

OPUS 2

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Grenfell Tower Inquiry

Day 79

November 30, 2020

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1 Monday, 30 November 2020
 2 (10.00 am)
 3 SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to
 4 today's hearing. Today we're going to continue hearing
 5 evidence from Mr Philip Heath of Kingspan.
 6 So would you ask Mr Heath to come back in, please.
 7 Thank you.
 8 MR PHILIP HEATH (continued)
 9 SIR MARTIN MOORE-BICK: Good morning, Mr Heath.
 10 THE WITNESS: Good morning.
 11 SIR MARTIN MOORE-BICK: Right, all ready to carry on then?
 12 THE WITNESS: Thank you.
 13 SIR MARTIN MOORE-BICK: Thank you.
 14 Yes, Ms Grange.
 15 Questions from COUNSEL TO THE INQUIRY (continued)
 16 MS GRANGE: Yes, thank you.
 17 I just want to start with some follow-up questions
 18 following your evidence on Thursday afternoon.
 19 We talked about the Building Regulations and you
 20 explained your understanding of the Building Regulations
 21 and Approved Document B between 2001 and 2010.
 22 Can we agree on this: that the Building Regulations
 23 are there to ensure that health and safety is properly
 24 safeguarded?
 25 A. Yes.

1

1 Q. And that, when I say "properly safeguarded", that means
 2 protecting the lives and bodily integrity of anyone
 3 affected by, for example, insulation products?
 4 A. That's correct.
 5 Q. Did you understand that between 2001 and 2010?
 6 A. Yes, I did.
 7 Q. Did you take health and safety seriously when you worked
 8 as a technical manager for Kingspan?
 9 A. Yes, I did.
 10 Q. Did you take care to ensure the fire safety of your
 11 products was properly assessed and described to those
 12 outside Kingspan who were using those products?
 13 A. Yes, I believe so.
 14 Q. And did you expect your technical officers underneath
 15 you to do the same, to take care to ensure that they
 16 were properly described?
 17 A. I would have done, yes.
 18 Q. And did you take care to ensure that you engendered
 19 a culture of taking health and safety seriously while
 20 you were at Kingspan?
 21 A. Yes, I would.
 22 Q. Now, just one question on the transcript. If we can go
 23 back to the transcript, {Day78/191:18}, this is your
 24 evidence from Thursday afternoon. Picking it up in
 25 line 18 there, this was where I was asking you about the

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1 point at which it became clear that you couldn't
 2 extrapolate and use one test to say that the system
 3 could be used in other applications. So at 18 I say:
 4 "Question: Yes, I was going to come to this. So
 5 are you saying that it was suggested to you by the BRE
 6 that if you tested that kind of simplified system, let's
 7 call it that, then you would be able to extrapolate from
 8 that and use it in other applications?
 9 "Answer: At the time that was -- that was the
 10 inference from the BRE, yes.
 11 "Question: When you say 'at the time', what time
 12 period are you referring to? Are you referring to
 13 before the 2005 test was done in May 2005?
 14 "Answer: Yes, it would have been.
 15 "Question: Yes.
 16 "Did there come a time when you became aware that
 17 that wasn't the case; that in fact, either because the
 18 BRE told you it or because you'd worked it out
 19 elsewhere, you couldn't test K15 in a representative
 20 configuration and then extrapolate onto other
 21 applications?
 22 "Answer: Well, obviously we -- we took the advice
 23 or the suggestion from the BRE to go down that route of
 24 that particular assembly. I think that was also
 25 probably to give them -- or to give them some technical

3

1 data as well in relation to how that particular test
 2 performed.
 3 "With regards to when we realised, I think after the
 4 test was completed, I'm not sure of the period of time,
 5 but --
 6 "Question: Yes.
 7 "Answer: -- when the BRE, I believe, retracted
 8 their original suggestion.
 9 "Question: Yes. Mr Meredith described it as 'moved
 10 the goalposts'?
 11 "Answer: Right.
 12 "Question: Is that a fair characterisation of what
 13 had happened?
 14 "Answer: Well, that's -- that's certainly
 15 an analogy."
 16 Do you see that there?
 17 I just wanted to see if I could pin you down as
 18 exactly when it was that the BRE made it clear that you
 19 couldn't use that test in a representative way?
 20 A. It was certainly post-test.
 21 Q. Yes.
 22 A. With regards the period of time from the test to being
 23 given that notification, I have no recollection.
 24 Q. Okay.
 25 Can you help us as to how you came to be aware of

