthermore, the standard for insulation in
 19 a building above 18 metres was higher than class 0; it
 20 was limited combustibility. Celotex were well aware of
 21 the confusion within the industry between class 0 and
 22 limited combustibility, and used it to their advantage.

23 This was consistent with the approach which Celotex
 24 took to the market in general, and in their dealings
 25 with Harley relating to Grenfell in particular. In

14

1 January 2015, in response to a query from
 2 Mr Anketell-Jones, Mr Roome of Celotex advised that he
 3 had attached the 12-page BS 8414 report showing the
 4 build-up and components used, and he had also attached
 5 a datasheet confirming the product as having a BS 476
 6 test, which gave it a class 0 performance, in addition
 7 to the BS 8414 test. However, if the full 32-page
 8 BS 8414 test report had been supplied, this would have
 9 revealed worrying images of extensive charring and fire
 10 damage, as well as the extra layer of magnesium oxide
 11 that had been employed.

12 Nobody should have been surprised at the extensive
 13 flaming, charring and fire damage from these insulation
 14 products. Both the Celotex RS5000 and the Kingspan K15
 15 were rigid foam products whose liquid flammable
 16 components were changed into a rigid foam by the use of
 17 a blowing agent which was itself extremely flammable,
 18 pentane.

19 At this same time, and while Grenfell was being
 20 designed and built, Arconic were likewise cynically
 21 aware that their products were highly dangerous. Thus,
 22 Wehrle advised his colleagues in the summer of 2015 that
 23 his opinion was that:

24 "... PE is DANGEROUS on façades, and everything
 25 should be transferred to FR [fire resistant] as a matter

15

1 of urgency. The NFP92 standard should have been
 2 discontinued over 10 years ago! This Opinion is
 3 technical and anti-commercial, it seems."

4 These three companies -- Arconic, Celotex and
 5 Kingspan -- were in fierce competition, but also learned
 6 deadly tricks from one another. Their products were
 7 dangerous. Tests and testing and certifying bodies were
 8 seen as something to be gained and got round, not
 9 engaged with honestly. Once successful results were
 10 obtained, by fair means or foul, any failed tests or
 11 contrary data were ruthlessly suppressed. Then the
 12 products were marketed hard and misleadingly. The fact
 13 that the industry was ignorant of many of the issues
 14 relating to terms such as "class 0" and "limited
 15 combustibility" was both known and exploited.

16 Arconic, Celotex and Kingspan were the principal
 17 wrongdoers, but they operated in a very murky world.
 18 Other corporate bodies were also at fault. In
 19 particular, Simco knew that the rig it was instructed to
 20 build for the 2014 BS 8414 test differed significantly
 21 from the drawings. They were, therefore, providing
 22 practical assistance to Celotex in manipulating the
 23 test.

24 Siderise knew its client, Harley, had recently
 25 carried out the defective installation of firestopping

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1 products at Waylands House. It then supplied
2 cavity barriers to Harley for use on Grenfell in 2015.
3 Siderise failed to ensure that no similar issues
4 occurred with the installation of its products there.

5 SIG supplied RS5000 and some K15 for Grenfell, even
6 though they seemed to have had major doubts internally
7 as to the safety of these products. Indeed, Mr Stearne
8 of SIG observed in an email to Celotex in April 2015:

9 "Never has the expression 'smoke and mirrors' been
10 more appropriate. I think I'll adopt a version of
11 caveat emptor and if specifically challenged use the
12 rock fibre options. If I'm not challenged it will be
13 RS5000".

14 Panel Systems Limited supplied glazing and infill
15 panels which contributed significantly to the tragic
16 events of the Grenfell fire. They failed to pay any
17 attention to the suitability, or lack of it, of their
18 class E rated products.

19 I turn now to the testing and certifying bodies who
20 had very important responsibilities, not merely to the
21 industry but also to society at large.

22 They should have been rigorously independent. Their
23 testing needed to be thorough and exacting. The results
24 of their tests should have been open to full public
25 scrutiny, and the testing bodies ought always to have

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1 kept themselves suitably distant from those who sought
2 their services.

3 In fact, the BRE, the BBA, and others signally
4 failed to discharge these responsibilities adequately.
5 They were far too close to their customers. Testing was
6 inadequate and certification haphazard.

7 It is not as if they were unaware of the risks.
8 Indeed, in May 2013, at a crucial point in the
9 development of the Grenfell design, the BRE circulated
10 a newsletter with the headline:

11 "The latest high profile fire in the UAE has
12 reaffirmed the need for properly approved, installed and
13 maintained cladding systems in high-rise buildings."

14 By their failures, the testing and certification
15 bodies contributed significantly to the Grenfell
16 disaster.

17 In January 2008, the BBA issued its certificate
18 08/4510 for Reynobond ACM. This provided, in effect,
19 a Kitemark for Arconic's product, but it was a deeply
20 misleading document.

21 Crucially, the BBA did not consider the fact that
22 the tests were carried out on two types of cores used in
23 the ACM cladding and their differing smoke production
24 when reacting with fire. The BBA also failed to
25 identify whether the fixing system used was riveted or

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1 cassette.

2 Moreover, although, as the BBA were aware, Reynobond
3 ACM panels came in at what was described as an almost
4 unlimited diversity of surfaces and with an extensive
5 selection of colours and gloss levels, the 2008
6 certificate contained only the following note:

7 "These performances may not be achieved by other
8 colours of the product and the designations of
9 a particular colour should be confirmed by test or
10 assessment in accordance with Approved Document B."

11 This note was clearly inadequate to alert potential
12 customers to the fact that, for versions of the product
13 with other colours, the reassurance apparently offered
14 by the certificate was meaningless.

15 It was not only Arconic who benefitted from the
16 BBA's benevolence. Later that same year, the BBA issued
17 its certificate 08/4582 for Kingspan's Kooltherm K15,
18 which stated at section 7, "Behaviour in relation to
19 fire":

20 "This product is classified as class 0 or low risk
21 as defined in the documents supporting the national
22 Building Regulations. The product may therefore be used
23 in accordance with the provisions of Approved
24 Document B."

25 This same section 7 also stated that the tested

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1 system included 60 millimetres thick board "mechanically
2 fixed to a non-combustible substrate". This substrate
3 was in fact a masonry wall. Kingspan had insisted that
4 the certificate refer to non-combustible substrate so
5 that it could make the claim that K15 could be used with
6 any non-combustible substrate and not just a masonry
7 wall. Crucially, the certificate did not state anywhere
8 that the classification was limited to the specific
9 system tested.

10 Kingspan then ruthlessly exploited the
11 BBA certificate in order to obtain an LABC certificate
12 in 2009 from Herefordshire building control. This
13 asserted in relation to requirement B4, "External fire
14 spread", that:

15 "Since K15 can be considered a material of limited
16 combustibility, it is suitable for use in all situations
17 shown on Diagram 40 of Approved Document B, including
18 those parts of a building more than 18 metres above the
19 ground."

20 Kingspan were internally quite brazen about the
21 methods employed to persuade Mr Jones of HBC -- and
22 could I please have up (KIN00020714) -- and we see them
23 referring to being very convincing when they need to be,
24 throwing "every bit of fire data we could at him",
25 that's Mr Jones:

20

1 "... we probably blocked his server, in the end
 2 I think the LABC convinced themselves Kooltherm is the
 3 best thing since sliced bread. We didn't even have to
 4 get any real ale down him!"
 5 Real ale or not, the result for Kingspan was
 6 spectacular, and they were suitably jubilant at having a
 7 certification which misleadingly conflated class 0 with
 8 limited combustibility.
 9 Later in that same email chain, they noted that
 10 there was:
 11 "GREAT NEWS! ...
 12 "The highlight of this Certificate and supporting
 13 documentation is the Requirement under B4 of AD B ...
 14 'Since K15 can be considered a material of limited
 15 combustibility, it is suitable in all situations shown
 16 on Diagram 40 of Approved Document B Volume 2, including
 17 those parts of a building more than 18m above
 18 ground ...'
 19 "K15 remains the only insulation board that has
 20 successfully met the requirements of the BBA and LABC
 21 System Approval."
 22 The successes of Kingspan in certification did not
 23 occur by accident and they did not happen without the
 24 collusion of the certifying bodies. These bodies were
 25 seemingly aware that they were being played by the

21

1 manufacturers but appeared powerless to do anything
 2 about it.
 3 For example, in 2010, Mr Meredith of Kingspan
 4 approached the BRE with the intimation that he had two
 5 new insulation products which he wished to test in
 6 BS 8414. He commented:
 7 "Potentially I would like two official tests.
 8 However it may also be two indicatives. This depends on
 9 costs."
 10 As to which Mr Baker of the BRE observed internally:
 11 "If we do indicatives how would this be reported?
 12 Just reading between the lines of Ivor's email it seems
 13 as though he would try to pass off indicatives as being
 14 full tests or am I just being a cynic!"
 15 Nor did the certifying bodies shine any light on the
 16 widespread confusion in the industry about class 0,
 17 often incorrectly referred to as "class O". Thus, the
 18 LABC's David Ewing emailed Celotex in January 2014 to
 19 say:
 20 "Essentially as the board is described as Class 0,
 21 it can be termed a 'material of limited combustibility'
 22 and so in terms of the relevant parts of Doc B it is
 23 suitable for use within the wall construction even at
 24 heights over 18m."
 25 Moreover, the testers and certifiers bent over

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1 backwards to help the manufacturers get positive
 2 results. Thus, in July 2014, Mr Howard of the BRE
 3 emailed Kingspan in the following terms:

4 "We need to work out what we need to test. The
 5 critical decision will be what is on the front face of
 6 the system. Do we go with the assumption that it is the
 7 panel system used in the 8414 test? If I have this
 8 correct, have you a datasheet with any reaction to fire
 9 info for that panel?"

10 The testers and certifiers were also remarkably
 11 unconcerned about what the companies they were supposed
 12 to be regulating were producing and developing. During
 13 the second review of its certificate, the BBA requested
 14 certification on at least 12 occasions that there had
 15 been no changes in the design, specification, context of
 16 use, or other details that would invalidate the
 17 certificate. No response was provided by Arconic, and
 18 the BBA took no action.

19 They should have done so. In failing to disclose
 20 information, despite numerous opportunities to do so,
 21 Arconic knowingly breached its contractual obligation to
 22 notify the BBA immediately of any new or additional
 23 information concerning the product or its suitability.
 24 The Reynobond PE cassette panel was eventually re-tested
 25 under the European Standard, achieving class E in 2011,

23

1 2014 and 2015. None of these test results was disclosed
 2 to the BBA.

3 Moreover, in January 2014, riveted Reynobond PE was
 4 classified Euro class E and then consistently classified
 5 Euro class C. None of these results were disclosed to
 6 the BBA either. Thus, from January 2014, the
 7 BBA certificate statement that Reynobond PE achieved
 8 Euro class B was untrue for both cassette and riveted
 9 products.

10 Why were the certifiers so indulgent and so
 11 unconcerned? A desire not to bite the hand that fed
 12 them may well have been an important factor, and we
 13 think that that will be a matter to be investigated
 14 carefully in the evidence.

15 Strikingly, after the Grenfell fire, the BBA at last
 16 recognised the significance of the difference between
 17 the riveted and cassette Arconic systems and their fire
 18 performance. They apparently discovered this via
 19 an approach from a journalist who had been himself
 20 prompted by a whistleblower. However, even in these
 21 circumstances, and even given the appalling loss of life
 22 which had occurred, the BBA seemed most concerned to
 23 protect its own commercial interests, with an internal
 24 email in April 2018, almost a year after the fire,
 25 recording as follows:

24

1 "Whilst the facts are fairly straightforward, the
2 handling has not been. We have a contractual position
3 with all our clients, including Arconic, in which
4 information is confidential. It has taken considerable
5 effort to persuade our lawyers that this was a case
6 where the BBA had to speak up. Imagine how the BBC
7 would have responded if the BBA had declined to comment
8 on whether we were told or not."

9 What all this shows is that the Inquiry, in
10 Module 2, will need to undertake an unsparing
11 investigation into the toxic and incestuous culture and
12 practices of this industry. How did it come about that
13 unsafe products were manufactured, marketed and sold?
14 How did the testing and certifying bodies allow this to
15 happen?

16 As regards the investigation which is required in
17 Module 2, the bereaved, survivors and residents are
18 grateful that the Inquiry has provided an interactive
19 platform for these openings, which we're all now using.
20 However, they have felt somewhat marginalised since the
21 hearings resumed in July as mere spectators on YouTube.
22 They trust, therefore, that the panel will continue to
23 offer these platform facilities once the oral evidence
24 starts, so that the BSRs and their lawyers can feel that
25 they are fully integrated into the process of this

25

1 Inquiry.

2 Moreover, despite their protestations to the
3 contrary, the consumers of these products, supposedly
4 specialists in their own right, cannot be exonerated in
5 any way. Why was there so much ignorance amongst those
6 involved at Grenfell as to such concepts as class O/O,
7 and limited combustibility? Why did they not ask
8 searching questions of the likes of Arconic, Celotex and
9 Kingspan? Why did they specify and use dangerous
10 materials?

11 It is important to appreciate that the findings of
12 responsibility which the Inquiry must make are not on
13 an either/or basis. Very many parties are to blame for
14 this disaster, but the mendacity of the manufacturers
15 and the gullibility or worse of the testing and
16 certifying bodies do not in any way exculpate Rydon,
17 Studio E, Harley and others for their part in this
18 tragedy.

19 Finally, I should say something about the stance
20 which the parties under the spotlight in Module 2 are
21 taking.

22 In his opening statement on 27 January of this year,
23 Mr Millett QC observed that he had invited the core
24 participants not to indulge in a merry-go-round of
25 buck-passing, but that regrettably that invitation had

26

1 not been accepted, save for RBKC. The same is true once
2 more in the opening submissions presented for this
3 module.

4 Three things stand out from those submissions.

5 The first is that, once again, the corporate
6 participants have decided to devote their extensive
7 resources to blaming others for this tragedy. Thus
8 Arconic assert that it "was the responsibility of others
9 to decide whether or not to choose their product for
10 a particular project, how to specify and utilise that
11 product in the construction or refurbishment of
12 Grenfell". Celotex unctuously and unnecessarily assure
13 us that it is "not a building designer, it does not
14 install exterior installation on buildings and did not
15 do so at Grenfell Tower, nor does Celotex manufacture,
16 supply or install cladding systems".

