

OPUS 2

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Grenfell Tower Inquiry

Day 81

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1 Wednesday, 2 December 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 evidence
 5 from another witness who used to work for Kingspan.
 6 Yes, Ms Grange.
 7 MS GRANGE: Yes, could we have Mr Tony Millichap, please.
 8 MR TONY CHRISTOPHER MILLICHAP (affirmed)
 9 SIR MARTIN MOORE-BICK: Thank you very much, Mr Millichap.
 10 Sit down, please, and make yourself comfortable.
 11 All right, there's some water and a glass for you if
 12 you want it.
 13 THE WITNESS: Yes, thank you.
 14 SIR MARTIN MOORE-BICK: Yes, Ms Grange.
 15 Questions from COUNSEL TO THE INQUIRY
 16 MS GRANGE: Yes, thank you.
 17 Can you give the Inquiry your full name, please.
 18 A. Tony Christopher Millichap.
 19 Q. If I can thank you very much for attending to give your
 20 evidence today, it is very much appreciated.
 21 If you have any difficulty understanding any of the
 22 questions I ask you, please ask me to repeat the
 23 question or put the point in a different way.
 24 If you feel you need a break at any time, please let
 25 us know.

1

1 If you can keep your voice up so that the lady just
 2 transcribing to your right can take a clear note of your
 3 evidence, that would be great.
 4 A. Yes.
 5 Q. You have provided one witness statement to the Inquiry.
 6 We're going to bring it up on the screen, and it's in
 7 a folder on the desk in front of you as well. It's at
 8 {KIN00020821}. If we could go to page 63 of that
 9 statement, we can see it's dated 18 October 2010.
 10 Now, is that a typographical error? I believe that
 11 should be 18 October 2019; is that right?
 12 A. Yes, it is.
 13 Q. Yes, so can we correct that? And is that your
 14 signature?
 15 A. It is.
 16 Q. Have you read that witness statement recently?
 17 A. I have.
 18 Q. And can you confirm that the contents are true?
 19 A. Yes.
 20 Q. Have you discussed your statement or the evidence you're
 21 going to give with anybody before coming here today?
 22 A. No.
 23 Q. Now, to start with, I want to ask you about your
 24 background.
 25 If we pull up paragraph 2.1 of your witness

2

1 statement on page 3 {KIN00020821/3}, you tell us that
 2 your career began when you assumed an entry level role
 3 in 1995 working as a technical adviser at Kingspan;
 4 that's right, isn't it?
 5 A. It is, yes.
 6 Q. And prior to that, you tell us in the second line you
 7 had previously completed an HND in civil engineering; is
 8 that right?
 9 A. Yes.
 10 Q. You tell us that at that time you reported to
 11 Philip Heath and you worked with Andrew Pack and
 12 Justin Davies; yes?
 13 A. Yes.
 14 Q. In that role as technical adviser, is it right that you
 15 were providing advice to customers on Kingspan's
 16 products?
 17 A. It is.
 18 Q. Did you provide advice on all of Kingspan's products
 19 during that time, or did you specialise in particular
 20 products?
 21 A. No, it would have been the full range of products.
 22 Q. You tell us in the next paragraph, 2.2, that in 2000,
 23 after five years, you left Kingspan and you joined
 24 a company called Metclad as a contract manager; is that
 25 right?

3

1 A. Yes.
 2 Q. Then you returned to Kingspan, you say in the second
 3 line there, in 2004 to undertake a similar role within
 4 the Kingspan TEK business.
 5 Can you just help us, what is the Kingspan TEK
 6 business?
 7 A. Yes, I think latterly you'll have probably known it as
 8 Offsite.
 9 Q. Yes.
 10 A. TEK is an actual product, and I believe there was
 11 a business unit actually just supporting TEK.
 12 Q. Yes.
 13 A. It's a structurally insulated panel system.
 14 Q. Yes, so it's a company producing structured insulated
 15 panel systems, so a whole system; is that right?
 16 A. Correct, yes.
 17 Q. Then in 2006, looking at 2.3, we can see that you were
 18 promoted to become the manager of Kingspan's tapered
 19 roofing department; is that right?
 20 A. Yes, it is.
 21 Q. In that role, you reported to, you say in the second
 22 line, Peter Wilson, the managing director of Kingspan
 23 UK; is that right?
 24 A. It is.
 25 Q. You also informally reported to Philip Heath and

4

1 Chris Guest; yes?
 2 A. Yes.
 3 SIR MARTIN MOORE-BICK: Mr Millichap, satisfy my curiosity
 4 if you would: what's a tapered roof?
 5 A. So it's flat roof insulation that introduces a drainage
 6 fall at the same time.
 7 SIR MARTIN MOORE-BICK: Oh, right. Thank you.
 8 MS GRANGE: Yes.
 9 Then if we look at paragraph 2.4, further down
 10 page 3 of your statement, you then tell us that in 2010,
 11 you were promoted again to the role of head of technical
 12 for Kingspan's UK and Ireland businesses, with
 13 responsibility for tapered roofing and technical
 14 services; that's right, yes?
 15 A. Yes.
 16 Q. Is it right that this role in 2010 gave you your first
 17 involvement with and responsibility for K15 as
 18 a product? Is that right?
 19 A. It is, yes.
 20 Q. Then you tell us at paragraph 2.5 below that that, in
 21 2015, you left Kingspan on good terms to pursue a career
 22 progression again at Metclad; is that right?
 23 A. Yes.
 24 Q. Where you became a director, first of their flat roofing
 25 business, before assuming the role of safety, health,

5

1 environment and quality director at Metclad; yes?
 2 A. Yes.
 3 Q. Are you still in that role at Metclad?
 4 A. I am, yes.
 5 Q. You are.
 6 Now, I'm going to be focusing on your role and
 7 responsibilities at Kingspan between 2010 and the middle
 8 of 2015 --
 9 A. Sure.
 10 Q. -- for the purposes of my questions.
 11 During that time, you managed and oversaw the
 12 technical services team within Kingspan; is that right?
 13 A. Yes.
 14 Q. And the technical projects team?
 15 A. Yes.
 16 Q. Did that include overseeing the technical advisers who
 17 were handling customer queries about, for example, K15?
 18 A. It did. There was another tier of management between
 19 myself and the frontline advisers.
 20 Q. And who was that tier of management?
 21 A. Matthew Evans, for the largest part.
 22 Q. Right, yes.
 23 In that period, as head of technical, who did you
 24 report to?
 25 A. Malcolm Rochefort.

6

1 Q. How often would you report to Dr Rochefort? How
 2 frequently were you in contact with him, reporting back?
 3 A. I would say we would have a face-to-face weekly and
 4 probably communication more often than that.
 5 Q. And that more often communication, would that be by
 6 email?
 7 A. Email or phone call, yes.
 8 Q. Were you physically located near to him at the Pembridge
 9 site?
 10 A. Yes, yes, I live local to Pembridge, I'd have been
 11 physically in the office around three days a week.
 12 Q. And your office within Pembridge, was that close to
 13 Dr Rochefort's office?
 14 A. It was in the same building.
 15 Q. Yes.
 16 A. It was probably a two or three-minute walk. So he was
 17 on the ground floor, I was on the upstairs, first floor.
 18 Q. You explain in paragraph 2.4 of your witness
 19 statement -- we can still see it there up on the
 20 screen -- that you managed a team -- it's in the third
 21 line down -- of up to 30 people, including the technical
 22 advisers; that's right, isn't it?
 23 A. Yes.
 24 Q. Did that include Mr Meredith throughout that period?
 25 A. It did.

7

1 Q. How frequently would the individuals you managed report
 2 back to you?
 3 A. We all worked in the same office. Some of the roles
 4 involved travelling, so we wouldn't have seen each other
 5 every day, but definitely every week. It was
 6 an open-plan office, deliberately. There were three to
 7 four offices within that -- glass offices within that
 8 space. I think it was seen and I definitely hold with
 9 being close to the people that are working around you,
 10 and there's a lot of cross-fertilisation between the
 11 team.
 12 Q. Is it fair to say that you worked closely with
 13 Mr Meredith during that period, 2010 to 2015?
 14 A. Yes.
 15 Q. Would you agree that he, in particular, during your time
 16 as head of technical, was tasked by you with the
 17 day-to-day responsibility for handling a number of
 18 important areas of work within the technical team?
 19 A. Yes.
 20 Q. Now, in terms of the particular responsibilities you
 21 held in relation to Kingspan's K15 product while you
 22 were head of technical, I want to ask you first about
 23 your recollections about how marketing material and
 24 product literature for K15 was produced and checked.
 25 If we can look at paragraph 4.4 on page 8 of your

8

1 statement {KIN00020821/8}, you tell us in the second
2 line there that you did have some limited involvement in
3 marketing and promotion, which you have gone on to
4 explain.

5 So is it right that your involvement in that was
6 limited?

7 A. It was, yes.

8 Q. Then in paragraph 4.6 of your statement, if we could
9 look further down the page at that, you explain that
10 there was a standalone marketing team -- that's in
11 lines 1 and 2 there -- who would produce marketing
12 literature and promotional materials.

13 Then if we look at the second sentence, the third
14 line down, you say:

15 "However, the Technical Team would be consulted with
16 regards to the technical content of marketing
17 literature, including product descriptions, physical
18 properties of products, fire testing and thermal
19 performance. The Technical Team would review this
20 information to ensure its accuracy."

21 Was that because the technical team would know, in
22 a way that the marketing team would simply not, how,
23 for example, the fire testing and performance in fire
24 should be described in order to be clear and accurate?

25 A. Yes, absolutely. There was a technical oversight.

9

1 An awful lot of that work was producing calculations
2 that populated the literature for U-value typically.
3 Fire performance wasn't as ... I suppose it wasn't as
4 difficult to include fire performance, because typically
5 it was against a test certification and therefore it was
6 pretty straightforward what would need to be included in
7 the literature. Around U-values, we had to decide what
8 thicknesses we were going to promote, what constructions
9 would be built up. So there was a bit more input into
10 that side of it than fire.

11 Q. Yes, yes.

12 At paragraph 4.7 on the next page {KIN00020821/9},
13 you tell us a little bit more about marketing
14 literature, and one of the things you say -- it's about
15 two-thirds of the way down that paragraph, there's
16 a sentence beginning on the far right, you say:

17 "As far as I recall, the marketing literature in
18 respect of all Kingspan products was subject to a robust
19 review process ..."

20 Do you see that there?

21 A. Yes.

22 Q. Is that right, that all the marketing literature was
23 subject to a robust review process?

24 A. Yes.

25 Q. Did you consider that Kingspan understood, throughout

10

1 your time as head of technical, the importance of the
2 technical content of marketing literature being clear
3 and accurate, particularly in relation to matters of
4 safety such as fire safety?

5 A. Yes.

6 Q. Now, you make the point again at paragraph 4.13 on
7 page 10 of your witness statement {KIN00020821/10} that
8 you had a limited involvement in reviewing or specifying
9 the granular detail of the content of the marketing
10 literature. That's in that first line.

11 Then you go on in that paragraph, in the next
12 sentence, to say this:

13 "Generally, I only intervened to give my input on
14 this from a supervisory perspective in circumstances
15 where there was a difference of opinion amongst those in
16 the Technical Team who reported to me as to such
17 content."

18 Do you see that there?

19 A. Yes.

20 Q. Now, with reference to the K15 product, can you give us
21 any examples of when that occurred, when you did
22 intervene because there was a difference of opinion
23 amongst the technical team who were reporting to you?

24 A. I don't recall any specific circumstances with K15.

25 Q. I see. You can't recall anything relating to K15 which

11

1 fell into that category?

2 A. No.

3 Q. Now, moving on to look at your role in terms of testing
4 now, and in particular testing of K15, if we look at
5 paragraph 4.4 on page 8 of your statement
6 {KIN00020821/8}, you tell us that, as head of technical,
7 your remit primarily related to the testing and
8 certification of K15; is that right?

9 A. Yes.

10 Q. And that would include the fire testing; yes?

11 A. Yes, yeah, as an overview.

12 Q. And then in the next paragraph you tell us a little bit
13 more about testing. If we can just show up the whole of
14 that paragraph, you say you were involved in fire focus
15 group meetings, et cetera, third line down:

16 "As part of these meetings, we established
17 a programme of testing and certification with a time
18 schedule and construction type for each test. The
19 oversight of the execution of the tests was delegated to
20 Ivor Meredith, a Technical Project Leader, who reported
21 to me."

22 Is that right?

23 A. Yes.

24 Q. And you tell us:

25 "My role was to set clear deadlines for fire tests

12

1 to be completed and for certification to be
 2 achieved ..."
 3 Yes?
 4 A. Yes.
 5 Q. Then at paragraph 11.8 of your statement on page 55
 6 {KIN00020821/55}, you tell us a little bit more. You
 7 say:
 8 "I worked with colleagues in the Fire Focus Group to
 9 set the programme of testing. Once that was agreed,
 10 Ivor would implement the programme and would update me
 11 as and when deadlines were met or if they were not met,
 12 he would report that to me."
 13 So that's how it worked in practice, is it? You
 14 would set the programme for the testing, and then --
 15 A. Yes.
 16 Q. -- Ivor would be involved in the day-to-day running of
 17 it?
 18 A. Yes. I think this test programme of K15 was quite high
 19 profile at the time, I'm sure for reasons that we'll
 20 come on to. It was important that there was buy-in from
 21 the business as to what was being tested, but day-to-day
 22 it was my role to make sure that we got that testing
 23 done through Ivor.
 24 Q. Yes. The colleagues in the fire focus group, those
 25 include Dr Rochefort; yes?

13

1 A. Yes.
 2 Q. And Andrew Pack?
 3 A. I'm not sure, honestly.
 4 Q. And --
 5 A. On occasion, perhaps.
 6 Q. When you talk about setting the programme of testing,
 7 did that include discussions and decisions about the
 8 materials to be tested?
 9 A. Yes.
 10 Q. And including the outer cladding for each?
 11 A. Yes.
 12 Q. And is it right that each test was carefully planned
 13 and, as far as possible, carefully timetabled?
 14 A. Where possible, yes.
 15 Q. Yes.
 16 Then at paragraph 11.23 on page 58 of your statement
 17 {KIN00020821/58}, you say out of interest, you attended
 18 a couple of tests.
 19 A. Yes.
 20 Q. Do you see that in the third line down:
 21 "Out of interest, I attended a couple of tests."
 22 Can you remember which tests those were? Were they
 23 BS 8414 large-scale tests?
 24 A. They were, yes. I believe definitely the 2014 Trespa
 25 test, and potentially the terracotta test as well, the

14

1 same year.
 2 Q. Yes, so the Trespa test was in March 2014. Does that
 3 sound right?
 4 A. It does, yes.
 5 Q. And the terracotta test was in July 2014.
 6 A. I don't have as clear a recollection as that one, but
 7 definitely the first one, yes.
 8 Q. If we could look at page 13 of your statement now
 9 {KIN00020821/13}, I just want to look at paragraph 4.23.
 10 You say there:
 11 "On a day-to-day basis, I relied on Ivor Meredith
 12 for directing and implementing this policy, assisted by
 13 his colleagues Joel Clarke, Matthew Evans, Andrew Pack,
 14 Matthew Ball and Dan Ball, all of whom were senior
 15 employees in that department. Andrew Pack was the most
 16 senior advisor within the Technical Team at this time."
 17 Is that right?
 18 A. Yes.
 19 Q. Now, in terms of your role giving technical advice to
 20 customers about K15, was that another area that fell
 21 under your remit? Is that right?
 22 A. Yes, yes.
 23 Q. I want to ask you about technical queries about the use
 24 of K15 over 18 metres.
 25 You were asked by the Inquiry about how those sorts

15

1 of queries were handled, and if we look at your answer
 2 at paragraph 4.19 on page 12 {KIN00020821/12}, basically
 3 what you say there is depending on the complexity of the
 4 technical queries, they would be directed to the person
 5 with the appropriate level of technical knowledge; is
 6 that a fair summary?
 7 A. It is.
 8 Q. I will read out what you say, but that's in essence what
 9 you're saying.
 10 If we can read what you say here, and I want to
 11 start by looking at the seventh line down, beginning "If
 12 the" on the right-hand side. You say this. You say:
 13 "If the frontline technical advisors that picked up
 14 customer queries were not comfortable answering
 15 a particular enquiry, for example, an enquiry relating
 16 to the use of K15 over 18m, they would escalate the
 17 enquiry appropriately. We had dedicated advisors within
 18 the Technical Team whose responsibility it was to
 19 address these types of queries. Queries relating to the
 20 use of K15 on buildings with a floor over 18m would be
 21 directed to these 'specialists' by the group of
 22 non-specialised technical advisors. I think we had
 23 a standard few opening paragraphs included in each
 24 response which set out the physical characteristics and
 25 properties of K15 and the building regulations and

16

1 Approved Document B. However, the rest of the response
2 would be tailored to respond to the customer's specific
3 query and their proposed build-up. It was not possible
4 to give completely rigid responses."

5 So we can see you have told us that in detail there.

6 Just going back to look at the middle of that
7 paragraph, you tell us that queries relating to the use
8 of K15 on floors over 18 metres would be directed to
9 "specialists" within the group of non-specialist
10 technical advisers.

11 Who were those specialists that were answering those
12 types of queries?

13 A. Typically the senior team that we outlined previously.

14 They would be more experienced advisers.

15 Q. Yes. So that was Ivor Meredith?

16 A. Ivor as the backstop, to be honest. He was definitely
17 the most expert.

18 Q. Yes.

19 A. But --

20 Q. And others such as Joel Clarke, Andrew Pack?

21 A. Yes, Dan Ball.

22 Q. Yes.

23 A. A few.

24 Q. Now, you were asked some questions about any checks on
25 the technical advice being given by Kingspan's frontline

17

1 advisers in relation to K15. If we look on page 17
2 {KIN00020821/17} at paragraph 4.38, the first few lines
3 here, you tell us in that paragraph:

4 "The 'checks' were undertaken by making sure that
5 members of the Technical Team were appropriately trained
6 and queries were directed to the correct people who were
7 qualified to answer them."

8 So was it the same group of people who were checking
9 that other members of the technical team were
10 appropriately trained and queries were being directed to
11 the correct people?

12 A. Yes.

13 Q. So that same group of people?

14 A. A collaborative effort.

15 Q. When you say that the checks were undertaken by making
16 sure members of the technical team were appropriately
17 trained, what did that training consist of?

18 A. Training was tracked against a competence matrix. The
19 majority of the training was in-house. It was quite
20 difficult, there weren't really dedicated courses that
21 were entirely relevant. Various advisers would come
22 with qualifications that would all add value, but
23 typically the training was on the job, peer to peer, by
24 experience.

25 Q. Yes, I see.

18

1 Now, in terms of the technical queries that Kingspan
2 received, you were asked about Kingspan's overall policy
3 or strategy about those queries, and you tell us about
4 that at paragraph 4.22 on page 13 of your statement
5 {KIN00020821/13}.

6 So the question was:

7 "Who, by reference to job titles and/or to
8 individual names, was responsible for directing
9 Kingspan's policies and strategies in this regard?"

10 That's about technical advice, and you say:

11 "As Head of Technical, I was overall responsible for
12 this between April 2010 and May 2015. However, when
13 I was appointed, I did not change the way in which the
14 Technical Team operated in this respect."

15 Do you see that?

16 A. Yes.

17 Q. You tell us as well that on a day-to-day basis you
18 relied on Ivor Meredith for directing and implementing
19 this policy; is that right?

20 A. It is.

21 Q. Then if we can look at paragraph 4.1 on page 7 of your
22 statement {KIN00020821/7}, you tell us this. You say:

23 "Kingspan had the very simple strategy of promoting
24 K15 in applications in which Kingspan could support its
25 use in accordance with the building

19

1 regulations/standards and best practice."

2 As we've seen, you have made clear that, when you
3 were appointed, you didn't change the way in which the
4 technical team operated. So I think what you're telling
5 us is that was the simple strategy and it didn't change
6 in the time that you were head of technical; is that
7 right?

8 A. It is.

9 Q. When you say you made no changes, had you satisfied
10 yourself that the strategy for giving advice was clear
11 and the system was working properly?

12 A. Over a period of time, yes. As I said earlier, I was
13 new to this particular application when starting the
14 post, and therefore there was a period of my own
15 self-learning.

16 Q. How long would you estimate that period lasted for?

17 A. I think it carries on today, but, I mean, to get to
18 a competent level, within the first few months,
19 six months.

20 Q. Yes.

21 A. But, yeah, you never stop.

22 Q. Were you satisfied, once you were up to speed with the
23 relevant regulatory regime, that the advice that
24 Kingspan was giving was satisfactory and appropriate?

25 A. Yes.

20

1 Q. Now, moving on to third-party certification of K15 by
 2 both the BBA and the LABC, do we understand it correctly
 3 that, in terms of your role, you had oversight of both
 4 and overall responsibility for both; is that right?
 5 A. It is.
 6 Q. But again, in respect of both the BBA and the LABC, is
 7 it your evidence that the actual day-to-day dealings and
 8 ongoing responsibilities were delegated to others within
 9 your team?
 10 A. Yes.
 11 Q. And who would that have been? Let's take the BBA. Who
 12 would you delegate dealing with the BBA to?
 13 A. It changed over the period. I believe initially it
 14 would have been Gareth Mills and then latterly
 15 Joel Clarke.
 16 Q. Then with the LABC, was that a different team within
 17 your technical advisers?
 18 A. Yes. My recollection isn't as clear. I think from
 19 evidence very recently, I know Andrew Pack originated
 20 that work, but I believe Ivor Meredith and Gareth Mills
 21 continued it.
 22 Q. Yes.
 23 If we can look at page 32 of your statement
 24 {KIN00020821/32}, paragraph 7.18, this is about BBA
 25 certification, you say this:

21

1 "Ivor Meredith and Joel Clarke would have had these
 2 discussions with the BBA. As far as I can recall, I was
 3 generally made aware of these discussions but I was not
 4 involved in them. However, my input may have been
 5 required in very limited circumstances. My role as
 6 a manager was to oversee the relationship, ensuring the
 7 flow of information from Kingspan to the BBA and
 8 vice versa."
 9 Is that right?
 10 A. Yes.
 11 Q. When you say that was about ensuring the flow of
 12 information from Kingspan to the BBA, was that the flow
 13 of information relevant to test data, say, on fire
 14 performance and other criteria?
 15 A. Yes, absolutely.
 16 Q. Now, I want to come on to ask you now about your
 17 understanding of the Building Regulations and associated
 18 guidance while you were head of technical.
 19 If we look at paragraph 5.1 on page 19 of your
 20 witness statement {KIN00020821/19}, you're being asked
 21 about this topic and your understanding of the relevant
 22 requirements for external cladding systems under the
 23 Building Regulations, and you explain at the beginning
 24 of that paragraph:
 25 "As Head of Technical, I understood that the

22

1 functional requirements for external cladding systems
 2 were set out in the building regulations or England and
 3 Wales, Approved Documents and various guidance notes,
 4 including the BCA Technical Guidance Note 18."
 5 Then you go on within that paragraph to detail your
 6 understanding of the routes to compliance for external
 7 cladding systems, which we'll come to in a moment.
 8 During the period between 2010, when you took over,
 9 and May 2015, did you ever attend any training on the
 10 Building Regulations or Approved Document B?
 11 A. Not dedicated training, no.
 12 Q. During that period, did you read the guidance set out in
 13 Approved Document B on fire safety?
 14 A. Yes, absolutely, all of the relevant sections. I don't
 15 recall reading it cover to cover.
 16 Q. Right. So you would have read carefully section B4 on
 17 external fire spread?
 18 A. Yes.
 19 Q. And did you do that right from the outset of your role?
 20 A. It would have been within months, yes.
 21 Q. Was that a document that you would go back to from time
 22 to time to remind yourself?
 23 A. Absolutely, yes.
 24 Q. So you had it available as you were working?
 25 A. We did.

23

1 Q. Does it follow that you were aware, throughout your time
 2 as head of technical, that there was particular guidance
 3 about the use of combustible insulation material in
 4 external constructions of buildings over 18 metres?
 5 A. Yes.
 6 Q. In terms of the meaning of the phrase "limited
 7 combustibility", if we could look at this point on
 8 paragraph 5.11 on page 23 of your statement
 9 {KIN00020821/23}, you explain there that:
 10 "The term came from Approved Document B, pursuant to
 11 which material would achieve 'limited combustibility'
 12 classification if it met certain criteria when tested to
 13 BS 476-11. With respect to the European test standards,
 14 a material will be classed as being of 'limited
 15 combustibility' if it is classified as A2-s3, d2 or
 16 better."
 17 Yes?
 18 A. Yes.
 19 Q. So you have helpfully set out for us that that was your
 20 understanding.
 21 Can you help us as to precisely when that was your
 22 understanding? Did you understand that throughout your
 23 time as head of technical, 2010 through to 2015?
 24 A. For the vast majority of that time period, yes. As
 25 I said, I wouldn't have known that when I started the

24

1 role, but it would have been something that I learned
 2 within the first six months. I couldn't be any more
 3 precise, I'm afraid.
 4 Q. Did you understand that K15 was not a material of
 5 limited combustibility --
 6 A. I did.
 7 Q. -- as defined there?
 8 A. Yes.
 9 Q. It's a combustible insulation, isn't it?
 10 A. It is.
 11 Q. You confirm that in your statement, 5.12, just below the
 12 paragraph we were looking at:
 13 "K15 could not be classed as 'non-combustible' or
 14 'of limited combustibility'. It is a product with
 15 national Class 0 classification."
 16 And I'll come back to that.
 17 Was it your understanding that those working on the
 18 front line as technical advisers also knew that K15 was
 19 not a material of limited combustibility?
 20 A. Yes. There will have been occasionally new starters
 21 within the department that would have had to have gone
 22 through a learning curve, but definitely the senior
 23 team. All the advisers were generally arranged in pods,
 24 so they would have somebody more senior sat with them.
 25 Q. Yes.