4

1 that from the BRE? Was that in a meeting or were you
 2 made aware of that by others at Kingspan? Can you help
 3 us?
 4 A. It would have been from others within Kingspan.
 5 Q. Do you think it was before or after the test report
 6 arrived in December 2005? We know the test was in
 7 May 2005. Was the point about it not being
 8 representative made clear to you before or after
 9 December 2005?
 10 A. I really can't recall.
 11 Q. Now, when we finished on Thursday, we were in the middle
 12 of discussing the fact there was no BR 135
 13 classification report for that 2005 8414 test at the
 14 time that you were technical manager.
 15 Can we look now at {KIN00020718}. This is
 16 a technical services report from January 2006, which is
 17 the month after that test report was issued in
 18 December 2005. This technical services report, you tell
 19 us in your statement, would have been produced by
 20 Ivor Meredith and you would have sent on to
 21 Mr Rochefort; is that right?
 22 A. That's right. All the team leaders or the senior people
 23 within the department would provide a report, and either
 24 Ivor or Andrew Pack would collate them, present it to
 25 me, and then I would present it to Dr Rochefort, yes.

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1 Q. If we go to page 2 {KIN00020718/2}, about halfway down
 2 under the heading "Projects", we can see the first
 3 bullet point there says this:
 4 "The K15 façade test report is here - BS 8414-1.
 5 Although very advantageous in its raw form. A further
 6 assessment is needed to gain full advantage."
 7 Do you see that there?
 8 A. Yes, I do.
 9 Q. What did you understand that to mean, "A further
 10 assessment is needed to gain full advantage"?
 11 A. Well, from recollection, it would be an assessment by
 12 Ivor in relation to the test report and the data that's
 13 within it.
 14 Q. I see, a written assessment?
 15 A. A written or verbal assessment by Ivor and the BRE to
 16 Ivor or -- because he was meeting with them regularly.
 17 Q. Sorry, just to be clear, you said Ivor and the BRE in
 18 that last answer.
 19 A. Yes, it would --
 20 Q. Who did you understand would be providing this
 21 assessment to gain full advantage?
 22 A. For me it would have been a combination of both Ivor and
 23 the BRE.
 24 Q. Yes. And, just to be clear, would you have expected to
 25 see that in writing?

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1 A. I'm not sure.
 2 Q. You're not sure?
 3 A. I'm not sure, no.
 4 Q. I see. Because I put it to you that is there no BR 135
 5 written assessment by anyone at this time, by Ivor or by
 6 the BRE.
 7 A. No.
 8 Q. We don't see that in a written form, do we?
 9 A. No, I'm not sure if, when I said a further assessment,
 10 that related to the BRE 195 -- sorry, I've forgotten the
 11 number of it, but I don't think that "further
 12 assessment" comment was related to the written
 13 assessment, the BR 135.
 14 Q. So what was that?
 15 A. I think it was just an assessment actually on the test
 16 report.
 17 Q. I see. Well, I suggest to you that actually a natural
 18 reading of that is that it is referring to the further
 19 assessment under BR 135 with the pass/fail criteria in
 20 it that is being referred to there; but you say that's
 21 not right?
 22 A. Yeah, I can't recall that far back, whether it's --
 23 I would have thought then it was an assessment, not
 24 a formal BR 135 report.
 25 Q. I see.

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1 Is it possible that the BRE did not provide a BR 135
 2 classification report at the time because those involved
 3 at Kingspan and the BRE considered this to be
 4 an indicative test and one which was not representative
 5 of a real-life external cladding system?
 6 A. No, not at all. I think we didn't -- Kingspan didn't
 7 believe it was important to actually have the BR 135.
 8 I think it was felt potentially it was optional at that
 9 time.
 10 Q. I see.
 11 A. We'd had the verbal assessment from the BRE that they
 12 felt it had passed that test, and I think at the time we
 13 felt it was sufficient.
 14 Q. I see.
 15 I want to look at some correspondence from 2015 now,
 16 which you wouldn't have seen at the time, but I want to
 17 ask you about whether the substance of it was
 18 communicated to you.
 19 If we go to {BRE00005123}, if we look at the bottom
 20 of page 1, this is an email request from Adam Heath of
 21 Kingspan to the BRE. It's Vida Gaubsaite at the BRE,
 22 and he basically says in the first line:
 23 "On a slightly related topic, it has come up in
 24 discussions recently that we never commissioned
 25 a classification report for our BS 8414-1 test ...