17 Secondly, such admissions as have been made are very
18 limited and highly qualified. For instance, Kingspan
19 accepting in relation to product marketing only that
20 "certain statements made in K15 product literature and
21 advice provided to customers were not sufficiently clear
22 or emphatic in explaining the limitations of the BS 8414
23 testing undertaken".

24 Finally, those opening submissions are couched in
25 very general terms and do not engage in the detail of

27

1 the widespread and persistent wrongdoing in which
2 Arconic, Celotex and Kingspan engaged, and which the BRE
3 and the BBA failed to deal with adequately or at all.

4 With those observations, I now hand over to
5 Mr Stein QC, who will be delivering the balance of the
6 opening submissions on behalf of Team 2.

7 Thank you very much.

8 SIR MARTIN MOORE-BICK: Thank you very much, Mr Williamson.

9 I'll now invite Mr Stein to pick up where you have
10 left off.

11 Yes, Mr Stein.

12 Opening statement on behalf of BSRs Team 2 by MR STEIN

13 MR STEIN: Good morning, sir. Good morning, Ms Istephan,
14 and Mr Akbor.

15 What has already been said by Mr Williamson QC and
16 others has demonstrated that, in hearing the evidence
17 within Module 2, sir, you and the panel may well come to
18 the conclusion that the manufacturers, Arconic, Kingspan
19 and Celotex, are little more than crooks and killers.

20 These companies knew their materials were dangerous
21 to life. They knew their materials would burn with
22 lethal speed. Yet they marketed their products into
23 an uncaring and underregulated building industry, which
24 spread them around residential buildings like a disease.

25 Just as Arconic hid behind false and outdated data,

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1 so we hear that some of Arconic's key witnesses are
2 hiding behind the French Blocking Statute. If Arconic
3 truly has nothing to fear, then that obstacle can be
4 overcome.

5 These Arconic witnesses are vital, and we echo
6 Mr Millett QC's words last Thursday when he said, "Do
7 the right thing". We suggest they should be fearless,
8 and they should come forward and tell our clients the
9 truth.

10 One of the truths identified by Dame Judith Hackitt
11 in her report was identified as a race to the bottom in
12 the building industry, but Dame Judith did not have the
13 evidence which we now have within this Inquiry, which
14 shows how far companies like Celotex were going to
15 spread around their combustible materials.

16 The product training presentation by Celotex's
17 Jonathan Roome -- if we can please have it on the screen
18 at the following reference: {CEL00001097} -- makes this
19 point clear. As we see here, this document is dated
20 30 April 2015, and describes itself as RS5000 product
21 training.

22 If we then please go to page 18 {CEL00001097/18} of
23 this document, we will see how this matter is then being
24 dealt with.

25 This is training that's being delivered to the

29

1 southern regional meeting within Celotex, located in
2 Maidenhead. What we have here is the way that matters
3 are being described, therefore, internally within the
4 company as the best way to promote their products.

5 "I see the market for RS5000 being split into three
6 defined potential customer tiers."

7 Helpfully, in terms of this presentation, there is
8 then a colour description used on the face of the next
9 few pages, which assists us in understanding, and no
10 doubt those that were going to sell these products into
11 the market.

12 The first one, please, at page 19 {CEL00001097/19}.
13 Red. Red is "No Use"; in other words, no-go for Celotex
14 combustible materials, as this is a description of the
15 part of the market where it cannot be sold.

16 Page 20 {CEL00001097/20}, the next page, please.
17 Thank you. 20 is in yellow. Now, this particular slide
18 demonstrates the part of the market where some of the
19 combustible materials can be sold.

20 Next page, please, 21 {CEL00001097/21}. Green.
21 Green for "Go, go, go". This is where combustible
22 materials can be sold. "This is where we can make our
23 money," says Mr Roome, "We can target buildings, as you
24 will see from the middle part, where the 18 metres
25 restriction on combustible materials does not cause

30

1 an issue". And, in the middle of that page, under
2 "Reason", the third bullet point, where builders are
3 "Not aware of 18m restriction", or where the contractors
4 have "Always used 'Combustible' ... materials".

5 Thank you, we can take the document down now,
6 please.

7 Celotex were not alone. This marketing strategy was
8 little different from that employed by Arconic and
9 Kingspan. So we can ignore the clever and well worked
10 out oral submissions made on behalf of the
11 manufacturers. These manufacturers knew that the
12 regulations were poor, and they used that fact.

13 But, in the end, it is the combination of the
14 Module 2 companies and those we have considered in
15 Module 1 which are responsible for creating the perfect
16 storm that stole the lives of 72 people and destroyed
17 the lives of countless others. We must not forget that.

18 The Module 1 evidence shows Rydon and the TMO rigged
19 the tender in Rydon's favour to make dangerous cost
20 savings. This evidence appears unassailable and
21 fraudulent. The police, we suggest, should be examining
22 the documentary evidence and instituting prosecutions in
23 this regard as soon as possible. There is no reason,
24 and there is no excuse for any delay.

25 Let me pause briefly to note that

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1 the Attorney General's undertaking does not provide any
2 restriction on the use of oral evidence within
3 disciplinary proceedings.

4 We suggest that the Royal Institute of British
5 Architects, RIBA, should review the architects'
6 testimony from Module 1 to consider whether the
7 documentary and oral evidence which demonstrated
8 a failure of professionalism and supervision can be
9 considered by them and should be considered by them to
10 see what regulatory and disciplinary actions can be
11 taken.

12 I turn now to the system of testing, certification
13 and control.

14 We say that the system was weak and ineffectual.
15 The primary agencies of regulation had been captured by
16 the manufacturers and become little more than outsourced
17 research and development departments for the cladding
18 and insulation industries. The failure of regulation is
19 so stark that, as said by Mr Hyett a few days ago,
20 a root and branch investigation is required and changes
21 must be made to these regulatory structures.

22 Change in this area does not come easily. It pays
23 to remember that during the Lakanal House fire, the dead
24 were three adults and three young children. One of the
25 adults spent 40 minutes on the phone with 999

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1 responders, who urged her to stay in the flat . At the
2 end of the call , the responder could no longer hear her
3 breathing. Such events were to echo repeatedly in the
4 Grenfell Tower fire .

5 If the Lakanal House fire did nothing to change
6 industry, or to change the way that architects were
7 trained, or to assist the fire services -- a point you
8 noted, sir , in your Phase 1 report -- then we suggest
9 that this Inquiry has the clearest of duty arising from
10 its knowledge of the evidence to make its views known as
11 soon as possible and without any unjustifiable delay .

12 It will be shown within Module 2, instead of
13 reacting to the Lakanal House fire in a positive way by
14 making changes, the manufacturers put themselves into
15 positions where they sought to influence regulation in
16 the worst possible way.

17 Within the system of regulation , the testing and
18 certification bodies were highly regarded. For example,
19 a certificate from the British Board of Agrément, the
20 BBA, was widely believed to be a gold standard relied
21 upon without question. In the words of the LABC
22 registered details manual, a BBA certificate does
23 provide absolute assurance and materials should not then
24 be interrogated further .

25 The fact is that the public should have been

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1 protected from these ruthless and criminal manufacturers
2 by the bodies who are responsible for testing and
3 certification . But the testing and certification bodies
4 provided no such protection; instead, they reinforced
5 the dangerous and dishonest culture within the industry .

6 Demonstrating how close the testing agency, the BRE,
7 was to industry, Ivor Meredith of Kingspan emails
8 Mr Philip Clark and Dr Sarah Colwell at the BRE on
9 9 January 2008, {KIN00003693/1}.

10 So you will there see the quote, which is that:

11 "Having cross referenced with previous tests it
12 would seem there was more fire spread from the insulant
13 (however please don't quote me on that) and the cavity
14 barrier may have failed slightly . Your 'off the record'
15 and 'on the record' comments may prove helpful."

16 Is it in any way acceptable for a body that is meant
17 to be protecting people to be working in such a way that
18 Kingspan feels able in open emails to refer to "off the
19 record" and "on the record" comments?

20 You can take the quote down, please. Thank you.

21 But it gets worse. On 17 October 2014, BRE's
22 Stephen Howard emails Jonathan Roper and Debbie Berger
23 at Celotex, referencing a conversation they had, and
24 that was -- I'll read it rather than going to the quote:

25 "... regarding the content of the classification

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1 reports and the level of technical detail they
2 contained. We need to put a lot of info in but you
3 don't want your competitors to see it . We have come up
4 with a way of doing it ."

5 It seems that Mr Howard at the BRE was working to
6 support Celotex as against its competitors.

7 The evidence shows that the BRE regarded itself as
8 a dependent business, {BRE00005769/105}. At page 105 we
9 have the quote that states this :

10 "... Kingspan are getting very indignant about the
11 delay. We have to get the report to them immediately if
12 we are not to completely piss them off and [lose] their
13 custom."

14 Turning now to emails from Jonathan Roper of Celotex
15 to Phil Clark and others within the BRE.

16 We know that what is said -- and please put it up on
17 the screen, {CEL00010052/12}, thank you -- the relevant
18 quote there states :

19 "Following the end of the test , Rob, Ian Cooper,
20 Phil and I had a discussion whilst at the BRE testing
21 centre. Phil said that he had 'seen worse fails ' and
22 suggested that Celotex might want to strengthen the
23 outside of the test rig in order to counteract the
24 cracking of the Marley Eternit panels."

25 Thank you, you can take that down from the screen.

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1 These are not the actions of an independent and
2 professional testing and certification body. These
3 types of suggestions being made by a BRE employee show
4 that the BRE was working to support manufacturers'
5 financial goals in October 2013.

6 Mr Roper from Celotex cynically emailed
7 Stephen Howard, the BRE business group manager, in
8 relation to Kingspan products which were purporting to
9 be compliant with the BS 8414 test. I don't need to go
10 to these emails. I'll read out the relevant parts.

11 What Mr Howard is being told by Mr Roper from
12 Celotex is this :

13 "We are aware that this product is used in buildings
14 above 18 metres using a wide variety of construction.
15 We are surprised that they [Kingspan] feel confident
16 enough to allow their product to be used in buildings
17 their fire test doesn't cover unless they have a report
18 to say other."

19 So here we have Celotex trying to get information
20 about a competitor, obviously seeking to gain a
21 commercial advantage.

22 Now, instead of BRE's Mr Howard saying he and the
23 BRE will -- "Thank you very much, we will look into this
24 issue", he said instead, and I'll read the quote rather
25 than going to it :

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1 "If we have issued a test report on a system then
2 the onus is on the building owner and building control
3 to ensure that the system being installed is covered by
4 a test report."

5 In summary, therefore, Mr Howard at the BRE was told
6 that products are being misused outside of the test
7 limitation, and shrugs off responsibility by saying that
8 the problem is not for the BRE, but for the building
9 owner or building control.

10 What does this all add up to? We suggest that the
11 BS 8414 test had become a route to market rather than
12 a route to safety.

13 We should remind ourselves of what happens to
14 polyisocyanurate and polyurethane within the cladding
15 and insulation under fire conditions.

16 Professor Purser's Phase 1 report said this, at
17 page 77:

18 "The contribution of each of the major products
19 individually is sufficient to produce dense, toxic smoke
20 within the flat and adjacent lobby within a few minutes.
21 But in practice, the contributions from each burning
22 item are summed as they penetrate into the flat, further
23 increasing the concentrations of smoke and toxic gases."

24 What are these toxic gases? They are carbon
25 monoxide and nitrogen dioxide and hydrogen cyanide ...

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1 (Connection lost)

2 ... well known and familiar to all, it's a killer,
3 even in small quantities.

4 SIR MARTIN MOORE-BICK: Mr Stein, I'm sorry, we have lost
5 the sound from you. Now we have lost you as well,
6 I'm afraid. So we will pause for a minute, while the
7 connection is restored.

8 MR STEIN: Sir, the feed seemed to have gone for a moment.
9 Can you hear me now, sir?

10 SIR MARTIN MOORE-BICK: We can hear you now, and you had
11 just been making the point that hydrogen cyanide, one of
12 the gases produced when these materials -- ah, I've lost
13 you again.

14 (Pause)

15 Thank you. I think we'll just sit here for a moment
16 patiently while we see if the connection can be
17 restored.

18 (Pause)

19 MR STEIN: Sir, I think there were some technical
20 difficulties there that have now kindly been sorted out
21 by the Inquiry team.

22 SIR MARTIN MOORE-BICK: Yes, you are back with us. We can
23 hear you, I hope you can hear me.

24 MR STEIN: I can, sir, yes.

25 SIR MARTIN MOORE-BICK: Just to remind you, we lost you at

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1 the point where you were saying that hydrogen cyanide,
2 one of the gases produced when these materials burn, is
3 a killer.

4 MR STEIN: Sir, yes, I'm very grateful.

5 SIR MARTIN MOORE-BICK: Right, so you pick it up from there.

6 MR STEIN: I will pick up from there.

7 By 2015, assessments to BR 135 were becoming very
8 popular as a way of demonstrating compliance with the
9 Building Regulations. They provided, therefore,
10 a significant source of income for the BRE. On
11 20 April 2015, Tom Lennon, principal consultant at
12 BRE Global, emails Stephen Howard regarding the
13 assessments. Again, I won't put this up on the screen,
14 I will simply read:

15 "... this will potentially be a huge source of
16 income ... but could also be a huge liability if not
17 managed properly."

18 Mr Howard responds stating:

19 "Agreed. I have both testing and assessments flying
20 in from all directions at present. Plus each test we
21 generate seems to spawn further openings."

22 We suggest that this demonstrates that there is
23 a commercial reality behind the operation of the BRE.
24 That commercial reality should not be present, we
25 suggest, in an independent testing organisation.

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1 In June 2012 the BRE prepared a report for Kingspan
2 entitled "An assessment of the external wall system for
3 the Riverlight project". This provided an opinion on
4 whether the proposed external wall system complied with
5 Approved Document B.

6 The proposed external wall system for this project
7 included combustible materials, K15. The report
8 highlighted that it expected the panel to fall away from
9 the rig in a BS 8414 test. Again, I don't need to go to
10 the document. What it states is:

11 "The low melting point of this type of framing
12 normally leads to an early deformation and collapse of
13 the system when exposed to fire. However although
14 BR 135 requires that such a performance is recorded it
15 is not part of the pass/fail performance criteria."