25

1 Now, back to routes to compliance. If we could look
 2 at paragraph 4.15 on page 11 of your statement
 3 {KIN00020821/11}, where you have explained different
 4 routes to compliance. What you explain in this
 5 statement is that there were four avenues by which
 6 compliance was achieved, you say that in the top line,
 7 and then you go on to say -- so you say:
 8 "There were four avenues by which compliance was
 9 achieved, and with a general absence or at least
 10 insufficiency of knowledge in the industry as a whole,
 11 I firmly believe that Kingspan were thought-leaders in
 12 this sphere."
 13 I just want to ask you about that.
 14 What did you mean when you said there was a general
 15 absence or at least insufficiency of knowledge in the
 16 industry as a whole? Can you explain what you mean by
 17 that?
 18 A. Yes. Through our experience of taking a high volume of
 19 calls generally, I think we were recognised as,
 20 you know, a source of knowledge generally, particularly
 21 around insulation. It was our experience that very
 22 often we were having to explain some of the
 23 fundamentals, you know, particularly around this area.
 24 Q. And what kind of professionals were you having to
 25 explain those fundamentals to? Can you give us some

26

1 examples?
 2 A. The entire raft, from installers right the way through
 3 to specifiers.
 4 Q. And architects?
 5 A. Yes, yes.
 6 Q. Then you say that you firmly believe that Kingspan were
 7 thought-leaders in this sphere. What do you mean by
 8 that? What do you mean by "thought-leaders in this
 9 sphere"?
 10 A. I don't -- it's probably not the best phrase, honestly,
 11 reading it now, but just from the point of view that we
 12 actually had quite a lot of input into influencing how
 13 this could be understood, and interpreting the
 14 regulations as we saw them.
 15 Q. And how did you have that input into influencing how
 16 this could be understood and interpreting the
 17 regulations? In what ways did you have that input?
 18 A. Through enquiries on specification for K15.
 19 Q. Right. I see. Yes.
 20 You explained that there were four avenues to
 21 compliance for external cladding systems. If we could
 22 look at paragraph 5.1 on page 19 {KIN00020821/19}, we
 23 can see from the fourth line down that you say that you
 24 understood there were four routes to compliance, and
 25 then you go on to explain what each of those routes

27

1 were.
 2 So you say, just below that:
 3 "The primary route to compliance was for the
 4 individual components ... to achieve the required level
 5 of fire performance i.e. non-combustible or of limited
 6 combustibility. The secondary route to compliance was
 7 via large-scale fire testing to BS 8414-1 or BS 8414-2
 8 resulting in achieving the BR 135 criteria. The third
 9 route to compliance (which became available after the
 10 BCA Technical Guidance Note 18 was published in 2014)
 11 was via a fire performance assessment which involves
 12 a fire engineer collating evidence of the performance of
 13 each individual component within system which has tested
 14 successfully to BS 8414 and, based on that, carrying out
 15 an assessment of the compliance of the design of
 16 a similar construction type."
 17 Just pausing there, do you mean desktop assessments,
 18 effectively, in that route?
 19 A. Yes, they've latterly been described as that.
 20 Q. Then the fourth route, you go on, four lines up, right
 21 at the bottom of that page, you say:
 22 "The final route was the fire engineering approach
 23 where a fire engineer considers the fire performance of
 24 all aspects of a holistic system as well as human
 25 behaviour and fire protection measures in order to

28

1 determine whether a proposed system will be compliant.”
 2 Now, was it your understanding from 2010, when you
 3 started as head of technical, to June 2014, when that
 4 BCA technical guidance note came out, that at that time
 5 there existed two routes to compliance, ie the limited
 6 combustibility route or the 8414 route, or did you think
 7 at that time that there were three routes to compliance?
 8 I'm just trying to understand when you --
 9 A. Right.
 10 Q. -- actually understood each of these routes to
 11 compliance to be available .
 12 A. I think all four routes were available over that period
 13 of time.
 14 Q. I see. So even before BCA Technical Guidance Note 18
 15 was out --
 16 A. Yes.
 17 Q. -- your understanding was that desktop assessments could
 18 be done extrapolating from 8414 test results?
 19 A. Yes.
 20 Q. Yes, I see.
 21 Did you understand that the primary route to
 22 compliance, ie non-combustible or limited
 23 combustibility, was an alternative to the other routes
 24 to compliance, including the 8414 route, ie they were
 25 separate routes to compliance?

29

1 A. Yes.
 2 Q. So you would say, "My insulation is of limited
 3 combustibility", and that's one route to compliance.
 4 A. Yes.
 5 Q. Alternatively, you could test the system to 8414 and
 6 that was a different route to compliance. Did you
 7 understand them to be different and alternatives?
 8 A. I did.
 9 Q. Yes.
 10 If we can look at this point at paragraph 4.36 of
 11 your witness statement on page 16 {KIN00020821/16}, you
 12 say this:
 13 "The approved documents/technical handbooks and
 14 guidance were not 'black and white'. Fire performance
 15 was not an exact science - it was open to a certain
 16 amount of interpretation which therefore led to
 17 ambiguity."
 18 Now, I just want to ask you what you meant by that.
 19 Can you help us as to what you meant by the fact that
 20 the approved documents and guidance were not black and
 21 white?
 22 A. We definitely experienced different interpretations from
 23 clients that were coming to us for product advice.
 24 I can't think of any specific examples off the top of my
 25 head.

30

1 Q. Right.
 2 A. But I think it's something that is understood, that,
 3 you know, the regulations aren't as clear as they can be
 4 on occasion.
 5 Q. Right. I mean, you've said:
 6 "Fire performance is not an exact science - it was
 7 open to a certain amount of interpretation which
 8 therefore led to ambiguity."
 9 Can you give us any examples of where there was
 10 ambiguity about fire performance requirements?
 11 A. Not necessarily about the requirements, but definitely
 12 in the way professional project teams would interpret
 13 information in the context of their project.
 14 Q. Did you think that the guidance in Approved Document B
 15 about insulation products was ambiguous?
 16 A. Which bit in particular? Is there a specific --
 17 Q. Well, the bits we've just been talking about, let's take
 18 those. So the requirement for it either to be of
 19 limited combustibility or to be tested to 8414 with
 20 a BR 135 classification; did you regard those parts of
 21 Approved Document B to be ambiguous?
 22 A. No, I think they're very straightforward.
 23 Q. There was nothing ambiguous, was there, about the
 24 available routes to compliance as they stood between
 25 2010 and 2014? Would you agree?

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1 A. Yes, I think what I was trying to explain was the
 2 ambiguities around how a fire safety professional may
 3 interpret product performance in the context of his
 4 project, because that comes down to a professional
 5 opinion.
 6 Q. Are you talking about once you have started
 7 extrapolating from test results? Is that what you're
 8 meaning, that there might be ambiguities --
 9 A. A fire safety engineer, yes.
 10 Q. Yes, I see.
 11 But just to be clear, were you clear in your own
 12 mind that the starting point was either the material had
 13 to be of limited combustibility, the insulation
 14 material, or it had to have been tested to 8414-1 or 2
 15 and been assessed to BR 135?
 16 A. Yes.
 17 Q. Now, given that K15 was not a material of limited
 18 combustibility, do you accept that Kingspan had to rely
 19 upon the alternative route to compliance offered by 8414
 20 and a system meeting the criteria in BR 135?
 21 A. Yes.
 22 Q. Did you read the test standards 8414-1 and 2 during that
 23 period, 2010 to 2015?
 24 A. I did.
 25 Q. At paragraph 5.2 on page 20 of your witness statement

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1 {KIN00020821/20}, you explain that your understanding is
 2 there were two tests: a part 1 test on a masonry
 3 substrate, and a part 2 test on a steel-frame substrate.
 4 Again, was that your knowledge throughout the period
 5 2010 to mid-2015?
 6 A. Yes.
 7 Q. Did you understand throughout that same period that
 8 BS 8414 was a system test?
 9 A. I did.
 10 Q. In the final two sentences of that paragraph, picking it
 11 up three lines up, you say:
 12 "For example, a manufacturer may double-up the
 13 bracketry for a system to be compliant. Clients would
 14 then have to build in the way that the system passed the
 15 test with the double bracketry."
 16 Were you giving that example to demonstrate that you
 17 knew that whatever system you tested then had to be
 18 replicated on your building?
 19 A. Yes, if you were to take that direct route to comply.
 20 Q. So can we agree that, in order to rely on a particular
 21 set of test results to 8414, the client relying on those
 22 results would need to use the exact same materials
 23 tested and arranged in the same specific configuration?
 24 A. If that was your route to compliance, yes.
 25 Q. You have also explained, a bit further down on that page

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1 at 5.4 of your statement, if we look at the third line
 2 down on the right-hand side, you say:
 3 "BS 8414 testing was designed to determine whether
 4 a system was appropriate for use on a building."
 5 Then at paragraph 11.14 on page 57 of your statement
 6 {KIN00020821/57}, if we can just look at what you say
 7 there, you say:
 8 "Ivor Meredith was responsible for the design of the
 9 test rig, including the preparation of drawings and
 10 plans. I would have overseen this process, providing
 11 technical input and feedback if necessary, particularly
 12 with regards to whether the test rig design was
 13 realistic."
 14 Can you help us, what do you mean by realistic?
 15 A. Just through experience of my other role working for
 16 a cladding contractor, sometimes it was just to
 17 understand how a material may actually be hung on the
 18 wall.
 19 Q. Yes, so you were able to bring that knowledge and
 20 expertise to your design of the test rigs?
 21 A. Yes, yeah.
 22 Q. Then just turning now to BR 135, did you read BR 135 at
 23 any stage?
 24 A. Yes.
 25 Q. Would that have been the second edition from 2003? Can

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1 you remember reading that edition?
 2 A. Yes.
 3 Q. Then the third edition came out in 2013. Do you recall
 4 reading that as well during that time you were head of
 5 technical?
 6 A. Yes. I don't recall the changes, honestly.
 7 Q. If we look at paragraph 5.4(a) of your witness statement
 8 and following, at the bottom of page 20 and over to
 9 page 21. So if we start on page 20 {KIN00020821/20},
 10 right at the bottom there you begin to explain:
 11 "My understanding is that the fundamental
 12 'pass/fail' criteria of BR 135 is that ..."
 13 And then if we go over the page {KIN00020821/21}, at
 14 (a), (b) and (c), you have set out the pass/fail
 15 criteria.
 16 A. Yes.
 17 Q. In the first paragraph you have set out effectively the
 18 criteria regarding early termination; do you see that
 19 there?
 20 A. Yes.
 21 Q. "A test will be terminated early if the test rig's
 22 façade cladding fails to resist fire propagation to the
 23 top of the test rig within the first 30 minutes ... The
 24 second 30 minutes ... is then for observation: to
 25 determine how to design the system for the protection of

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1 life and the protection of property ... The test can
 2 still be terminated early during this second half of the
 3 test."
 4 Then you explain the criteria in respect of
 5 temperatures and thermocouples at (b).
 6 Then you explain at (c) the test rig must not have
 7 been burnt through within the first 15 minutes, that's
 8 for the part 2 testing.
 9 So you give us your detailed explanation there of
 10 the pass/fail criteria.
 11 Was that your level of knowledge throughout the
 12 period 2010 to 2015?
 13 A. Again, not from day one, but yes, I would have quickly
 14 got to that.
 15 Q. Yes, effectively.
 16 Then at paragraph 6.8 on page 25 of your statement
 17 {KIN00020821/25}, you're talking about BR 135, we can
 18 see that from the heading just above these paragraphs,
 19 and at 6.8 you say:
 20 "We went to significant lengths to make sure that
 21 the relevant senior members of the Team (those who
 22 participated in the Fire Focus Group as I set out in my
 23 response to Inquiry question 7) understood BR 135
 24 criteria and all of the standards that were applicable
 25 to K15's fire performance by way of training and the

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1 compilation of a technical library of information."
 2 Just taking that in stages, those senior members of
 3 the team, did that include Malcolm Rochefort?
 4 A. Yes.
 5 Q. So you went to significant lengths to make sure that he
 6 understood the BR 135 criteria and all the standards
 7 applicable? You recall that, do you?
 8 A. Yeah, it would have been via the fire focus group
 9 meetings. Ivor would have given presentations to
 10 explain the BR 135 criteria .
 11 Q. Yes.
 12 A. That group were setting the test programme going
 13 forward, so it was important that they understood,
 14 you know, what the pass/ fail criteria were.
 15 Q. Would that have included Andrew Pack as well?
 16 A. I don't recall if Andrew was included in that group.
 17 I think he may have been early on.
 18 Q. You say that you went to significant lengths to ensure
 19 that relevant senior members of the team understood the
 20 criteria . Was that just through the work you have just
 21 explained in the fire focus group, or were there other
 22 actions that were done in that respect?
 23 A. It was. At the same time, we were trying to better
 24 collate our understanding of past tests . There wasn't
 25 an awful lot of access to the prior test information.

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1 Ivor's way of working could be quite erratic at times,
 2 so often, you know, it was important that he stored his
 3 information centrally so that it was available to all .
 4 Q. Did that include trying to make sure you'd collated
 5 together all of the information about previous
 6 8414 tests?
 7 A. Yes, in terms of the actual -- what was tested.
 8 Q. Yes.
 9 A. There was something called a certification matrix,
 10 I think, which was a spreadsheet essentially listing the
 11 chronology of what had already been tested.
 12 Q. I see, yes.
 13 That technical library of information that you refer
 14 to there, you say there was training and then there was
 15 the compilation of a technical library of information,
 16 what documents were contained in that technical library
 17 of information?
 18 A. The whole raft, to be honest. This is a central server
 19 location that was available to all . Again, it was
 20 really about just making sure that that information was
 21 organised and, you know, could be found.
 22 Q. So would that have, say, Approved Document B on it?
 23 A. Yes, it would, yeah.
 24 Q. Copies of the 8414 test standards?
 25 A. It would.

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1 Q. What about CWCT? Were any of their pieces of guidance
 2 ever collated as part of that group?
 3 A. Not that I recall specifically .
 4 Q. And BR 135, would you have copies of BR 135?
 5 A. Yes.
 6 Q. Did you understand, between 2010 and 2015, that
 7 a classification to BR 135 is applicable only to
 8 a tested system?
 9 A. Yes.
 10 Q. And did you understand that it's not intended as
 11 a guarantee of the fire performance of any individual
 12 component part of that tested system?
 13 A. Yes.
 14 Q. And did those in the technical adviser roles underneath
 15 you also understand that, as far as you could tell ?
 16 A. As far as I could tell , particularly the senior team
 17 again.
 18 Q. Yes.
 19 If we look now at paragraph 4.11 of your statement
 20 on page 10 {KIN00020821/10}, you say:
 21 "During my time as Head of Technical, the Technical
 22 Team at Kingspan had a very good understanding of these
 23 routes to compliance. However, it was not uncommon for
 24 Kingspan to get questions from other professionals
 25 within the industry who clearly did not understand the

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1 requirements within the building regulations and
 2 associated guidance documents to achieve compliance to
 3 the same extent. We hoped that our 'Routes to
 4 Compliance' document would assist in the industry's
 5 understanding of this ."
 6 Would you say that a lack of understanding about the
 7 requirements within the Building Regulations and
 8 Approved Document B was widespread among professionals
 9 in the industry at this time?
 10 A. I don't think I'd be in a position to comment on the
 11 whole industry, but there was definitely experience of
 12 that, yes.
 13 It does bring to mind something I said earlier ,
 14 actually , which I think is wrong. I think I mentioned
 15 that we would influence specifiers , whereas I think
 16 I meant to say inform.
 17 Q. Right.
 18 A. "Influence" is too strong a word.
 19 Q. Right.
 20 A. And I don't think we were in a position to influence ,
 21 honestly. They came to us for product advice.
 22 Q. I see.
 23 Given what you have said there and what we discussed
 24 earlier , do you think that reliance was being placed by
 25 professionals on the advice given to them by Kingspan

40

1 about these matters?

2 A. Definitely reliance, but I wouldn't have thought

3 over-reliance. It doesn't absolve them of their own

4 responsibilities.

5 Q. I see. Yes.

6 Now, just turning now to a different aspect of the

7 fire performance of K15, and this is about national

8 class 0, if we could look at paragraph 5.7 on page 22 of

9 your statement {KIN00020821/22}.

10 You say that:

11 "During my time as Head of Technical, my

12 understanding was that Class 0 was a designation in

13 Appendix A of Approved Document B relating to surface

14 spread of flame based on achieving two British Standard

15 test results: BS 476 Parts 6 and 7. If a material had

16 achieved Class 0 classification, it meant that it showed

17 limited surface spread of flame and fire propagation

18 characteristics. A material would achieve Class 0

19 if ..."

20 And then you have explained the definition of

21 class 0.

22 Then you say in 5.8:

23 "I understood that Kingspan undertook BS 476-6 and

24 BS 476-7 tests on K15 and K15 achieved Class 0

25 classification."

41

1 Now, is it your understanding that, at all times

2 between 2010 and mid-2015, test data from tests to 476-6

3 and 7 existed on the basis of which K15 could be said to

4 have a class 0 classification?

5 A. Yes, that would be my understanding.

6 Q. Who was responsible for that testing to those two parts

7 of 476, part 6 and part 7, during that period?

8 A. Predominantly it fell on the technical production team

9 to carry out those small-scale tests. They were

10 occasionally assisted by Ivor and the wider team as

11 well, but predominantly it was through the technical

12 production team.

13 Q. What did you understand the relevance of class 0 to be

14 for insulation products?

15 A. I know there is some reliance on class 0 in determining

16 fire barrier separation.

17 Q. Yes.

18 A. Other than that, it is a very well established property

19 that I think most specifiers would recognise.

20 Q. Did you understand at the time that a class 0

21 classification does not tell you anything about whether

22 or not a product is one of limited combustibility?

23 A. Yes.

24 Q. Were you aware that there existed in the industry at

25 this time some confusion about class 0, including the

42

1 difference between the meaning of class 0 and limited

2 combustibility?

3 A. Yes. Specifically, I believe there were a few

4 comparison tables that were floating around in -- that

5 tried to bring correlation. I think this is in specific

6 contexts. I don't recall the specifics, but I believe

7 that did lead to some confusion, in that I think people

8 wanted to be able to draw a parallel.

9 Q. Yes.

10 A. I clearly understood there wasn't one.

11 Q. Was it for that reason that the product literature for

12 K15 throughout 2010 to 2015 does prominently highlight

13 the class 0 classification?

14 A. I don't think it was specifically for that reason. As

15 I said previously, class 0 was a very well recognised

16 fire performance property, and for that reason we

17 maintained it in the literature.

18 Q. Did you understand that some in the industry thought it

19 was the highest classification for these types of

20 materials, class 0, that it --

21 A. No.

22 Q. You didn't understand that?

23 A. No.

24 Q. And did you think others in industry might have

25 understood that?

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1 A. It's possible, I suppose. Class 0 typically related to

2 a designation for internal surfaces, so it may well be

3 that it was the only designation that some people were

4 familiar with. But somebody in this profession looking

5 at cladding, for example, would be aware of other fire

6 performance classifications.

7 Q. Did you become aware during your time as head of

8 technical that Kingspan was testing just the foil facer

9 only in those 476-6 tests?

10 A. No, I'm not aware of that specifically.

11 Q. You were never made aware that that was what was going

12 on within Kingspan; is that right?

13 A. Erm --

14 Q. They were testing the foil facer only?

15 A. I know that happened. I believe there was some wording

16 in the Building Regulations that allows the definition

17 to be on the surface material.

18 Q. What view did you take about testing only on the

19 foil facer for class 0?

20 A. If that were accepted, then I didn't see a problem with

21 that.

22 Q. Is that the view you took at the time? I'm not saying

23 hypothetically, I'm asking you: at the time, did you

24 take a view on whether it was acceptable to be testing

25 on the foil facer alone?

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1 A. I can't recall what my thoughts would have been at the
 2 time.
 3 Q. Did you or anyone else to your knowledge ever check
 4 BS 476-6 to see whether it said that the substrate ought
 5 to be tested as well as part of any test? Did you ever
 6 do that check?
 7 A. Personally, no.
 8 Q. I want to ask you now some questions about your early
 9 period as head of technical, when you took over from
 10 Philip Heath. Yes?
 11 A. Okay.
 12 Q. I would like to understand what you came to learn from
 13 Mr Heath or from others at that stage about K15, in
 14 particular about its testing and certification history.
 15 Now, in terms of tests to BS 8414 on systems
 16 incorporating K15, were you told in 2010 about the
 17 8414 test that had been carried out on 31 May 2005?
 18 A. By Mr Heath?
 19 Q. Well, by anybody when you started, but yes, as part of
 20 some kind of handover or induction process?
 21 A. No, there wasn't a handover.
 22 Q. Did you come to learn about the May 2005 8414 test --
 23 A. Yes.
 24 Q. -- after being appointed head of technical?
 25 A. Yes.

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1 Q. And who told you about that test?
 2 A. I don't recall specifically, but most likely it would
 3 have been Ivor.
 4 Q. Can you remember what you were told about that test?
 5 A. Yes, it was the test which obviously we'd based an awful
 6 lot of our advice on. I'm aware the test was a part 1.
 7 I'm aware that it was designed to replicate, as far as
 8 possible, a non-combustible construction of the other
 9 components.
 10 Q. Did you know what the outer layer was? Were you told
 11 what the outer surface was on that test?
 12 A. Yes. I'm aware more latterly that there was some
 13 confusion over that, but I was ... it was described to
 14 me that it was intended to replicate a building board
 15 of -- that was non-combustible.
 16 Q. Were you told any more by Mr Meredith or others about
 17 what that building board was at the time you took over?
 18 A. No, not in detail.
 19 Q. If we look at your witness statement at this point, if
 20 we go to paragraph 11.38 on page 61 {KIN00020821/61},
 21 you say that:
 22 "The system tested was a 'fibre cement board'
 23 system. I believe that a fibre cement board system is
 24 representative of an external cladding system - as far
 25 as I am aware, these systems are still used in the 'real

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1 world' today. During the course of preparing this
 2 witness statement, it has been explained to me that the
 3 written report for this test incorrectly describes the
 4 system as a 'cement particle board' system. I was not
 5 previously aware of this."
 6 Now, you obviously didn't have any involvement in
 7 that test at all.
 8 A. No.
 9 Q. How did you come to understand that it was a fibre
 10 cement board system?
 11 A. I think that is more recently, through disclosures.
 12 Q. Who told you that?
 13 A. I think that came through some of the documents that
 14 were supplied as part of the evidence for the trial.
 15 Q. For this Inquiry?
 16 A. Yes.
 17 Q. When you were preparing your witness statement?
 18 A. Yes.
 19 Q. Prior to that, had you understood it to be a cement
 20 particle board that was used?
 21 A. Yes, something that would typically be non-combustible
 22 and representative of a cladding panel.
 23 Q. Which documents told you more recently that it was
 24 in fact a fibre cement board? What documents were you
 25 looking at to tell you it was in fact a fibre cement

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1 board?
 2 A. I don't know specifically. Whether it was that or
 3 whether it was testimony, I'm not sure.
 4 Q. We can see you have told us that:
 5 "I believe a fibre cement board system is
 6 representative of an external cladding system - as far
 7 as I am aware, these systems are still used in the 'real
 8 world' today."
 9 Can you help us what you mean by that?
 10 A. Yeah, that there are systems today that would be
 11 a similar dimension to the panel that was used, and
 12 a decorative cladding panel. They're not as commonly
 13 used these days as they have been in the past, to my
 14 knowledge.
 15 Q. I see. I understand you're saying that it might have
 16 been representative in terms of its dimension, its
 17 thickness; yes?
 18 A. Yeah.
 19 Q. Are you saying that that is representative in any other
 20 way?
 21 A. Fibre cement boards, I understand, are used as cladding
 22 panels, yes.
 23 Q. On external surfaces of buildings?
 24 A. Mm-hm.
 25 Q. Where do you get that knowledge from?

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1 A. Just through working for a cladding manufacturer --
 2 sorry, a cladding installer .
 3 Q. What kind of rainscreen would that --
 4 A. Yes.
 5 Q. -- provide in the real world? Wouldn't it soak up rain,
 6 go soggy, fall off? How would a fibre cement board fare
 7 on the outside of a building, on your understanding?
 8 A. Whether -- I'm not sure, I can't recall the exact
 9 material composition of those cladding boards, but they
 10 are generally referred to as a cement reinforced board.
 11 Q. Okay.
 12 In terms of then going back to your awareness when
 13 you took over as head of technical and what you were
 14 told, were you made aware of any changes to the K15
 15 product which had taken place after that test in 2005?
 16 A. No, I can't recall I was specifically made aware.
 17 Q. Were you made aware that there had been a changeover
 18 from old technology K15 to new technology K15 before you
 19 took over as head of technical?
 20 A. Not before I took over, no.
 21 Q. When did you first become aware of that change from
 22 old tech to new tech?
 23 A. Specifically it will have probably been around the
 24 period that we re-engaged with the testing programme.
 25 Q. So would that have been around 2014?

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1 A. I would have thought 2013, 2014, yes.
 2 Q. So at that point you were made aware that there was
 3 old tech and new tech; yes?
 4 A. Yes, I was aware of that. I don't recall being
 5 specifically made aware of that. I could have been --
 6 come across that information in various ways through --
 7 perhaps through the fire focus groups and looking at
 8 past minutes. I also did a piece of work on
 9 redeveloping the PPDS system, so I would have had to go
 10 through all of that data. I was aware that that change
 11 had happened.
 12 Q. Did anyone ever discuss with you or did you see it in
 13 any of the documentation concerns about the fire
 14 performance of new technology K15?
 15 A. No, that's not something I was aware of.
 16 Q. So Mr Meredith never said to you, after the change in
 17 technology, "We had real problems with the testing of
 18 K15"? That was never said to you?
 19 A. No, not that I recall, no.
 20 Q. And Mr Heath didn't say that to you either?
 21 A. No. I'm very aware of obviously all the documents that
 22 were disclosed through Ivor's testimony, and I don't
 23 recall knowledge of those documents. Obviously they
 24 pre-dated my time in the role, but I don't recall them
 25 being shown to me whilst I was in the post.