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1 completed in 2005."
 2 Do you see that there?
 3 A. Yes.
 4 Q. What happens is this request is sent on to Tony Baker of
 5 the BRE. You can see that from the email immediately
 6 above on 8 September, that's forwarded to Tony Baker.
 7 Then if we look at the top of page 1 at his response, he
 8 says this:
 9 "Hi Vida,
 10 "This is not a straight forward one; in theory we
 11 could issue a classification document, however I can
 12 understand why one was not issued for this test as it
 13 seems like an indicative type test.
 14 "BS 8414 and BR135 is a system test and
 15 classification system and from what I can see from this
 16 report, there is no external weather protection system
 17 included (e.g. render system or rain screen cladding).
 18 Whilst they have a cement board overcladding, I doubt
 19 this would be considered a complete system. Data such
 20 as this has been misrepresented in the market in the
 21 past."
 22 Do you see that there?
 23 A. Yes.
 24 Q. Now, what I want to ask you is whether that was
 25 communicated to you at the time, that at least one of

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1 the reasons why a BR 135 classification report wasn't
 2 obtained was because in fact it wasn't a complete
 3 overcladding system, it had no weather protection
 4 included on the outside of the board, whether render or
 5 rainscreen? Was that ever said to you by anybody?
 6 A. No, it wasn't.
 7 Q. I see.
 8 Were you aware that Kingspan positively asserted to
 9 customers that such an assessment was being or had been
 10 carried out, a BR 135 assessment, after the 2005 test?
 11 Were you aware of that?
 12 A. Sorry, could you just repeat that again?
 13 Q. Yes. Were you aware that Kingspan positively asserted
 14 to customers that such an assessment was being or had
 15 been carried out, that BR 135 assessment? Were you
 16 aware of that?
 17 A. Not as far as I'm aware.
 18 Q. I see.
 19 Now, I want to ask you now about the change in the
 20 technology of the foam. We briefly discussed last week
 21 the change from old tech to new tech K15, and I want to
 22 ask you in more detail now.
 23 If we look at your witness statement, first, on
 24 page 9, so {KIN00020709/9}, and I want to look at
 25 paragraph 3.4. You tell us in that paragraph that in or

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1 around 2003, Kingspan purchased a Dutch company called
 2 Marec based in Kesteren in the Netherlands, which also
 3 produced phenolic insulation using basically the same
 4 chemistry but different production technology than
 5 Kooltherm Limited, and you say:
 6 "Because the Kesteren phenolic technology allowed
 7 a faster production line speed and the production of
 8 greater thicknesses it was decided to transfer the
 9 production of all phenolic products to the Kesteren
 10 technology and to do this by modifying the existing
 11 production line at the Kingspan site in Pembridge."
 12 Do you see that there?
 13 A. Yes, I do.
 14 Q. You say there that it was "basically the same chemistry
 15 but different production technology". So that's in the
 16 second and third lines, really in the third line,
 17 "basically the same chemistry but different production
 18 technology".
 19 What do you mean by basically the same chemistry?
 20 A. Well, I'm not -- I'm obviously not an industrial
 21 chemist, but I believe the three major components
 22 remained the same. Yeah, I think it was basically --
 23 yeah, fundamentally the three major components of the
 24 foam remained the same. I think that's what I meant
 25 about "basically the same chemistry".