16 On its website, the BRE states that the BRE Trust is
17 an independent charity dedicated to improving the built
18 environment for the benefit of all. It is, though, we
19 suggest, questionable whether the BRE was or is
20 improving the building environment for all, or whether
21 it was more simply improving the financial environment
22 of a few.

23 The BRE's customers used the BRE as a research and
24 development department. It had in effect become part of
25 the marketing strategy for manufacturing companies to

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1 provide a veneer of respectability, instead of doing
2 what it should have been doing, instead of acting as
3 an impartial and independent guarantor of safety.

4 Turning now to the BBA, the British Board of
5 Agrément. The BBA website states that:

6 "BBA certification is recognised throughout the
7 construction industry as a symbol of quality and
8 reassurance. It's the vital ingredient in the provision
9 of assurance, quality and integrity to a plethora of
10 stakeholders in the construction industry."

11 We suggest that the BBA as an organisation was beset
12 by fundamental issues. Those issues compromised its
13 ability to discharge its safety-critical function.
14 Those issues included a lack of independence arising
15 from a fear of losing business, competing commercial
16 interests, and a drive for cost efficiency over
17 accuracy.

18 The BBA also permitted Arconic an extraordinary
19 degree of control over the certification process.
20 Mr Albon, the chief scientific officer of the BBA,
21 confirms Arconic requested the BBA to consider the
22 riveted and cassette versions as different fixing
23 systems rather than as separate products. It appears
24 the BBA simply acceded to this, so rather than imposing
25 its requirements on Arconic, the BBA allowed Arconic to

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1 dictate that riveted and cassette versions of the
2 cladding system should be considered different fixing
3 systems rather than separate products.

4 Any form of regulatory control should include
5 updating and checks on currency of testing and
6 certificates, and once the BBA certificate was issued,
7 it was then the BBA's duty to regularly review the
8 subject of the certificate to ensure it remained
9 regulation compliant.

10 Although the BBA states that ongoing validity of
11 an agrément certificate is dependent on ongoing
12 surveillance and certificate reviews being
13 satisfactorily carried out, during a series of reviews
14 over several years, Arconic failed to produce its
15 marketing literature when requested by the BBA. Despite
16 this persistent and deliberate failure to comply, the
17 BBA failed to exercise its powers to withdraw and
18 suspend certificates in the event of non-compliance.

19 Normal regulatory bodies, certification bodies, have
20 a system of highlighting risk. Risk is normally
21 a product of a variety of different issues that come to
22 the attention of that body, and it means that, where
23 risk is identified and where there are repeated failures
24 by organisations which have dealings with a regulatory
25 and certification body, then normally it means that

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1 action is taken. Here that wasn't the case.

2 As a result of the inadequate review process in
3 which the problem regarding cassettes was never fully
4 investigated and realised, it was determined that the
5 certificate remained valid, even though the only
6 Reynobond 55 PE panel that had successfully obtained
7 class B under EN 13501 was Reynobond PE 55 riveted,
8 rather than PE generally, and Arconic had no EN 13501
9 test data demonstrating class B for Reynobond 55 PE
10 cassette.

11 On at least 12 occasions the BBA requested written
12 confirmation from Arconic that there be no changes in
13 the design, specification, context of use or other
14 details that would invalidate the certificate. This met
15 with no response from Arconic and the BBA took no
16 action. On the face of the document, the BBA
17 certificates were misleading. The front page of the
18 Reynobond certificate claimed class 0 for both FR and PE
19 products.

20 But the abuse of the BBA certification process was
21 not limited to Arconic. Major competitor Kingspan also
22 manipulated this process to bring a product to market
23 with a fire performance that did not conform to the
24 information on the BBA certificate.

25 The BBA was meant to provide the highest standard of

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1 certification, but the BBA, we suggest, was not
2 an independent regulator. The relationship with
3 manufacturers was not conducted at a proper distance,
4 and the BBA relied upon manufacturers who wanted their
5 products certified for income.

6 So the fact is that this Inquiry (inaudible) has the
7 evidence from which it can make its views clear for
8 Module 1, and as we go through Modules 2 and 3 later on,
9 you will be shown the appalling state of this industry,
10 which in turn should compel you, sir, and the panel to
11 make your views known sooner rather than later.

12 We have suggested in our written submissions that
13 some points are already clear. Some examples:

14 Companies selling potentially dangerous products to
15 the construction industry should be required to have
16 a compliance officer to manage regulatory risk.

17 The testing and certification bodies such as the
18 BRE, BBA, LABC and the oversight regulator, UKAS, must
19 be overhauled to make sure their systems and tests are
20 first rate and their operations entirely independent.

21 The BRE and the BBA should be placed under a legal
22 obligation to disclose full details of tests undertaken,
23 including any failings.

24 Let us turn to the Inquiry timetable set out in the
25 letter dated 4 September of this year.

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1 Within Module 2, we will be dealing with cladding
 2 products, testing and certification, product marketing.
 3 The timing for this, subject of course to delays caused
 4 by factors outside, approximately 2020 to January 2021.
 5 Moving then on to Module 3, dealing with complaints
 6 and communication with residents, active and passive
 7 fire safety measures, approximately February to
 8 May 2021.
 9 After the end of the first three modules,
 10 the Inquiry will then have closing submissions for all
 11 three modules in one go. But instead of stopping to
 12 take stock and consider the implications of the first
 13 three modules, when matters are fresh and complete,
 14 the Inquiry intends to just keep going. That means that
 15 the Inquiry continues straight after Module 3, after
 16 submissions have been made, with Module 4, aftermath of
 17 the fire; Module 5, firefighting; Module 6, the
 18 oversight of regulation, to take place in approximately
 19 October to December 2021; Module 7, further evidence
 20 from expert witnesses, approximately December 2021;
 21 moving then after that to the inquest function, clearly
 22 in 2022.
 23 So if we generously estimate the Inquiry evidence
 24 dates its finish in March 2022, you will then, I expect,
 25 have written and oral submissions. A final report won't

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1 be issued until what at best will be December 2022 and
 2 is likely to be in 2023. The date of the fire we all
 3 know was 14 June 2017.
 4 Margaret Atwood says if you're going to speak truth
 5 to power, make sure it's the truth. So let me give that
 6 a try.
 7 We suggest that the truth is that this Inquiry must
 8 involve itself in the process of change. This Inquiry
 9 should not just sit on the sidelines and listen to the
 10 evidence over the next two years whilst change goes on
 11 all around you.
 12 Sir, we know you to be, and you have proven yourself
 13 to be, a very ...
 14 (Connection lost)
 15 SIR MARTIN MOORE-BICK: Mr Stein, I'm sorry to interrupt
 16 you, but we lost you there for a moment. I don't think
 17 we lost a lot, but I don't think we got it on the
 18 transcript, that's the point.
 19 Could I trouble you to go back to the point at which
 20 you were saying we shouldn't sit on the sidelines?
 21 MR STEIN: Yes, sir.
 22 Well, sir, I repeat that, perhaps usefully so,
 23 I hope, for emphasis. We suggest that this Inquiry must
 24 involve itself in the process of change, not just sit on
 25 the sidelines and listen to the evidence over the next

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1 two years whilst change goes on all around you.
 2 I then went on to say, sir, that you, sir, the Chair
 3 of the Grenfell Tower Inquiry, are well known to be very
 4 experienced and expert as a judge, and you proved
 5 yourself -- though you didn't need to -- through Phase 1
 6 to be capable of providing a report which analyses
 7 evidence and makes clear recommendation. Currently,
 8 this Inquiry is certainly on a pathway to pursue the
 9 directly causative facts. But there are issues, we
 10 suggest, whether the Inquiry is considering properly the
 11 less obviously causative but contributing issues such as
 12 class, race, mobility and age.
 13 You identified in the Phase 1 report that, as
 14 regards the rainscreen, the principal reason why the
 15 flames spread so rapidly up and down and around the
 16 building was the presence of the aluminium composite
 17 material, ACM, rain panels with polyethylene cores,
 18 which acted as a source of fuel. As regards the
 19 insulation materials, you said this:
 20 "The presence of the polyisocyanurate (PIR) and
 21 phenolic foam insulation boards behind the ACM panels
 22 and perhaps components of the window surrounds
 23 contributed to the rate and extent of vertical
 24 fire spread."
 25 So where have we got to now as regards change since

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1 your first report?
 2 The Public Accounts Committee reported on the
 3 progress in remediating dangerous cladding on
 4 16 September of this year. Three years after the
 5 Grenfell Tower disaster in which 72 people lost their
 6 lives, only a third of high-rise buildings with
 7 Grenfell-style flammable cladding have had their
 8 cladding replaced with a safe alternative. Only
 9 a third.
 10 Progress has been unacceptably slow, a conclusion
 11 accepted by the Ministry of Housing, Communities and
 12 Local Government, say the Public Accounts Committee. So
 13 where has been the voice of the Inquiry in promoting
 14 change?
 15 The Public Accounts Committee continued:
 16 "Most residents in blocks with dangerous cladding
 17 face exorbitant costs of funding interim safety measures
 18 such as waiting watches while waiting for the cladding
 19 to be removed. Leaseholders have been trapped in this
 20 situation, unable to sell their flats, which are worth
 21 nothing. Many residents have reported worsening mental
 22 health as a result of worries about their safety and the
 23 life changing bills they face for remediation works."
 24 Again, so far, no voice from the Inquiry in this.
 25 There has been astonishing and inspired work from

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1 the cladding campaigners, and they are doing their very
2 best in order to push forward the timetable for change
3 and the removal of dangerous cladding. But how much
4 more could have been done if the Inquiry were involved?

5 The October 2020 monthly report from the Mayor's
6 office, update on progress of the Grenfell Tower Inquiry
7 recommendation, states:

8 "The Government is responsible for
9 Building Regulations, including those that relate to
10 fire safety. Issues relating to the construction,
11 refurbishment and management of Grenfell Tower are being
12 examined in more detail in Phase 2 of the Inquiry. But
13 it is vital that the Government, housing and building
14 industries do not wait for the Inquiry's next report to
15 take action on such an important issue."

16 In the opening to Module 1, I commented on the need
17 potentially to call evidence from the Mayor's office as
18 to what change is taking place in order so that this
19 Inquiry could be satisfied that change is taking place
20 and appropriately so.

21 Now we have a different turn of events. The
22 Government, quite rightly, is not waiting for
23 the Inquiry. It goes ahead with change without this
24 Inquiry's recommendations. The Building Safety Bill and
25 the Fire Safety Bill's timetable for that legislation to

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1 come into effect is 2021, next year. At present, those
2 Bills, the Building Safety Bill and the Fire Safety Bill
3 are going through the committee stages in the
4 House of Lords.

5 What these Bills do is create a system of building
6 regulation for building owners, and a new system of
7 building safety managers for each building. Each
8 qualifying building will have a safety certificate which
9 will require regular updating and checking. The system
10 will ensure that qualifying buildings in future will
11 have an accountable person upon whose shoulders
12 responsibility lies. All of this to be dealt with under
13 the Health and Safety Executive system.

14 But also proposed is a Construction Product Safety
15 Committee, with membership which we are told will be
16 comprised of technical experts and academics. It will
17 advise the Secretary of State for Housing on whether
18 voluntary industry standards or construction products
19 should also become UK regulatory standards.

20 Within this legislation, residents remain sidelined
21 into their own committee within the new regulatory
22 structures, and appear not to have been thought capable
23 of assessing the risks posed by construction products.
24 And yet again there is the concern that the
25 profit-driven and focused industry, which has repeatedly

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1 proven itself incapable of being trusted, will no doubt
2 try its best to pervert any system that can be put in
3 place, and push forward perhaps the technical experts
4 that may be all too close to industry.

5 But are these the right changes? Do these bills go
6 far enough? This panel should be making that assessment
7 and making its views known.

8 The terms of reference define the scope of this
9 Inquiry's investigations. They were set on
10 15 August 2017. In this regard, they include,
11 obviously, the immediate causes of the fire, design and
12 construction of the building, and the refurbishment, the
13 regulation and arrangements made by local authority for
14 receiving and acting upon information obtained by the
15 residents. Crucially, the terms of reference require
16 this Inquiry to report its findings to the
17 Prime Minister as soon as possible and to make
18 recommendations. Do any of us think that 2022, or worse
19 2023 -- does that sound as soon as possible?

20 Ms Barwise QC set out in her oral submissions the
21 need for this Inquiry to engage earlier than currently
22 considered in the process of recommendations. We agree.
23 But we suggest that this issue requires deeper analysis.

24 Sir, if you and the panel continue on the current
25 course within the current timetable, the consequences

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1 will be that any recommendations you make as regards the
2 proposals set out within the Fire Safety Bill, the
3 Building Safety Bill and product safety will come after
4 they have all been enacted and the new structures put in
5 place. Already Government is setting up a shadow
6 regulator so that she or he can be in place when statute
7 is enacted.

8 On behalf of the families and survivors, we have
9 often complained that the current system of engaging
10 with the Inquiry forced upon us by the pandemic has
11 relegated us to the status of YouTube watchers. We have
12 said in the past that this process means we are not able
13 to effectively participate in the Inquiry process.
14 I agree with Mr Williamson that this platform and
15 ability to interact with the panel is welcome.

16 The term "effectively participate" is a term drawn
17 from the case law, but what would be worse, we suggest,
18 is that this Inquiry is not effectively participating in
19 the process of change going on around it.

20 Ms Istephan, Mr Akbor, you must have come into this
21 Inquiry because you saw that this was a chance to make
22 a difference. Apologies, Mr Akbor, I bet you're
23 thinking you've barely warmed your feet. If you,
24 Ms Istephan and Mr Akbor, don't discuss the process and
25 timetable of this Inquiry with the Chair, there is

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1 a real danger that you will also become bystanders to
2 the Inquiry in relation to the process of change.

3 Sir, you will recall what it's like on the other
4 side of the courtroom, where an advocate is trying to
5 change a judicial mind when new facts arise and after
6 a ruling has been made. That is what the final report
7 will do in the end of 2022 at best, more likely 2023,
8 because the change will have occurred without your
9 input.