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1 Q. So when you were reading -- you said you obviously read
 2 past minutes and the PPDS -- you didn't ever come across
 3 any documents which were talking about the 2007/2008
 4 8414 tests?
 5 A. Yeah.
 6 Q. Did you not come across any documents about those?
 7 A. No, not that I specifically recall.
 8 Q. Did you know that there had been 8414 testing in 2007
 9 and 2008 as well as in 2005?
 10 A. Yes.
 11 Q. Did you know that those had been all test failures?
 12 A. I did.
 13 Q. And did you know that the K15 was recorded as being
 14 concerning in and of itself in some of the documents
 15 stemming from those tests?
 16 A. No, I hadn't taken that inference from that.
 17 Q. Right.
 18 SIR MARTIN MOORE-BICK: Did you have any information about
 19 the nature in which the tests had failed?
 20 A. I don't recall reviewing the test reports specifically .
 21 I know they weren't close, you know, fails , if you like .
 22 I know that they were significant fails .
 23 SIR MARTIN MOORE-BICK: Yes. All right, thank you.
 24 MS GRANGE: When you say you know they were significant
 25 fails , do you know that now, or did you know that then,

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1 when you were head of technical?
 2 A. No, I knew that then.
 3 Q. And who told you that they were significant fails ?
 4 A. That would have been through Ivor.
 5 Q. Did you ever learn about any testing that had been done
 6 in conjunction with Kingspan Offsite?
 7 A. I'm aware it happened; I'm not familiar with how it came
 8 about or the detail of it .
 9 Q. Did anyone at Kingspan Offsite ever discuss with you any
 10 concerns they had about the fire performance of K15?
 11 A. No. Whilst I did have a role working with that side of
 12 the business, I don't believe I ever actually worked
 13 with any of the people that were raised in some of the
 14 communications that have come out recently.
 15 Q. So far as you were aware, the K15 product which was
 16 being sold when you became head of technical, were you
 17 aware that that was the same product which had been
 18 tested to 8414 in May 2005?
 19 A. I knew that there was -- the 2005 test was old
 20 technology.
 21 Sorry, could you rephrase the question?
 22 Q. Yes. So far as you were aware, was the K15 product
 23 which was being sold when you became head of technical
 24 the same product that had been tested to 8414 in 2005?
 25 SIR MARTIN MOORE-BICK: I'm sorry, may I just interrupt you.

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1 Is that what you intended to ask, whether the witness
 2 was aware that it was the same product, or was he under
 3 the impression that it was the same product?
 4 MS GRANGE: Let's put it that way.
 5 SIR MARTIN MOORE-BICK: Because they're quite different.
 6 MS GRANGE: Were you under the impression that the product
 7 you were selling to market when you became head of
 8 technical was the same product that had been tested in
 9 2005?
 10 A. Yes, absolutely, that the 2005 test represented the
 11 product that was being sold.
 12 Q. You said that you were aware that that was old tech,
 13 though, and that you became aware of that in 2013/2014.
 14 A. Yes.
 15 Q. Did there come a time when you became aware that the
 16 product that was being sold was not the same as that
 17 that had been tested in 2005?
 18 A. I think what I'm trying to say is that I was aware of
 19 old technology being used in the 2005 test. What
 20 I didn't appreciate was that that didn't represent or
 21 wasn't representative of the product that was being sold
 22 latterly when I was in the role. The difference --
 23 I must admit, the difference between old and new
 24 technology is lost on me. I don't know -- other than
 25 I know it was intended to increase production speed, but

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1 beyond that I'm not aware of what old and new technology
 2 means.
 3 Q. Did you ever ask anybody to explain that to you? Did
 4 you ever say, "What are the differences, old tech,
 5 new tech?"
 6 A. No, specifically. I don't believe -- I'm not sure what
 7 context I came to understand that the 2005 test was old
 8 technology, but I worked on the assumption that the test
 9 which had been established and used in the business for,
 10 you know, over five years was representative of what was
 11 being supplied in the market.
 12 Knowing what I know now, you know, that should have
 13 been looked into in more detail at the time. But
 14 I wasn't aware that that could, should or did have
 15 an impact on its fire performance.
 16 Q. Right. So are you aware now that that test report from
 17 2005 has been withdrawn? It was withdrawn in
 18 October 2020.
 19 A. Yes.
 20 Q. Are you aware of that?
 21 A. Yes.
 22 Q. It was withdrawn on the basis that the K15 product
 23 tested was not representative of the product sold from
 24 September 2006 onwards; yes?
 25 A. Yes.

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1 Q. So is it your evidence that the first time you became
 2 aware of that was, what, in the last few weeks --
 3 A. Yes, absolutely.
 4 Q. -- upon hearing that?
 5 A. Yes.
 6 Q. Was that a surprise to you, to come to be aware of that?
 7 A. Yes, it was.
 8 MS GRANGE: Mr Chairman, I think that would be a good moment
 9 for a break.
 10 SIR MARTIN MOORE-BICK: Yes, all right. Thank you.
 11 Well, we have a break during the course of the
 12 morning, Mr Millichap.
 13 THE WITNESS: Sure.
 14 SIR MARTIN MOORE-BICK: We're going to take it now.
 15 So we'll break now. We will come back, if you
 16 would, please, at 11.35, and I have to ask you, please,
 17 not to talk to anyone about your evidence or anything to
 18 do with it while you're out of the room. All right?
 19 THE WITNESS: No. Thank you.
 20 SIR MARTIN MOORE-BICK: Thank you very much, if you would
 21 like to go with the usher, please.
 22 (Pause)
 23 Right, 11.35, please.
 24 MS GRANGE: Thank you.
 25 (11.20 am)

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1 (A short break)
 2 (11.40 am)
 3 SIR MARTIN MOORE-BICK: Right, ready to carry on,
 4 Mr Millichap?
 5 THE WITNESS: Yes.
 6 SIR MARTIN MOORE-BICK: Thank you.
 7 Yes, Ms Grange.
 8 MS GRANGE: Yes, thank you.
 9 So we were discussing whether you knew about the
 10 worse fire performance of the new tech K15 while you
 11 were head of technical. That's what we were discussing
 12 before the break. Just a few more questions on that.
 13 Did Dr Rochefort never say to you at any time
 14 between 2010 and 2014, before he retired, that there had
 15 been reports that the new tech K15 had performed worse
 16 in fire?
 17 A. No, not to my knowledge.
 18 Q. Did he never tell you about it performing worse in
 19 8414 tests?
 20 A. No.
 21 Q. In class 0 testing, that they were struggling to get
 22 class 0, particularly BS 476-6, for the new tech? Was
 23 that never said to you?
 24 A. I'm aware that there were difficulties in maintaining
 25 the class 0. I think there were -- I can recall that

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1 there were variations in results that they were getting
 2 through various test laboratories for various reasons,
 3 and there was a lot of work into why there would be
 4 variation between laboratories.
 5 Q. Were you ever told that one of the differences, and one
 6 of the reasons why you might have been getting those
 7 varied results with class 0 testing, was the fact you
 8 had changed over to the Kesteren technology?
 9 A. No, I don't -- I wasn't specifically told that. I was
 10 aware of that, and I don't know precisely how. It could
 11 have been through, as I say, my investigations through
 12 remodelling the PPDS system, it may have been through
 13 historical minutes, but not something that
 14 I specifically recall being told.
 15 Q. So I want to be absolutely clear what you were aware of.
 16 You were aware that you were getting varied results with
 17 the class 0 testing; yes?
 18 A. Yes, through various -- what I recall from documentation
 19 that I've reviewed since is that it was variations
 20 between different test laboratories.
 21 Q. Right, but I'm very much interested in what your
 22 knowledge was at the time, so if you can try and keep
 23 that in mind when I'm asking you the questions.
 24 A. Yes.
 25 Q. That's what is most important for us, what you knew at

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1 the time as head of technical.
 2 A. Sure.
 3 Q. Not what you have come to know in more recent times.
 4 A. Sure.
 5 Q. So, just to be clear, you knew, did you, that they were
 6 struggling to get BS 476-6 passes for the new technology
 7 K15? Did you know that?
 8 A. Yeah, through the discussions that were documented in
 9 the technical lamination minutes.
 10 Q. And did you know that one of the reasons or one of the
 11 possible reasons for that was the changes that had been
 12 brought about with the new technology from the old
 13 technology?
 14 A. No, I hadn't made that connection.
 15 Q. What about the perforations to the foil facer? Were you
 16 aware that the new technology had brought with it
 17 perforations to the foil facer, and that that was one of
 18 the reasons you were said to be struggling with getting
 19 BS 476-6?
 20 A. I've only ever been aware of the product with
 21 perforations.
 22 Q. Right. So you weren't aware that the old tech was
 23 unperforated foil?
 24 A. No, I wouldn't have been aware of that.
 25 Q. What was your reaction when you discovered very recently

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1 that in fact the 2005 test was on a different product?
 2 A. I was surprised, absolutely. I'm not sure that
 3 I entirely understood what that meant at this time.
 4 Obviously reviewing Mr Rochefort's evidence, I'm still
 5 not sure if I understand what the implications are
 6 between the two technologies on fire performance.
 7 Q. But you must have appreciated, did you not, that you
 8 were relying -- you have already mentioned it this
 9 morning -- very heavily on that 2005 test --
 10 A. Yes.
 11 Q. -- for much of the time that you were head of technical;
 12 yes?
 13 A. Yes.
 14 Q. So were you not extremely surprised to learn that that
 15 2005 test was based on old technology K15?
 16 A. Yes. I only temper that with Malcolm's explanation
 17 yesterday, in that I don't believe it's his belief that
 18 the difference is as marked as potentially it's being
 19 portrayed, I'm not sure.
 20 Q. Right. Well, we have his evidence on that.
 21 A. Yeah.
 22 Q. If we could go now -- I'm still trying to follow through
 23 what your knowledge was, and understand what your
 24 knowledge was when you took over as head of technical.
 25 I want to ask you now about the absence of a BR 135

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1 classification report --
 2 A. Yeah.
 3 Q. -- for the 2005 test.
 4 If we can look at paragraph 11.43 of your witness
 5 statement on page 62 {KIN00020821/62}, you have been
 6 asked about the lack of a BR 135 classification report,
 7 and you say:
 8 "As I say at my response to Inquiry question 27
 9 above, if it is the case that we did not get a BR 135
 10 classification report for this test at the time that it
 11 was done, I was not aware of this."
 12 So that's right, is it, that during the whole of
 13 your time as head of technical, you weren't aware that
 14 there was no BR 135 classification report for the 2005
 15 test?
 16 A. I don't think I was initially aware of that. I think
 17 I did come to understand that, but from the point of
 18 view that Ivor had a very firm belief that he had enough
 19 knowledge to interpret a test report. I do remember
 20 having that conversation with Ivor.
 21 Q. And can you remember roughly when that conversation was?
 22 Was it early on in your time as head of technical, or
 23 later?
 24 A. Again, it will have been around the time of the new
 25 testing schedule.

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1 Q. So 2013/2014; yes?
 2 A. 2013 onwards, yes.
 3 Q. Did you never question why there was no separate
 4 documentation with that BR 135 assessment? You have
 5 told us that you knew full well what the criteria were,
 6 you have set those criteria out in detail in your
 7 witness statement.
 8 A. Yes.
 9 Q. Did you never question why there was no documented
 10 assessment to BR 135?
 11 A. Yes, it was questioned, and I believe we considered
 12 actually getting that classification report
 13 retrospectively. I don't think that was done whilst
 14 I was still at Kingspan, but it was discussed.
 15 Q. So you say, "Yes, it was questioned"; who questioned it
 16 and when?
 17 A. I will have questioned Ivor on that, and I know his view
 18 was very strongly that he didn't believe it was entirely
 19 necessary.
 20 Q. And what was your view when you had these discussions
 21 with him? Did you think it was necessary to have
 22 a BR 135 classification report, given the reliance you
 23 were placing on that 2005 test?
 24 A. Yes, given the investment we'd already made, I think
 25 Ivor's rationale at the time was it was an extra £4,000

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1 that was unnecessary, and, you know, in the context of
 2 what we were doing, that wasn't going to make
 3 a difference.
 4 Q. Did anyone ever say to you, "Well, it's going to be very
 5 difficult to get a BR 135 classification report because
 6 that wasn't actually a full, real-life system, that was
 7 just part of a programme of testing we were doing at the
 8 time to explore this area"?
 9 A. No, I wasn't aware that we couldn't get one. Having
 10 said that, I don't think we'd actually tried at that
 11 point. I don't know what Ivor's opinion would have been
 12 at that time.
 13 Q. I see.
 14 Did you have any awareness of the four tests to
 15 BS 8414-2 on systems incorporating K15 which had been
 16 carried out in December 2007, April 2008, and June 2008?
 17 A. Yes, some awareness. Not to a detailed level. There
 18 was a summary document that mapped the chronology of the
 19 tests.
 20 Q. Yes.
 21 A. That had a level of detail in it that basically
 22 described the construction that was tested.
 23 Q. I think you said earlier that you were aware those were
 24 significant failures; is that right?
 25 A. At least, yeah, some of them were, yes.

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1 Q. But is this right: at no stage did anybody tell you that
 2 what had been observed in those tests was the K15 itself
 3 performing badly under fire conditions?
 4 A. No, that wasn't the conclusion that I was told.
 5 Q. So what was the conclusion you were told about those
 6 tests?
 7 A. That it related to the system failing. I think it was
 8 a common understanding that it was very difficult to see
 9 exactly what component had what influence on the test.
 10 It was obviously something that we were, you know, keen
 11 to understand and trying very hard to understand.
 12 Q. We will come to it later: so even though when you're
 13 testing in 2014, there are varying different K15s that
 14 you're testing with, different research and development
 15 products --
 16 A. Yes.
 17 Q. -- did that not alert you to the fact that the standard
 18 K15 that was being sold was not considered to be able to
 19 perform well in those conditions?
 20 A. No, no, not specifically. One of the primary drivers
 21 behind the development products with solstice was
 22 actually lambda value. It gave a significant thermal
 23 performance improvement, and that was very attractive to
 24 the sales arms of the company. Production were very
 25 keen to move to that technology as well. It was seen as

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1 the way forward at the time.
 2 Q. I see, so --
 3 SIR MARTIN MOORE-BICK: I'm sorry to interrupt.
 4 MS GRANGE: No, no, carry on.
 5 SIR MARTIN MOORE-BICK: I wonder if you could just help me
 6 with this a little bit: you told us a little earlier
 7 that you were under the impression that the product
 8 remained the same between 2005, when the successful test
 9 was carried out, through until, let's say, 2010 or a bit
 10 later.
 11 I'm just wondering, did it not trouble you that,
 12 although you had had one test which had passed in 2005,
 13 what you thought was the same product had failed on
 14 three successive tests in 2007/2008? Did that not cast
 15 some doubt on the reliability of the test in 2005?
 16 A. No, not specifically. The test in 2005 was potentially
 17 the least onerous test. Every component other than the
 18 consistent component, K15, was engineered to give us the
 19 best chance of getting a result. The tests latterly in
 20 2007 and 2008, I believe, were partially sponsored
 21 tests, so I had a concern that actually they perhaps
 22 weren't the next logical tests. It was something I was
 23 trying to improve my understanding, and, you know, to
 24 actually learn about this test, we needed to test, in my
 25 view, in a logical way so that we could begin to

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1 understand what the drivers are for a pass or a fail .
 2 SIR MARTIN MOORE-BICK: Yes, but as you rightly point out,
 3 these are whole system tests .
 4 A. Yes.
 5 SIR MARTIN MOORE-BICK: So if you are responding to
 6 customers with requests for suitability of K15 --
 7 A. Yeah.
 8 SIR MARTIN MOORE-BICK: -- this series of tests would
 9 suggest that one ought to be very cautious about giving
 10 any positive advice unless you could be confident that
 11 the system that they were going to introduce was
 12 directly comparable, if not identical to the one tested
 13 in 2005?
 14 A. Yes, obviously -- well, not necessarily obviously, but
 15 our concern with giving that as a way forward was that
 16 there was -- it was never going to be practical to
 17 provide an exact test for every construction in the
 18 industry. It's widely known that, you know, you rarely
 19 install the same cladding system twice on occasion,
 20 there's normally something that changes. From that
 21 point of view, to support the product in that
 22 application, we felt it was necessary that the evidence
 23 we could give would need to be assessed to match systems
 24 that were actually being built .
 25 SIR MARTIN MOORE-BICK: Right. Thank you.

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1 I'm sorry, I've taken you a little off course.
 2 MS GRANGE: No, that's absolutely fine .
 3 SIR MARTIN MOORE-BICK: Thank you, Mr Millichap.
 4 A. That's okay.
 5 MS GRANGE: Still thinking about your understanding and
 6 knowledge about K15 when you became head of technical,
 7 we're going to move on now to some questions about
 8 third-party certificates which were in place for the
 9 product when you took over. I want to start with the
 10 LABC.
 11 You understood that a system approval certificate
 12 had been issued for K15 in 2009, so before you were
 13 appointed head of technical in 2010; is that right?
 14 A. Yes.
 15 Q. Were you told anything about that certificate when you
 16 took on that role in 2010?
 17 A. No, I didn't know much about that at all at the time.
 18 Q. If we can go at this point to paragraph 8.20 of your
 19 witness statement on page 45 {KIN00020821/45}, there are
 20 some paragraphs here where you're responding to
 21 a question about:
 22 "On what basis do you understand the LABC to have
 23 asserted that K15 was, or may be considered, a material
 24 of limited combustibility?"
 25 You tell us in 8.20 that you understand this is

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1 a reference to a phrase used in the LABC system approval
 2 that K15, and then you set out that phrase, "can be
 3 considered as a material of limited combustibility".
 4 You say in the following paragraph:
 5 "I do not know how or why the LABC used this phrase.
 6 The document was issued before I stepped into a relevant
 7 role and so I was not involved."
 8 Then you say this:
 9 "For the purposes of preparing this witness
 10 statement, I have been shown this document. As far as
 11 I can recall, I was not aware of this phrase being
 12 within the LABC System Approval during my time as Head
 13 of Technical. When I was appointed as Head of Technical
 14 I recall there being some internal liaison taking place
 15 relating to a LABC document but I was not involved.
 16 Ivor Meredith was handling this."
 17 Now, I just want to be absolutely clear about your
 18 knowledge of this certificate .
 19 Did you actually read that LABC system approval
 20 certificate in 2010 when you took over?
 21 A. I don't recall doing so specifically, no.
 22 Q. Wasn't that a very important document to read, given --
 23 A. Yes.
 24 Q. -- the significance of it for the sales of K15?
 25 A. Yes, it will have been. I will have got to it. I don't

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1 recall reading it straight away.
 2 Q. Do you recall reading it at some stage after you became
 3 head of technical?
 4 A. I do, but I seem to recall that it was pretty much
 5 immediately under review. I think there was
 6 correspondence which relates to that phraseology being
 7 changed.
 8 Q. Can I just look at an email, {KIN00005383}. This is
 9 an email of 9 May 2009 by Philip Heath. If we can look
 10 at the top half of the page, what we see is that this
 11 email is sent to a number of technical services
 12 divisions within Kingspan, including the roofing
 13 division. Do you see that? It's three lines up from
 14 the bottom of the recipients, the "To" list .
 15 A. Yeah.
 16 Q. The email is headed "GREAT NEWS", and it's all about the
 17 LABC system approval certificate, and if we look a bit
 18 further down into the body of the email, Mr Heath has
 19 highlighted the phrase "material of limited
 20 combustibility" in this email, and set out what the
 21 benefits are, what it was.
 22 Now, you were managing the roofing division in 2009;
 23 is that right?
 24 A. No.
 25 Q. No?

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1 A. No, I was managing a very small part of the roofing
 2 division, which was the internal function that supported
 3 the tapered roofing. That was ... it was more of
 4 a designed product, and therefore there were designers
 5 that I managed alongside an estimating function to
 6 support the sales of that product.
 7 Q. Right.
 8 Do you remember receiving this email, now you have
 9 looked at it? Do you remember getting it in 2009 when
 10 it was sent?
 11 A. No, I don't recall it.
 12 Q. When you took over from Philip Heath in 2010, were you
 13 made aware by others of the statement in it about
 14 limited combustibility in this LABC system approval
 15 certificate?
 16 A. No, I don't recall specifically being made aware of it.
 17 Q. So nobody discussed that with you, drew your attention
 18 to it, explained the importance of it; no?
 19 A. No.
 20 Q. Did you read any of the later LABC certificates for K15?
 21 There were certificates which I'll take you to later
 22 that were issued in 2013, 2014 and early 2015. Did you
 23 read any of those later versions?
 24 A. Yes, I did come to be aware of them, yes.
 25 Q. Can you remember the words, "K15 can be considered

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1 a material of limited combustibility" being used again
 2 after the May 2009 system approval certificate?
 3 A. Sorry, could you rephrase?
 4 Q. Yes. Can you remember the words, "K15 can be considered
 5 a material of limited combustibility" being used again
 6 after that May 2009 system approval certificate, in
 7 a later version? Do you remember that?
 8 A. No, not specifically.
 9 Q. We will come back to that.
 10 Turning now to the BBA, when you were appointed in
 11 the role of head of technical, there was a certificate
 12 in place from the BBA for K15; do you remember that?
 13 A. Yes.
 14 Q. You tell us in your witness statement, this is at
 15 page 29 {KIN00020821/29} paragraph 7.5:
 16 "A BBA certificate was valuable as an independent
 17 third-party approval of a product. Its value was as
 18 an independent investigation of a product."
 19 On the same page at 7.6, you say:
 20 "It was valuable in that it was perceived in the
 21 marketplace as an independent third-party verification.
 22 It was significant for the marketing and sales of K15
 23 because it verified K15's fire and thermal performance."
 24 Now, what do you mean there by it verified K15's
 25 fire and thermal performance?

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1 A. As part of the process, we had to provide the evidence
 2 we had on the product's performance. The BBA would
 3 review that, I presume in their internal processes, and
 4 therefore re-publish independently to confirm our
 5 claims.
 6 Q. I see.
 7 Did you think that the BBA itself would do some
 8 testing on K15 as part of that process?
 9 A. Potentially they could highlight gaps, if it were
 10 required, against a particular product in a particular
 11 application.
 12 Q. So they could highlight gaps; did you ever think that
 13 they might be doing themselves some testing on K15 as
 14 part of that process?
 15 A. No.
 16 Q. No?
 17 A. No.
 18 Q. So the BBA would be dependent, wouldn't they, on the
 19 test evidence provided by Kingspan?
 20 A. Yes.
 21 Q. And you clearly understood that throughout your time as
 22 head of technical?
 23 A. I did.
 24 Q. Now, the first issue of the BBA certificate for K15 was
 25 on 27 October 2008, which was over a year before you

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1 became head of technical.
 2 When you were asked about the content of that
 3 certificate, if we can look at paragraph 7.27 of your
 4 witness statement on page 34 {KIN00020821/34}, you were
 5 asked about your understanding of some of the wording in
 6 that certificate, and the answer you gave in your
 7 statement was:
 8 "I cannot comment on my understanding of this
 9 wording and whether it was correct at the time, i.e. in
 10 2008, as I was not in a relevant role until 2010."
 11 Did you actually read that certificate when you took
 12 over as head of technical?
 13 A. I would have done at some point, yes.
 14 Q. Because it remained in place -- is this right? -- until
 15 mid-2013, didn't it?
 16 A. Yes.
 17 Q. Let's look now at that certificate. It's at
 18 {BBA00000038}. In that first page, if we can look at
 19 the bottom half of the page, we can see it was issued
 20 27 October 2008, and under "Key factors assessed", three
 21 headings down, we see "Behaviour in relation to fire",
 22 and the words there that we can see after that say:
 23 "The boards will not contribute to the development
 24 stages of a fire or present a smoke or toxic hazard ..."
 25 Now, just leaving aside the smoke and toxic hazard,

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1 can you help us with what those words mean, "will not
2 contribute to the development stages of a fire"?
3 A. I don't specifically know what evidence the BBA would
4 reference to come up with that wording. I would assume
5 it's related to surface spread of flame or propagation.
6 Q. When you first read this, did you ask that question?
7 Did you say, "Can someone tell me what test evidence
8 supports that statement in our BBA certificate"?
9 A. No, I've taken it as a standard phrase that the BBA use
10 against this factor.
11 Q. Did you understand what it meant when you read it?
12 A. Yes, but I don't think it refers specifically -- it's
13 not quantifiable in the way that it's written.
14 Q. What does that mean, it's not quantifiable in the way
15 that it's written? Do you mean it's vague and
16 ambiguous?
17 A. Yes, I think it is. It should reference back to a test
18 that, you know, can be measured more specifically.
19 Q. Can you explain why, as head of technical, that wasn't
20 something you ever pursued?
21 A. No, I can't.
22 Q. Did it ever occur to you that that wording was vague and
23 unspecified, and ought to be more precisely based on
24 test evidence?
25 A. No, I don't recall that I did.