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1 Q. If we go over the page to 3.5 {KIN00020709/10}, you tell
 2 us in the second line, just picking it up in the second
 3 sentence:
 4 "To the best of my understanding the difference
 5 between 'old' or 'Barry' phenolic technology and 'new'
 6 or 'Kesteren' phenolic technology relates to the
 7 manufacturing technique and the processing of the same
 8 chemicals, namely, phenol resin, acid catalyst and
 9 blowing agent."
 10 Do you see that there?
 11 A. Yes, I do.
 12 Q. Now, if we can look at a spreadsheet now which was
 13 produced for the Inquiry by Kingspan, and it's exhibited
 14 to the third witness statement of Adrian Pargeter, it's
 15 at {KIN00022307}, and we'll need the native version. We
 16 also need the second tab, which is "Major changes". So
 17 this was provided to the Inquiry after we asked for
 18 details of all major changes to the K15 product since
 19 its inception.
 20 If we go down to row 7 on this spreadsheet, we see
 21 the change in the Kesteren technology. Do you see that
 22 there, at the bottom of the page? September 2006,
 23 "Kesteren Technology SOPs with perforated facing". Do
 24 you see that there?
 25 A. Yes, I do.

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1 Q. And SOPs stands for ...?
 2 A. Standard operating procedures.
 3 Q. Standard operating procedures, yes, thank you.
 4 That is a reference there to the Kesteren technology
 5 also introducing perforations to the foil facing; that's
 6 right, isn't it?
 7 A. That's correct, yes.
 8 Q. Whereas previously the K15 foil facings had been
 9 unperforated, hadn't they?
 10 A. They had.
 11 Q. That's a significant change, isn't it, to go from
 12 an unperforated to a perforated foil?
 13 A. It's a change; I wouldn't have thought it would have
 14 been a ... sorry, what was the word you used?
 15 Significant change.
 16 Q. Yes.
 17 A. Yes, I wouldn't have thought it was a significant change
 18 in the facing. The facing remained the same, but with
 19 obviously some perforations within it.
 20 Q. Did you ever think whether that might be a significant
 21 change from the point of view of its fire performance?
 22 A. I wouldn't, because the constituents or the build-up of
 23 the composite face remained the same. The contribution
 24 of the foil at the time would have been minimal. So
 25 I wouldn't have expected, and under advice from the

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1 technical processing team, I wouldn't have thought that
 2 was a significant change.
 3 Q. Did you ever ask for any tests to be carried out to
 4 check whether the change from an unperforated to
 5 a perforated foil facing made any difference in terms of
 6 its fire performance?
 7 A. I can't recall, but -- whether the -- because the
 8 processing team would have undertaken, if they felt it
 9 necessary, some small-scale tests, but I can't recall
 10 particularly asking for them.
 11 Q. I see.
 12 Now, at column I, if we can have column I on the
 13 page, this provides details of the steps taken to ensure
 14 the satisfactory product quality. Do you see that
 15 there? I want to read from the second paragraph down,
 16 beginning "The resin", have you got that there? Do you
 17 see that?
 18 A. Yes, I -- yes.
 19 Q. It says there:
 20 "The resin that was going to be used in the
 21 production of phenolic foam at Pembridge was trialled at
 22 Kesteren before the Pembridge machine was commissioned
 23 in order to approve the use of the resin. Kingspan
 24 worked closely with the resin supplier to duplicate the
 25 resin that was used at Kesteren."

14

1 Do you see that there?
 2 A. Yes, I do.
 3 Q. So does that mean that the transfer to the new
 4 technology also involved the use of a resin which had
 5 not previously been used in the Pembridge production
 6 line?
 7 A. Reading that, it would seem to be a variant.
 8 Q. So that was a change, wasn't it?
 9 A. That would be seen as a change in the chemical --
 10 different supplier, but obviously trying to resemble
 11 what they were producing at Kesteren, yes.
 12 Q. Yes, and my question to you is: that different resin is
 13 a different chemical, is it not?
 14 A. It is a different chemical; how different it is from
 15 a chemical composition, I wouldn't comment, but it is
 16 a different chemical.
 17 Q. Did you ever take steps to ascertain what the difference
 18 was in terms of its fire performance, the change in
 19 resin?
 20 A. I'm not sure if I knew that was the case at the time.
 21 Q. So are you saying you didn't know it was a different
 22 resin?
 23 A. I might not have known there was that variable at that
 24 time in ...
 25 Q. Let's look at column N of this spreadsheet. Various