10 So what are the options? The Independent Inquiry
11 into Child Sexual Abuse works with a system of
12 investigations that is similar to the Grenfell modular
13 system, but different from the Grenfell Tower Inquiry in
14 that, at the end of the abuse inquiry investigation, it
15 then reports on its findings and makes recommendations
16 as to change. So far, therefore, the Independent
17 Inquiry into Child Sexual Abuse has had a number of
18 investigations and a number of reports.

19 The Infected Blood Inquiry Chair,
20 Sir Brian Langstaff, writes to Government and comments
21 on issues that require attention.

22 In other words, there are ways of making your views
23 clear as the Inquiry continues, and, to an extent, this
24 Inquiry has done this already, but only in part, by
25 splitting its process into Phase 1, and then reporting,

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1 and then on to Phase 2.

2 As I already said, built into our current programme
3 are combined Module 1 to 3 submissions at the close of
4 Modules 1 to 3. As a panel, you may want to consider
5 that this would provide the best time to invite written
6 and oral submissions on what this evidence means in
7 Modules 1 to 3 and its effect on the changes taking
8 place within the legislative and regulatory structures.
9 Whether you would call that the end of Phase 2 and
10 create a new Phase 3 will be a matter for you.

11 If you don't do this, and don't participate in the
12 process of change whilst it takes place, the voice of
13 this panel will not be heard as it should, and one of
14 the main reasons to have an Inquiry will be lost.

15 Surely the duty of an Inquiry is to be effective, to
16 use its knowledge at a time when that knowledge is
17 required in order to effect change. Sir, you will
18 remember that at the close of the evidence of all of the
19 survivors who spoke to you in Phase 1, all of them said
20 that they wish for this Inquiry to support change.

21 There is a danger, there is a real danger, that the
22 survivors and family members of the Grenfell Tower fire
23 will be let down by this Inquiry if it doesn't
24 participate in the process of change.

25 Let me finish with one last point: if you, the

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1 panel, adopt the suggestion we make to report perhaps in
2 the following way after Modules 1 to 3 as a whole at the
3 close of those modules, this would also encourage the
4 currently stagnated police investigation and the DPP to
5 reconsider the current halt policy on the criminal
6 process pending the conclusion of this Inquiry.

7 Once Modules 1 to 3 are finished, there is no good
8 reason whatsoever to not go ahead with the criminal
9 investigation and to bring the criminals who killed so
10 many to justice as soon as possible.

11 Sir, if you wish us to work with Team 1 and prepare
12 short submissions into what should be looked at and
13 reported on at the end of Modules 1 to 3, we will
14 of course get that done.

15 Sir, those are my submissions.

16 SIR MARTIN MOORE-BICK: Thank you very much indeed,

17 Mr Stein. I'm sorry that we had one or two slight

18 hitches during the course of your submissions, but

19 I don't think we lost anything. I think you were always
20 able to go back to where we had left off, so we have got
21 a full transcript of what you have said to us, and we
22 have obviously welcomed hearing from you.

23 Thank you very much indeed.

24 MR STEIN: Thank you, sir.

25 SIR MARTIN MOORE-BICK: We will take a short break at this

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1 point and come back to hear our next legal
2 representative at, I think, 11.50, please.

3 11.50, please.

4 (11.35 am)

5 (A short break)

6 (11.50 am)

7 SIR MARTIN MOORE-BICK: At this point I'm going to ask

8 Mr Taverner QC to address us on behalf of Rydon. So are
9 you there, Mr Taverner?

10 MR TAVERNER: I am indeed, sir.

11 SIR MARTIN MOORE-BICK: Thank you. You can obviously hear
12 me and we can hear and see you. So when you are ready,
13 please make your opening statement.

14 Opening statement on behalf of Rydon by MR TAVERNER

15 MR TAVERNER: Good morning, Mr Chairman, Ms Istephan,
16 Mr Akbor, and all those attending.

17 The Inquiry has Rydon's Module 2 written opening
18 submissions dated 16 October 2020, and they can be found
19 at {RYD00094561}. Those written submissions have the
20 electronic references for the documents I will refer to
21 today.

22 Rydon thank the Inquiry for the opportunity to make
23 oral submissions. The dreadful human consequences of
24 the tragedy continue to remain very much in the
25 consciousness of all those I represent.

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1 Rydon's interest in this module arises in this way:
 2 the Inquiry has explored with those who specified and
 3 approved products for use at Grenfell how they came to
 4 be chosen, and the reliance placed on marketing material
 5 and certification. There is little doubt that, rightly
 6 or wrongly, such material played an important role, not
 7 only in their selection for use at Grenfell, but also in
 8 many other projects involving other construction
 9 professionals.

10 Rydon were at the top of the supply chain at
 11 Grenfell and has acknowledged that it has a contractual
 12 liability for those designers and specialists it
 13 engaged, as well as those it employed.

14 Today, Rydon focuses on two products: Reynobond
 15 polyethylene 55, which I will call RB PE 55, and
 16 Celotex RS5000.

17 Other CPs consider in their opening submission
 18 detailed other products, such as K15, and the role and
 19 involvement of the testing and certification bodies.
 20 This is of course not the right place to consider legal
 21 liability of the manufacturers or others, whether in the
 22 context of the statutory duties, contractual obligations
 23 or potential tortious conduct.

24 I will deal with Arconic and Celotex separately, if
 25 I may.

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1 Turning first to Arconic.

2 Certain themes have been developed by Arconic in the
 3 course of this Inquiry to the effect that Arconic were
 4 mere manufacturers of a product, but it was up to others
 5 to make sure that its RB 55 PE or any other PE product
 6 was lawfully and safely used. As a result of this and
 7 in any event, says Arconic, it did not need to know, and
 8 indeed knew little or nothing, of the relevant
 9 regulations which governed or restricted its use. Nor,
 10 it says, did it concern itself with whether its RB PE 55
 11 product, whether in riveted or cassette form, was
 12 suitable for use on particular types of project, such as
 13 the above-18-metre market. Arconic says it was
 14 exclusively for others to decide, based on materials it
 15 disseminated to the market, including that related to
 16 testing and certification. We submit that Arconic's
 17 position is simply not borne out by the facts and is
 18 indeed insensible.

19 Putting on one side its legal duties, commercial
 20 common sense dictates, first, that any company
 21 manufacturing a product for distribution and use needs
 22 to know it is safe to use and is compliant with relevant
 23 regulatory requirements, for no other reason than it is
 24 likely to be easier to sell a safe, compliant product
 25 than one which is not. Secondly, if an industry, in

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1 this case the construction industry, habitually relies
 2 on independent certification endorsing the use of
 3 a product, a company such as Arconic will need to
 4 establish whether it can legitimately gain such
 5 certification to advertise the safe use of its product.
 6 It is obvious, false or misleading certification can
 7 only lead to an unsafe product being used when it should
 8 not.

9 Arconic had dedicated personnel responsible for
 10 ensuring the safety of their products, understanding and
 11 keeping up with national and international regulations,
 12 as well as individuals charged with overseeing
 13 independent testing and certification of their products.
 14 Arconic's internal documents are replete with
 15 consideration of and discussion about, first, safety of
 16 RB PE 55; secondly, its compliance with regulations;
 17 and, thirdly, its certification in Europe by the CSTB
 18 and, in this jurisdiction, by the BBA.

19 What is shocking about these internal documents is,
 20 first, as to safety, Arconic concluded well before and
 21 repeatedly by the time of the sale of RB PE 55 for use
 22 at Grenfell that it was so highly dangerous that it
 23 should not be used in what it called architecture,
 24 certainly not on resident tower blocks over 18 metres,
 25 and most definitely not in its cassette form. Arconic

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1 discussed these matters internally right up to the time
 2 of the fire in June 2017.

3 Secondly, internal documents establish that Arconic
 4 had concluded that regulations precluded the use of
 5 RB PE 55 in many jurisdictions, certainly at any height
 6 above 18 metres in residential tower blocks. As to the
 7 UK, the continued opacity of the UK regulations were
 8 such that Arconic viewed that they could be "worked
 9 with", to use Arconic's own words, to allow it to market
 10 and sell for use in the above 18-metre UK market what it
 11 knew to be dangerous PE.

12 Thirdly, as to certification, Arconic proactively
 13 relied on the 2008 BBA certificate to promote use of
 14 RB PE 55 cassette as being safe and compliant with the
 15 UK regulations, not just at Grenfell, on the basis it
 16 had been tested and achieved either a class Euro rating,
 17 or a class 0 BS 476 UK classification, when it knew that
 18 it had not.

19 It apparently saw a gap in the certification to be
 20 exploited. It could only have knowingly allowed false
 21 information to remain in a certificate in order to
 22 mislead construction professionals into specifying
 23 a product which, with clear and accurate information,
 24 they would not otherwise specify.

25 In our submission, any one of these three factors

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1 would be sufficient to condemn Arconic.
 2 To illustrate the above points, we turn to what
 3 happened in four periods. We've split it up, perhaps
 4 artificially, into four periods. The Inquiry will
 5 excuse me for referencing certain parts of that
 6 chronology already referred to at the Inquiry, but they
 7 are important documents.

8 The first period is between 2008, when the
 9 BBA certificate was issued, and 18 November 2012, the
 10 date of the Tamweel fire in Dubai. The second period is
 11 from the date of the Tamweel Dubai fire to the end of
 12 May 2013. The third period, 2014 and 2015, when
 13 RB PE 55 was selected, ordered and installed at
 14 Grenfell. The final period from the installation of
 15 RB 55 PE cassettes at Grenfell Tower to the fire.

16 Turning to the first period, if I may, from 2008,
 17 when BBA certificate was issued, and the date of the
 18 Tamweel fire in Dubai, that was 18 November 2012. It
 19 of course starts with the issue of the BBA certificate
 20 on 14 January 2008.

21 To summarise, as the Inquiry is aware, section 6.1
 22 of the certificate stated that RB 55 FR and PE when
 23 tested for fire achieved a classification of B in
 24 accordance with EN 13501-1. I will refer to that as
 25 class B.

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1 At 6.3 of the certificate, on the same page, it
 2 certified the PE panels, whether riveted or cassette, as
 3 a result of its class B classification and tests on FR
 4 panels, may be regarded as having a class 0 surface in
 5 relation to Approved Document B of the
 6 Building Regulations.

7 Both statements were then false with regard to the
 8 classification of cassette.

9 Notable features of the story thereafter before the
 10 Tamweel fire include the following: 17 July 2009 where,
 11 as mentioned by Mr Williamson this morning, Arconic
 12 discussed the fire that had taken place in Romania, and
 13 Arconic's Mr Wehrle, to whom reference has already been
 14 made in this Inquiry, commented:

15 "Here are some pictures to show you how dangerous
 16 'PE' can be when it comes to architecture ..."

17 On 16 March 2010, Mr Wehrle let slip in an email
 18 conversation with a Mr Scheidecker:

19 "And Reynobond PE in cassette form doesn't obtain
 20 level 'B' either. Having said that, this shortfall in
 21 relation to the standard is something that we have to
 22 keep as VERY CONFIDENTIAL!!!!"

23 To which Mr Scheidecker responded:

24 "This shouldn't even have been mentioned."

25 Arconic knows that the BBA certificate wrongly

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1 passes off RB PE 55 cassette as having achieved class B,
 2 and in the UK therefore could be treated as having
 3 a class 0 rating for the purposes of Approved
 4 Document B. It knows that even mentioning what it calls
 5 the shortfall displays in writing Arconic's knowledge of
 6 the misrepresentation being perpetrated on the market.

7 It's clear from an email dated 5 July 2010 from
 8 Arconic's Isabel Moyses that Arconic's personnel are
 9 representing that cassettes have a more favourable
 10 rating than riveted, when Arconic knows the exact
 11 opposite is true. Mr Wehrle knows this, and expressly
 12 acknowledges that Arconic is "not clean". "Not clean",
 13 it is suggested, can only mean in this context: "We,
 14 Arconic, are knowingly misrepresenting the suitability
 15 of RB cassette to the market".

16 On 29 June 2011, Mr Wehrle recorded PE cassettes as
 17 having received a class F designation, commenting,
 18 "Oops". The consequences of this were obvious, as
 19 reported by Mr Wehrle on 30 June 2011. The F
 20 classification meant that RB 55 cassettes are "not
 21 suitable for use on building façades".

22 Rightly, there are no qualifications to this
 23 statement to the effect that it might or would be
 24 suitable in combination with other particular materials
 25 or with particular measures in place. It was not

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1 suitable, full stop. No ifs and no buts.

2 Did Arconic therefore ensure that it was never sold
 3 for use on building façades and warn those where it had
 4 been? Regrettably not. Instead, as evidenced in
 5 an email dated 5 July 2011, Arconic's corporate response
 6 was this:

7 "For the moment, even if we know that PE material in
 8 cassette has a bad behaviour exposed to fire, we can
 9 still work with national regulations who are not as
 10 restrictive."

11 I turn now to the second period, which starts with
 12 the Tamweel Dubai fire, to the end of May 2013. In this
 13 period, the 34-storey Tamweel Tower caught fire in
 14 Dubai. It was clad in PE. This occurred on
 15 18 November 2012. The press reported on the fire
 16 stating:

17 "The fire spread down the building. The cladding
 18 acted as a fuel."

19 On 28 November 2012, Mr Wehrle, commenting on the
 20 fire, identified the PE cladding as "Gutbond",
 21 commenting and acknowledging that "all PE composites
 22 react the same way".

23 On 25 April 2013, there are internal Arconic emails
 24 in which Arconic personnel state this:

25 "... the tests that we conducted are not really

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1 reflective of the riveted system in general. So, Alcoa
2 aligns with the market classification and does not use
3 it any more, preferring a class 'E' regardless of the
4 system."

5 Isabel Moyses responds:

6 "Yet we still won't stop proposing the riveted
7 product in PE???"

8 To which Mr Wehrle responds:

9 "Yes, that's the thing ... It's a gap in the
10 certification that we continue to make use of."

11 Note that the "not reflective" comment tallies with
12 Claude Wehrle's later note of 24 June 2016 regarding
13 enquiries about a project in Finland, when in
14 a disturbing exchange Mr Wehrle says this:

15 "We also had a class 'B' at the time in PE, but by
16 'arranging' the system to pass. So this report is
17 really not a reference."