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1 Q. If we go to section 7 of this certificate now, at the
2 bottom of page 5 {BBA00000038/5}, this deals with K15's
3 performance in fire. It's the detailed section.
4 At 7.1 we see a detailed description of the 2005
5 test and what was tested. Then at the end of the
6 description, in the last sentence, it states:
7 "Within the stated test time the temperature at the
8 level 2 thermocouples did not exceed 600°C, therefore
9 displaying limited fire spread away from the fire source
10 and that the product meets the criteria stated within
11 BRE 135."
12 Now, would you agree that that statement, "the
13 product meets the criteria stated in BRE 135", is simply
14 not correct, is it?
15 A. Strictly, no, not according to the system test.
16 Q. No, because no product can meet that criteria; that is
17 a system test; yes?
18 A. Yes, "product as part of a system" would be a better
19 wording.
20 Q. When you read that, did you appreciate that that was
21 inaccurate? When you read it, did you realise that?
22 A. No, I don't believe I did at the time. I think I was
23 reading it in the context of it being a product agreement
24 approval, albeit referring to a system in this case.
25 Q. What does that mean, you "read it in the context of it

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1 being a product agreement approval, albeit referring to
2 a system in this case"?
3 A. The agreement is specific to the product and therefore
4 I think it's referencing performance against the
5 product, whilst it's not strictly accurate, because the
6 product in this case was part of a system.
7 Q. Yes. And it's right, isn't it, that you can't
8 extrapolate away from a system test how one individual
9 product has done in that test in that way?
10 A. I couldn't, no.
11 Q. No.
12 Now, if we could look at paragraph 7.28 at page 35
13 of your witness statement {KIN00020821/35}, you were
14 then asked about amended issue 1 of the BBA certificate
15 dated April 2010, and you say:
16 "As far as I can recall, I had only just stepped
17 into the role of Head of Technical and so I was not
18 involved in this. In any event, the precise content of
19 BBA certificates would have been the responsibility of
20 Ivor Meredith and Joel Clarke who handled the day-to-day
21 correspondence and liaison with the BBA regarding K15's
22 (and other products') certification. It is important
23 that I emphasise that, as Head of Technical, my role was
24 managerial in nature. I managed a team of around
25 30 employees and my key responsibilities were ensuring

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1 that the team functioned well and deadlines were met."
2 Now, did you ever read this certificate, amended
3 issue 1, dated April 2010?
4 A. I will have done, yes.
5 Q. Let's go to it, it's at {BBA00000037}. At the bottom of
6 page 1, it says the date of first issue is October 2008,
7 and then underneath that, in fainter writing, we can see
8 it says:
9 "Certificate amended on 6 April 2010 with revisions
10 made to Scottish Building Regulations references, the
11 Behaviour in relation to fire and Maintenance
12 sections ..."
13 So we can see that there.
14 At page 1, under "Behaviour in relation to fire", it
15 still says, "The boards will not contribute to the
16 development stages of a fire", and then we can see some
17 wording that's been added which was not included in the
18 previous issue, where it says:
19 "The product has been tested to BS 8414-1 ... for
20 one specific construction on masonry walls (see
21 section 7)."
22 Now, are you able to help us as to when it was that
23 this certificate was actually published and circulated
24 for use? Can you help us with that?
25 A. No, I don't recall.

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1 Q. Two BBA employees, Mr Denyer and Mr Albion, have told
 2 the Inquiry in their witness statements that this
 3 certificate was not published until July 2013.
 4 Now, does that sound right to you?
 5 A. That would seem like a very long delay, even in the
 6 context of the BBA.
 7 Q. Yes.
 8 A. We for some time were very frustrated around the
 9 turnaround of these types of certificates. We held
 10 quite a few of them against most products in most
 11 applications, and it was always frustrating to try and
 12 progress, you know, getting the certificates released.
 13 It would very often take over a year. Three years seems
 14 an exceptional long time even in that measure.
 15 Q. In your experience, did Kingspan always get back to the
 16 BBA quickly when suggested amendments were proposed to
 17 certificates?
 18 A. Yes.
 19 Q. They did?
 20 A. On the basis that we were frustrated that very often the
 21 information was requested in series rather than
 22 parallel, so we would think we were making progress and
 23 then we would get another question that we could have
 24 been asked perhaps earlier.
 25 Q. Yes.

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1 If we can look now at page 5 {BBA00000037/5} of the
 2 certificate and the detailed section 7 on behaviour in
 3 relation to fire, and if we read section 7.1, it says:
 4 "The product is classified as Class 0 or 'low risk'
 5 as defined in the documents supporting the national
 6 Building Regulations. The product, therefore, may be
 7 used in accordance with the provisions of ..."
 8 Then we see for England and Wales, those provisions
 9 are:
 10 "Approved Document B, paragraph 8.4, Volume 1 and
 11 paragraphs 12.5, 12.6 and 12.7, Volume 2 (see also
 12 Diagram 40)."
 13 And note references to paragraphs 12.5 and 12.7
 14 there of Approved Document B.
 15 Now, I just want to turn up what you say in your
 16 witness statement about this at this stage. If you go
 17 to paragraph 7.30 on page 35 of your statement
 18 {KIN00020821/35}, you were asked about that very wording
 19 and what it meant. You say:
 20 "I think that a reader with knowledge of the subject
 21 matter would understand that this wording means that K15
 22 can be considered for use on buildings with a floor over
 23 18 metres subject to compliance with Approved Document B
 24 paragraphs 12.5, 12.6 and 12.7, Volume 2. However,
 25 I also can see that the use of 'may' in the wording

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1 could be misunderstood to imply that K15 will always
 2 meet the requirements of Approved Document B
 3 paragraphs 12.5, 12.6 and 12.7, Volume 2. That is not
 4 what the wording set out at Inquiry question 40(a) says
 5 but it is possible that the wording could be
 6 misinterpreted in that way."
 7 So that's what you have said in your witness
 8 statement.
 9 Let's just go back to the certificate, so we can
 10 just see the wording again, {BBA00000037/5}, 7.1. We
 11 can see 7.1 says:
 12 "The product, therefore, may be used in accordance
 13 with the provisions of ..."
 14 Then we get 12.5, 12.6, 12.7, as well as other
 15 provisions.
 16 Now, K15 could never comply with or be used in
 17 accordance with the requirements of paragraph 12.7 of
 18 Approved Document B, could it?
 19 A. You'd have to refresh me on that paragraph, sorry,
 20 I don't recall them.
 21 Q. Yes. If we go to {CLG00000224/96}, there's 12.7. It's
 22 specifically about insulation materials:
 23 "In a building with a storey 18m or more above
 24 ground level any insulation product, filler material ...
 25 used in the external wall construction should be of

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1 limited combustibility ..."
 2 Now, you have already explained to us that you were
 3 aware of Approved Document B, you were aware of the
 4 different routes to compliance, and you were aware that
 5 the primary route to compliance was for the product to
 6 be of limited combustibility; that's right, isn't it?
 7 A. Yes.
 8 Q. So that's paragraph 12.7 of Approved Document B.
 9 K15 could never comply or be used in accordance with
 10 the requirements of that paragraph, could it?
 11 A. No, it's not limited combustibility.
 12 Q. No. Because it is not a material of limited
 13 combustibility, we agree that?
 14 A. We have, yes.
 15 Q. Yes.
 16 Let's go back to the certificate again,
 17 {BBA00000037/5}.
 18 Do you accept that the wording of this certificate
 19 is inaccurate and misleading?
 20 A. To include 12.7, yes.
 21 Q. Yes. And do you accept that readers could very easily
 22 have understood the technical content of this
 23 certificate to be advising that K15 was a material of
 24 limited combustibility, given the inclusion of 12.7 in
 25 that paragraph?

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1 A. I wouldn't have said "very easily", no. You would have
 2 had to have quite an involved knowledge of all of those
 3 documents surrounding it, and therefore likely,
 4 you know, a specialist in cladding in this instance, and
 5 in that case I don't think Kingspan ever promoted K15 as
 6 a material of limited combustibility. I know there was
 7 a statement in the LABC document that is worded "can act
 8 as", but that isn't stating it's a material of limited
 9 combustibility.

10 Q. But wouldn't you agree that the reader of this
 11 certificate would read that it may be used in accordance
 12 with those provisions, see 12.7, go and look at 12.7,
 13 and say to themselves, "Ah, it's a product of limited
 14 combustibility because it can be used in accordance with
 15 12.7 of ADB"? Do you not see that that was a natural
 16 way to read and understand the certificate?

17 (Pause)

18 A. Yes, it could be read that way.

19 Q. Can you explain why Kingspan allowed this inaccurate and
 20 misleading statement to be made in the BBA certificate?

21 A. I can't.

22 Q. In your witness statement, you have been at pains to
 23 emphasise the care that the technical team would take
 24 over checking the technical content of marketing
 25 literature, et cetera, and other third-party

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1 certificates. Can you explain how that's got into this
 2 certificate?

3 A. No. It wouldn't have been done deliberately. I don't
 4 know why it will have appeared in there in the first
 5 place.

6 Could I see 12.5 and 12.6 to give it some more
 7 context?

8 Q. Yes, absolutely. If we go back to {CLG00000224/95},
 9 12.5 is there. It starts with a general warning about
 10 the external envelope not providing a medium for
 11 fire spread if it's likely to be a risk to health and
 12 safety, and it says:

13 "The use of combustible materials in the cladding
 14 system and extensive cavities may present such a risk in
 15 tall buildings."

16 Then it goes on:

17 "External walls should either meet the guidance
 18 given in paragraphs 12.6 to 12.9 or meet the performance
 19 criteria given in the BRE Report ... (BR 135) ... using
 20 full scale test data from 8414 ..."

21 That's 12.5.

22 12.6 is then about the external surfaces of walls
 23 should meet the provisions in diagram 40. So that's
 24 about the external surface --

25 A. Yeah.

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1 Q. -- say your rainscreen cladding panel, and there's
 2 various guidance given in diagram 40, and then we get
 3 12.7, which is about insulation materials.

4 Does that help?

5 A. It doesn't change the fact that 12.7 is wrong in the
 6 context of that certificate.

7 Q. Yes.

8 Can you remember a time, as head of technical, where
 9 people were discussing the fact that that certificate
 10 was inaccurate and that 12.7 had been mistakenly
 11 included in there? Was that ever discussed?

12 A. No. I wouldn't have been involved in a conversation at
 13 that level of detail that I can recall.

14 Q. If we look at your witness statement, paragraph 7.42,
 15 page 39 {KIN00020821/39}, at the end of that first line,
 16 picking it up there, you say:

17 "... Kingspan was offered the opportunity to comment
 18 on draft BBA certificates before they were finalised.
 19 As part of this, Kingspan was expected to check the
 20 factual information pertaining to the physical
 21 characteristics of the product and test build-up
 22 details, but not the conclusions about the product
 23 arrived at by the BBA."

24 Now, I appreciate you say that there, but if
 25 a conclusion reached by the BBA in a certificate was

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1 demonstrably wrong, do you agree that Kingspan ought to
 2 have alerted the BBA to that error?

3 A. Yes.

4 Q. And particularly where something like fire safety and
 5 life safety was concerned?

6 A. Absolutely.

7 Q. But is it right, I think if we move on to paragraph 7.45
 8 of your witness statement, still on page 39, that what
 9 you tell us is that those checks were not your area of
 10 responsibility; it was Ivor Meredith and Joel Clarke who
 11 would have been responsible for carrying out those
 12 checks; is that right?

13 A. Yes, at that level of detail. I mean, obviously they
 14 report to me, so it's still my responsibility.

15 I don't know, the sentence almost doesn't make
 16 sense, because to refer to those clauses together
 17 contradicts, you know, they can't all be true, it's
 18 going to be one or the other. So it does feel like
 19 a mistake to me, rather than something deliberate.

20 Q. Right.

21 I want to ask you some questions now about what
 22 Kingspan's technical advisers were saying to customers
 23 in the period from 2010 to July 2014 about the
 24 suitability for use of K15 in the external walls of
 25 buildings over 18 metres in height.

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1 First, is it fair to say that in your witness
 2 statement, and I've taken you to a lot of it already,
 3 you are keen to emphasise that Kingspan's role in
 4 advising on the use of K15 in any given high-rise
 5 project was a limited one? That's what you say in your
 6 statement; yes?
 7 A. Sorry, could you say that again?
 8 Q. Is it right that, in your statement, you're keen to
 9 emphasise that Kingspan's role in advising on the use of
 10 K15 in any given high-rise project was a limited one?
 11 A. Yes.
 12 Q. Let's look in a little bit more detail about what you
 13 say about that. If we can go to page 7 {KIN00020821/7},
 14 paragraph 4.2, you explain:
 15 "We provided customers with the information they
 16 needed about K15 and the available routes to compliance
 17 in order for them to design compliant structures.
 18 Kingspan was a manufacturer of just one component in an
 19 entire system: K15. It was not our place to advise as
 20 to whether or not a holistic system complied with the
 21 building regulations/standards."
 22 Then you make a similar point if we look on at
 23 page 13 {KIN00020821/13}, paragraph 4.21. You say:
 24 "It is important for me to be clear that the
 25 Technical Team at Kingspan did not fulfil the function

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1 of building control. The technical advisors gave advice
 2 to customers on the products that Kingspan made and
 3 their potential uses but did not give advice on the
 4 compliance of buildings and construction systems used on
 5 those buildings."
 6 At 4.29, page 15 {KIN00020821/15}, you say there:
 7 "Our Technical Advisors were not trained to confirm
 8 that K15 was suitable because this was not their or
 9 Kingspan's responsibility."
 10 Then I want to look at paragraph 4.36 at the top of
 11 page 17 {KIN00020821/17}. I want to just look at the
 12 last few lines of that paragraph. You say:
 13 "Kingspan had a good grasp of these documents and
 14 the processes involved but I think that there were
 15 plenty of professionals who did not which is why, as
 16 I say above, customers tried to rely on us too much for
 17 confirmations that we could not give to them."
 18 Then again, at 7.47 of your statement, page 40
 19 {KIN00020821/40}, you say:
 20 "As I say above, Kingspan would get queries coming
 21 in from architect or engineer customers relating to the
 22 use of K15 on buildings with a floor over 18 metres
 23 where they were seeking representations as to the
 24 suitability of K15 in the build-ups that they had
 25 designed. It was not Kingspan's responsibility to

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1 determine compliance. When we explained this to them
 2 and provided them with information about K15 and the
 3 routes to compliance, they would sometimes raise
 4 concerns about this. These concerns were misplaced:
 5 they were trying to lay responsibility for compliance
 6 with Kingspan which was not appropriate."

7 So those are points that you clearly feel strongly
 8 about, in your statement; is that right?

9 A. Yes.

10 Q. That that's not something that Kingspan could do.

11 Between 2010 and 2015, did you take any steps to
 12 ensure that Kingspan's technical advisers were not
 13 advising on the compliance of particular build-ups,
 14 given your view that it would be inappropriate for them
 15 to do so?

16 A. I think there's a distinction here between offering our
 17 opinion based on the product information that we're able
 18 to supply and actually being able to state that
 19 something will comply with the Building Regulations. It
 20 wasn't our position that we wouldn't give an opinion.
 21 What we wouldn't do was state that it would comply with
 22 Building Regulations.

23 Q. I see. But do you accept that when giving your opinion,
 24 particularly within an industry that you have accepted
 25 often didn't understand the requirements well, there was

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1 a real danger that that opinion was then taken as being
 2 authoritative and reliable about systems that could be
 3 used on external walls?

4 A. No, I think it's very clear that the project team, in
 5 whatever contractual arrangement they have, have that
 6 responsibility. It's not the manufacturer's
 7 responsibility to provide that cast-iron compliance.

8 Q. I see.

9 Well, we're going to come on and look at some
 10 examples during your evidence in a number of places
 11 about advice that was being given by Kingspan.

12 A. Okay.

13 Q. But before we get to that, I asked you earlier about
 14 what Kingspan's policy or strategy was in terms of the
 15 use of K15 over 18 metres, and I want to look again at
 16 what you said at paragraph 4.1 on page 7 of your
 17 statement {KIN00020821/7}. It's where you explain that:
 18 "Kingspan had the very simple strategy of promoting
 19 K15 in applications in which Kingspan could support its
 20 use in accordance with the building
 21 regulations/standards and best practice."

22 Now, what I want to understand is: what were those
 23 applications? In what situations could Kingspan support
 24 the use of K15 in the external construction of buildings
 25 over 18 metres?

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1 A. Based on the test and certification that was in place at
 2 any given point in time, other desktop studies, as they
 3 began to be undertaken, and specifically relating to the
 4 type of construction that the product was going to be
 5 incorporated into. I can't -- there is as many
 6 different variations as you can imagine, so it would be
 7 very difficult to put a specific description on that.
 8 Q. You begin that answer by saying, "Based on the test and
 9 certification that was in place at any given point in
 10 time". Let's just focus on the test evidence. If we
 11 think about the period 2010 to, say, the end of 2013 --
 12 A. Yeah.
 13 Q. -- before you start testing again, we know the product's
 14 not of limited combustibility; yes? So that's not
 15 a route to compliance?
 16 A. Mm-hm.
 17 Q. It's right, isn't it, during that period, the use of K15
 18 above 18 metres could only be supported by one set of
 19 test data to 8414 from 2005?
 20 A. As test data, yes.
 21 Q. That was it, wasn't it, the May 2005 test? There was
 22 nothing else, was there?
 23 A. There was the NHBC certification. Sorry, the Lantac
 24 approval, or did it become the system approval?
 25 Q. The LABC system approval?

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1 A. Yes, the type approval.
 2 Q. What test evidence did that --
 3 A. Sorry, test evidence was just 8414.
 4 Q. -- demonstrate for use above 18 metres?
 5 A. But that certification could be used in combination with
 6 the test evidence.
 7 Q. Well, we'll come back to that certificate, but I'm
 8 trying to concentrate on test evidence for the moment.
 9 Forget the certificates for the moment and the fact that
 10 it refers to limited combustibility.
 11 What test evidence did you have to actually support
 12 the use of K15 over 18 metres?
 13 A. The 8414 test from 2005.
 14 Q. That was it, wasn't it?
 15 A. Yes.
 16 Q. So does it follow, then, that the only advice you could
 17 legitimately give during that period about K15's use on
 18 other buildings was that it could only be used on that
 19 specific configuration, with that specific same system?
 20 A. Unless the project team were prepared to assess against
 21 that information for the construction that they had.
 22 Q. But what was Kingspan's view? What was your view? Was
 23 your view at the time that K15 could only be used on the
 24 exact same system, or was it Kingspan's view at the time
 25 that they could be advising clients based on that test

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1 to use on a whole range of other systems?
 2 A. No, I don't think that's the case. We would provide the
 3 evidence that we had at the time for that project team
 4 to make their assessment as to whether it supported the
 5 product's use in their circumstances.
 6 Q. So is that right? All you would do is just provide that
 7 test data and say, "Over to you, you make your own
 8 assessment"?
 9 A. No, not only that, there -- it would depend on how much
 10 information was offered from the project team. It was
 11 quite often that was the case, that we could only
 12 provide the evidence, because the rest of the build-up
 13 of any -- for various projects was very difficult to
 14 come by. Depending on what stage any particular
 15 contract was at, it wasn't even fixed on many occasions.
 16 It would often change during the course of a contract.
 17 Q. But can we agree that there were occasions, many of
 18 them, when you were told what the build-up of the
 19 external wall was going to be --
 20 A. Yes.
 21 Q. -- and Kingspan did positively advise that K15 was
 22 suitable in those high-rise applications?
 23 A. Depending on what that information supplied was, yes.
 24 Q. When you say, "Depending on what that information
 25 supplied was", many of those systems weren't exactly the

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1 same as the 2005 system, were they?
 2 A. No.
 3 Q. No.
 4 A. Not exactly.
 5 Q. If we can look at paragraph 4.17 of your statement, on
 6 page 11 {KIN00020821/11}, you say there:
 7 "I have never had any concerns as to the content of
 8 any Kingspan marketing literature. During my time at
 9 Kingspan, I firmly believe that the marketing material
 10 that was produced by the Marketing Team with technical
 11 input was representative of our products and the
 12 collection of data we had sitting behind each product."
 13 Now, what led you to that firm belief that the
 14 marketing material was representative of the product?
 15 A. The process that was in place to assess that literature
 16 as and when it was produced.
 17 Q. You didn't check that marketing material yourself, did
 18 you?
 19 A. Personally, no.
 20 Q. What was the collection of data sitting behind the K15
 21 product between 2010 and, say, June 2014 for use over
 22 18 metres?
 23 A. The BS 8414 2005 test.
 24 Q. Yes.
 25 If we now look at paragraph 4.33 on page 16 of your

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1 witness statement {KIN00020821/16}, you're asked the
2 question:
3 "Did Kingspan's approach to technical advice ...
4 develop and change over the period of your employment in
5 a relevant role? If so, please describe any such
6 changes, including your understanding as to the reasons
7 for them."

8 You say at 4.33:

9 "As I say above, the advice that we gave in response
10 to customers' queries about the use of K15 on buildings
11 with floors over 18m related to the physical qualities
12 of the K15 product, the tests that Kingspan had carried
13 out on the product and an indication of whether K15
14 could be considered for use on their proposed build-up."

15 Now, you use the phrase "tests" there, "tests" in
16 the plural, in the third line down. What tests were
17 there up to July 2014 that you could be using to justify
18 the use of K15 over 18 metres?

19 A. I think that's a reference to the fact that we would
20 provide all of the test data for the product, not just
21 BS 8414 but the smaller scale tests as well that can
22 also characterise performance, that a fire safety
23 engineer could take into account. It was often
24 requested.

25 Q. But how were those relevant tests for over 18 metres,

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1 given your knowledge of the regulatory regime?

2 A. I don't think it would be my knowledge that would be
3 relevant, it would be the fire engineer's knowledge. It
4 was something we provided that helps characterise the
5 fire performance of the product, and, as I say, it was
6 often requested when somebody was undertaking that type
7 of assessment.

8 Q. Right.

9 If we could look at this point at paragraph 4.19 of
10 your statement on page 12 {KIN00020821/12}, this is
11 quite a long paragraph, but I am going to read out all
12 of it with you, because it's all quite important. You
13 say:

14 "When I was appointed as Head of Technical, there
15 was not a written policy in place with regards to
16 advising customers on the use of K15 over 18m. The
17 endless possibilities of the system combinations meant
18 that a formulaic policy was not practical. However the
19 Team did take a unified approach to dealing with these
20 queries which required flexible responses. To respond
21 to customers' queries, technical advisors drew on their
22 'on the job' experience and training and referred to
23 Kingspan's library of key documents, including the
24 Approved Documents and marketing literature. If the
25 frontline technical advisors that picked up customer

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1 queries were not comfortable answering a particular
2 enquiry, for example, an enquiry relating to the use of
3 K15 over 18m, they would escalate the enquiry
4 appropriately. We had dedicated advisors within the
5 Technical Team whose responsibility it was to address
6 these types of queries. Queries relating to the use of
7 K15 on buildings with a floor over 18m would be directed
8 to these 'specialists' by the group of non-specialised
9 technical advisors. I think we had a standard few
10 opening paragraphs included in each response which set
11 out the physical characteristics and properties of K15
12 and the building regulations and Approved Document B.
13 However, the rest of the response would be tailored to
14 respond to the customer's specific query and their
15 proposed build-up. It was not possible to give
16 completely rigid responses."

17 Now, I want to ask you a little bit about that
18 paragraph.

19 If we go back to look at the start of it, what do
20 you mean in the second line there about, "The endless
21 possibilities of the system combinations meant that
22 a formulaic policy was not practical"?

23 A. The endless possibilities refers to the combinations of
24 cladding systems which, when you take into account
25 variables in the cladding panel itself, the bracketry,

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1 the cavity barriers, the substrates, thickness of
2 insulation, size of gaps, it does mean that there is
3 an endless combination of possibilities.

4 The formulaic policy is meant to get across that we
5 did take a standard approach, but it had to be tailored
6 based on what information we knew about the project that
7 was being considered.

8 Q. Can you help us as to why there would need to be
9 anything but one response for over-18-metre queries?
10 Wouldn't that one response be, "We've only tested in one
11 specific configuration and we have no test data to
12 support the use in any other system"?

13 A. No, because the information was being provided on the
14 premise that the product or the system could be assessed
15 by an engineering route to determine whether it could be
16 compliant for that project.

17 Q. I see. That's the basis on which you thought you were
18 providing advice to customers about K15 --

19 A. Yes.

20 Q. -- over 18 metres, is it?

21 A. Yes.

22 Q. That it could be used as part of a holistic
23 fire-engineered assessment whether to use it or not?

24 A. Yes, an assessment report.

25 SIR MARTIN MOORE-BICK: But would it be right to say that,

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1 in those circumstances, it wouldn't be appropriate to
 2 express any view about whether it was or wasn't suitable
 3 for the project, because the advice would have to be,
 4 "We haven't tested your project, you'll have to take
 5 some advice or have a test done?"
 6 A. Yes, if they were only considering compliance via
 7 a direct route in using specific test evidence from
 8 a BS 8414. If they were prepared to build exactly the
 9 same construction but using another non-combustible
 10 cladding panel --
 11 SIR MARTIN MOORE-BICK: That would be for them, wouldn't it?
 12 A. It would, yes.
 13 SIR MARTIN MOORE-BICK: Or if they wanted to take on
 14 a fire engineer to do a holistic --
 15 A. Yes, absolutely.
 16 SIR MARTIN MOORE-BICK: But the message would be, "We can't
 17 tell you whether this is suitable, you'll have to decide
 18 for yourself by following one of these routes?"
 19 A. Absolutely, which is why I took -- was at pains to
 20 explain that it wasn't Kingspan's decision to say
 21 whether it was compliant or not. We --
 22 SIR MARTIN MOORE-BICK: Well, with respect, that's
 23 a slightly different thing, isn't it? It's one thing to
 24 say, "Well, this is my view, but you've got to make the
 25 decision"; it's another thing to say, "I can't express

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1 a view because I'm not qualified to do so on the basis
 2 of your proposed system".
 3 A. Yes. I believe our view was to try and explain some of
 4 the finer parameters as to how the 8414 had been
 5 achieved, so it was expressing things like the
 6 cavity barrier centres, the fact that it was
 7 a non-combustible substrate, a non-combustible cladding.
 8 So it was -- you're right, I mean, I suppose it is
 9 arguable whether we were in a position to give that
 10 opinion. But it clearly was just our opinion and not us
 11 stating that it would comply.
 12 SIR MARTIN MOORE-BICK: Right, thank you.
 13 MS GRANGE: I see.
 14 SIR MARTIN MOORE-BICK: Yes, Ms Grange.
 15 MS GRANGE: Yes, thank you.
 16 During that period, 2010 to mid-2014, there was no
 17 test data, was there, to support the use of K15 on
 18 steel-framed rather than masonry structures?
 19 A. No.
 20 Q. So far as you were aware, were customers routinely
 21 advised in that period, 2010 to mid-2014, that K15 had
 22 only been tested on a masonry structure?
 23 A. Yes.
 24 Q. Do you agree that if Kingspan told customers that K15
 25 has been successfully assessed to BS 8414 and BR 135 and

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1 is suitable for buildings above 18 metres in height
 2 without caveat or qualification, at least some of them
 3 would be likely to accept that?
 4 A. I'd hope not. We were always advising people that were
 5 part of a wider project team that had to take these
 6 responsibilities forward. If they were to take our
 7 advice without their own consideration and input, surely
 8 that would be avoiding their own responsibilities.
 9 Q. I see.
 10 Were you aware that that assertion, that K15 had
 11 been successfully tested to BS 8414 and assessed to
 12 BR 135, and that it was suitable for use over 18 metres,
 13 was part of the technical advisers' standard response?
 14 Were you aware of that?
 15 A. Could you rephrase it again? Is this --
 16 Q. Yes, sorry, it's quite long.
 17 Were you aware that that assertion, that K15 had
 18 been successfully tested to BS 8414 and assessed to
 19 BR 135, and that it was suitable for use over 18 metres,
 20 was part of the technical advisers' standard response?
 21 A. Yes.
 22 Q. Let's look at an example now. If we could go to
 23 {KIN00005894/6}. This is an email chain. It's from
 24 December 2013, and if we look at page 6, there's
 25 an email there from someone at the NHBC called

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1 Chris Myers, and he's copied in Nick Francis, who is at
 2 Boon Brown Architects. We can see that the NHBC have
 3 advised Nick Francis, the architect, as follows.
 4 They've said:
 5 "In order to use Kingspan K15 insulation in
 6 buildings over 18m, Kingspan needs to be approached to
 7 provide justification of its use in that location and in
 8 conjunction with the specific cladding system proposed.
 9 A copy of the BBA certificate is not adequate."
 10 So that's what the NHBC said. If we move up the
 11 chain, at page 5 {KIN00005894/5}, we can see that
 12 Nick Francis then forwards that email to Kingspan's
 13 technical enquiries email address on 9 January there, at
 14 the bottom, 16.33:
 15 "Dear Kingspan Technical
 16 "Please can you assist with the query below from the
 17 NHBC."
 18 We can tell from the title of that email, the
 19 subject title, that it's about Bellway Homes, First
 20 Central, K15 insulation over 18 metres.
 21 Still on page 5, we see that then Nick Francis
 22 chases Kingspan about this, just under a week later:
 23 "Dear Kingspan Technical
 24 "Can someone please confirm that this is being
 25 looked at?"