15

1 details are given in column N of the names of the
 2 individuals who were involved in consideration,
 3 assessment or testing of each change. If I can read
 4 that paragraph, it says:
 5 "The PPDS ..."
 6 Just help us, what's a PPDS?
 7 A. I believe it's either a product plan development system.
 8 Q. Or a product process development system?
 9 A. Yes.
 10 Q. So that's a method of checking the significance of any
 11 change; would you agree?
 12 A. That was a system that Dr Rochefort introduced in the
 13 1990s, I believe, yes.
 14 Q. Yes, and it was a system for checking whether there had
 15 been any consequences to a change made; do you agree?
 16 A. Yes.
 17 Q. It says there:
 18 "The PPDS shows that Vincent Coppock (R&D ..."
 19 That would be research and development; yes?
 20 A. Yes.
 21 Q. "... (R&D Manager) was the Project Manager. His role
 22 was to work with the Dutch manufacturer to understand
 23 the Kesteren Technology and bring that technology to
 24 Pembridge, including arranging any trials. Malcolm
 25 Rochefort (Technical Director) updated the status of the

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1 PPDS confirming that fire testing was required for this
 2 project."
 3 Then it says this:
 4 "Philip Heath (Technical Services Manager) signed
 5 off the part of the PPDS to confirm that physical/fire
 6 tests and certification were completed ..."
 7 Do you see that there?
 8 A. Yes, I do.
 9 Q. Is that correct, that you did sign off the part of the
 10 PPDS to confirm that physical/fire tests and
 11 certification were completed?
 12 A. At that time, yes. Yes. I'm not sure of the list of
 13 fire tests that I signed off, but yes, I did sign that
 14 off.
 15 Q. No, I'm going to ask you about that.
 16 Before I ask you some more details about that,
 17 I just want to take you to something Mr Meredith told us
 18 during his evidence. If we can go to the transcript,
 19 {Day75/39:3}, towards the top of that page. This is
 20 where I'm showing Mr Meredith exactly the same
 21 spreadsheet I've just shown you.
 22 A. Right.
 23 Q. I ask him:
 24 "Question: Do you agree with what's said there in
 25 terms of who had responsibility for different aspects of

17

1 this, including that Philip Heath undertook the
 2 fire testing and certification for the new technology
 3 K15?
 4 "Answer: Yeah. This is the problem I had with this
 5 system, that although it's signed off, it doesn't
 6 necessarily mean that it's done, it means that it's in
 7 hand, I think.
 8 "Question: I see.
 9 "Answer: Because this -- the certification and the
 10 fire testing for these products, we were doing it for
 11 years after the changeover."
 12 Do you see that there?
 13 A. Yes, I do.
 14 Q. Would you agree with Mr Meredith that the fire testing
 15 and the certification work for the new product was being
 16 done for a period of years long after K15 had been sold
 17 in its new technology form?
 18 A. Yes. I mean, it is an ongoing development of the
 19 product. By 2006, you know, we could not have tested it
 20 with every single component that's involved in
 21 ventilated rainscreen. I think the sign-off was related
 22 fundamentally then to make it as a correlation to, as
 23 I say, old technology, so you'd be looking at
 24 small-scale tests potentially for reference, say, for
 25 CE marking.

18

1 Q. Can you help us to understand why it was that you were
 2 carrying on doing fire testing long after the 2006 start
 3 date for the new technology, the sale of new technology
 4 K15?
 5 A. Yes. I think, you know, like I say, we're only
 6 a component within a wall assembly, you know, we would
 7 get approached from other component or associated
 8 product producers to be involved in further testing.
 9 So, you know, there would be an initial test, but there
 10 would always be further ongoing tests. I mean, that's
 11 not just the case in ventilated rainscreen, but we also
 12 saw that in flat roofing applications as well, where
 13 other material manufacturers wanted to test their
 14 product with our product within a particular system. So
 15 it might be a new player or an existing player in the
 16 market.
 17 Q. But on what basis did you consider it was safe to be
 18 selling new technology K15 from a fire safety point of
 19 view?
 20 A. I think then it would have been based on the small-scale
 21 test to either a Euroclass or to the class 0 surface
 22 spread of flame, and then also the 2005 test.
 23 Q. So that's your evidence, is it, that you did some Euro
 24 tests and the national class 0 tests?
 25 A. It would have been -- from memory, it would have been