18 "Arranging" is in inverted commas.

19 On 9 May 2013, Ms French, Arconic's UK
20 representative, reports to Arconic's high command,
21 including Mr Wehrle, that a Mr Richard Geater,
22 a representative in the UK for Alucobond, an Arconic
23 competitor, and in the aftermath of the Tamweel Tower
24 fire, has emailed Alucobond fabricators explaining that
25 Alucobond is now using a fire core only as standard.

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1 The email chain includes Mr Geater's strident attack on
2 the use of ACM PE in the Middle East. He says the
3 systems in the Middle East are like a chimney which
4 transports the fire from bottom to top or vice versa in
5 the shortest possible time. He comments that PE burns
6 fiercely.

7 The forwarded email by Ms French had a link to the
8 BBC report, which reported on the use of ACM with a PE
9 core in the UAE and which referred also to several other
10 fires. It informed Arconic personnel of what they
11 already knew:

12 "When the panel ignites fire spreads rapidly, racing
13 to the top of the building and sending flaming debris
14 hurtling to the streets below."

15 This was another opportunity for Arconic to come
16 clean and to withdraw its dangerous PE from the market.
17 It is quite clearly what Arconic ought to have done.

18 Instead, on 13 May 2013, Arconic wrote to its
19 fabricator, CEP, and apparently other customers as well,
20 and this was written to the knowledge of those at
21 Arconic's headquarters, including Mr Wehrle and
22 a Mr Peter Froehlich. The email was sent to assure CEP
23 and other Arconic customers. It was referred to this
24 morning by Mr Williamson. Referring to the BBC reports,
25 Ms French said, regarding any enquiries made to

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1 suppliers such as CEP, and I pick it up in the third
2 paragraph, if I may:

3 "Regarding the supply of Reynobond in the UK, as you
4 know we supply both PE and FR core and can control and
5 understand what core is being used in all projects due
6 to the control supply route we have. By only supplying
7 Reynobond to a very small group of Approved Fabricators
8 and working very closely with them on all projects we
9 are able to follow what type of project is being
10 design/developed and then offer the right Reynobond
11 specification including the core.

12 "At this stage we will continue to offer both FR &
13 PE core and continue the close working relationship we
14 have with our approved fabricators to make sure that the
15 right technical support, Reynobond specification and
16 materials are being used and installed on Reynobond
17 projects."

18 So, here, Arconic announced its responsibility, did
19 not, as we know, see that responsibility through to
20 Grenfell, and now Arconic, in their submissions, deny
21 its very existence. To make good on this announcement,
22 Arconic would not have put the PE up for consideration
23 at Grenfell Tower, let alone allowed it to be used.

24 To the third period, 2014 and 2015, when Reynobond
25 PE was selected, ordered and installed on Grenfell.

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1 Over this period of time, even the riveted form of
2 RB PE 55 was downgraded by the CTSB from B to C.
3 However, the BBA certificate not only remained
4 unaltered, but was used to sell RB PE 55 cassette on
5 Grenfell. Arconic continued to receive reports of yet
6 more fires involving PE.

7 Again, referring to certain important events, on
8 31 January 2014, CSTB published the certificates, which
9 cancel and replace previous certificates, and certified
10 class E for both RB PE 55 riveted and cassette.

11 Notwithstanding this and Ms French's knowledge of
12 the downgrade, the misleading BBA certificate in the
13 same form as had been issued in 2008 was, on
14 23 April 2014, sent by Arconic to Harley and CEP, and
15 then by Harley to Rydon, in support of the use of RB 55
16 at Grenfell Tower.

17 On 25 July 2014, Ms French was told that the
18 Grenfell architects had chosen RB PE 55 in cassette
19 format.

20 On 31 July 2014, Ms French is sent a picture of the
21 tower, which shows it to be well over 18 metres.

22 On 17 October 2014, Arconic's Serge Wahler reports
23 to Mr Wehrle that Ms French had told him that PE is used
24 regardless of the project and that there is no specific
25 legislation. He commented, "Debby pushes hard for the

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1 PE prescriptions ”.
2 Notwithstanding the assurances given in the 13 May
3 2013 emails and knowledge of the misleading
4 BBA certificate , PE was being peddled by Arconic in the
5 UK market.

6 Later that year, on 4 December 2014, out of the
7 blue, two certificates were CSTB, one confirming
8 cassettes at E and the other for rivet at C. Even if
9 the rivet class C was typical and not an arranged
10 classification , it was inappropriate for use in Europe
11 and the BBA certificate remained wrong for both rivet
12 and cassette .

13 Notwithstanding all that Arconic knew, Arconic
14 confirmed a CEP order for a significant amount,
15 3,000 square metres, of RB PE 55 on 26 March 2015 for
16 use at Grenfell Tower.

17 From April/May 2015, the panels were being supplied,
18 fabricated and installed at Grenfell . During that time,
19 on 5 May 2015, a report was forwarded to Arconic,
20 Mr Wehrle and others, concerning the Melbourne Lacrosse
21 Docklands fire , a post-incident analysis report.
22 Appendix 12 of that report documents seven fires in
23 high-rise buildings clad with aluminium polyethylene
24 composite panels in which fire spread rapidly over each
25 tower, either from bottom to top or top to bottom.

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1 On 29 June 2015, consistent with his view over many
2 years and reinforced by the many fires taking place all
3 over the world, Mr Wehrle writes in a way which can only
4 be interpreted as him recording the fact that he is
5 being told not to talk about the mis-selling of PE into
6 the French market, and of PE being represented as M1
7 standard under the French certification system when it
8 was not. He clearly considered he should put his now
9 often referred to opinion in writing:

10 "PE is DANGEROUS on façades ... This Opinion is
11 technical and anti-commercial, it seems."

12 In June 2015, an Arconic sales meeting was told that
13 the technical team's Claude Wehrle was managing
14 Arconic's regulatory watch and product system
15 certification , and that another individual was managing
16 fire certification . A slideshow produced included
17 a slide which identified , with regards to PE,
18 "limitations given by the smoke production and flaming
19 droplets", and under what is said typical application ,
20 "maximal building height of 8 metres to 12 metres
21 depending on the country".

22 On 16 October 2015, whilst the refurbishment works
23 continued, Arconic discussed a fire at the King Fahd
24 Medical Centre, which used Alucobond FR. It was
25 referred to by Mr Williamson this morning. Mr Wehrle

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1 commented:

2 "In PE, the fire would have spread over the entire
3 height of the tower, while in this case only the area
4 near the fire is affected . Long Live FR."

5 The fourth period, and the final section of the
6 chronology, runs from the installation of RB PE 55
7 cassettes at Grenfell to the date of the fire . This
8 period shows continued cynicism on the part of Arconic
9 and disregard for the serious potential consequences of
10 supplying product that had already been released into
11 the UK market.

12 On 19 January 2016, Mr Wehrle was reporting on
13 another fire , the Wolleck Tower fire , as again referred
14 to by Mr Williamson this morning:

15 "We were very lucky ... The Wolleck tower is in
16 Reynobond PE 10 metres from a fire! ... fortunately , the
17 wind didn't change direction , but ... we really need to
18 stop proposing PE in architecture ! We are in the
19 'know', and I think it is up to us to be proactive ...
20 AT LAST."

21 As specialist manufacturers, and with their
22 monitoring of fires worldwide, Arconic were very much in
23 the know.

24 On 9 February 2016, one Herve Marichez wrote to
25 Mr Wehrle with regard to what he described as a typical

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1 French market case:

2 "... do you reply with FR (with your conscience
3 clear) or PE (so you're sure to get the business)?
4 "What a dilemma!"

5 That it could even be posed as a dilemma gives
6 an insight into the profoundly irresponsible profit at
7 all costs culture prevalent within Arconic.

8 By 3 May 2016, it seems that in France, at least ,
9 the obvious dangers of PE and its lack of compliance
10 with requisite French standards meant that in France, at
11 least , a corporate decision was forced on Arconic. It
12 had to come clean. It's worth reading this , and I
13 wonder if I could ask the operator to bring up
14 {MET00053158_P06/99}.

15 Having set out what he describes as an ambiguous
16 situation --

17 SIR MARTIN MOORE-BICK: Just a moment, we haven't got it up
18 yet.

19 MR TAVERNER: I'm sorry.

20 SIR MARTIN MOORE-BICK: That's all right.

21 Oh, I'm sorry, it looks as though we aren't going to
22 be able to bring it up. Would you like to quote from
23 it?

24 MR TAVERNER: I will indeed, sir , thank you.

25 SIR MARTIN MOORE-BICK: Thank you.

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1 MR TAVERNER: So he sets out in this email what he describes
2 as an ambiguous situation -- that's Mr Alain Flacon --
3 when seeking to align the French NF P92-501 standard to
4 the European EN 13501 standard:

5 "You [and he is referring there to Arconic
6 personnel] or your customers regularly specify our
7 Reynobond products on large-scale architectural
8 projects. As such, [Arconic] finds itself as
9 a knowledgeable entity, and therefore accepts its
10 responsibility and image as a specialist in this field.

11 "In view of the potential calorific benefits of
12 Reynobond FR (vs Reynobond PE), and consequently its
13 superior performances, we have taken the proactive habit
14 of favouring FR as the only solution in our
15 specifications. As from today, I ask you to go even
16 further and to systematically confirm in writing the
17 requirements for FR for all projects on which
18 a Reynobond specification is involved, regardless of the
19 nature and size of the building project.

20 "... Claude [Wehrle] ... will give you all the
21 necessary information to justify this choice and advise
22 the specifiers as best as possible regarding this
23 solution, which is by far the safest."

24 On 12 June 2017, two days before the fire at
25 Grenfell, Mr Wehrle wrote with regards to enquiries

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1 originating in Israel:

2 "In Europe normally PE should no more be used on
3 a building for external cladding."

4 Arconic, however, having mis-sold the dangerous PE
5 for use at Grenfell, notified no one. Rather than
6 ensuring that the right product with the right core was
7 used on the right project, Arconic sought actively to
8 exploit the lack of clarity in regulatory regimes, which
9 were slow to respond to the dangers of PE, whether in
10 cassette or riveted form, they issued and relied upon
11 the misleading BBA certificates, which to their
12 knowledge wrongly represented that the cassettes had
13 a Euro B classification, and relied on an old superseded
14 and arranged test. They sought to use what they
15 considered gaps in the certification process, and all
16 this against the backdrop of their specific knowledge of
17 fire after fire in tower blocks clad in PE, where they
18 understood that all PE acts in the same way, and their
19 explicit recognition that PE was dangerous and should
20 not be used in architecture; in other words, in
21 buildings such as Grenfell Tower. Yet they manufactured
22 and sold RB PE 55 knowing it was to be used at Grenfell.

23 It is suggested that the fire at Grenfell could not
24 have come as any surprise to those in many positions of
25 responsibility within the Arconic organisation.

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1 Turning now, if I may, to Celotex and the use of
2 their RS5000 insulation board within the cladding
3 system.

4 In 2013, Celotex was looking enviously at Kingspan's
5 sales and, in particular, the success of its K15
6 insulation board in the above 18-metre exterior cladding
7 market in the UK.

8 At a meeting in Durham in June 2013, Celotex
9 considered with a cladding system company, Sotech, and
10 fire experts, IFC, how Kingspan could possibly and
11 legitimately seek to support the use of K15 within
12 systems using ACMs when the BS 8414 tests used by them
13 to obtain the BR 135 fire certification had only tested
14 K15 together with non-combustible cladding.

15 A note prepared by Celotex's Jonathan Roper at that
16 Durham meeting stated, under the heading "K15 BBA
17 Certification & Literature":

18 "Astonished as to how K15 is used so widely based on
19 testing involving a cement particle board as the outer
20 face to represent a typical cladding panel. Identified
21 that [Kingspan] used Promaseal fire barriers fixed to a
22 galvanized steel sheet. Sotech convinced that the
23 system quoted using a standard cladding panel would fail
24 as the post flashover that occurs would penetrate and
25 melt the panel and allow the flame to enter the cavity.

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1 Cleverly designed and worded i.e. non combustible
2 substrate wording used in literature could be
3 interpreted as applicable for part 1 and part 2 (cp
4 board & masonry face). Outer face using CP board
5 classified as 6mm non combustible cladding in product
6 literature."

7 There was a further meeting, this time at Peterlee
8 on 3 October 2013, attended by Sotech and IFC again, and
9 by Jonathan Roper and Jamie Hayes of Celotex, to discuss
10 the Kingspan tests and whether what was then called
11 FR5000 could also pass the test.

12 The summary of the meeting states this:

13 "Fire test

14 •" Very problematic to pass - Kingspan failed twice
15 with standard cavity barriers.

16 •" John at Sotech sceptical about pass with
17 decorative cladding.

18 •" Still no idea how Kingspan support the use of
19 decorative cladding as their fire test uses a non
20 combustible cladding.

21 •" Very unlikely to pass on the basis that Celotex
22 FR5000 is slightly better than Phenolic (according to
23 IFC testing)."