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1 Then if we move up the chain again, we see a series
 2 of emails between Nick Francis and a Kingspan technical
 3 adviser named Dee Powell which appear to concentrate on
 4 the type of sheathing board to be used in this
 5 particular project.
 6 If we look at the email from Nick Francis to
 7 Dee Powell on page 2 {KIN00005894/2}, on 29 January 2014
 8 at 15.26, we can see that Nick Francis says to Dee:
 9 "Dear Dee
 10 "I can now confirm that the plywood substrate will
 11 be changed ..."
 12 So that's the first sentence there. Then in the
 13 second paragraph he says:
 14 "Unfortunately the NHBC are still insisting on the
 15 following from yourselves:-
 16 "The K15 could be accepted as long as the following
 17 is provided in conjunction with the proposed design
 18 revisions.
 19 "• Product to be used strictly in accordance with
 20 conditions of BBA Cert.
 21 "• written confirmation required from Kingspan that
 22 it is suitable for the actual design proposed.
 23 "• We receive copy of acceptance from Kingspan for
 24 the actual design justifying compliance with the
 25 building regs and NHBC standards.

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1 "I will need to review all upon receipt.
 2 "Hopefully you can provide me with the information
 3 required, as I am sure this product must have been
 4 approved by the NHBC on other residential buildings over
 5 18m high."
 6 Then at this stage Mr Meredith becomes involved, and
 7 what happened was, before responding, Mr Meredith
 8 checked the wording of his draft response with you. If
 9 we can look up on page 1 {KIN00005894/1}, to the top
 10 email in the chain, we will see from Mr Meredith's email
 11 in a moment, which is the second one down on this page,
 12 that what he does is forward a draft to you for comment,
 13 and you have responded to him:
 14 "With some tweaks otherwise happy."
 15 Can you see that?
 16 A. Yes.
 17 Q. Can you recall these exchanges? Is this provoking
 18 a memory?
 19 A. Not from the time, no.
 20 Q. Then if we can go to Mr Meredith's email to you, he
 21 says:
 22 "Tony,
 23 "I'm getting increasingly concerned about the number
 24 of K15 projects that the NHBC are involved in and the
 25 fact that they are referring to us for confirmation that

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1 the product is suitable .. With this in mind if you can
 2 just check the letter below and give me your thoughts.
 3 I do not think I can do anymore apart from elude to our
 4 forthcoming test program, which is what we advised the
 5 NHBC we were doing ..."
 6 Then he has set out some wording there:
 7 "Kingspan Insulation Limited during 2014 intend to
 8 embark on a test programme to further ..."
 9 And then it looks like you have amended that word,
 10 you have taken out "prove suitability" and you have
 11 suggested -- is this right? -- with your initials, "TM",
 12 "extend the scope of use for?"
 13 A. Yes.
 14 Q. "... Kooltherm K15 in high rise facades therefore would
 15 appreciate feedback on any combustible cladding systems
 16 that you are typically adopting in high rise buildings."
 17 So you have amended that text.
 18 He goes on and explains:
 19 "The reason the NHBC are asking for this information
 20 at the moment is because they do not want to say no to
 21 Kingspan however if we cannot provide the correct
 22 information they will say no. If you can provide your
 23 sign off to the letter below and suggest if it needs
 24 anything else it would be appreciated."
 25 Then if we can look at the letter, the draft letter

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1 that Mr Meredith has sent to you, it reads:
 2 "Re: First Central - London - Bellway Homes ...
 3 "Further to our previous discussions with regards to
 4 the First Central project, and the use of Kooltherm K15
 5 within the ventilated rainscreen facade system in
 6 a building with a storey of 18metres or more above
 7 ground level we can confirm the following ..."
 8 Then it says in the next paragraph:
 9 "It is our opinion that our Kooltherm K15 product
 10 would be fit for purpose if installed onto
 11 a non-combustible substrate, with horizontal
 12 cavity barrier installed inline with intermediate
 13 floors, and at centres not exceeding 3.5m."
 14 Then he goes on:
 15 "Kingspan Insulation Limited have tested Kooltherm
 16 K15 successfully to BS 8414-1 [and he refers to the test
 17 report in brackets] ... In this test the Kooltherm was
 18 fitted onto a non-combustible substrate behind
 19 a non-combustible cladding system. The details we have
 20 reviewed of your project show Kooltherm K15 fitted onto
 21 a cement particle board behind a zinc cladding system
 22 which sits on a trapezoidal steel sheet (non
 23 combustible). As long as the cement particle board [and
 24 you have added the word 'is'] replaced with
 25 a non combustible layer i.e. calcium silicate or

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1 magnesium oxide the detail would then be brought in sync
 2 with our guidance and the LABC Registered detail RD165
 3 and therefore [and you have added the words 'should be
 4 accepted'] by your Local Authority Building Control ...
 5 "We trust that the foregoing information is of
 6 assistance ..."
 7 Aren't you giving advice here on the compliance of
 8 the construction system proposed on this particular
 9 building?
 10 A. Yes, we're offering an opinion.
 11 Q. Yes, you're saying to this architect that the external
 12 façade construction, the details of which have been
 13 given to you, should be accepted by your Local Authority
 14 Building Control, in exactly those words; yes?
 15 A. Yes.
 16 Q. In other words, you are giving direct advice on the
 17 compliance of that system, aren't you?
 18 A. As an opinion, yes.
 19 Q. What expertise did you have to be able to assert that
 20 K15 should be accepted by building control on this
 21 build-up?
 22 A. The knowledge of the approvals that we had, and the
 23 similarities between what they're intending to build and
 24 what it was that was -- had passed the test.
 25 Q. When you say, "The knowledge of the approvals that we

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1 had", what do you mean by that, "the approvals that we
 2 had"?
 3 A. How the BS 8414 was constructed and what it consisted
 4 of.
 5 Q. So it's back to that one test, isn't it --
 6 A. Yes.
 7 Q. -- in 2005? That's it, isn't it?
 8 A. Yes.
 9 Q. K15 had never been tested behind a zinc cladding system,
 10 had it?
 11 A. No.
 12 Q. There was therefore no test evidence on the basis of
 13 which you could have suggested that the proposed
 14 build-up would be accepted by building control; do you
 15 agree?
 16 A. Other than the 8414 that we had that was intended to
 17 represent a non-combustible system as much as possible.
 18 Q. Yes.
 19 You're saying there it "should be accepted by your
 20 Local Authority Building Control", and if we look at the
 21 page before that we previously read, in the second
 22 paragraph Mr Meredith is saying:
 23 "It is our opinion that our ... product would be fit
 24 for purpose if installed [in this way] ..."
 25 So they're saying it would be fit for purpose.

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1 Can you explain how you came to give that advice?
 2 A. I believe that advice has come from experience of other
 3 projects where we've offered advice and it's been
 4 assessed and accepted. What we're doing here is
 5 offering advice on ... based on the test evidence that
 6 we had, and relating it to similarly non-combustible
 7 cladding build-ups.
 8 Q. When you say that advice has come from "experience of
 9 other projects where we've offered advice and it's been
 10 assessed and accepted", you didn't have any test
 11 evidence relating to those other projects of how K15
 12 would perform in fire in such build-ups, did you?
 13 A. No, because they would have been assessments themselves.
 14 Q. So does that amount to, "K15's been put forward on lots
 15 of other buildings, it's not been objected to, so on the
 16 back of that we can keep pushing it for projects like
 17 this"?
 18 A. Yeah, our route to market was to provide the evidence we
 19 had on the basis that it would be assessed against what
 20 it was to be incorporated in and deemed appropriate or
 21 otherwise.
 22 Q. I see. That advice was entirely misleading, wasn't it,
 23 given the test evidence you actually had?
 24 A. I don't believe it was. I think we were drawing
 25 parallels to the test evidence that we had and offering

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1 that as an opinion for professionals in that capacity to
 2 make their own judgement.
 3 MS GRANGE: Okay.
 4 Mr Chairman, I think that's a good moment for lunch.
 5 SIR MARTIN MOORE-BICK: Right. Yes, I agree.
 6 I think we're going to stop there, Mr Millichap, so
 7 we can all have some lunch. We will come back at
 8 2 o'clock, please.
 9 THE WITNESS: Yes.
 10 SIR MARTIN MOORE-BICK: Again, please don't talk to anyone
 11 about your evidence or anything to do with it over the
 12 break.
 13 THE WITNESS: Thank you.
 14 SIR MARTIN MOORE-BICK: Thank you very much, if you would
 15 like to go with the usher, please.
 16 (Pause)
 17 Good, 2 o'clock, then, please. Thank you.
 18 (1.02 pm)
 19 (The short adjournment)
 20 (2.00 pm)
 21 SIR MARTIN MOORE-BICK: All right, Mr Millichap?
 22 THE WITNESS: Yes, thank you.
 23 SIR MARTIN MOORE-BICK: On we go, then.
 24 Yes, Ms Grange.
 25 MS GRANGE: Yes, thank you.

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1 Can we just go back to the email we were looking at
2 when we broke off, {KIN00005894}. As we saw, this was
3 the draft letter that you helped amend in relation to
4 the Bellway Homes project.

5 I want to look at what's said right at the very
6 bottom of that page, in the paragraph beginning:
7 "Kingspan Insulation Limited have tested ..."
8 We can see at the very bottom, in the last two
9 lines, it says this:

10 "As long as the cement particle board ... is
11 replaced with a non-combustible layer, i.e. calcium
12 silicate or magnesium oxide the detail would then be
13 brought in sync with our guidance and the LABC
14 Registered detail ..."

15 Do you see that there?

16 A. Yes.

17 Q. Can you just explain that to us? How would it be the
18 case that once those parts are replaced with calcium
19 silicate or magnesium oxide, the detail would then be
20 "brought in sync with our guidance and the LABC
21 Registered detail"?

22 A. It's a reference to the components other than the
23 insulation then being non-combustible.

24 Q. Is what's happening here that you're referring to the
25 LABC registered details certificate as further back-up

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1 for the use of K15 over 18 metres? Is that what you're
2 doing here?

3 A. Yes.

4 Q. But how can you be doing that in circumstances where
5 there's no other test evidence referred to in that LABC
6 registered detail, is there; all you had was the 2005
7 test, do you agree?

8 A. Yes, I do.

9 Q. So can you explain how it's right and proper to be
10 referring back to that LABC registered detail when that
11 doesn't contain any further test evidence to support its
12 use over 18 metres?

13 A. It's used in combination with the 8414 test information.
14 It's -- in itself, it's an assessment of the product's
15 performance and, from that point of view, it was offered
16 as further support to justify the use of the product in
17 their detail.

18 Q. But would you agree that the only testing basis for any
19 such assessment by the LABC could be the same 2005 test?

20 A. Yes.

21 Q. Would you agree?

22 A. Yes.

23 Q. Would you agree with this: it's like a pack of cards or
24 a house of cards, isn't it? You're building upon things
25 which in fact are based on a very shaky foundation. Do

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1 you agree?

2 A. I wasn't aware of that at the time. I don't think
3 that's 100% clear today. And therefore that advice was
4 offered in good faith. There was an absolute -- not
5 absolute; a strong belief that K15 can be relevant as
6 a rainscreen cladding above 18 metres in the right
7 circumstances. We were representing the product
8 alongside the evidence that we'd gathered for others to
9 make their judgement on that.

10 Q. Okay, you started your answer by saying:

11 "I wasn't aware of that at the time. I don't think
12 that's 100% clear today."

13 What's not 100% clear today?

14 A. That the -- based on what I saw of Malcolm's evidence
15 yesterday, that the old technology isn't representative
16 of the product that was being supplied. I think it was
17 Malcolm's evidence that, from his chemist point of view,
18 there was an awful lot of correlation between the
19 products.

20 Q. I see. But put that change in tech to one side and just
21 think to what you knew at the time, or what you say you
22 knew at the time.

23 A. Yes.

24 Q. The only foundation for what you're saying here is just
25 one test, isn't that right, the 2005 test again?

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1 A. And small-scale tests and fire professionals'
2 assessments.

3 Q. Yes, but we've agreed that those small-scale tests don't
4 help you when it comes to over 18 metres, do they?

5 A. No, I haven't agreed that. I think they can form part
6 of somebody's understanding of the performance of the
7 product.

8 Q. I see. Where do you get that from?

9 A. Because they outline properties of the product.

10 Q. I see. What I'm suggesting to you is that in fact that
11 LABC registered detail had as the only support for it
12 the 2005 test. So that's why it's a house of cards; it
13 all comes falling down if that 2005 test isn't the same
14 as the system that's being installed here.

15 A. I appreciate what you're saying.

16 Q. Do you agree with it, you yourself?

17 A. No, I don't agree with it.

18 Q. Because what else was there other than the 2005 test?

19 A. I'm not disagreeing that the only thing referenced was
20 the 2005 test; I'm disagreeing that that can't be
21 relevant as part of an assessment for the use of K15 in
22 a cladding system.

23 Q. I see. Let's move on.

24 I'm now going to ask you some further questions
25 about the LABC certificates for K15. We have already

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1 touched upon this, but I'm now going to ask you some
2 questions about the certificates which were issued while
3 you were head of technical at Kingspan.

4 In terms of the purpose of having an LABC
5 certificate, I think you explain this at paragraph 8.6
6 on page 42 of your witness statement {KIN00020821/42},
7 if we can just turn that up. You explain there:

8 "An LABC Registered Details Certificate is like
9 an independent third party validation of a product and
10 it is then relied upon and accepted by all local
11 authority building controllers. It is akin to type
12 approval in that as long as you build in accordance with
13 it, local authority building controllers should accept
14 it. The official LABC document which was replaced by
15 LABC Registered Details Certificates was called
16 a 'System Type Approval' Certificate."

17 So we can see there the importance of that
18 certificate.

19 You also say at paragraph 8.7 below that, third line
20 down, after the semi-colon:

21 "... all local authority building controllers could
22 look at it as acceptance by their governing body that,
23 as long as a build-up complied with the details in the
24 certificate, it was compliant."

25 Now, we discussed earlier the system type approval

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1 which was issued for K15 in May 2009.

2 Having been appointed as head of technical in 2010,
3 did you become aware that at some stage that system
4 approval certificate was due to expire in May 2012?

5 A. I don't recall the specific dates, but all certificates
6 do expire.

7 Q. Who would have been responsible in May 2012 for dealing
8 with LABC certification for K15?

9 A. That would have been Ivor or Gareth Mills.

10 Q. If we can go now to an email chain, {KIN00005552/2}.
11 I want to start at the bottom email on page 2. Here we
12 see an email from Martin Taylor at the LABC to
13 Justin Davies.

14 Now, is it right that he is the marketing and
15 production development project manager at Kingspan at
16 this time?

17 A. I don't know. It doesn't sound correct to me. Justin,
18 during my tenure at Kingspan, was working in a global
19 role for certification.

20 Q. I see. We took that from Mr Heath's organogram, so
21 maybe that's not right.

22 A. So that would have been previously.

23 Q. Earlier, I see.

24 A. Yes.

25 Q. So you think by this time he had a more wide-ranging

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1 role for certification?

2 A. He did. He didn't have much involvement in the UK other
3 than where there were maybe existing relationships.

4 Q. Yes.

5 We can see that Martin Taylor at the LABC is
6 responding to various queries that have been raised by
7 Justin Davies about those LABC registered details
8 certificates. We don't need to read that, we can just
9 see there's been some queries raised.

10 If we go up to the next email in the same chain,
11 page 1 over into page 2, there's an email of
12 14 September 2011, and then what happens is -- this is
13 right at the very bottom, can you see, from
14 Justin Davies?

15 A. Yeah.

16 Q. It's forwarded, if we then look at the top of page 2, on
17 to you and to Gareth Mills, and he says:

18 "Additional info to Gareth's email."

19 And he forwards that email on.

20 Then if we go up the chain on page 1

21 {KIN00005552/1}, on 29 September at 22.44, you say:

22 "This is another project to be tracked, Gareth's
23 list. It required a team meeting to progress."

24 Now, that reference to Gareth's list, is that a list
25 being compiled by Gareth Mills, do you think?

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1 A. It would be. I don't know a list of what. I didn't
2 read Justin's email.

3 Q. Do you want to go back and read Justin's email?

4 A. Yes, if I may.

5 Q. Sorry, yes, on page 2 {KIN00005552/2}. He is saying in
6 point 1, if we could blow that up:

7 "All LABC Registered Detail Certificates last for
8 12 months and usually [there is a] renewal fee ...
9 Clearly if you were to submit all the systems described
10 in the quotation ... renewal fee ... would not be
11 appropriate."

12 In the second paragraph he says:

13 "Our new website is about to go live and will
14 include a Registered Detail Register of all certificates
15 [in the system] ..."

16 A. Yeah.

17 Q. He attaches at 3 example certificates to demonstrate the
18 process, so it would appear that Martin Taylor is
19 explaining this.

20 A. Yes.

21 Q. And this was a new system of registered details
22 certificates which replaced the system or type approval
23 certificates; do you recall that?

24 A. Yes, sorry, it was just to clarify that it was
25 a certificate project rather than an actual build

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1 project.
 2 Q. Yes, it would appear so.
 3 A. Yeah.
 4 Q. So if we go back to the email referring to Gareth's list
 5 {KIN00005552/1}, does that help you as to what it was?
 6 A. It would have been a list of Gareth's approvals that he
 7 was responsible for, and bring -- moving forward.
 8 Q. Yes.
 9 Then we see the next email up is in fact a year
 10 later, on 28 September 2012 at 11.38, from Mr Meredith
 11 to Mr Mills, asking him about the status of the project.
 12 He says, "was it done? Ivor."
 13 Just pausing there, by that time, in September 2012,
 14 the LABC system approval certificate from 2009 had
 15 lapsed.
 16 A. Right.
 17 Q. Does that sound right to you? That's as we understand
 18 it.
 19 A. Yes, if it had a three-year validity.
 20 Q. Yes.
 21 Then Mr Meredith forwards his email to Gareth Mills
 22 on to you on 15 October 2012, if we go up the chain
 23 again. So Mr Meredith to you, 15 October 2012, and he
 24 says:
 25 "Hi Tony,

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1 "You may or may not be aware that our LABC approval
 2 for K15 has lapsed ... without this we have lots of tall
 3 building issues which are causing a major headache and
 4 potentially a lot of lost work.
 5 "Whose responsibility was the K15 LABC approval as
 6 GM ..."
 7 Is that Gareth Mills?
 8 A. Yes.
 9 Q. "... refuses to answer my emails on the subject and
 10 AP ..."
 11 Would that be Andrew Pack?
 12 A. Andrew Pack, yeah.
 13 Q. "... says although he [knew] it had lapsed he was going
 14 to wait to see if they contacted him as he kicked it
 15 off.
 16 "I need to also put pressure back on production to
 17 come up with a testable K15 as to get a new LABC type
 18 approval we will probably need new data (since we let it
 19 lapse).
 20 "Your thoughts on this issue would be appreciated.
 21 "Regards
 22 "Ivor."
 23 I want to ask you a number of things about this
 24 email.
 25 Looking at that very first paragraph, what did you

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1 think Mr Meredith meant where he is referring to, "we
 2 have lots of tall building issues which are causing
 3 a major headache?"
 4 A. It would have been not having the LABC approval to help
 5 support the specification of K15.
 6 Q. Yes, because that certificate said that K15 can be
 7 considered to be a material of limited combustibility;
 8 do you remember?
 9 A. Yes, it did.
 10 Q. And did you understand that he's telling you that,
 11 without that, you're going to have lots of problems in
 12 justifying the use of K15 on tall buildings?
 13 A. It would be more difficult without that, yes. But we
 14 were still pursuing the same approach before that
 15 approval, so it would have meant having to revert to
 16 that, and using the test certificate without the LABC
 17 approval.
 18 Q. Ie just using the 2005 test?
 19 A. Yes.
 20 Q. So just to be clear, the question I asked you was: did
 21 you understand that he is telling you that, without
 22 that, you're going to have lots of problems justifying
 23 the use of K15 on tall buildings? Is that how you
 24 understood it at the time?
 25 A. Yes.

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1 Q. Then looking at that third paragraph, he says this:
 2 "I need to also put pressure back on production to
 3 come up with a testable K15 as to get a new LABC type
 4 approval we will probably need new data ..."
 5 What did you understand him to mean by that,
 6 particularly the phrase "a testable K15"?
 7 A. I honestly don't know. To my knowledge, the K15 we were
 8 supplying to market should have been used in any new
 9 test. I'm not even sure what test it is he's referring
 10 to, to re-support the LABC approval.
 11 Q. Doesn't that confirm that the current K15 that you're
 12 selling was not considered by him to be testable?
 13 A. Potentially, yes, but without knowing to what test and
 14 a bit more context, it's difficult to say.
 15 Q. Well, can I suggest that what that shows is that
 16 potentially you were aware at that time that there
 17 wasn't a version of K15 that Mr Meredith considered
 18 testable to be able to get a new LABC approval
 19 certificate.
 20 A. That may have been Ivor's opinion, and based on some of
 21 the documents I saw as part of Mr Heath's evidence where
 22 Ivor had made these observations pretty clear. That
 23 wasn't something that I was aware of at the time. It
 24 wasn't something that Ivor had made perfectly clear to
 25 me. We were obviously very mindful of the tests that

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1 had failed .
 2 When is this? This is October 2015, so --
 3 Q. No, sorry, it's October 2012.
 4 A. Sorry, yes, yeah. So we were looking to move towards
 5 another test programme, I don't think we were in
 6 conversation with NHBC at this stage.
 7 Q. If you didn't know about the problems that they'd had
 8 with the fire performance of K15 at that time, why
 9 didn't you go straight back to him and say, "What do you
 10 mean, a testable K15? We've got a testable K15, that's
 11 the one from 2005"? Did you say that back to him?
 12 A. I don't know. I wouldn't be able to recall how
 13 I replied without seeing it now.
 14 Q. So is it your evidence that you simply didn't understand
 15 what he meant by "come up with a testable K15"?
 16 A. Yeah, based on what there is to recollect then, that is
 17 my evidence.
 18 Q. What I'm going to put to you is that at or around this
 19 time, through emails like this, you did in fact become
 20 aware that you didn't have a testable K15 and that you
 21 needed to develop a new K15 that was going to get a pass
 22 in an 8414, particularly part 2 test; that's right,
 23 isn't it?
 24 A. Yes, that would be right, based on trying to achieve
 25 a part 2 test, Ivor's experience being that K15 was

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1 struggling to achieve a type 2 test. That doesn't infer
 2 it's the product that's failing; it infers the type 2
 3 test is failing .
 4 Q. Well, that's not what it says, is it? It says "testable
 5 K15".
 6 A. But the test is a system, it's not a product.
 7 Q. I see. So it's your evidence, is it, that you at this
 8 point thought that you had a K15 which was testable and
 9 that was the one from 2005?
 10 A. We did. It was the product, as I understood it at the
 11 time, that was being supplied at that time.
 12 Q. And why wasn't that the product that then you used for
 13 the tests in 2014 that we'll come to later in your
 14 evidence?
 15 A. I think I mentioned earlier that there were other
 16 drivers around those tests as well, such as thermal
 17 performance.
 18 Q. I see. So you don't accept that the change in the foil,
 19 thickening of the foil, the use of unperforated foil,
 20 the use of different blowing agents in those tests had
 21 anything to do with problems with K15 itself? Is that
 22 what you're saying?
 23 A. Yes, the products were devised to expand the evidence
 24 into the type 2 test, which previously we'd struggled to
 25 pass with the K15 product.

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1 Q. I see.
 2 No tests to 8414 had been run on systems
 3 incorporating K15 since June 2008; that's right, isn't
 4 it?
 5 A. Yes.
 6 Q. Moving on now, but still focusing on this LABC
 7 certificate for K15, if we look at your witness
 8 statement, paragraph 8.2 on page 41 {KIN00020821/41},
 9 you say there, in the second sentence:
 10 "I recall that we decided to seek a Registered
 11 Details Certificate from the LABC and so I was aware
 12 that conversations were going on in relation to this
 13 between Kingspan and the LABC. However, I was not
 14 involved in these conversations and so I was not aware
 15 of the timings or detail of the discussions. I believe
 16 that a certificate was finally issued in 2013 and this
 17 certificate replaced a 'System Type Approval'
 18 Certificate which had been in place since before my
 19 appointment as Head of Technical."
 20 Now, we've seen that you were involved in some
 21 discussions about this renewal of this certificate,
 22 we've just looked at those.
 23 A. Yeah.
 24 Q. Do you agree?
 25 A. Yes.