19

1 based on those. There might have been other small-scale
 2 tests that the technical process team had undertaken to
 3 help me understand that more as well.
 4 Q. When did you actually sign off on the PPDS saying that
 5 that testing was complete and, from your point of view,
 6 it was a safe product to be selling?
 7 A. I can't recall when I would have signed that off.
 8 Q. If we can go to Mr Rochefort's witness statement at this
 9 point, this is {KIN00008838/9}, paragraph 3.16. Here
 10 Mr Rochefort is dealing with the transfer to the new
 11 tech, and if I pick it up in the third line, he says:
 12 "I have seen a screenshot of the data that was
 13 captured through the PPDS process relating to the
 14 transfer of new technology for all phenolic products
 15 except Koolduct which shows that this process was signed
 16 off by me in January 2006 and ultimately signed off by
 17 the Operations Director on 29 September 2006. This
 18 process did include a section in relation to fire
 19 testing and certification which was signed off on
 20 21 February 2008 by Phil Heath which indicates to me
 21 that fire testing was one of the requirements to be
 22 completed, and signing off would indicate that this had
 23 been completed for all affected products."
 24 Do you see that there?
 25 A. Yes, I do.

20

1 Q. Can you explain why that fire testing and certification
2 part of the PPDS was signed off by you in February 2008,
3 when the evidence suggests that K15 had been sold in its
4 new form for two years prior to that point?

5 A. Yeah, no, I cannot explain that.

6 Q. Would you agree that what ought to have happened was
7 a comprehensive programme of fire testing, so that you
8 fully understood the fire safety consequences of that
9 new product before it was sold, and particularly before
10 it was sold and marketed for use on buildings over
11 18 metres?

12 A. On reflection, yes.

13 Q. Now, you have been able to confirm to us in your
14 statement that the test that was carried out in 2005,
15 the 8414 test, must have been on old technology K15.
16 For the record, that's at paragraph 3.11 of your
17 statement {KIN00020709/11}.

18 Now, moving on now, we don't need to go to it, but
19 at paragraph 3.17 of your statement on page 12
20 {KIN00020709/12}, you explain that there was an internal
21 group set up specifically to handle the transfer to the
22 new tech, which was called the Kesteren technology
23 transfer group. That's right, isn't it?

24 A. Yes, I believe so.

25 Q. As a member of that group, you explain that you were

21

1 confirming what further testing of new tech was required
2 prior to its adoption and arranging the appropriate
3 tests.

4 If we can look at some minutes of a meeting of that
5 Kesteren technology transfer group, this is
6 {KIN00022003}. You were not present at that meeting,
7 you have sent apologies. This is 16 September 2004. Do
8 you see that there?

9 A. Yes.

10 Q. At the bottom of page 2 {KIN00022003/2}, right at the
11 bottom of page 2, we see a heading, "Certification &
12 testing needed", and it says:

13 "Basically all current UK results will need to be
14 confirmed with Kesteren product. SBI [single burning
15 item] results are mostly already covered ... and should
16 be transferable. BS 476 part 6 & 7 class 'O' has been
17 achieved by some Kesteren products. Action: P Heath -
18 confirm outstanding tests needed and arrange testing."

19 Do you see that there?

20 A. Yes, I do.

21 Q. So, consistent with that spreadsheet that Kingspan
22 provided to us, it looks like you were responsible for
23 confirming what outstanding tests needed doing and
24 arranging those tests; is that right?

25 A. Sorry, could you just repeat the question? I was just

22

1 reading it again, sorry.

2 Q. Yes. Consistent with the spreadsheet we have had from
3 Kingspan, it looks like you were responsible for
4 confirming what outstanding tests were needed and
5 arranging those tests; is that right?

6 A. Looking at the action, that was the action.

7 Q. Yes.

8 Now, just going back to your witness statement, if
9 we could bring this up, on page 13 {KIN00020709/13} of
10 your witness statement, paragraph 3.19 on page 13, you
11 say this:

12 "As part of the change from old technology to new
13 technology K15, we were continuously undertaking product
14 development and fire testing. When new technology K15
15 was first adopted in 2006, my recollection is that
16 I understood that it had equivalent fire performance to
17 old technology K15 and I had signed off on this as part
18 of the Kesteren Technology Transfer project."

19 Do you see that there?

20 A. Yes, I do.

21 Q. Now, can you help us as to how you came to the
22 conclusion then that the products were equivalent in
23 fire performance to old technology? On what basis did
24 you reach that conclusion at that time?