24 During the course of an email exchange later that
25 month, on 31 October 2013, regarding the possible design

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1 of the cladding system to be submitted for BS 8414
 2 testing, Mr Roper said this:
 3 "The big issue we have is that we know that a
 4 standard aluminium panel will melt and amount to
 5 a failure in this particular test."
 6 In an email of 1 November 2013 from Roper to Evans,
 7 Mr Roper sets out the position at length and sets out
 8 Celotex's view of the lack of knowledge of the industry
 9 and the consideration of whether to exploit that lack of
 10 knowledge. This can be found at {CELO0000716}. I'll
 11 quote from this at length:
 12 "Well ... I think we have two possible solutions for
 13 testing in which both David @ IFC and I have confidence
 14 in. Will explain more on Monday but essentially since
 15 the beginning of the project, we have been looking at
 16 testing worst case scenario with an improved fire
 17 barrier to be then supported by an assessment report
 18 which broadens the scope of potential systems that we
 19 are applicable for.
 20 After much research, I don't think this is possible
 21 and I don't believe [Kingspan] have a similar report
 22 [this must be a reference to the assessment report]. We
 23 cannot seem to find or design a suitable barrier in
 24 which we have enough confidence that it can be used
 25 behind a standard ACM panel which we know will melt and

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1 allow fire into the cavity. Speaking to SIMCO on
 2 Wednesday in [Birmingham] with IL, he confirmed that
 3 architects will specify K15 with a standard fire barrier
 4 and panel. When the work is contracted and then
 5 sub-contracted to cladding contractors such as Simco,
 6 H A Marks, Stanmore etc, they value engineer that system
 7 to be competitive at tender. This means changing fire
 8 barriers, changing panels. The architect's only
 9 guarantee is that K15 will be used because there is no
 10 other alternative available.
 11 "An architect will be told that K15 is applicable
 12 for above 18m in accordance with ADS and that suffices
 13 from their perspective. Kingspan have done a great job
 14 at the spec end and according to Simco are specified
 15 much more than Rockwool Duo Slab for thermal
 16 performance. As discussed above, contractors opt for
 17 more cost effective solutions and although they are
 18 liable for what goes into that building, they do not
 19 know enough about the fire test to challenge. The only
 20 figure who might possibly challenge a product's
 21 eligibility for use in buildings above 18m is the
 22 building control officer. Kingspan I would suggest do
 23 not have a piece of paper that states they can
 24 specifically be used behind any cladding panel. What
 25 they have done is got BEA certification stating the fire

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1 test method and taken that to LABC to get a registered
 2 document detail which states that K15 can be used in a
 3 variety of cladding systems and complies with ADS
 4 through passing BR 135. A building control officer is
 5 unlikely to challenge a document that is approved from
 6 the head of building control."

7 The note then goes on to discuss options in the
 8 fourth and fifth paragraphs, before then at the seventh
 9 paragraph saying this:

10 "Do we in fact need to spend f25k/f30k for a BBA to
 11 be able to gain this document from LABC which in my mind
 12 gives us very little chance of being challenged from
 13 building control. Do we partner with a few fire barrier
 14 manufacturers who have tested with K15 currently to gain
 15 confidence in the [market] that way? Or do we take the
 16 view that our product realistically shouldn't be used
 17 behind most cladding panels because in the event of a
 18 fire it would burn?"

19 "What [Kingspan] have done extremely well is say
 20 very little but build confidence if challenged by having
 21 fire barrier manufacturers showing tests with K15,
 22 achieve BBA validation and subsequently gain LABC
 23 approval. There is always the chance they do have the
 24 piece of paper in the top drawer from somebody that
 25 states for use with any system but I doubt it!"

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1 On 8 November 2013, Mr Roper emailed Luke Cresswell
 2 and John Simmons discussing BRE test details. In that
 3 email, and talking about the BRE test, he says this:

4 "As much as they limit the scope of the tested
 5 system, they [that's the BRE] do accept that although
 6 one system was tested, ie Eternit, they understand that
 7 commonly this allows insulation products to be used with
 8 a variety of systems in practice. I think testing with
 9 an Eternit panel is the route to go but shouldn't cause
 10 us any issues with regards to using Celotex behind
 11 Reynobond on the up and coming job. I have also got
 12 LABC involved to issue a report stating that Celotex can
 13 be used behind a variety of systems above 18 metres to
 14 prevent any challenge from building control."

15 In our submission, five things can be taken from
 16 Celotex's document as to the state of play at the end of
 17 2013.

18 First, Celotex were impressed rather than appalled
 19 that Kingspan's K15 was taken in the marketplace as
 20 being suitable for use with a variety of cladding
 21 systems, including ACM cladding, above 18 metres.

22 Second, Celotex's market research told them that
 23 building contractors did not know enough about the fire
 24 test to challenge. Presumably by challenge, Celotex
 25 meant challenge any suggestion, implicit or explicit, as

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1 to the suitability of the use of products in a variety
2 of systems not in fact the subject matter of any BS 8414
3 test.

4 Third, Celotex believed that if an architect was
5 somehow told that K15 was suitable for use above
6 18 metres in accordance with Approved Document B, that
7 statement would or at least could suffice from the
8 architect's perspective.

9 Fourth, Celotex had concluded that any challenge to
10 a product's eligibility for use in buildings above
11 18 metres by the building control officer could be
12 deflected with an approval from the body known as the
13 LABC, a body whom could be counted on to issue reports
14 stating that Celotex could be used behind a variety of
15 systems above 18 metres.

16 Fifth, Celotex fatefully turned its back on the
17 accurately expressed view that the product realistically
18 shouldn't be used behind most cladding panels because in
19 the event of a fire it would burn.

20 I turn now to 2014.

21 With that backdrop, Celotex's first step in 2014 was
22 to get some sort of BR 135 certificate based on BS 8414
23 testing. Having made one failed attempt on
24 14 February 2014, using 8-mil Marley Eternit A2 cladding
25 panels, Celotex tried again on 2 May, using thicker

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1 12-mil Marley Eternit cladding, and further adding
2 a 6-mil non-combustible magnesium oxide board as
3 reinforcement in the area of the cavity barriers. It
4 passed, obtaining BR 135 accreditation. To Celotex's
5 knowledge, the BRE test report omitted reference to the
6 6-mil non-combustible magnesium board.

7 Soon after the BRE pass, Celotex held an internal
8 meeting on 14 May 2014. A presentation at the meeting
9 was entitled "Above 18 metres". That presentation again
10 was referred to earlier this morning. Slide 10 of the
11 presentation contained a review of Kingspan's K15 and
12 how Kingspan had tested K15 using a non-combustible
13 cladding as a façade and obtained LABC approval,
14 commenting that Kingspan had created a strong perception
15 of fire-safe Kooltherm board.

16 It went on and produced slide 11 -- again, if it's
17 possible to get up this slide, Mr Operator, I would be
18 grateful, it's at {CEL00008648/11}. If we can't, I'll
19 quote from it.

20 SIR MARTIN MOORE-BICK: Just a moment, it might come up.

21 (Pause)

22 Is that the one you wanted? No.

23 MR TAVERNER: No, it's not, I am afraid. I will continue

24 and quote from the document, if I may.

25 SIR MARTIN MOORE-BICK: Yes, all right, you carry on.

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1 MR TAVERNER: Under the heading "Market Research", bullet
2 point:

3 •" Everybody Uses K15 As There Is No Alternative .

4 •" Nobody Understands The Test Requirements

5 (Architects Ask If It Can Be Used Above 18m, The Answer
6 is YES).

7 •" Building Control Have Hugely Differing Levels Of
8 Understanding On The Subject.

9 •" Give Us A Board That Is An Alternative ..."

10 This restated the deeply-held view in Celotex that
11 nobody understands the test requirements, and Celotex
12 set out to exploit that belief.

13 The Celotex marketing team appeared to be being told
14 that if they are asked the practical question by
15 an architect, "Is it suitable for use above 18 metres?",
16 you can answer "Yes", simply and without qualification,
17 presumably by reference to a test of the system which
18 for all intents and purposes would never be replicated
19 in reality.

20 Celotex then turned their attention on getting the
21 product approved by the LABC, such approval to be used
22 to show building control officers, those whom Celotex
23 assessed as being unlikely to challenge a document that
24 is approved from the head of building control. So on
25 17 June 2014, Celotex emailed LABC with details of the

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1 registration Celotex was seeking and the verbatim
2 wording it required and ultimately obtained.

3 On 21 August 2014, Celotex was granted LABC
4 registration for RS5000. The registered system related
5 to Celotex RS5000 insulation board for use within
6 rainscreen construction with "limitations of use
7 detailed in the attached drawing and document list".
8 That drawing and document list stated as follows:

9 "Limitations of use: For use in rainscreen wall
10 construction including above 18 metres height. The
11 required thickness of board for a particular
12 construction must be established with the use of the
13 Celotex online calculator."

14 This refers to the insulation values.

15 "Advice notes: Celotex RS5000 can be used with
16 a variety of cladding systems (including masonry or
17 rainscreen systems) and can be fixed back to
18 a structural steel frame using a sheathing board or
19 direct back to masonry.

20 "Celotex RS5000 has successfully tested to BS 8414:2
21 2005, meets the criteria set out in BR 135 and therefore
22 is acceptable for use in buildings with storeys above
23 18m in height (subject to the board being fixed to
24 a non-combustible substrate) alternative compliance to
25 AD B. The product has been tested [and] achieves

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1 a 'Class 0' spread of flame."
 2 This wording not only gave, for all intents and
 3 purposes, unqualified approval for RS5000 to be used
 4 above 18 metres in steel-framed cladding systems such as
 5 that tested by Celotex under BS 8414-2, but also
 6 extended that unqualified approval to masonry-fixed
 7 systems falling within BS 8414-1, which Celotex had not
 8 even tested.

9 Note also the use of the words "non-combustible
 10 substrate", which echoed the Kingspan phraseology which
 11 it will be recalled Celotex regarded as "clever" at the
 12 June 2013 Durham meeting, since it was liable to be
 13 misunderstood as applying to the masonry wall.

14 In short, by securing LABC registration in the terms
 15 it did, Celotex now had unrestricted LABC approval for
 16 RS5000 to be used in any above 18-metre cladding system
 17 which could then be confidently presented to any
 18 building control officer.

19 On 29 September 2014, Celotex prepared what it
 20 called a standard response, which was to be issued to
 21 anyone enquiring of Celotex about the use and
 22 application of RS5000 and whether it had BBA
 23 certification. The standard response should be read in
 24 full but included this:

25 "Celotex RS5000 successfully tested to

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1 BS 8414-2:2005 and therefore complies with the
 2 requirements of ADB for buildings that exceed 18 metres
 3 in height."

4 It goes on:

5 "Celotex RS5000 has current certification from the
 6 Building Research Establishment (BRE) confirming the
 7 product has met the criteria set out in BR 135 and
 8 therefore is acceptable in rainscreen cladding systems
 9 above 18 metres in height. The BRE has also validated
 10 that Celotex RS5000 achieves Class 0 fire performance
 11 ... Celotex RS5000 has also achieved Local Authority
 12 Building Control (LABC) approval for use in rainscreen
 13 cladding systems. Please find this attached confirming
 14 that the product is suitable for use in masonry and
 15 steel frame constructions, has achieved the performance
 16 criteria set out in BR 135 ..."

17 There is nothing in the standard response that would
 18 alert anyone making an enquiry to the reality that, in
 19 fact, the BR 135 certification applied only to Celotex
 20 being used in an unusual and atypical combination of
 21 products, one of which was, to Celotex's knowledge,
 22 undisclosed.

23 On 6 August 2014, the very next day after the launch
 24 of RS5000, Mr Roome emailed Ben Sharman of Harley as
 25 follows:

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1 "Hi Ben,

2 "Good to speak to you again. I have the pleasure of
 3 informing you as of yesterday we have now launched the
 4 first PIR Board to Successfully Meet The Performance
 5 Criteria In BR 135 For Insulated Rainscreen Cladding
 6 Systems. Therefore Acceptable For Use In Buildings
 7 Above 18m In Height."

8 The unqualified email highlighted that Celotex's
 9 system was available with regard to the insulation
 10 U-value calculations, but not the fact that the BS 8414
 11 tests were carried out using Celotex as part of
 12 an unusual, atypical, non-standard cladding board
 13 system, and further undisclosed magnesium oxide board
 14 used as a fire barrier. Nor did they point out that the
 15 statement "therefore acceptable for use in buildings
 16 above 18m in height" was for all practical purposes,
 17 because of the nature of that test, thoroughly fanciful.

18 Celotex was marketing RS5000 to a contractor whom
 19 Celotex had already assessed and hoped as not knowing
 20 enough about the fire test to challenge. Roome, in this
 21 email, attached the RS5000 product datasheet, the
 22 rainscreen cladding compliance guide, an application
 23 datasheet and a product comparison matrix.

24 The message in the email to Harley was reinforced on
 25 the first page of the RS5000 product datasheet to which

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1 we were referred this morning. It was under the whole
 2 heading "suitable for buildings above 18 metres in
 3 height". I won't quote the whole of that document
 4 again, other than to point out that within that first
 5 page was added "Has Class 0 fire performance throughout
 6 the entire product in accordance with BS 476", and under
 7 a bullet 5, "supported by LABC approval".

8 It also said under "Applications" on the same
 9 opening page:

10 "Celotex RS5000 is specifically designed for use in
 11 rainscreen cladding systems for both new build and
 12 refurbishment projects."

13 The application datasheet also sent to Harley was,
 14 on page 1, almost verbatim, in the same terms and sent
 15 the same clear message: suitable for use above
 16 18 metres.

17 On 28 August, Celotex sent some additional material:
 18 a rainscreen cladding specification guide, a four-page
 19 abridged BRE classification of course, the LABC
 20 certificate and drawings and document list.

21 Celotex say now that they were entitled to expect
 22 that contractors, architects and building officers would
 23 ensure either that (1) RS5000 was only used in
 24 accordance with the Eternit cement board tested system,
 25 and it seems the magnesium oxide fire barrier; (2) that

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1 the RS5000 should be bespoke BS 8414 tested with the
2 actual system to be used on any particular project; or
3 (3) would be otherwise justified by an assessment
4 report, desktop study, or some other holistic approach
5 which could extrapolate from the BR 135 test.

6 Celotex say now, in effect, that they were entitled
7 to expect that the very people they set out to dupe, or
8 that they deemed insufficiently equipped to understand
9 the ramifications of the material it disseminated, would
10 not be duped and so frustrate the very aim of Celotex's
11 marketing strategy with regards to RS5000.

12 Celotex points in its written submissions to what
13 they say was information which made the position clear,
14 for example on the last pages of the RS5000 application
15 datasheet, and similar wording in the rainscreen
16 cladding compliance guide, wording such as:

17 "The fire performance and classification report
18 issued only relates to the components detailed above.
19 Any changes to the components listed will need to be
20 considered by the building designer."

21 If that consideration took the form of enquiries to
22 Celotex, they no doubt planned to give the standard
23 response and told suitable for use above 18 metres.

24 Celotex point to other similar text which
25 concentrates on components being suitable, not the

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1 components being suitable for only part of the system.
2 The rainscreen cladding compliance guide, which included
3 wording to the same effect as above, was the only
4 document that reproduced, tucked away, the limitation
5 and warning applicable to BR 135 certification, and that
6 it was important to check the classification documents
7 over the end-use application.