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1 Q. But is what you're saying in that paragraph that you
 2 weren't involved in discussions between Kingspan and the
 3 LABC --
 4 A. Yes.
 5 Q. -- even though you were involved in some internal
 6 discussions about this?
 7 A. Just trying to get it moving, yes.
 8 Q. Yes.
 9 Now, no registered details certificate was in fact
 10 issued until 28 August 2013. We'll come to look at
 11 that, but first I want to ask you this: can you recall
 12 what was the reason for the delay? Can you help us on
 13 that?
 14 A. Not beyond what was in the previous email, which it
 15 seems like it had fallen between a number of personnel
 16 as to who was carrying it forward.
 17 Q. And you can't help us as to why it took almost
 18 nine months from the emails between you and Mr Meredith
 19 that we've just looked at in October 2012 for
 20 a certificate to be published?
 21 A. No, but that wouldn't be an unreasonable timeframe,
 22 if -- depending on what it actually entailed, to support
 23 the system type approval.
 24 Q. If we can go to {KIN00005647}, what we can see -- this
 25 isn't an email that --

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1 A. Sure.
2 Q. -- you receive or you're copied in to, but it's to
3 Gareth Mills. What we see here is that Cathal Brennan
4 of the LABC sends Gareth Mills a new registered details
5 certificate and associated documents in draft --
6 A. Yeah.
7 Q. -- for comment, and he says:
8 "If you require any changes please let me know and
9 I will then arrange for final copies to be issued."
10 Did you see the drafts at any stage?
11 A. No, I don't recall that I did.
12 Q. Did Gareth Mills discuss the drafts with you, or the
13 wording in this new certificate with you?
14 A. It's entirely possible, but I don't recall it.
15 Q. If we can go now to {LABC0000961}. Again, this is not
16 a chain that you're copied in to or sent, but what we
17 see in this chain is Gareth Mills providing detailed
18 comments on the draft to the LABC.
19 If we go to page 7 of this string {LABC0000961/7},
20 there's an email of 1 August 2013 at 11.22 by
21 Gareth Mills to Cathal Brennan. At the start of the
22 email he says:
23 "We had a look over the documents and wondered if we
24 can add some more detail into some of the sections
25 regards where the product can be used. We would welcome

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1 your [advice] on the most appropriate sections for
2 including this information ..."
3 Then he lists a number of numbered points. If we
4 look at point 1, he says there:
5 "1) The product is suitable for use with a variety
6 of outer claddings, including rainscreens (pressure
7 equalised or drained and vented systems), and also can
8 be used with masonry outer leaves with a 50mm clear
9 cavity between the K15 and masonry (Note - some further
10 details on these applications are included in the BBA
11 certificate supplied with the original application if
12 required)."
13 Then at point 3 he is suggesting this wording:
14 "3) The product can be used on buildings with
15 stories [note how he has spelt the word 'storeys']
16 greater than 18m from ground level provided it is used
17 in combination with suitably non-combustible substrates
18 and ancillary components (note - BS 8414 testing
19 referenced in section 7.1 of the BBA certificate is
20 noted as meeting requirements of BRE 135, i.e.
21 alternative compliance route referenced in Approved
22 document B ..."
23 Then finally at point 6 he says:
24 "6) We have two images which we would like to
25 include within the drawings section if possible, which

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1 I will follow up with shortly. I would have the images
2 available to send either as bitmap or jpeg format, which
3 of these is preferable for you."
4 Now, having seen the detail of the comments that
5 were being provided by Mr Mills back to the LABC, can
6 you recall whether you had any input into these
7 suggestions?
8 A. No. They're not familiar with me at all.
9 Q. If we can look now at something you say in your witness
10 statement on this topic, go to paragraph 8.19 on page 44
11 of your statement {KIN00020821/44}, you say:
12 "Our responsibility to check the accuracy of LABC
13 certificates was similar to our responsibility to check
14 the accuracy of BBA certificates. We would be offered
15 the opportunity to comment on draft LABC Registered
16 Details certificates before they were finalised. As
17 part of this, Kingspan was expected to check the factual
18 information pertaining to the physical characteristics
19 of the product and test build-up details but judgments
20 about the fire performance of K15 were for LABC to make
21 alone."
22 Then you go on. You say:
23 "I anticipate that had we tried to influence the
24 LABC's conclusion on the fire performance of K15, we
25 would have been met with a firm push back."

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1 Do you see that there?
2 A. Yes.
3 Q. In those final lines, where you say:
4 "I anticipate that had we tried to influence the
5 LABC's conclusion ... we would have met with a firm push
6 back."
7 What do you mean by the LABC's conclusion on the
8 fire performance of K15?
9 A. Just their -- the content of their certificate. We
10 obviously go through a process of providing them with
11 evidence. They'll draft a certificate based on their
12 conclusions as to the use of that product in their
13 certificate.
14 Q. It's right, isn't it, that the LABC did not then and do
15 not now carry out any test themselves or measurements
16 themselves to conclude anything about the fire
17 performance, do they? They are completely beholden to
18 whatever fire test data you provide them with; yes?
19 A. Yes.
20 Q. Now, if we can go back to the email chain we were
21 looking at, {LABC0000961}, and we can go to the top
22 email in the chain on page 1, after a number of further
23 emails, Gareth Mills confirms to the LABC on
24 28 August 2013 that Kingspan are content with the draft
25 certificate and documents. He says there in that email:

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1 "We would be happy to issue the document in its
2 current form (as per the attached files)."
3 Had he checked the content with you before he made
4 that final response back to the LABC, do you know?
5 A. I don't know.
6 Q. You don't know? You can't recall?
7 A. No.
8 Q. Was that the kind of thing, as the head of technical,
9 that you would normally get involved in, looking at,
10 say, the final draft of a certificate like this?
11 I mean, it was a pretty important certificate, wasn't
12 it?
13 A. Yeah, if there was something that had potentially
14 changed or, you know, affected our position, then
15 I would have expected to be involved. Other than that,
16 Gareth had a lot of experience, he would obviously
17 bounce off colleagues in the office as well. So if it
18 were not a reproduction, but essentially a re-issue in
19 a new format of an existing approval, then that would be
20 acceptable.
21 Q. I think in this one there were a number of things that
22 had changed.
23 Let's look at that certificate. {KIN00009546}. We
24 can see the date of it at the bottom, it's dated
25 28 August 2013, and it's said to be valid for a year

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1 until 28 August 2014.
2 If we go now to the drawings and document list for
3 the certificate, it's in a separate document,
4 {KIN00009547}. Here in this details drawing and
5 document list, what we can see is, three lines down from
6 the top, "Supporting Documentation Reference Numbers",
7 and what we can see is it includes three things: the
8 Herefordshire Council type approval summary -- that
9 would be the original one from the LABC.
10 A. Yeah.
11 Q. The ninth issue of Kingspan's own marketing literature
12 for Kooltherm K15, and then the BBA certificate from
13 2008 that we've already looked at.
14 So no additional test data there, was there?
15 A. No.
16 Q. Now, just pausing there for a moment, by July 2013 there
17 was an amended issue of the BBA certificate for K15; do
18 you remember that?
19 A. No, not specifically. It doesn't surprise me.
20 Q. If we quickly look at that, that's at {BBA00000037}, and
21 if you look under "Key factors assessed", "Behaviour in
22 relation to fire", if you remember, this had
23 an additional line added:
24 "The product has been tested to BS 8414-1 for one
25 specific construction on masonry walls ..."

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1 A. Yes.
2 Q. Do you remember that? We looked at it earlier.
3 A. Yes.
4 Q. Now, going back to the certificate supporting
5 documentation, {KIN00009547}, there's reference there to
6 the BBA certificate of 27 October 2008, but there's by
7 now an issue 1 of that, a further issue.
8 Did you ever check whether the most up-to-date
9 version of the BBA certificate had actually been
10 provided to the LABC?
11 A. I didn't, no. That would have been Gareth's
12 responsibility to make sure that had happened.
13 Q. Would it have been your assumption at the time that he
14 would have provided the most recent BBA certificate and
15 not --
16 A. Yes.
17 Q. -- an older one?
18 If we then look in appendix A of this document,
19 which is on page 2 {KIN00009547/2}, what we see here is
20 a number of points about the product's suitability for
21 use, and if you look at point 1 and also point 3, what
22 we can see is the points we've looked at from
23 Gareth Mills' email of 1 August 2013 are repeated there
24 within this document verbatim. Do you see that?
25 A. Yes.

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1 Q. They have been copied and pasted, it would appear, even
2 with the misspelling of the word "storeys" in
3 paragraph 3, in the first line.
4 A. I can see that.
5 Q. The pictures that Gareth Mills attached for inclusion
6 are also there on page 3 {KIN00009547/3}. The first
7 shows the external façade system of a steel-frame
8 structure, and the second depicts K15 with terracotta
9 tiles.
10 Now, it's right, isn't it, that at this point
11 Kingspan had no test data to BS 8414 showing that any
12 steel-frame structure with K15 in the external façade
13 system could meet the criteria in BR 135? That's right,
14 isn't it?
15 A. Yes, there wasn't a specific test for that.
16 Q. And K15 had never been tested to 8414 at this point in
17 a system with terracotta tiles as the outer cladding,
18 had it?
19 A. No.
20 Q. Did you ever consider whether it was appropriate to
21 include those photographs shortly after text, some of
22 which says it's suitable for use on buildings over
23 18 metres?
24 A. I suppose there is the potential that the systems could
25 be used below 18 metres. All of the components shown

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1 are non-combustible, potentially . It was my
 2 understanding that the LABC certificates were peer
 3 reviewed, I think that was mentioned, and therefore
 4 they're accepting this, and it isn't inconsistent with
 5 our approach to offer K15 into systems that are akin to
 6 that which we had test evidence for .
 7 Q. I see. So are you saying you did look at this
 8 certificate, you looked at the wording that Mr Mills had
 9 added, you looked at these pictures, and you were
 10 entirely comfortable that it was a fair and accurate
 11 representation of the situations in which K15 could be
 12 used?
 13 A. And assessed by LABC, yes.
 14 Q. Does seeing the correspondence we've just looked at, the
 15 email exchanges and this certificate, change the view
 16 you have expressed in your witness statement -- we
 17 looked at it earlier -- where you said {KIN00020821/44}:
 18 "I anticipate that had we tried to influence the
 19 LABC's conclusion on the fire performance of K15, we
 20 would have been met with a firm push back."
 21 A. Seeing it now, yes, in this context, it does seem like
 22 his comments were incorporated without question.
 23 I don't know that for sure, that would have to be asked
 24 of the LABC. But I do understand there was
 25 a peer review process in that, so if there were changes,

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1 that should have gone back through that process.
 2 Q. Well, the reality is there was no push-back at all, was
 3 there? We've seen that Mr Mills' suggested wording
 4 simply gets replicated into the certificate .
 5 A. On that evidence, yes.
 6 Q. Yes.
 7 If we could now go to appendix A of the drawing and
 8 documents list, so page 2 {KIN00009547/2}, paragraph 3,
 9 that wording that was added in:
 10 "The product can be used on buildings with
 11 stories (sic) greater than 18m from ground level provided
 12 it is used in combination with suitably non-combustible
 13 substrates and ancillary components ..."
 14 Do you consider that claim to be accurate, or did
 15 you consider that claim to be accurate at the time?
 16 (Pause)
 17 A. I think it could be accurate, in that LABC were prepared
 18 to support the use of K15 with non-combustible
 19 build-ups.
 20 Q. I see. But forget any judgement the LABC might have
 21 exercised in relation to this just for a moment. If
 22 you'd have seen those words at the time as part of
 23 something presented to you, would you have agreed that
 24 they were an accurate representation of the situation in
 25 which K15 could be used above 18 metres?

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1 A. If I'd have written it myself at the time in support of
 2 a project with more specific, you know, components to
 3 comment against, it could have been relevant, yes. But
 4 the point here is this is the LABC's opinion.
 5 Q. I see.
 6 Within that paragraph, we can see in brackets
 7 there's reference to section 7.1 of the BBA certificate .
 8 A. Yeah.
 9 Q. Do you see that?
 10 A. I do.
 11 Q. Now, that's the reference to BS 8414 testing which is in
 12 the 2008 version of the BBA certificate at section 7.1.
 13 If we just quickly pull that up, {BBA00000038/5}. This
 14 is the 2008 -- the very first version of the
 15 BBA certificate, and we can see at 7.1 we get exactly
 16 that, we get details of the system tested to BS 8414 and
 17 then the claim at the end that we looked at earlier
 18 about BRE 135.
 19 A. Yes.
 20 Q. But if we go to section 7.1 of the updated version of
 21 the BBA certificate, if we bring that up, {BBA00000037},
 22 if you remember, this is the certificate that had that
 23 sentence added on this front page, "The product has been
 24 tested ... for one specific construction on masonry
 25 walls". So this is the updated certificate as of

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1 6 April 2010.
 2 If we go to section 7.1 of this {BBA00000037/5},
 3 there's no reference to BS 8414 testing in that section .
 4 Do you see that?
 5 A. Yes.
 6 Q. That's been moved in this updated certificate to
 7 section 7.5. At the bottom of that page we get the
 8 BS 8414 details and the system.
 9 A. Yes.
 10 Q. Now, the question I want to ask is: it appears that the
 11 LABC may not have been provided with the most up-to-date
 12 issue of the BBA certificate, because we saw they
 13 referenced the 2008 version on page 1 of the
 14 certificate, and we just saw that they were referencing
 15 7.1 as details of the system, but that would have been
 16 accurate on the old BBA certificate and not on this
 17 latest one.
 18 A. Okay.
 19 Q. Do you think that's possible, that that's what's
 20 happened?
 21 A. It's possible. I don't know whether that's what
 22 happened or not. This level of detail, it would have
 23 been obviously Gareth's responsibility .
 24 Q. Well, what I want to ask you is: could that have
 25 occurred because the updated version did make clear that

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1 the one 8414 test had been carried out on one particular
 2 masonry construction? The later BBA certificate was
 3 a lot less advantageous to Kingspan. Do you remember
 4 that ever being discussed?
 5 A. No, we were very open about the evidence that we were
 6 basing our advice on.
 7 Q. Let's go back to the LABC certificate, {KIN00009547/2},
 8 and the statements made there that Mr Mills has added.
 9 Did you ever read that certificate during your time
 10 as head of technical?
 11 A. I'm not sure that I did. I don't know. This was issued
 12 late 2014?
 13 Q. 2013. This was issued in 2013.
 14 A. Okay.
 15 Q. So you're not sure that you looked at this?
 16 A. I would -- I'd like to think I would have at the time.
 17 I'm not familiar with it. It isn't something that is
 18 plainly obvious to me.
 19 Q. You did tell us earlier on in your evidence that you did
 20 read the later LABC certificates. I was asking you
 21 earlier and you said you couldn't remember reading the
 22 2009 one, but that you had read the later versions.
 23 A. And that's what I would have expected to have done,
 24 but ... I'm not saying that I haven't, I'm just saying
 25 that I don't recall specifically reading it.

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1 Q. Okay. So you can't recall ever noticing these
 2 provisions and having thoughts on them, about their
 3 accuracy or their validity?
 4 A. I was supporting the document at the time. It had gone
 5 through the department and a process to get it
 6 re-issued, so, yes, I'd support what it says.
 7 I appreciate, reading it, it can be misconstrued, but it
 8 is also the advice of the LABC. It is supposed to be
 9 independently checked as well.
 10 Q. Well, what I want to put to you is that that advice,
 11 particularly at paragraph 3 there, is misleading.
 12 (Pause)
 13 A. It could be read as misleading.
 14 Q. Yes.
 15 Let's move to the next set of LABC registered
 16 details. These were from 20 August 2014, and if we
 17 could go to that at {NHB00000798}. So these are some
 18 new LABC registered details. We can get the date at the
 19 bottom of this first page. This certificate was first
 20 issued on 28 August 2013, it's valid until
 21 30 November 2014, and this issue is dated
 22 20 August 2014. Do you have that?
 23 A. Yes.
 24 Q. So, slightly oddly, it looks like it was issued in
 25 August 2014 and it was going to be valid only until

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1 November 2014; do you remember that?
 2 A. Yes. I'd like to think that was an oversight and that
 3 it's just based on when it actually got finally issued
 4 and that the validity wasn't extended.
 5 Q. I see. Can you help us on why there was only that very
 6 short period of validity for this certificate?
 7 A. Yeah, I believe it would be related to the fact that it
 8 didn't get issued at the time that it was anticipated it
 9 would be issued.
 10 Q. I see.
 11 Now, the content of this certificate in respect of
 12 the areas we're interested in in terms of fire
 13 performance is different from the content of the
 14 previous certificate we just looked at. Do you remember
 15 that?
 16 A. No.
 17 Q. If we go to page 2 {NHB00000798/2}, and look just above
 18 the table, in that bottom section, we can see it says:
 19 "K15 has been successfully tested to BS 8414-1 ...
 20 meets the criteria set out in BR135:2013 and therefore
 21 is acceptable for use in buildings with storeys above
 22 18 metres in height (subject to matching the
 23 specification criteria identified in BBA ..."
 24 Then that's a reference to the BBA certificate:
 25 "... section 8.2 and fixed to a non-combustible

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1 substrate) as alternative compliance to AD B."
 2 Now, again, K15 as a product can't meet the criteria
 3 in BR 135, can it?
 4 A. No, but as a product in a system it can.
 5 Q. Yes, but what's being said there, "K15 has been
 6 successfully tested ... meets the criteria set out in
 7 BR135". You see the problem again, do you?
 8 A. As previously, yes.
 9 Q. Yes.
 10 If we go over to page 3 {NHB00000798/3}, in the
 11 middle of the page, under the heading, "AD B
 12 Fire Safety", we can see this. So it's "AD B
 13 Fire Safety", and then there is a note:
 14 "From the results, it can be considered as
 15 a material of limited combustibility and meets the
 16 criteria for Class 0 classification for spread of flame.
 17 Since K15 can be considered a material of limited
 18 combustibility, it is suitable for use in all situations
 19 shown on Diagram 40 of Approved Document B Volume 2,
 20 including those parts of a building more than 18m above
 21 the ground. In the latter circumstances, the cladding
 22 system and the substrate to which the insulation is
 23 applied must also meet the requirement for limited
 24 combustibility."
 25 Then it goes on:

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1 "Where the substrate is a metal-framed wall system
 2 rather than masonry or concrete, a non-combustible
 3 lining board must be specified to the external face of
 4 the metal frame wall or (eg calcium silicate board or
 5 similar ...)"

6 This is an exact repeat of wording found in the
 7 May 2009 LABC type approval summary.

8 A. Yeah.

9 Q. Do you see that?

10 A. I do.

11 Q. Now, can you help us: this is on your watch now, you're
 12 head of technical when this certificate is issued; in
 13 what possible situation could K15 be considered
 14 a material of limited combustibility?

15 A. I think, as has been explained previously, the LABC had
 16 made that connection from the point of view that it had
 17 met a route of compliance that was also applicable by
 18 a material of limited combustibility, and therefore
 19 conferred the same description to that product.

20 Q. But that makes no sense, does it?

21 A. I wouldn't say it makes no sense.

22 Q. How much sense does it make to you?

23 A. Well, if you're meeting compliance by two acceptable
 24 routes, then surely those routes of compliance could
 25 have some comparability.

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1 Q. But that can't be right, can it? You can't test
 2 a system in a system test, then pluck out one of the
 3 materials in that test and, in a different system, say,
 4 "Ah, this is all fine, it's a product of limited
 5 combustibility". That can't be right, can it?

6 A. I entirely agree with that, but that isn't what this is
 7 doing. It is then going on to clarify in what system
 8 it's to be used.

9 Q. Yes, although those weren't systems that you'd actually
 10 tested, were they?

11 A. No, but it's an assessment.

12 Q. I appreciate you say this is an assessment, but I want
 13 to know what you thought of this and what Kingspan
 14 thought of this at the time. Do you agree it's
 15 demonstrably incorrect and misleading?

16 A. No. It supports the fact that we were promoting the
 17 product for use in non-combustible systems on the basis
 18 that, if the constructions are comparable,
 19 a professional in the right capacity could make that
 20 assessment.

21 SIR MARTIN MOORE-BICK: Just help me, because I'm having
 22 trouble with this as well, Mr Millichap.

23 A. Sure.

24 SIR MARTIN MOORE-BICK: What they say is, "From the results,
 25 it could be considered as a material of limited

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1 combustibility". What results are they talking about
 2 there?

3 A. They would be talking about the BS 8414.

4 SIR MARTIN MOORE-BICK: If that's the case, that isn't
 5 a basis for considering any individual element of the
 6 system as having limited combustibility, is it?

7 A. This is the opinion that they've come to.

8 SIR MARTIN MOORE-BICK: Well, it's the opinion they express,
 9 but I think the point that Ms Grange is asking you to
 10 consider is: is it an opinion which makes any sense?

11 (Pause)

12 A. I think it can. I think, again, this was another piece
 13 of supporting evidence that we were using alongside the
 14 test report itself, and an opinion expressed from
 15 Kingspan for others to make their own judgement upon.

16 SIR MARTIN MOORE-BICK: All right.

17 A. It is an extension of the same thing that we were trying
 18 to prove all along. I accept you don't agree, but it
 19 was our opinion at the time.

20 SIR MARTIN MOORE-BICK: Thank you.

21 Yes, Ms Grange.

22 MS GRANGE: I see.

23 K15 was not suitable for use in all situations shown
 24 on diagram 40 of Approved Document B, was it? Do you
 25 see that wording there, four lines down?

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1 A. Yeah. I don't know diagram 40 off the top of my head.

2 Q. It shows lots of different tall buildings.

3 (Pause)

4 A. "All situations" is a stretch, if it's read in
 5 conjunction with the restrictions around non-combustible
 6 systems, then it can be used above 18 metres.

7 Q. I see.

8 Were you ever made aware of any complaints about the
 9 content of this certificate, at any stage?

10 (Pause)

11 A. I'm sure it will have been referenced. I can't recall
 12 a specific complaint.

13 Q. What does that mean, "I'm sure it will have been
 14 referenced"? What does that mean?

15 A. I'm aware that there were complaints.

16 Q. And who made those complaints?

17 A. Through the NHBC definitely. There was an issue with
 18 Wintech, and there were a number of discussions on
 19 projects whereby a project team had specified and
 20 adopted the product and then retrospectively questioned
 21 its suitability. In some ways I didn't necessarily see
 22 that as a complaint because it was trying to validate
 23 something after they'd already made a decision, given
 24 that we weren't given the opportunity to, you know,
 25 support it upfront.