25 A. I would have imagined that that would have been based on

23

1 the small-scale tests on Euroclass and potentially ...
2 yeah, the single burning item test, I would have based
3 it on that, and also the comments from the processing
4 team that it -- the technology that we were transferring
5 across wouldn't have had any particular difference to
6 the old technology.

7 Q. Is it your evidence that there were in fact further
8 tests that were actually carried out by Kingspan on the
9 new technology to ascertain its fire performance, as
10 part of that process?

11 A. New tests -- certainly the 8414 test would have been
12 a new test.

13 Q. Which 8414 test are you referring to there?

14 A. That would have been the 2005 test.

15 Q. Yes, but I think we're all agreed that that --

16 A. Sorry, that was on old technology, yeah, sorry.

17 Q. -- was on old technology.

18 So what tests were actually carried out, as far as
19 you can recall, under your watch to investigate and to
20 reach that conclusion, or disprove that conclusion?

21 A. I can't recall, because I know we were very much -- the
22 technical department -- our technical services
23 department were very much involved in the large-scale
24 testing, and the small-scale tests would have generally
25 been organised by the technical processing team. So

24

1 although it said in the minutes previously that I would
 2 arrange the tests, it wouldn't be -- as far as I can
 3 recall, it wouldn't be myself or my team who would
 4 arrange small-scale tests.
 5 Q. But you, presumably, as the person signing off the PPDS
 6 on fire performance, would expect to be informed about
 7 the results of those fire tests.
 8 A. I would, indeed I would, but I can't recall what those
 9 tests would be.
 10 Q. And would those have included tests to national class 0,
 11 BS 476-6 and 7 tests?
 12 A. It would, or we'd have correlated it from results of the
 13 Kesteren technology.
 14 Q. Let's look at a report now, {KIN00005292}, it's
 15 a half-yearly report for 2007. Do you see that there?
 16 A. Yes.
 17 Q. "Kingspan Technical Services Department, Half yearly
 18 report for 2007."
 19 A. Yes.
 20 Q. Underneath can you see it says, "Andrew Pack - Technical
 21 Services Manager"?
 22 A. Yes.
 23 Q. And then Ivor Meredith and Gareth Mills are listed on
 24 there. Do you see that there? That's your team, isn't
 25 it?

25

1 A. Andrew, Ivor -- yeah. Gareth -- yeah, the three direct
 2 lines were Andrew Pack, Ivor Meredith and Justin Davies.
 3 I believe Gareth reported in to Ivor, but yes.
 4 Q. If we look on page 5 {KIN00005292/5}, there is a heading
 5 "CE Marking, Certification and Fire Testing". Do you
 6 see that there?
 7 A. Yes.
 8 Q. If we go on to page 11 {KIN00005292/11}, I think what we
 9 see is that we can see from page 11 that this section
 10 appears to have been written by Ivor Meredith. Do you
 11 see that there?
 12 A. Yes.
 13 Q. So this section of the report is written by him.
 14 Can you remember reading that half-yearly report?
 15 A. I would have read it at the time.
 16 Q. Yes.
 17 If we can go to page 7 {KIN00005292/7} and look at
 18 the first paragraph there. If we can read that, it
 19 says:
 20 "We have had numerous attempts with the new
 21 technology to achieve the Class 0 requirement within the
 22 BS 476 Part 6 test. We are now looking at future
 23 modifications utilising fire retardants, however this
 24 will push us into a mandatory higher level of
 25 attestation for CE marking which for the moment may be

26

1 an issue for Phenolic ..."
 2 Do you see that there?
 3 "We are also looking at repeating some of the near
 4 misses at alternative laboratories just in case."
 5 So we know that BS 476-6 is a fire propagation test,
 6 and it's one of the tests you have to have done and
 7 certain results obtained to achieve national class 0.
 8 It appears from this, doesn't it, that the new
 9 technology was struggling to pass 476-6 by mid-2007,
 10 doesn't it?
 11 A. Yes, it does.
 12 Q. And that would suggest, wouldn't it, that it didn't have
 13 equivalent fire performance? Do you agree?
 14 A. The problem with 476-6, it's -- and any tests of this
 15 nature, they're very variable in the results that it
 16 provides, and I think one of the characteristics of
 17 phenolic and other insulants is that it can extinguish
 18 the flame source. So it is a very variable test.
 19 Q. But, Mr Heath, do you see the first lines there? It
 20 says:
 21 "We have had numerous attempts with the new
 22 technology ..."
 23 They hadn't tried it once; they have had numerous
 24 attempts and you're being told that it's struggling to
 25 achieve that 476-6 test. What I'm asking is: at the