8 There are the following points.

9 Celotex knew that the tested system using the thick
10 Marley cement board, either alone or together with the
11 magnesium oxide board, was not only not standard but
12 would never be used in practice. Celotex must have
13 known that no properly conducted BS 8414 tests with
14 standard panels would ever achieve BR 135 certification.
15 If that was the case, Celotex could have arranged for
16 those tests themselves. It would have been marketing
17 gold.

18 Celotex must have known that an assessment report or
19 desktop study based on its BS 8414 testing could not
20 sensibly verify the use of Celotex RS5000 in the ACM
21 cladding market above 18 metres, and certainly for use
22 with a product similar to RB PE 55. Again, Celotex had
23 considered that strategy of getting such a report or
24 assessment but had abandoned it.

25 Celotex knew that to use RS5000 in a cladding system

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1 was unsafe. It knew that it should not be used behind
2 most cladding panels because in the event of fire it
3 would burn. It follows, we suggest, that Celotex must
4 have known that either the BR 135 certification was of
5 no practical value whatsoever in the real market it was
6 seeking to break into, or that the certification,
7 together with how that certification was going to be
8 presented, would likely result in use of RS5000 in
9 circumstances above 18 metres, and in cladding systems
10 such as those used in Grenfell and where it was not
11 suitable for use.

12 The icing on the cake in terms of its marketing
13 materials was the nonsensical, false and irrelevant
14 assertion that its product complied with class 0
15 throughout. This can only have been included in order
16 to give weight to the premise of the certificate: it
17 satisfied BR 135 and therefore was safe and suitable to
18 use with ACMs in buildings above 18 metres.

19 Celotex's only explanation for its inclusion so far,
20 as it is understood, is that it was useful information,
21 without explaining why, or indeed why it wrongly said
22 that it was class 0 throughout when it was not.

23 A real mischief in the language of the product
24 literature is that, by referring to the RS5000 as the
25 first PIR insulation board to meet the performance

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1 criteria of BR 135, and that it was therefore suitable,
2 acceptable, for use above 18 metres, the impression was
3 given that RS5000 on and of itself satisfied the
4 approved document. That implies compliance by the
5 linear route, ie that it was safe to use on its own,
6 irrespective of what other components it was combined
7 with to make up a complete cladding system.

8 Celotex referenced the BR 135 alternative route to
9 compliance for a system, but used it to imply compliance
10 via the linear route for a single component of that
11 system. The reference to "class 0 throughout"
12 contributed to the impression that it satisfied the
13 linear route.

14 Neither tranches of literature sent to Harley in
15 August 2014 included the health and safety datasheet
16 relied heavily upon by Celotex last Thursday in its
17 opening oral submissions. None of the product
18 literature that was sent to Harley said that RS5000 was
19 combustible. Further, a health and safety datasheet is
20 not where you would expect to have to look to find
21 details about the fundamental properties of the
22 insulation that affected the range of applications for
23 which it was or was not suitable. The product
24 literature did not direct readers to the health and
25 safety datasheet to find out it was Building Regulation

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1 compliant, as now suggested by Celotex.
 2 After the contract made by Celotex with Harley,
 3 there was further correspondence between them throughout
 4 the rest of the year. On 17 November 2014
 5 Grenfell Tower was identified on a list of must-win
 6 projects which was sent to Paul Lake, the managing
 7 director of Saint-Gobain UK.
 8 During November 2014, as outlined in our written
 9 submissions, Celotex was sent information during those
 10 exchanges which showed that the Celotex was to be used
 11 with Reynobond 4-millimetre ACM, that it was to be used
 12 in cassette format, and that the RS5000 was going to be
 13 fixed directly to the existing concrete walls of
 14 Grenfell Tower and not to a steel frame.
 15 What Celotex hoped would happen on the back of the
 16 BR 135 certificate, the LABC approval and its marketing
 17 material in fact happened: its product was chosen with
 18 an ACM which, to its knowledge, was RB 55 for use at the
 19 Grenfell Tower block over 18 metres in height.
 20 What Celotex also knew would happen happened: that
 21 Celotex in the case of fire burnt with tragic
 22 consequences.
 23 In conclusion, the aim of both Arconic and Celotex
 24 was to have their products used in the circumstances in
 25 which they were in fact used at Grenfell, in the

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1 knowledge that the understanding of construction
 2 professionals was such that it was likely that they
 3 would be duped. They were both expressly aware of the
 4 potential consequences and as occurred at
 5 Grenfell Tower.
 6 Chairman, members of the panel, thank you for your
 7 patience.
 8 SIR MARTIN MOORE-BICK: Mr Taverner, thank you very much
 9 indeed for your submissions.
 10 Our next speaker is scheduled to appear at
 11 2 o'clock, so at that point we will stop for the morning
 12 and resume then, that is at 2 o'clock.
 13 Thank you very much.
 14 (12.50 pm)
 15 (The short adjournment)
 16 (2.00 pm)
 17 SIR MARTIN MOORE-BICK: Well, at this point I'm going to
 18 call upon Ms Leek QC to address us on behalf of the BRE.
 19 Are you there, Ms Leek?
 20 MS LEEK: I am, sir, thank you.
 21 SIR MARTIN MOORE-BICK: At the moment you're not on my
 22 screen, I'm afraid. Ah, you are now. That's all right.
 23 So I can see and hear you; can you see and hear me?
 24 MS LEEK: I can, thank you, sir.
 25 SIR MARTIN MOORE-BICK: And Ms Istephan as well, I hope.

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1 All right. Well, when you are ready, then, off you
 2 go. Thank you.
 3 Opening statement on behalf of the BRE by MS LEEK
 4 MS LEEK: Thank you.
 5 Mr Chairman, panel members, BRE welcomes the public
 6 scrutiny in this Inquiry of the events that led to the
 7 fatal fire at Grenfell Tower. BRE wishes to express
 8 again its deepest sympathies to all of those affected by
 9 the tragic events which occurred. BRE recognises the
 10 distress that both the fire and this scrutiny bring to
 11 the bereaved, survivors and residents, and would like me
 12 to acknowledge publicly their and their legal teams'
 13 assistance to the Inquiry. BRE too remains ready to
 14 assist in this module and beyond to establish the facts
 15 of what happened at Grenfell Tower and to establish
 16 necessary action to prevent a similar tragedy from
 17 happening.
 18 In this brief oral opening, which supplements BRE's
 19 written opening, I will address four issues. But before
 20 I do so, BRE would like it to be noted that, prior to
 21 the tragic fire at Grenfell Tower, it had no involvement
 22 in assessing the safety of the cladding systems
 23 installed on to the tower. Its knowledge of those
 24 systems is derived from its after-the-event assistance
 25 to Government, and from evidence submitted to this

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1 Inquiry.
 2 The four issues are as follows: first, what is BRE?
 3 Second, the cladding systems installed on to
 4 Grenfell Tower. Third, an overview of how BRE and its
 5 witnesses may assist in this module and beyond. Fourth,
 6 a brief comment on the disclosures made during this
 7 Inquiry by both Celotex and Kingspan.
 8 Turning to the first issue: what is BRE?
 9 BRE is a multidisciplinary building science centre
 10 with a mission to improve buildings and infrastructure
 11 through research and the generation of knowledge.
 12 (Connection lost)
 13 Sir, I think we got disconnected there for a moment.
 14 SIR MARTIN MOORE-BICK: We did for a moment, I'm afraid.
 15 Why don't you start that point again, and then we'll
 16 make sure we have everything on the transcript.
 17 MS LEEK: Sir, since its founding in 1921, BRE has striven
 18 to make a positive difference in the built environment,
 19 for the health and safety of all of us who live and work
 20 in and otherwise use that environment. It is
 21 a profit-for-purpose organisation owned by a charitable
 22 trust. Surplus income is used to fund new research
 23 and education programmes designed to meet the aims of
 24 promoting safety and sustainability.
 25 One of BRE's functions is that of a testing house.

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1 In that capacity, BRE is engaged by test sponsors to
2 test, for example, products or systems for use in the
3 building industry. Tests are carried out using
4 established methodologies and measured against published
5 standards.

6 As other core participants have already stated in
7 opening, the published standard relevant to the cladding
8 systems installed on Grenfell Tower is BR 135, and the
9 relevant test methodology is BS 8414-1. A cladding
10 system tested used using the BS 8414-1 methodology that
11 meets the test in BR 135 is said to have achieved
12 classification.

13 Essentially, BRE is engaged by a manufacturer or
14 supplier of a cladding product or system. That test
15 sponsor constructs a cladding system, known as a test
16 rig, at BRE's test site. BRE's technicians set fire to
17 the test rig. They observe and record how the test rig
18 reacts to the fire. The data generated is assessed
19 against the criteria of BR 135, and only if the tested
20 cladding system meets those criteria will
21 a classification report be produced, if the test sponsor
22 asks for one. The result is a binary pass/fail for that
23 specific system. The test sponsor may then use that
24 classification report to evidence that the specific
25 system tested adheres to the fire safety requirements in

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1 Building Regulations Approved Document B. If components
2 are substituted, altered or moved, it is no longer the
3 same system, so the classification report does not
4 apply.

5 In this opening, it is also pertinent to state what
6 BRE does not do, due to misapprehensions in some core
7 participants' opening statements.

8 BRE is not a regulator and does not fulfil the
9 function of a building control authority. It has no
10 mandate, role or authority to monitor what manufacturers
11 and suppliers do with their test and classification
12 reports, and has no oversight as to how they are used to
13 fulfil their obligations under Building Regulations.
14 BRE's function is that of a test house; in short, to
15 burn systems and products and assess how they perform.

16 The second issue is the cladding systems installed
17 on to Grenfell Tower. It is BRE's considered opinion
18 that a fire test to classify to BR 135, as just
19 described, would have been the only available route to
20 ascertain whether these cladding systems were safe.
21 These systems were combustible, so the linear route
22 under Approved Document B was not available.
23 An extended field of application by means of a desktop
24 study was not available either, as these systems were
25 not similar to the systems that had been classified to

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1 BR 135. There was no similar safe application to
2 extend. The only possible other alternative route, ie
3 a fire engineering assessment, would also be unsuitable
4 due to the apparent lack of robust relevant evidence and
5 information upon which to carry out the assessment.

6 Before installing the cladding on to Grenfell Tower,
7 at least one company involved with the manufacture, sale
8 or installation of the cladding should have engaged
9 a test house, such as BRE, to test those systems in
10 a fire test. None of them did so.

11 After the tragic events at Grenfell Tower, BRE
12 provided assistance to the then Department for
13 Communities and Local Government to identify the types
14 of aluminium composite materials that were and are
15 installed on many other blocks of flats across the UK,
16 and how they would perform when tested in combination
17 with different types of insulation.

18 In addition, BRE provided technical support to the
19 Metropolitan Police Service investigation into the fire,
20 to help ascertain how the fire developed and spread in
21 the way that it did. BRE's assistance established that
22 the two cladding systems on Grenfell Tower, one
23 incorporating Celotex RS5000 and one incorporating
24 Kingspan K15 insulation, in combination with
25 polyethylene-cored aluminium composite material, fail

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1 against BR 135. It was shown that, had any of the
2 companies involved with the manufacture, supply and use
3 of those systems engaged a test house, it is highly
4 unlikely that the fatal fire would have spread as it
5 did.

6 The facts now known about these cladding systems are
7 shocking. The bereaved, survivors and residents, and
8 indeed society at large, are entitled to an explanation
9 as to why those unsafe cladding systems were installed
10 on to Grenfell Tower. They are also entitled to
11 a proper explanation about the compliance regime that
12 should have been followed, resolute scrutiny of the
13 companies and individuals who did not follow it, and
14 an analysis as to how the failures identified by this
15 Inquiry came about.

16 Issue 3: BRE's witnesses and assistance to
17 the Inquiry.

18 BRE was not a core participant in Phase 1. As
19 a core participant in Phase 2, BRE is committed to
20 assisting the Inquiry with its investigation, as it
21 assisted the police and Government, and to contributing
22 to lessons that can be learned so that the tragedy of
23 14 June 2017 is never repeated.

24 In this Module 2 of Phase 2, three of BRE's
25 employees, current and former, will give evidence to

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assist with these issues. Tony Baker, who will be giving evidence on 15 December, is BRE's fire resistance laboratory manager and co-author of the current edition of the BR 135 standard, which is a standard that was funded by the BRE Trust. He is in a position to explain, among other things: first of all, BRE's role as a testing laboratory accredited by the UK Accreditation Service; second, the classification process that should have been followed for the cladding systems installed on Grenfell Tower; third, the limitations of any individual classification report; fourth, the relevance or, more accurately, the irrelevance of the tests carried out on behalf of Kingspan and Celotex to the question of whether the cladding systems in fact installed on Grenfell Tower were safe; and, finally, the difference between classification and certification, in particular that classification services could not reasonably be taken to include the provision of consultancy advice.

Mr Baker is also able to assist the Inquiry with the broader legislative regime within which BRE operates, BRE's role within that regime and the part played by the provision of classification services. He will also be able to clarify apparent misapprehensions raised in some opening submissions about BRE's role and functions.

Further, if called upon to do so in this module,

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Mr Baker can comment on matters exposed by the witness evidence of other core participants about a lack of understanding about the meaning and significance of classification to BR 135, and apparent poor industry practice that the facts now reveal.

Two former employees of BRE will also be giving evidence in this module, Stephen Howard and Phil Clark, who too may be able to assist with these matters.

Issue 4: disclosures made by Celotex and Kingspan.

Sir, BRE wishes to express its concern and dismay about the disclosures from both Celotex and Kingspan in respect of misleading information provided to BRE about components in cladding systems tested on their behalf.

The classification process relies on accurate information being provided by test sponsors. BRE classification reports clearly state:

"This classification is valid only for the system as installed and detailed. Test sponsors are contractually obliged to provide accurate information during the testing and classification process."

It is now known that Celotex intentionally misled BRE about the components that comprised its test rig on 2 May 2014. Celotex intentionally procured and used a classification report in the knowledge that it was inaccurate. BRE is deeply troubled by this. BRE

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welcomes Celotex's acknowledgement by Craig Orr QC during his oral opening on 5 November that these events involved unacceptable conduct on the part of Celotex's former employees, and that the components to be tested should have been accurately reported.