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1 Q. Were those complaints about the contents of this
2 certificate ?
3 A. I don't recall, that's why I said --
4 Q. Okay.
5 Let's go to a chain of email correspondence now,
6 {NHB00000810}. This is a chain of correspondence
7 between a building control body in Manchester called
8 Assent and the NHBC from November 2014. Now, you're not
9 copied in to this, but I want to ask you about some of
10 what's said.
11 If we look at the bottom of the chain first, at the
12 bottom of page 5 {NHB00000810/5} and over on to page 6,
13 we can see there's is internal email from John Miles of
14 Assent on 12 November 2014, asking about the use of K15
15 on tall buildings. He says:
16 "Afternoon all,
17 "I have the query below and wondered what the view
18 is on buildings over 18m.
19 "Would anyone have any hesitation in accepting
20 this?"
21 There's an extract from an email below where someone
22 said:
23 "The issue seems to be primarily about the use of
24 an appropriate substrate ... as directed in the LABC
25 certificate. This appears, on the face of it, to

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1 endorse the use of K15 in certain conditions although it
2 does not comply with the stated requirements of AD:B, in
3 particular, a material of limited combustibility."
4 Then there is a response to Mr Miles on the same day
5 from someone called Jane Keeley at the top of page 5.
6 She says:
7 "Hi John,
8 "As I understand it Kingspan have a test certificate
9 where it is not combustible when used in conjunction
10 with a non-vented rainscreen cladding. The certificate
11 does not cover the situation where it is used with
12 a vented rainscreen cladding and I have heard that it
13 burns quite readily when it is used in a vented
14 situation. I believe the LABC certificate has been
15 withdrawn now.
16 "I have just received details with Kingspan at
17 a height of over 18 and I have asked for a test
18 certificate specifically for use with a vented
19 rainscreen situation."
20 Then if we go up the chain to page 4
21 {NHB00000810/4}, we can see that on 13 November 2014
22 Jane Keeley forwards the chain of correspondence to
23 John Lewis at the NHBC. That's at 12.08 in that top
24 email there. She says:
25 "Not had chance to read this yet but this is the one

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1 they have withdrawn/are withdrawing?"
2 Then if we can scroll up to the top of page 1
3 {NHB00000810/1}, there is a long email from John Lewis
4 of the NHBC, and he begins with this. He says:
5 "It's all garbage. Hereford LABC didn't know what
6 they were talking about. We had a telephone call with
7 LABC Warranty Technical Manager (can't recall his name)
8 at which he stated that they were withdrawing their
9 approval straightaway - that was on 27th October. So
10 I would check it's still valid, if I was you."
11 Now, he is right, isn't he, it was all garbage? Do
12 you agree?
13 A. No. I think it could have been better worded. There
14 was more ambiguity in there than there should have been.
15 It was peer reviewed by LABC, as we were led to believe,
16 and therefore we felt that that was their position.
17 Q. Were you at any time made aware that the LABC had been
18 contacted by the NHBC in this way about the content of
19 this particular certificate ?
20 A. No.
21 Q. Just going back to the answer you just gave, you say,
22 "It was peer reviewed by the LABC"; how do you know it
23 was peer reviewed by them?
24 A. That was my understanding of the process. I didn't
25 believe it was -- you know, the whole point of the

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1 approval is that it can be used nationally, so it
2 wouldn't make sense for one local authority to establish
3 a certificate, then impose that on everybody else.
4 I was of the belief that there was -- there is --
5 a central control for LABC that would have reviewed the
6 national approval.
7 Q. I see. Yes.
8 If we go on with John Lewis' email, what he does
9 then is he goes through the difference between tests to
10 8414-1 and 2, and then if we can have a look at the
11 bottom of page 2 {NHB00000810/2}, still within his
12 email, in that very last paragraph he says this:
13 "Kingspan have since done at least two tests
14 (I suspect they've done more but have kept the results
15 close to their chests because they performed so badly!)
16 using a steel frame and ventilated rainscreen and there
17 is an issue with ongoing burning. Once the fire source
18 is extinguished, the insulation continues to burn up the
19 cavity and, in one case, continued over the cavity
20 barrier and to the top of the test rig. So, it's not
21 clear why the LABC detail states that it's a MOLC
22 [material of limited combustibility] when it clearly
23 isn't."
24 Is it still your evidence that around this time --
25 so we're now in late 2013/2014 -- you didn't know about

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1 the K15 having an issue with ongoing burning?
 2 A. No, I was aware K15 could, in some circumstances, have
 3 burning after the crib had been extinguished.
 4 Q. You were aware of that?
 5 A. Yes.
 6 Q. I see.
 7 A. That was evident from the 2014 test.
 8 Q. Right.
 9 Then if we go on, after the ADB screenshot on page 3
 10 {NHB00000810/3}, if you look on the next page --
 11 actually, that's not a screenshot of ADB; that's
 12 a screenshot from the LABC certificate that we've just
 13 looked at.
 14 He says this in parenthesis after that screenshot:
 15 "(The bit about using a non-combustible lining board
 16 instead of a masonry backing on a steel framed wall has
 17 since proved not to be correct. These words were
 18 Kingspan's - they assumed that it would perform the same
 19 but, when they did the tests, it was found that it
 20 performed far worse)."
 21 Now, that's entirely correct, isn't it? The advice
 22 to use a non-combustible backing board on steel-framed
 23 structures came from Kingspan originally, didn't it?
 24 A. Yes.
 25 Q. Is it right that that was to try and mask the fact that

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1 no successful test to BS 8414-2 on a steel-frame
 2 structure had been carried out on any system
 3 incorporating K15?
 4 A. No, it wasn't there to try and hide anything. It was
 5 there as -- it was a strong opinion of Ivor's that the
 6 part 2 test with that board in place would perform
 7 similarly to the part 1 test.
 8 Q. So that was Ivor's opinion; was it based on anything
 9 else?
 10 A. It was based on the fact that a test had never failed
 11 via the burn-through criteria.
 12 Q. I see. So taking just one criteria from BR 135, that
 13 was the basis on which that assessment was made, was it?
 14 A. That was Ivor's opinion, yes.
 15 Q. John Lewis is talking about some tests that performed
 16 far worse. He says, "These words were Kingspan's", ie
 17 using the non-combustible lining board instead of
 18 a masonry backing on a steel-frame wall:
 19 "These words were Kingspan's - they assumed that it
 20 would perform the same but, when they did the tests, it
 21 was found that it performed far worse)."
 22 Can you help us as to what tests he's referring to
 23 there?
 24 A. No, I -- it's the first time I've seen this
 25 correspondence, it ... I assume it would be the part 2

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1 tests, 2007/08, but that's obviously to a different
 2 system.
 3 Q. Yes, because that wasn't a non-combustible lining board
 4 on a steel-frame wall, was it?
 5 A. The --
 6 Q. 2007/08 tests.
 7 A. I don't recall.
 8 Q. Okay.
 9 In the next paragraph he says this:
 10 "It's all an accident waiting to happen and we're
 11 meeting with all the PIR manufacturers to try and get
 12 something sorted. But, in the meantime, they continue
 13 to state that it's fine and most BCBs [building control
 14 bodies] accept that at face value without sifting
 15 through the details. However, DCLG are now on the case,
 16 hence why we need to sort something out soon."
 17 Now, were you at any stage alerted to DCLG, the
 18 Department for Communities and Local Government, being
 19 on the case?
 20 A. I don't believe so, no.
 21 Q. Were you ever contacted by anybody at DCLG?
 22 A. No.
 23 Q. But you were aware, were you not, in late 2013, that the
 24 NHBC were certainly on the case? Is that right?
 25 A. Yes, there was a dialogue with NHBC from around that

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1 time.
 2 Q. Can we go now to {LABC0000996}. This is an email from
 3 David Ewing of the LABC to Mr Meredith and Mr Ball.
 4 They were in your team, weren't they, at this time?
 5 A. Yes.
 6 Q. Again, I make it clear, you're not copied in to this
 7 email.
 8 If we look at the opening two paragraphs, Mr Ewing
 9 says this:
 10 "I have tried to phone today but thought I should
 11 just clarify some of the issues for you that we have
 12 around recertification for K15 and other thermoset
 13 materials above 18m.
 14 "LABC have been contacted by NHBC in connection with
 15 the wording used in the earlier Registered Detail
 16 certificate following the reissue of the BBA certificate
 17 08/4582 in December last year. There was concern that
 18 the certificate implied a global approval to the use of
 19 K15 above 18m and that the revised BBA certificate had
 20 been amended to read suitability for use on
 21 non-combustible substrates only ie to masonry or
 22 concrete structures."
 23 Then he goes on to explain that there has been
 24 a meeting, and he says that draft guidance has been
 25 circulated as to whether the mechanical performance

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1 criteria in BR 135 should be a matter for consideration
 2 by building control or not.
 3 I want to now look at the penultimate paragraph of
 4 this email on page 1. If you see that last paragraph
 5 there, looking in the second line, in the middle of the
 6 page, it begins:
 7 "The issue is fundamentally a warranty issue rather
 8 than a building control matter, although there is
 9 clearly a duty of care required by building control.
 10 I have also suggested that we could include wording
 11 within the certification to read 'It is important that
 12 the use of this product is agreed with Warranty
 13 providers prior to installation to ensure that its
 14 performance has been considered as part of the overall
 15 risk assessment of the finished building'. I am however
 16 mindful that this may still create further issues for
 17 approval."
 18 Now, were you made aware by Mr Meredith at any stage
 19 that the LABC had reported to him that there had been
 20 concerns about the certificate and that it implied
 21 a global approval to the use of K15 above 18 metres?
 22 A. I've not seen this correspondence, that I recall, but
 23 I was aware that they did want to review the wording,
 24 yes.
 25 Q. You were made aware of that, and did you know why they

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1 wanted to revisit the wording?
 2 A. Yes, I would have known at the time, yes.
 3 Q. And you knew that it was because of the reference to
 4 limited combustibility within it?
 5 A. Well, I think it stated there that it gives potentially
 6 a broader scope than was intended.
 7 Q. Yes.
 8 Now, if we look back at the top of that page,
 9 a proposed revised certificate was attached to
 10 David Ewing's email, and if we can look at that, that's
 11 at {LABC0000997}. This one also appears to be dated
 12 20 August, this draft that's sent through, and also
 13 carried an expiry date of 30 November -- actually, that
 14 one says 30 November 2015.
 15 A. Yeah.
 16 Q. What's happened in this certificate is that the claim
 17 that K15 can be considered a material of limited
 18 combustibility had been removed.
 19 If we go to page 3 {LABC0000997/3} and look in the
 20 middle of the page, we can see under "Fire Safety", it
 21 says there:
 22 "Thermosetting insulants (rigid polyurethane foam
 23 boards) do not meet the limited combustibility
 24 requirements of AD 82(sic) Table A7 and so should not be
 25 accepted as meeting [ADB] paragraph 12.7."

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1 So very different wording was included in this
 2 certificate. Do you remember that?
 3 A. I know it was changed, yes.
 4 Q. Do you recall any discussions between Kingspan and the
 5 LABC about the removal of the wording and the
 6 replacement with this wording?
 7 A. No, they would have happened with Ivor and Gareth.
 8 Q. Do you remember any internal discussions about it within
 9 Kingspan?
 10 A. There would have been them, but I don't recall the
 11 detail.
 12 Q. Can you help us as to what version of the LABC
 13 certificate was in place and being circulated between
 14 August 2014 and March 2015?
 15 A. It should have been the contemporary one.
 16 Q. Right.
 17 Just to complete the story, on 30 March 2015,
 18 another updated registered details certificate for K15
 19 was issued, that's at {KIN00016733}. We can see that
 20 from the date at the bottom of this page, it's dated
 21 30 March 2015 and it's valid until 30 March 2016.
 22 Would you have read this certificate at the time?
 23 (Pause)
 24 A. I don't know. Yes, it's entirely possible, but I may
 25 not have got to it, given that was towards the end of my

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1 tenure.
 2 Q. Yes, and on page 4 {KIN00016733/4} we see the same
 3 information about thermosetting insulants not meeting
 4 certain requirements, and not meeting paragraph 12.7 of
 5 ADB.
 6 A. Yes.
 7 MS GRANGE: Mr Chairman, I think that's a good moment for
 8 our break, because I'm now moving to a slightly
 9 different topic.
 10 SIR MARTIN MOORE-BICK: All right, let's stop there.
 11 We will have a short break now, Mr Millichap. We
 12 will come back and resume at 3.30, if that's all right,
 13 and please no talking about your evidence while you're
 14 out.
 15 THE WITNESS: No, of course.
 16 SIR MARTIN MOORE-BICK: Thank you very much.
 17 THE WITNESS: Thank you.
 18 (Pause)
 19 SIR MARTIN MOORE-BICK: Very good. Thank you.
 20 3.30, thank you.
 21 (3.15 pm)
 22 (A short break)
 23 (3.30 pm)
 24 SIR MARTIN MOORE-BICK: All right, Mr Millichap?
 25 THE WITNESS: Yes, thank you.

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1 SIR MARTIN MOORE-BICK: Thank you.
 2 Yes, Ms Grange.
 3 MS GRANGE: Yes, thank you.
 4 Now, broadly in the topic of your awareness of
 5 concerns being raised about K15 in the period from 2013
 6 onwards, I now want to move to some email correspondence
 7 from November 2013. If we can go to {KIN00009682/5}, at
 8 the bottom, this is an email from Peter Harris from
 9 Astec Projects, and he is making enquiries on
 10 27 November 2013 about the use of K15 on a project
 11 called Hampton House. We can see that from the subject.
 12 A. Yes.
 13 Q. Do you have that there?
 14 A. Yes.
 15 Q. He says:
 16 "We are tendering the above project which is a 15
 17 storey residential structure, and are considering the
 18 use of Kingspan insulation materials (externally) behind
 19 the façade cladding.
 20 "Before requesting formal quotations ... can you
 21 please review the attached detail drawings and confirm
 22 your ability to comply with [a U-value] ..."
 23 Then there are more details given and:
 24 "Your earliest response would be appreciated."
 25 Then Joel Clarke of Kingspan responds to that on the

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1 same day at 16.17 at the bottom of page 4
 2 {KIN00009682/4} and on to page 5. We can see he
 3 attaches some calculations for three wall types, and
 4 then he says:
 5 "There are quite a few comments we would offer in
 6 regard to these proposed build-ups.
 7 "1 - For the steel-frame wall types: although cement
 8 boards of the type described can be (and are) excellent
 9 fire performers and could withstand the temperatures in
 10 a BS 8414 test ... our current testing to that standard
 11 is limited to a fully non-combustible substrate.
 12 Therefore we have shown a non-com calcium silicate board
 13 as the sheathing."
 14 Do you see that there?
 15 A. Yes.
 16 Q. Then if we go up in the chain, on 29 November 2013 at
 17 15.03, Simon Hepworth responds on page 3
 18 {KIN00009682/3}. So we can see Simon Hepworth responds
 19 to him, copying in Mr Meredith. You're not involved in
 20 this at this point.
 21 A. Sure.
 22 Q. He says:
 23 "Joel,
 24 "Please excuse me hijacking this email thread but
 25 further to your e-mail to Peter recently ..."

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1 Then he says this:
 2 "Your email would indicate it is still Kingspan's
 3 view that K15 is fit-for-purpose over 18m. Is this the
 4 case? You have talked about non-combustible substrates
 5 yet, the main points of contention with regard to your
 6 8414 testing is that it was based on block work
 7 substrate not [steel-framed structure] with a sealed
 8 cementitious outer cladding. Neither of these
 9 conditions even remotely resemble what the proposed
 10 construction is here and you know it is the BRE's view
 11 that the use of K15 should not be specified on the basis
 12 of those test results."
 13 Just pausing there, did you know that it was the
 14 BRE's view that the use of K15 should not be specified
 15 on the basis of those test results? Were you aware of
 16 that at this time?
 17 A. No, I don't believe I was.
 18 Q. Then he goes on, in the next paragraph:
 19 "Further, the project in question is for the same
 20 client, who are using the same consultants as our
 21 Riverlight project, where the substantiation of K15 use
 22 still remains unresolved after many months of extremely
 23 difficult negotiations. Kingspan seem to have lost
 24 interest in this issue pending results of the upcoming
 25 8414-2 test. This has not gone unnoticed by the

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1 building developer.
 2 "Your prediction of condensation is not in question,
 3 we would not install a VCL behind the K15, we would,
 4 however, be mindful to use a breather membrane ..."
 5 So that's what's he is talking about in that
 6 paragraph.
 7 Then if we can pick it up in the next paragraph, he
 8 says:
 9 "I realise a lot hinges on the results of next
 10 week's 8414-2 test, but ask what is Kingspan going to do
 11 if it fails? Where does that leave us with Riverlight?
 12 What is your position with regard to this should we have
 13 to start stripping cladding off an 18 storey building?
 14 "This remains the most serious issue on my agenda
 15 and despite Mark Swift's assurances it would be yours,
 16 we see little evidence of it being so.
 17 "With the above in mind we find it incredible you
 18 have any comfort in proposing K15 on this project, or in
 19 fact any other over 18m. This does, in my mind bring
 20 your corporate responsibility into question. You will
 21 no doubt take the view that we, as the envelope
 22 contractor have to take responsibility for the design
 23 and specification of the façade materials and you are
 24 simply an insulation supplier, yet here we are with you
 25 endorsing your product knowing it is not appropriately

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1 tested, with little way of substantiating it is fit for
 2 purpose for this project in any way whatsoever.
 3 "I look forward to your comments.
 4 "Simon."
 5 Now, is the reference there to "the same consultants
 6 as our Riverlight project" a reference to Wintech? Does
 7 that sound right to you?
 8 A. It could be, they are a consultant, yes.
 9 Q. Now, we can see that you received this email. If we go
 10 one email up, it's forwarded to you on 11 December 2013
 11 at 15.45 on page 3. It's from Richard Bromwich to
 12 Mark Swift, Joel Clarke, Ivor Meredith, and you are cc'd
 13 there. Do you see your name there in the cc list?
 14 A. Yes.
 15 Q. Do you remember reading that email?
 16 (Pause)
 17 A. Yes.
 18 Q. What consideration did you give to the concerns that
 19 were raised by Simon Hepworth?
 20 A. I don't recall at the time without reviewing if there's
 21 further correspondence. The points he raises are valid.
 22 Q. Yes.
 23 A. But, again, it does point towards an issue whereby,
 24 you know, they have gone a very long way down the line
 25 in adopting this product without it being signed off

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1 prior to building the building. This is, you know,
 2 installing a solution and then trying to get it ratified
 3 retrospectively. Surely he should have done his
 4 homework before we found ourselves in this position
 5 where, you know, we're being held to try and support the
 6 project. I'm not suggesting that that isn't something
 7 that we weren't trying to do. But there does
 8 come a point whereby, as I said, if they don't agree
 9 with the advice and the opinion that we've given in
 10 respect of their project, then, absolutely, K15
 11 shouldn't have been installed.
 12 Q. But wasn't it on the back of Kingspan's endorsement of
 13 their product that they installed it in the first place?
 14 A. As I said, they've stated themselves in the email that
 15 they are the envelope contractor and that it is their
 16 responsibility.
 17 Q. Yes, but if we look back to that --
 18 A. They can't delegate that.
 19 Q. If we look back to that part of the email, if we go down
 20 the chain to Simon Hepworth's email again, it's over the
 21 page, that part you were just referring to
 22 {KIN00009682/4}. He does say in that paragraph:
 23 "You will no doubt take the view that we, as the
 24 envelope contractor have to take responsibility for the
 25 design and specification of the façade materials and you

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1 are simply an insulation supplier ..."
 2 But then he goes on and says:
 3 "... yet here we are with you endorsing your product
 4 knowing it is not appropriately tested, with little way
 5 of substantiating it is fit for purpose for this project
 6 in any way whatsoever."
 7 So he acknowledges that point. He recognises that.
 8 A. Sure.
 9 Q. But he said, "But here we are and you're still endorsing
 10 your product on these types of projects".
 11 A. Yes. I mean, you know, similar constructions had been
 12 supported and had gone through the assessment phase. My
 13 point here, again, is that he's accepting this is his
 14 responsibility and yet he's trying to address that
 15 responsibility after he has built the building.
 16 Q. Well, that may be so, but why didn't you go back to him
 17 and say, "There has been a terrible error, your concerns
 18 are completely valid, we have only tested to part 1"?
 19 Why doesn't someone respond in that way?
 20 A. Because we were approaching these projects as I've
 21 explained, that used in a non-combustible system we felt
 22 that K15 can be appropriate above 18 metres.
 23 Q. But what test basis did you have for making that
 24 assessment? We can see you're about to do some more
 25 8414-2 tests. We can see that in the middle of this

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1 email.
 2 A. The test evidence we've referred to for 8414 from 2005.
 3 Q. That's it, again?
 4 A. At this time, I think that's the case.
 5 SIR MARTIN MOORE-BICK: I mean, that's really the position,
 6 isn't it, that you had decided -- I say you, but people
 7 within Kingspan -- that you could extrapolate from the
 8 2005 test to extend it, for example, from blockwork
 9 substrate to non-combustible substrate?
 10 A. That's the opinion we were offering, yes.
 11 SIR MARTIN MOORE-BICK: And so on. And so you were --
 12 A. Yes.
 13 SIR MARTIN MOORE-BICK: -- I think for understandable
 14 reasons, seeking to stretch the limits of the original
 15 8414 test.
 16 A. Yes, and that was borne out through numerous assessments
 17 from, you know, project teams --
 18 SIR MARTIN MOORE-BICK: Well, that's another question,
 19 because extrapolation from the original 8414 test might
 20 be something for a fire engineering expert, but --
 21 A. Yes.
 22 SIR MARTIN MOORE-BICK: -- possibly not for the manufacturer
 23 himself.
 24 A. Absolutely. No, I entirely agree. We were offering
 25 an opinion into a project team to make that decision.

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1 In my experience, any project really of this scale above
 2 that height would normally have a level of expertise
 3 that should be able to make that judgement.
 4 MS GRANGE: If we can just carry on with this chain, if we
 5 go back up the chain to Richard Bromwich's email where
 6 he's copied you in {KIN00009682/3}. Richard Bromwich
 7 was the national business development manager --
 8 A. Yes.
 9 Q. -- of Kingspan.
 10 In the second paragraph he says:
 11 "I know this is an extremely difficult position for
 12 us as we need the additional test which I know Ivor's
 13 about to set fire too. But, we must handle these
 14 installers as delicately as possible at the moment
 15 because there's a number of the big ones losing a lot of
 16 faith in the way we're managing things these
 17 installers would include the likes of Aztec, Keyclad and
 18 Dane Architectural who as you know deal with many of the
 19 major K15 jobs throughout the UK.
 20 "Could you please let me know what the action plan
 21 is here as I intend to pick the phone up to
 22 Peter Hepworth to try and pacify the man before he gives
 23 up on Kooltherm (and Optim-R) completely?"
 24 So he is saying that.
 25 Do you remember reading that email at the time?

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1 A. Yes. Not in those exact words, but yes, I would have
 2 read that at the time.
 3 Q. Then Mr Meredith responds on the same day. If we go to
 4 page 2 {KIN00009682/2}, there is an email at 16.39 from
 5 Mr Meredith. He says in the first paragraph:
 6 "It's actually Simon Hepworth and I have already
 7 pacified him on this matter, however it may help if you
 8 give him a call
 9 "Simon had to sound off at Joel about his [advice]
 10 ... hence why I spoke to him instead of putting my
 11 thoughts in writing. However we do have to stand firm
 12 with our position with K15. The question is do we not
 13 specify our products if Astec request a calculation??
 14 Currently we do; if we were to stop this would put
 15 further doubt in their minds.
 16 "From my first hand understanding as I have sat with
 17 Richard the Design Director and Simon Hepsworth(sic) at
 18 Aztec and they currently see a panel that you cannot
 19 burst as a bit of a joke when it comes to rainscreen due
 20 to the amount of cuts required and the unknown
 21 performance in fire. I know this because when I last
 22 went down to reading I took them a sample and asked for
 23 their honest opinion. When you see how they install our
 24 products over rainscreen brackets you will understand
 25 why Optim-R could seriously slow down their per metre

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1 rate. However they may just be saying this because they
 2 are facing the possibility of having to remove 1000s of
 3 m2 of K15 off a couple of sites if Kingspan do not come
 4 up with a result."
 5 By "result" he means a test result to BS 8414-2,
 6 doesn't he?
 7 A. Yes.
 8 Q. Then you go on to respond, two emails up in the chain on
 9 page 1 {KIN00009682/1}, on the same evening at 7.30 in
 10 the evening, and you say this:
 11 "All,
 12 "Given Simon's comments below we will need to defend
 13 our position in writing. It is clear that he is
 14 beginning to position himself in the worse case event
 15 that cladding will need to be removed and who will cover
 16 the related costs.
 17 "I appreciate the need to keep installers onside
 18 however we also need to defend Kingspan."
 19 Do you remember writing that?
 20 A. Yes.
 21 Q. Now, at that point, you have had very serious concerns
 22 being raised with you; did any issue about the risk of
 23 public safety arise in your mind?
 24 A. Yes. I mean, in this case, the building is practically
 25 built, from what I can see. We are supporting our

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1 position in what we feel can demonstrate compliance,
 2 albeit in a near-impossible position, because this
 3 cladding contractor obviously have their hands tied.
 4 They don't have another route forward that isn't going
 5 to cause extreme issues monetarily if they need to
 6 remove the boards, irrespective of who pays for it.
 7 Again, it's not our position to say whether it
 8 actually achieves building control consent. The
 9 difficulty, through this entire chain, is the fact that
 10 the building's already built.
 11 Q. Yes, Mr Millichap, I entirely accept this puts you in
 12 a very different position because K15 is already on this
 13 building.
 14 A. Yes.
 15 Q. And I can see how difficult that was. But my question
 16 was: at any time, did you consider the risks to public
 17 safety?
 18 A. Absolutely.
 19 Q. How? How did you do that?
 20 A. By continuing to support, where we possibly could, give
 21 everybody all the information they would need to make
 22 the decision on whether a specification is appropriate.
 23 Q. But why are you continuing to say to your colleagues,
 24 "We've got to defend our position in writing"?
 25 A. Defending the position wasn't necessarily about the

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1 appropriateness of the specification in this case, it's
2 actually identifying how things are going to fall out of
3 this, including, you know, obviously remediation costs
4 if it's decided that the insulation needs to be
5 replaced.

6 Q. But wasn't this near-impossible position brought about
7 by Kingspan's endorsement of systems with no test
8 evidence to support them?

9 A. No, I think it was brought about by somebody not doing
10 their own due diligence ahead of building the building.

11 Q. Did you ever discuss concerns about public safety with
12 anybody else within Kingspan? Did you ever have
13 a discussion to that effect, where you said, "Actually,
14 this is really difficult because this is fire safety,
15 life safety, in tall buildings, often tall residential
16 buildings"? Did you ever have those discussions with
17 anybody else at Kingspan?

18 A. Yes. Not in those terms per se, but it was implied by
19 our understanding as to whether the product is
20 acceptable. It brings all of that -- that's the whole
21 point of the Approved Document B compliance, is
22 life safety, so it's implied in our understanding of
23 what we feel is an acceptable specification.

24 Q. I see. Because what we see from the emails appears to
25 be just solely a focus on Kingspan's commercial

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1 interests. We don't ever see anybody saying, "This is
2 fire safety, we need to be very, very careful here". Do
3 you agree?

4 A. No, I don't agree. In this particular instance, it is
5 about defending Kingspan's position because we haven't
6 allowed -- well, we haven't been responsible for this
7 contractor going beyond where he should have before he
8 was comfortable with the specification.

9 Q. I see.

10 A. It was obvious this was going to turn into a monetary
11 problem as to who would need to replace the insulation
12 if they couldn't agree that it was appropriate.

13 Q. But it's right, isn't it, that you carry on endorsing
14 K15 on other projects? This isn't just an historic
15 problem at this point, is it? You keep going and
16 recommending K15 on tall buildings with no test evidence
17 to support it; that's right, isn't it?

18 A. I wouldn't say no test evidence, no. I think we've set
19 out the premise on which we believed K15 could be
20 appropriate above 18 metres, given that advice to
21 enquiries that are asking the questions for them to make
22 a decision on its appropriateness.

23 Q. Let's look at another email chain on this topic,
24 {KIN00021135}. This is an email from Stuart Harris at
25 Lakesmere to Joel Clarke and Ivor Meredith on 2 May 2014

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1 about a project called First Street North in Manchester.
2 It would appear that what's happened is Lakesmere had
3 taken some advice from Arup about the compliance for use
4 of K15 on that project. Can you remember this?

5 A. Yes.

6 Q. Can you remember this project?

7 A. Yes.

8 Q. The email from Stuart Harris that we see here reads as
9 follows:

10 "In simple terms K15 100mm is not compliant with
11 Building Regs for use in buildings over 18m, because it
12 has not been tested in accordance with BR135/BS 8414-1
13 2002.

14 "As a result we're now having to remove the three
15 floors of insulation and fire barriers that we have
16 currently installed, and replace it all with mineral
17 wool insulation and new fire barriers to the entire
18 complex.

19 "Not a good way to end the week."

20 Now, it's right, isn't it, that the K15 insulation
21 was in fact removed from that high-rise building; do you
22 remember that?

23 A. Yes.

24 Q. And Kingspan agreed to issue a £20,000 credit note.
25 Let's take a look at that, {KIN00011810/4}. If we look

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1 at the bottom email in the chain on page 4, we can see
2 an email from Adrian Taylor of Kingspan:

3 "Jim Good Afternoon hope you're well.

4 "Paul has asked me to send this to you. It was
5 a production complaint for Lakesmere on K15. Paul,
6 kingspan and the [contractor] had agreed a credit of
7 £20k (as attached) but for some reason the original
8 order is unpaid and on our debtors list."

9 Then it's you that receives this paperwork for
10 filing in January 2015. If we look at the top email in
11 this chain on page 1 {KIN00011810/1}, this is all
12 forwarded on to you, the Minster credit note, First
13 Street North, Manchester, and you say to Emma Rogers at
14 Kingspan:

15 "To file please.

16 "Regards

17 "Tony Millichap."

18 A. Yes.

19 Q. Do you remember having to issue that credit note for K15
20 having been removed and Rockwool replacing it?

21 A. Yes, I do.

22 Q. Yes.

23 You were asked, when you provided your witness
24 statement, whether you were aware of any concerns about
25 the use of K15. If we look in the middle of page 40 of

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1 your witness statement {KIN00020821/40}, there's Inquiry
2 question 48:

3 "Were you, at any stage prior to May 2015, aware of
4 any concerns raised by ... in respect of the use of
5 K15 ... If so, please identify the source ..."

6 Why didn't you mention any of these examples in your
7 witness statement, the examples I've just taken you to?

8 A. I wouldn't have been able to recall them at the time
9 I did this. I wasn't -- I didn't have the time to do as
10 extensive a review of the documents I was supplied prior
11 to writing the statement. I did review a lot of
12 documents, but much of it had to be done from memory.

13 Q. I see. So, what, you weren't provided with all of the
14 documentation?

15 A. No, I was absolutely provided with it. It was a case of
16 having the time, whilst doing another full-time job.
17 I got through as much of it as I could in a priority
18 order and then continued to review it after producing
19 the statement.

20 Q. We can see in the paragraph below that you say:

21 "... Kingspan would get queries coming in from
22 architect or engineer customers relating to the use of
23 K15 on buildings with a floor over 18 metres ..."

24 But then you go on and say:

25 "It was not [our] responsibility to determine

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1 compliance. When we explained this to them and provided
2 them with information about K15 and the routes to
3 compliance, they would sometimes raise concerns about
4 this. These concerns were misplaced: they were trying
5 to lay responsibility for compliance with Kingspan which
6 was not appropriate."

7 Now, that's simply not right, is it? You have
8 accepted that the concerns that we just saw previously
9 on projects were valid complaints that were being
10 raised.

11 A. On -- not -- I don't think we discussed the First Street
12 complaint.

13 Q. Well, we've seen complaints where you have said, from
14 Simon Hepworth's complaints, "Yes, they were valid".
15 They weren't misplaced, were they?

16 A. No, but they came about in the wrong order, completely.
17 There wouldn't have been a complaint at all if they
18 hadn't installed the product before determining whether
19 it was suitable.

20 Q. Why do you not tell us that K15 had to be removed from
21 that high-rise building because it was non-compliant?
22 Why didn't you tell us that?

23 A. Because -- sorry, could you rephrase?

24 Q. Yes. Why didn't you tell us -- we've just looked at you
25 issuing a credit note --

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1 A. Yes.

2 Q. -- because K15 had to be removed and mineral wool
3 replaced instead.

4 A. Yes.

5 Q. Why didn't you tell us about that in your witness
6 statement?

7 A. Because I didn't actually view it as a complaint about
8 the product. The order of events is that they've
9 installed a product and then checked whether it's
10 suitable, and therefore the credit was against the fact
11 that they'd installed the product before determining
12 that it was suitable.

13 Q. I see.

14 Now, I want to ask you some more questions now about
15 the NHBC. We know that you had some contact with the
16 NHBC during your role as head of technical between 2010
17 and 2013.

18 What did you understand the role of the NHBC to be?

19 A. The NHBC, as far as I can recall, are an insurer body,
20 and they also have responsibility over approval to the
21 Building Regulations as well.

22 Q. Yes.

23 Now, looking again at your witness statement,
24 page 38 {KIN00020821/38}, paragraph 7.39, perhaps what
25 we can do is just look at the question that you were

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1 asked, just before that {KIN00020821/37}. So you were
2 asked:

3 "Were you aware, prior to the issue of this
4 certificate [so this is in December 2013], of any issues
5 raised with Kingspan by the National House Building
6 Council ... in relation to the use of K15 with buildings
7 with a floor over 18m? If so, please describe the issue
8 or issues. Please also explain when and how these were
9 raised, by and with whom, and any action Kingspan took
10 in respect of them ..."

11 Your answer is simply:

12 "No I was not aware."

13 Looking at that now, is that right? Are you saying
14 that you weren't aware of any concerns raised by the
15 NHBC prior to December 2013?

16 A. This again was based on what I believed the timeline was
17 on the discussions with NHBC. I also -- the NHBC issues
18 were dealt with later in the statement as well.

19 Q. I see.

20 When was the first time that you knew of concerns
21 being raised by the NHBC in respect of the use of K15 on
22 buildings over 18 metres? Can you help us with that?

23 A. Yes, I believe it was late 2013.

24 Q. Right.

25 If we look at paragraph 10.2 of your statement on

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1 page 48 {KIN00020821/48}, you say:
 2 "Between stepping into a relevant role in 2010 and
 3 the end of 2013, my engagement with the NHBC was
 4 limited. It principally concerned departmental
 5 enquiries relation (sic) to specific projects. However,
 6 in 2014 the NHBC had much greater contact with Kingspan.
 7 The reason for this contact was that the NHBC was
 8 concerned about the fire performance qualities of
 9 materials used as part of cladding systems on high rise
 10 buildings in connection with their substantial housing
 11 stock. I understood from the NHBC that K15 was one of
 12 many cladding products whose performance they were
 13 monitoring."

14 Now, that last sentence there, you understood it was
 15 one of many cladding products whose performance they
 16 were monitoring, how did you come to understand that?

17 A. I believe that was relayed in the meeting that

18 I attended with NHBC at their premises.

19 Q. Was that the first meeting you had with the NHBC?

20 A. From memory, I believe that's the only meeting I had
 21 with NHBC.

22 Q. You only had one meeting with them?

23 A. I believe so, yes.

24 Q. I see.

25 Then at paragraph 10.4, if we can look at that now,

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1 further down in this section on page 49
 2 {KIN00020821/49}, you say:

3 "At the meeting I attended there were three Kingspan
 4 personnel [there] ..."

5 We will come back to that. Then you say:

6 "There were a number of specific construction types
 7 on which the NHBC were looking to us to retrospectively
 8 validate the use of K15."

9 Now, is that right, that your understanding was they
 10 were looking for retrospective validation of K15 on
 11 a number of specific construction types?

12 A. Yes. Well, actual buildings, in fact.

13 Q. Yes.

14 Then if we look at paragraph 10.8 on page 50
 15 {KIN00020821/50}, you explain from that second sentence
 16 in that first line:

17 "The NHBC's concerns escalated in 2014 and they were
 18 seeking reassurance from Kingspan concerning the use of
 19 K15 on a wide variety of construction projects in
 20 respect of which they were engaged relating to buildings
 21 with a floor over 18m. We did not consider that
 22 Kingspan could retrospectively validate the use of K15
 23 on the variety of cladding systems used by the NHBC.
 24 However, we did want to offer the NHBC whatever
 25 reassurance we were able to regarding the technical

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1 qualities of K15."

2 Now, let's look at the request the NHBC actually
 3 made. If we can go to {NHB00000645/4}. I want to start
 4 at the very bottom of the email chain on page 4. There
 5 is an email of 26 November at 10.52, right at the bottom
 6 there, from John Lewis at the NHBC. He writes to the
 7 technical enquiries Kingspan email address asking
 8 specifically about -- the subject is "Kingspan K15 use
 9 in a Building Greater than 18m", and in his email he
 10 says:

11 "I'm looking in detail at the use of Kingspan K15 as
 12 part of the external cladding system in a building
 13 greater than 18m. I note that K15 isn't a material of
 14 limited combustibility and so I need to establish how it
 15 meets with the alternative AD B2 guidance referring to
 16 a system whose performance has been assessed according
 17 to ... BR135 ..."

18 He says:

19 "The building in question is a RC frame ..."

20 A. Reinforced concrete.

21 Q. Exactly:

22 "... with lightweight steel frame infill panels."

23 Do you see that?

24 A. Yes.

25 Q. So that's the building that's being described.

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1 If we go up the chain, there are then various emails
 2 with a technical adviser where he's asked for the
 3 project address and building use, and then he's sent
 4 some literature, including the BBA certificate for K15.

5 Then if we look at the bottom of page 2
 6 {NHB00000645/2}, Mr Lewis writes again to that same
 7 email address. He thanks the technical adviser for the
 8 BBA certificate, and then he says:

9 "But the BBA certificate ... refers back to
 10 obtaining clarification from yourselves about the use of
 11 K15 in a building which exceeds 18m in height. Hence my
 12 original query."

13 Now, do you see at this point it's become circular,
 14 because Kingspan sent the BBA certificate, the
 15 BBA certificate's got a line in saying, "Speak to
 16 Kingspan about buildings over 18 metres", and he is
 17 going round in circles; do you see that?

18 A. Yes.

19 Q. Then in the second paragraph of his email, he says:

20 "As far as I can see, where the building exceeds 18m
 21 in height, paragraph 12.7 of AD B2 refers to the need
 22 for limited combustibility of all elements of a cladding
 23 system both above and below 18m. This includes the
 24 insulation, internal lining board and the external
 25 facing material. The exclusions are smaller gasket

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1 parts and similar low-risk items."
 2 Then over on the next page {NHB00000645/3}:
 3 "Therefore, the use of a material of limited
 4 combustibility for these components will satisfy the
 5 requirements of Section 12 of AD B2 and Part B4 - the
 6 definition of a [material of limited combustibility] is
 7 stated in Table A7 of AD B2.

8 "However, as K15 isn't a material of limited
 9 combustibility, an acceptable alternative approach (see
 10 AD B2 paragraph 12.5) is for the Kingspan to submit
 11 evidence that the complete proposed external cladding
 12 system has been assessed according to the acceptance
 13 criteria in BR135 ... The preferred method of
 14 demonstrating compliance is via a fire test carried out
 15 in accordance with BS8414-1 ... [or] BS8414-2 ..."

16 And he sets out the titles of those two standards.
 17 Then he continues:

18 "The test should be carried out by an independent
 19 UKAS accredited testing body. The BS8414 tests do not
 20 give a PASS/FAIL answer because the data obtained is
 21 used by different bodies with different minimum
 22 requirements. Hence, for Building Regulation purposes,
 23 any test using this method needs to be supported by
 24 proof that the acceptance criteria of BR135 have been
 25 met.

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1 "As far as I can see, only one test in accordance
 2 with BR135 was carried out using BS8414:1. As such, the
 3 use of K15 as part of any other cladding build-up fixed
 4 to the face of a building, or for a cladding system
 5 fixed to a structural steel frame (covered by BS8414:2)
 6 isn't allowable?

7 "Please could you advise if I've interpreted the
 8 requirements wrongly?"

9 Now, do you agree that this is exactly the same
 10 difficulty that Wintech and Astec had already raised
 11 with Kingspan by this time?

12 A. Yes, it relates to the same set of regulations, so it
 13 would be the same query that they've raised.

14 Q. Yes. And it's the same difficulty that Lakesmere went
 15 on to raise in May 2014 in the email we just looked at,
 16 where K15 had to be stripped from the building; yes?

17 A. Yes.

18 Q. Looking at Mr Lewis' email, do you think he had
 19 interpreted the requirements incorrectly?

20 A. No, he's interpreted them that he is looking to
 21 demonstrate compliance via those specific routes. That
 22 being the case, in his particular construction, we
 23 wouldn't have the evidence to demonstrate that.

24 Q. I see. But we've seen that this was a case where the
 25 BBA certificate was being sent for K15, when enquiries

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1 were being raised about whether or not it was suitable.

2 A. Yes.

3 Q. This isn't a request, is it, for Kingspan to
 4 retrospectively legitimise certain build-ups, is it?

5 A. No.

6 Q. It's a simple question, isn't it? They're asking on
 7 what basis Kingspan say that any over 18 metres external
 8 construction build-up other than that tested can comply
 9 with the Building Regulations; would you agree?

10 A. Yes, I believe this was -- I think Mr Lewis was the
 11 first approach from the NHBC prior to it being
 12 escalated.

13 Q. Yes.

14 Now, moving up to the next email on page 2
 15 {NHB00000645/2}, Mr Lewis emails again the following
 16 day, on 13 December 2013, and in that email to the
 17 technical enquiries techline, he says:

18 "Hello Ben

19 "Thank you for your help so far.

20 "I, and my managers here at NHBC, would very much
 21 like to resolve this issue with you as soon as possible.
 22 Could I request that you escalate it to your management
 23 team with a view to a meeting early in the new year
 24 between both parties?"

25 He says this in the next paragraph:

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1 "Unfortunately, given the number of affected
 2 projects that NHBC deals with, we feel that we need to
 3 start to advise our customers that K15 doesn't comply
 4 with the Building Regulation requirements or the BBA
 5 certificate when used on a building in excess of 18m
 6 high.

7 "I look forward to hearing from you ..."

8 When he says in that paragraph given the number of
 9 affected projects they're going to have to start to
 10 advise their customers in that way, do you know how many
 11 projects that might have been approximately?

12 A. We didn't know at this time. I believe -- and it was
 13 only ever mentioned verbally, but I believe it was in
 14 excess of 100, possibly 140, I'm not sure. I don't
 15 think it was ever put in writing.

16 Q. So that's his message on 13 December 2013, and then if
 17 we go on up again to page 1 {NHB00000645/1} of this
 18 string, it would appear that his messages are forwarded
 19 to Mr Meredith and Mr Mills. Can you see?

20 A. Yes.

21 Q. On 16 December:

22 "Gareth/Ivor,

23 "Issues from NHBC regarding K15, meeting request for
 24 new year?"

25 Then Mr Meredith responds on the same day, page 1,

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1 top email, and he says:
 2 "Further to your correspondence with our Technical
 3 Team we would like to invite you up to our head office
 4 in Herefordshire in the new year, alternatively we can
 5 come to you. Having read your comments we request that
 6 you hold off on advising your customers until we have
 7 had a chance to sit down and go through the body of
 8 evidence that leads to our alternative method of
 9 compliance. We appreciate the opportunity to talk you
 10 through this therefore the sooner we can have this
 11 discussion the better."

12 Now, do you know what body of evidence Mr Meredith
 13 was referring to at this stage?

14 A. Yes. At this stage, it will be the evidence that we've
 15 referred to throughout the day, so essentially the 8414
 16 from 2005 and small-scale testing, along with any -- if
 17 there were any formal assessments done at this point.

18 Q. Just after that reference to the body of evidence, he
 19 said "that leads to our alternative method of
 20 compliance". Can you help as to what that was referring
 21 to? What was Kingspan's alternative method of
 22 compliance at this stage?

23 A. Yes. Again, as we've referred to today, it would be
 24 using that body of evidence via an assessment to assess
 25 a particular construction.

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1 Q. I see. So this is before the BCA Technical Guidance
 2 Note 18 has come out in June 2014, this is
 3 December 2013.

4 A. Yes.

5 Q. I think you alluded to this earlier. It's your
 6 position, then, is it, that Kingspan was effectively
 7 doing its own extrapolations, desktops, based on that
 8 2005 test?

9 A. Not as a fire engineer, no. I mean, we were offering
 10 advice that was our opinion that people could
 11 incorporate into an assessment.

12 Q. And how did you think that that was compliant with the
 13 Building Regulations at the time?

14 A. Because we were advocating the use of the product in
 15 constructions which had similar performance to those
 16 which we were able to demonstrate compliance. So
 17 non-combustible.

18 Q. So you're making that assessment, that you think it
 19 complies with the Building Regulations because of the
 20 2005 test, effectively?

21 A. We believed it could comply with the
 22 Building Regulations, yes, on the basis that, having
 23 offered that advice previously, it had been assessed and
 24 incorporated into constructions.

25 Q. Mr Meredith invites the NHBC to Pembridge for a meeting.

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1 Did he do that with reference to you, his direct
 2 line manager at the time? Did you authorise him
 3 inviting the NHBC to that meeting?

4 A. It doesn't look like I was included. I'm guessing at
 5 this stage -- I believe Richard Bromwich was very
 6 au fait with, you know, the premise that we were
 7 operating under and would have had the authority to kick
 8 off that meeting.

9 If -- I'm not sure whether that meeting happened,
 10 but it should have included myself or another senior
 11 technical colleague as well.

12 Q. Were you made aware of this correspondence in November
 13 and December 2013?

14 A. I believe I would have been, yes.

15 Q. Yes.

16 Now, moving forward with the chronology, I want to
 17 return now to a matter we covered earlier: the
 18 BBA certificate for K15. I've asked you some questions
 19 about the first BBA certificate, which was dated
 20 27 October 2008, and we've also looked at the amended
 21 issue 1, which carried an issue date of April 2010.

22 Were you aware that a new amended version of the
 23 BBA certificate was issued by the BBA on
 24 17 December 2013?

25 A. I would have been aware, yes.

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1 Q. Yes.

2 If we look at your witness statement at
 3 paragraph 7.7 on page 30 {KIN00020821/30}, you tell us
 4 at 7.7 that prior to that you had been involved in
 5 a meeting with the BBA in around May 2013:

6 "This was an introductory meeting. There had been
 7 a change in personnel at the BBA: one of the individuals
 8 in a senior post had left and we were meeting their
 9 replacement."

10 Who was that? Who had left and who were you
 11 meeting?

12 A. I don't recall the name of the -- I believe it's
 13 a gentleman that left. He was replaced by a lady called
 14 Claire. I don't recall her surname.

15 Q. Right. Then you explain:

16 "From Kingspan's side, the driver behind this
 17 meeting was to establish a relationship with this new
 18 BBA representative and informally raise the issue of
 19 delays that Kingspan regularly experienced working with
 20 the BBA in the hope that they might have their eye on
 21 this going forwards and help the BBA to run more
 22 efficiently."

23 Is that right?

24 A. Yes.

25 Q. If we can go on, at paragraph 7.38, page 37 of your

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1 witness statement {KIN00020821/37}, if we look in the
 2 fourth line of that in the middle of the page, you say:
 3 "For the purposes of preparing this witness
 4 statement I have been shown an internal Kingspan email
 5 which I was forwarded by Ivor Meredith relating to an
 6 upcoming meeting on 1 May 2013 with the BBA to discuss
 7 amendments to this certificate. As far as I recall,
 8 I did not attend this meeting."

9 Now, I just want to be clear, is it your
 10 recollection that there were two meetings between
 11 Kingspan and the BBA in May 2013 but that you only
 12 attended one of them?

13 A. That's entirely possible. My only doubt is the meeting
 14 that I attended was definitely not to discuss amendments
 15 to a particular certificate; it was a meet-and-greet,
 16 basically, with the new CEO or whatever that position
 17 was.

18 I'm not sure whether ... it's possible Ivor could
 19 have been in attendance with me and had a spin-off
 20 meeting at the same time, I'm not sure.

21 Q. Okay, yes.

22 Now, if we can go to the December 2013 certificate
 23 now, which is at {BBA00000036}. Do you remember reading
 24 this certificate at the time? We can see that date of
 25 second issue in the bottom left-hand corner, 17 December

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1 2013. Do you remember reading this?

2 A. I wouldn't necessarily have read it cover to cover if
 3 there weren't significant changes in it, but if there
 4 were changes, yes, I would have read that.

5 Q. I see, yes.

6 If we look, "Key factors assessed", under "Behaviour
 7 in relation to fire", we can see it says there:

8 "The product will not contribute to the development
 9 stages of a fire or present a smoke or toxic hazard ..."

10 A. Yes.

11 Q. The sentence that had been included in the previous
 12 version about it's only been tested in one specific
 13 masonry construction, that's not there.

14 A. No.

15 Q. If we go on to page 5 {BBA00000036/5}, if we look at
 16 "Behaviour in relation to fire", that section has
 17 actually been moved now to section 8, right at the
 18 bottom of that page. The readers are told in 8.1 that
 19 the product is classified as class 0 as defined in the
 20 documents supporting the Building Regulations.

21 Now, just pausing there, before this certificate was
 22 issued, would you expect test results to BS 476-6 and 7
 23 showing the necessary results to get classification to
 24 class 0 to have been provided to the BBA?

25 A. Yes, whether they were provided in support of this

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1 particular re-issue or whether they were still on file
 2 and relevant.

3 Q. Who would have provided those test results, do you
 4 think, at this time? So we're now into 2013. There
 5 have been meetings in May.

6 A. I believe --

7 Q. This is a December certificate.

8 A. It may now have transferred to Joel Clarke.

9 Q. Right.

10 If we go to the top of page 6 {BBA00000036/6} and
 11 look at 8.2, it says there:

12 "When tested to BS 8414-1 ... the following specific
 13 cladding construction met the criteria as stated in BRE
 14 Report BR 135 ..."

15 Then we've got the construction.

16 A. Yes.

17 Q. Do you see there is a little footnote after "When
 18 tested", footnote number 1?

19 A. Yes.

20 Q. Then in smaller text below that construction
 21 description, it states:

22 "The test result relates only to this specific
 23 construction and a separate test would be required to
 24 establish the performance of any other combination of
 25 materials."

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1 A. Yes.

2 Q. Then section 8.3, it says:

3 "The product incorporated in the construction
 4 defined in section 8.2 can be used in buildings with a
 5 floor more than 18m above ground level."

6 A. Yes.

7 Q. "Fire breaks should be used at every floor level after
 8 the first floor."

9 Now, do you accept that this is the first time
 10 a BBA certificate for K15 made clear that the test data
 11 from the May 2005 test is only applicable to the
 12 specific tested system, and that further testing would
 13 be required for any other combination of materials?

14 A. Yes, it's clearer.

15 Q. Were you made aware of this significant change to the
 16 content of the "Behaviour in relation to fire" section
 17 of the BBA certificate?

18 A. Yes, I was aware it was evolving.

19 Q. Was that something that Kingspan had been attempting to
 20 avoid, something quite that clear and straightforward?

21 A. I don't believe that's the case. I believe this is a --
 22 probably a growing understanding within the BBA.

23 Q. Now, in terms of the information that was provided to
 24 the BBA, you have explained in your witness statement --
 25 for the transcript, this is at paragraph 7.16, page 31

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1 {KIN00020821/31} -- that you weren't made aware of all
 2 the technical data that was supplied to the BBA, but you
 3 say you might have been copied in to email traffic from
 4 time to time --
 5 A. Yes.
 6 Q. -- about that; is that right?
 7 A. It is.
 8 Q. But you say ultimate responsibility for this lay with
 9 Mr Meredith and Joel Clarke; is that right?
 10 A. At a day-to-day, yes.
 11 Q. What about contractual matters between the BBA and
 12 Kingspan? Were you aware of what the contractual
 13 requirements were and Kingspan's responsibilities were
 14 in terms of providing information to the BBA?
 15 A. I would have been at some point, yes. I couldn't recall
 16 it.
 17 Q. Were you aware that on 6 December 2013, Joel Clarke sent
 18 to the BBA a signed re-issue contracts document for
 19 various products, including for K15?
 20 A. I wouldn't have necessarily been copied in to that, no.
 21 Q. I see.
 22 Did you ever see the contract that had been signed
 23 between Kingspan and the BBA for K15 at this time?
 24 A. Not at this time. I don't believe so.
 25 Q. Were you made aware that Kingspan had to immediately

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1 notify the BBA of any change in the particulars supplied
 2 or of any new or additional information about the
 3 subject or its suitability for use?
 4 A. Yes.
 5 Q. So you had that general awareness?
 6 A. Yes.
 7 Q. And were you aware that you had to inform the BBA of any
 8 information about its physical or chemical composition
 9 and any change in the process of method of manufacture,
 10 or any change in the place of manufacture, processing or
 11 assembly?
 12 A. Yes, I believe that was subject to audit as well.
 13 Q. To your knowledge, did Kingspan ever tell the BBA that
 14 the K15 used in the test in 2005 was carried out on
 15 a different product to the one that was being
 16 manufactured and sold from September 2006 onwards?
 17 A. Not to my knowledge, no.
 18 MS GRANGE: Now, Mr Chairman, I'm just looking at the clock.
 19 SIR MARTIN MOORE-BICK: Yes.
 20 MS GRANGE: I'm about to start a separate topic about the
 21 testing that then takes place in 2014.
 22 SIR MARTIN MOORE-BICK: Might it be sensible to call a halt
 23 at that stage?
 24 MS GRANGE: Yes, and I can take stock overnight.
 25 SIR MARTIN MOORE-BICK: Yes.

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1 We're a little bit earlier than usual, but I don't
 2 suppose you will mind that.
 3 THE WITNESS: No, that's fine.
 4 SIR MARTIN MOORE-BICK: We will stop there for the day. I'm
 5 afraid I'm going to have to ask you to come back again
 6 for some more questions tomorrow.
 7 THE WITNESS: Of course, yes.
 8 SIR MARTIN MOORE-BICK: As before, I must ask you not to
 9 talk about your evidence or anything relating to it
 10 overnight.
 11 THE WITNESS: Yes.
 12 SIR MARTIN MOORE-BICK: But we will stop there. If you go
 13 with the usher, and we will resume at 10 o'clock
 14 tomorrow morning, please.
 15 THE WITNESS: Great, thank you.
 16 SIR MARTIN MOORE-BICK: Thank you very much.
 17 (Pause)
 18 Thank you. 10 o'clock tomorrow.
 19 MS GRANGE: Thank you. Thanks.
 20 SIR MARTIN MOORE-BICK: Thank you.
 21 (4.30 pm)
 22 (The hearing adjourned until 10 am
 23 on Thursday, 3 December 2020)
 24
 25

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