Turning to Kingspan, BRE received from Kingspan a letter dated 23 October 2020. Kingspan informed BRE that a test carried out in 2005 used what is now being referred to as "old technology K15". There is nothing wrong with that. Further, there was nothing wrong, contrary to what is said by other core participants, with a classification report concerning that test being produced by BRE ten years later. Classification was achieved as a matter of fact, as BRE's Mr Baker can explain.

Nonetheless, in light of Kingspan's disclosure, BRE now questions the motives behind Kingspan procuring a classification report ten years after the event, and nine years after the so-called "new technology K15" was introduced. Kingspan knew or ought to have known that the classification report did not apply to the K15 product on the market.

The letter also informed BRE, first, of other inaccuracies in the way in which Kingspan described components and, second, that two other tests carried out

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in 2014 used K15 that was not representative of what was being sold to the market.

BRE is actively considering the implications of Kingspan's very recent disclosures.

Although the Celotex and Kingspan cladding systems that did achieve classification are markedly different from those installed on Grenfell Tower, so that these classification reports tell us nothing about the safety of those on Grenfell Tower, the conduct of these companies is alarming. BRE welcomes this Inquiry's scrutiny of the conduct of these companies, the lessons that can be learned from that scrutiny, and the assessment of whether the legal, contractual or ethical failures of these companies demonstrate a need for the regulatory regime to be reformed.

In conclusion, BRE used its knowledge to assist Government in the immediate aftermath of the fire. It is committed to assisting the Inquiry in its endeavour to establish the facts, and to make recommendations as to practical and achievable measures which can be taken to avoid such a tragedy ever happening again, and to learn broader lessons as to how to ensure a healthy and safe built environment for us all.

Thank you, sir.

SIR MARTIN MOORE-BICK: Thank you very much, Ms Leek.

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1 Well, now, the next speaker is Mr Campbell QC, who
 2 is going to address us on behalf of Siderise. He was
 3 expecting, I think, not to be called on until 2.30, but
 4 I see you are there, Mr Campbell, is that right?
 5 MR CAMPBELL: I am, sir, yes. Can you hear me?
 6 SIR MARTIN MOORE-BICK: Yes, I can hear you, thank you, and
 7 I can see you. Are you ready to go?
 8 MR CAMPBELL: I am, sir, yes.
 9 SIR MARTIN MOORE-BICK: Well, then, we'll hear from you
 10 straight away, if that's convenient.
 11 Opening statement on behalf of Siderise by MR CAMPBELL
 12 MR CAMPBELL: It is convenient, sir, and Siderise is
 13 grateful for this opportunity to make an opening
 14 statement, which will be relatively brief.
 15 Sir, this is the first occasion on which Siderise
 16 has made an oral statement to the Inquiry, and therefore
 17 may I take this opportunity on behalf of Siderise and
 18 its employees to extend their very deepest sympathy to
 19 the families of all those who lost their lives as
 20 a result of the devastating fire at Grenfell Tower, and
 21 to everyone who is affected by the tragedy. Siderise
 22 supports the vitally important work of the Inquiry and
 23 will do all that it can to assist.
 24 Sir, there are three areas that I would like to
 25 cover in this opening statement: the first is the

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1 testing and certification of Siderise's cavity barriers,
 2 the second is the marketing of the cavity barriers, and
 3 the third is the advice provided by Siderise to Harley.
 4 Can I turn then to the first of those topics, which
 5 is the testing and certification of Siderise's
 6 cavity barriers.
 7 The cavity barriers are made from a non-combustible
 8 stone wool material known as lamella which has been
 9 certified as achieving an A1 fire rating. It is clear
 10 from the evidence that the Inquiry has heard that
 11 significant errors were made in the installation of the
 12 cavity barriers, and it's also clear that there were
 13 failures in the cavity barrier strategy, perhaps most
 14 importantly the failure to place cavity barriers around
 15 windows.
 16 Further, the cavity barriers as individual
 17 components were subject to the correct tests and were
 18 correctly certified. The cavity barriers as products,
 19 we would submit, were not non-compliant. It's necessary
 20 to descend to some detail to make good that point, but
 21 I hope not too much detail.
 22 Can I turn first to the horizontal or open-state
 23 cavity barriers, which were tested to the principles of
 24 BS 476 part 20, part 20 being the most applicable part
 25 of BS 476. The BS 476-20 test procedure was not

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1 entirely suitable for an open-state cavity barrier with
 2 an intumescent strip. With an open-state
 3 cavity barrier, there has, of necessity, to be an air
 4 gap along one side of the barrier at the start of the
 5 test, and the presence of that gap results in
 6 an automatic failure of the integrity criteria of the
 7 BS 476-20 test.

8 However, subject to that limitation of the BS 476
 9 test procedure, the horizontal cavity barriers were
 10 tested to and met BS 476-20. In particular, the
 11 horizontal cavity barriers were demonstrated as meeting
 12 the requirement within table A1 of ADB of having at
 13 least 30 minutes' integrity and 15 minutes' insulation.

14 Recognising that the BS 476 test procedure was not
 15 entirely suitable for an open-state cavity barrier, in
 16 2014, the Association for Specialist Fire Protection, or
 17 ASFP, produced a bespoke test for open-state
 18 cavity barriers, known as Technical Guidance Document,
 19 or TGD, 19. Siderise's horizontal cavity barriers were
 20 tested to and met the requirements of that new test,
 21 TGD19.

22 In December 2014, Siderise arranged a meeting with
 23 Dr Lane and Charlotte Roben of Arup to discuss, amongst
 24 other things, the fact that there was no entirely
 25 suitable BS or EN test for an open-state cavity barrier.

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1 It was agreed that TGD19, whilst not perfect, was a good
 2 step forward as a suitable test for an open-state
 3 cavity barrier.

4 Some criticism is made by BSR Team 1 in their
 5 written submissions that the testing of the open-state
 6 cavity barriers was undertaken between concrete lintels,
 7 which is not representative of a rainscreen cladding
 8 system. However, that criticism is, with respect to
 9 them, misplaced and doesn't properly take into account
 10 the distinction between component tests and systems
 11 tests. It's standard practice in a test under either
 12 BS 476-20 or TGD19 for the cavity barrier to be tested
 13 between concrete lintels. Test procedure for TGD19
 14 makes that clear.

15 The purpose of such a component or product test is
 16 to demonstrate the integrity and insulation of the
 17 cavity barrier itself, not to test the fire resistance
 18 of other materials that may be used in the construction.
 19 If the test was carried out with the cavity barrier next
 20 to material that was not inert, there would be lack of
 21 clarity as to whether fire resistance or lack of it came
 22 from the cavity barrier or the other component.

23 The BS 476-20 or TGD19 tests are not intended to be
 24 an equivalent to or a substitute for a full-scale
 25 BS 8414 test. Although they're not a substitute for

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an 8414 test, they are nevertheless valuable and provide evidence for the elemental performance of the component.

Table A1 of ADB refers to the fire resistance of elements being tested pursuant to the relevant part of BS 476, and thus effectively recommends that manufacturers test their products to the relevant part of BS 476. There was also industry guidance, for example from the Centre for Window and Cladding Technology, the CWCT, that cavity barriers should be tested to the principles of BS 476-20.

Therefore, we submit Siderise should not be criticised for having tested the cavity barriers to BS 476-20 and then TGD19, and making clear to customers that they had done so. They were the correct product or component tests.

Turning very briefly to the vertical cavity barriers, they were tested to and demonstrated compliance to EN 1366-4. As with a BS 476 test, it's standard practice for a test under EN 1366-4 for the test to be undertaken between concrete lintels, as the standard itself makes clear. The vertical cavity barriers were thus, as components, also tested and certified to the appropriate standard.

Can I then turn to my second topic, which is the marketing of the cavity barriers.

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Criticism is made of Siderise by BSR Team 1 and by Mr Hyett that Siderise wrongly marketed its products as being suitable for use in rainscreen cladding systems. There are a number of points I wish to make in relation to that criticism.

The first is that Siderise were and continue to be strong advocates of BS 8414 testing. As far as Siderise is aware, a BS 8414 test incorporating ACM panels had not been undertaken by anyone prior to 2016. That was a collective failure by the construction industry.

Siderise had drawn attention to the value of system testing pursuant to BS 8414 at a conference it hosted in 2012 attended, among others, by representatives of the BRE, Arup and Harley. At that conference, Siderise stated that it was keen to test to BS 8414 and asked for a cladding partner to come forward to participate in such a test, but unfortunately no one did.

However, if used with appropriate panels and insulation, Siderise's cavity barriers are suitable for use in a rainscreen cladding system. Since the fire at Grenfell Tower, there have been several full-scale 8414 tests which have involved metal rainscreen components in conjunction with Siderise cavity barriers and which have passed. Where the tests have failed, it has not been because of the performance of the cavity barrier.

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Examples of such tests include those undertaken by the BRE in 2017 on the instructions of the Ministry of Housing, Communities and Local Government. Those tests were all undertaken by the BRE with cavity barriers supplied by Siderise. Further examples of positive 8414 tests using Siderise cavity barriers are given in the witness statement of Stephen Swales, Siderise's chief commercial officer.

Clearly, therefore, with the right components, it is very possible to design a metal rainscreen system with Siderise's cavity barriers that will pass a BS 8414 test.

By marketing their cavity barriers as being suitable for rainscreens, Siderise were certainly not suggesting or representing that their cavity barriers were suitable for any set of components regardless of the fire resistance of the panels or insulation.

To put the same point another way, by marketing its cavity barriers as suitable for rainscreen systems, Siderise were not in any way indicating to their customers or to designers that there was no need to consider whether the rainscreen system as a whole was compliant with ADB or the Building Regulations. It was plainly incumbent on the designers of a rainscreen cladding system to make that assessment for themselves.

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Can I turn then, sir, to the third and final topic I wish to cover, which is the advice provided by Siderise.

Siderise had no involvement in the overall design or specification of the cladding system and wasn't involved in the installation of the cavity barriers. Siderise's first contact in relation to the Grenfell refurbishment project was by Kevin Lamb on or about 3 March 2015. On 3 March 2015, Mr Lamb sent specification notes for the rainscreen cladding to Siderise indicating the use of Siderise firebreaks. Siderise had no involvement in the production of that specification. It was not involved in the selection of the other materials for use in the façade and nor would it expect to be. The information provided to Siderise was limited. For example, it had no information as to the type of insulation to be installed.

During the course of the refurbishment, Siderise were, as you know, sir, from the evidence you have heard in Module 1, asked by Harley to advise on a number of issues relating to the cavity barriers. However, that advice was sought in relation to specific issues. Siderise were not asked to provide general advice in relation to the cavity barriers.

Siderise's limited role was acknowledged by

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1 Kevin Lamb in his evidence in Module 1. In particular,
2 he stated that he would not have expected Siderise to
3 comment on the positioning of cavity barriers unless
4 specifically asked to do so, and when asked whether he
5 took advice from Siderise as to the position of the
6 cavity barriers, Mr Lamb's answer was, "No, not at all."

7 Consistent with that, when Mr Mort's "weak link for
8 fire" email was put to him, Mr Lamb commented:

9 "But don't forget, this is a comment from
10 a subcontractor or a supplier that wasn't necessarily in
11 full knowledge of the circumstances."

12 Neither Harley nor anyone else asked for advice on
13 how to install the cavity barriers. BSR Team 2 has
14 suggested in its written opening that Siderise should
15 have provided greater support to Harley in relation to
16 the installation of the cavity barriers. Siderise, for
17 probably obvious reasons, would certainly much prefer it
18 if its products were installed and used correctly.
19 However, there is a limit to what Siderise as a supplier
20 can practically do. Siderise would have provided such
21 support to Harley if it had been requested, but it
22 wasn't requested.

23 Mr Mort and Mr Kay of Siderise will give evidence in
24 Module 2, and I will not now seek to anticipate all the
25 issues that may be raised with them. However, there's

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1 two issues I want to touch on very briefly. The first
2 is the lack of cavity barriers around the windows.
3 Siderise's datasheets specifically refer to the
4 requirement within ADB for cavity barriers around all
5 openings, including windows. The Siderise datasheet has
6 a clear diagram showing the requirement within ADB for
7 cavity barriers around windows.

8 Siderise would of course, for obvious commercial
9 reasons, have been happy to supply cavity barriers for
10 use round the windows, had they been asked to supply it.
11 However, Siderise were not asked to advise on whether
12 cavity barriers were required around the windows, and
13 Siderise didn't know whether cavity barriers for the
14 windows were being obtained from another source, or
15 whether the design for the windows was to use steel as
16 the cavity barrier.

17 The second issue I wish to touch on very briefly is
18 Mr Mort's email of 30 March 2015 drawing Harley's
19 attention to the "weak link for fire" at the window
20 head. That weak link is an issue that should have been
21 picked up by, amongst others, Harley and Studio E.
22 Mr Mort hadn't been asked to advise on that issue, but
23 he volunteered his view. His advice on it wasn't
24 followed, though Mr Mort did not know at the time that
25 it wasn't being followed.

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1 It's suggested by BSR Team 2 in their written
2 opening that Mr Mort ought to have followed up his
3 advice to ensure that it was being followed. We would
4 submit that, given Siderise's limit role, Mr Mort and
5 Siderise had no obligation to do so. Further, it's
6 relatively clear that, as a matter of practice, any
7 further advice from Mr Mort would not have been
8 welcomed. It would also, I suggest, be unfair, having
9 provided advice in relation to a design flaw for which
10 he was not responsible, for Mr Mort now to be subject to
11 criticism that he would have avoided if he had simply
12 said nothing.

13 So those are my submissions, unless I can assist you
14 further.

15 SIR MARTIN MOORE-BICK: That's very helpful, Mr Campbell,
16 thank you very much indeed.

17 Well, that brings us to the end of the opening
18 statements that we were expecting to hear today. We
19 have reached that point rather sooner than we had
20 expected, but that's no criticism of anyone.

21 So we will break off now and resume at 10 o'clock
22 tomorrow morning, when I think we're going to hear from
23 Dr Lane again. Is that right, Mr Millett?

24 MR MILLETT: Yes, Mr Chairman, that's correct.

25 SIR MARTIN MOORE-BICK: Good. Thank you very much.

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1 Right, 10 o'clock tomorrow morning, please.
2 Thank you.

3 (2.35 pm)

4 (The hearing adjourned until 10 am
5 on Tuesday, 10 November 2020)

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