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1 time, did it occur to you that it wasn't of equivalent
 2 fire performance?
 3 A. At the time, looking at that, it would appear that way,
 4 but the process team would be advising as to how they
 5 were going to continue and pursue this. I think there
 6 was a number of people looking at this whole project,
 7 but at the time we were clearly struggling in meeting
 8 that fire propagation test, yes.
 9 Q. Can you explain how you were continuing to sell K15 with
 10 class 0 as part of the marketing literature throughout
 11 this period?
 12 A. Well, I think, under advice from the processing team,
 13 you know, we were using, I think, some -- a fire test
 14 report that was based on the old Kesteren or based on
 15 the Marec/Kesteren technology that we're using at the
 16 time.
 17 Q. So are you saying for the national tests -- these are
 18 national, they're specific to the UK, not Holland -- you
 19 were trying to rely on reports that had come from
 20 Holland? Is that what you're saying?
 21 A. I think we were basically basing -- we had the class 0
 22 results from the Kesteren technology produced in
 23 Holland, yes.
 24 Q. Where are those reports? Can you remember actually
 25 seeing them?

28

1 A. I can't recall. I can't recall --
 2 Q. Is it speculation on your part that there were such
 3 reports, or do you actually recall seeing such reports
 4 from the Netherlands?
 5 A. I've no recollection. It's just obviously how we were
 6 informed by the processing team about the results, both
 7 the Kesteren team and the UK team. But I've no
 8 recollection of seeing those reports.
 9 Q. No.
 10 A. I mean, I see a lot of reports, so I've no recollection
 11 of one individual, no.
 12 SIR MARTIN MOORE-BICK: I'm a bit puzzled by this, Mr Heath,
 13 see if you can help me.
 14 Is it your recollection that tests in accordance
 15 with the British Standard -- this is BS 476-6 -- had
 16 been carried out in Holland on what we've called the new
 17 technology material?
 18 A. I was under the impression that the BS 476-6 and 7 tests
 19 had been done on the Kesteren-produced phenolic
 20 technology. Where the tests were undertaken, whether it
 21 was in the UK or a Dutch laboratory, I'm not sure, but
 22 I was under the impression that a class 0 had been
 23 achieved for that technology, although not produced in
 24 Pembridge.
 25 SIR MARTIN MOORE-BICK: I mean, that's slightly difficult to

29

1 reconcile with the first paragraph on this page, isn't
 2 it?
 3 A. Yes, I agree. Yes.
 4 MS GRANGE: If we go to page 11 {KIN00005292/11} of this
 5 report, within this same section from Mr Meredith,
 6 I want to look at the second bullet point down. Do you
 7 see there, he is summarising the main highs and the main
 8 lows? Second down, he says:
 9 "Successful promotion and persuasion of the market
 10 into accepting Phenolic as the best thing since sliced
 11 bread."
 12 Do you see that there?
 13 A. Yes, I do.
 14 Q. In the third bullet point:
 15 "The Approved Document B consultation and the
 16 introduction of the BS 8414 clauses therefore allowing
 17 us better access to the high rise market for K15 i.e.
 18 above 18metres."
 19 Do you see that there?
 20 A. Yes, I do.
 21 Q. So would you agree that what's being said in this report
 22 is one of the highs at this time is that you have
 23 successfully promoted and persuaded the market into
 24 accepting phenolic, including in the over-18-metre
 25 market?

30

1 A. Did this report also -- did it reference the 2005 test
 2 as well, or what ...
 3 Q. We will check that.
 4 A. Can you just remind me what date this --
 5 Q. We can check that, but I think we're agreed that --
 6 actually, I'm being told no, it does not, but the 2005
 7 was on old tech.
 8 A. Right.
 9 Q. Not new tech.
 10 A. Right.
 11 Q. So if you were using that, you shouldn't have been,
 12 should you?
 13 (Pause)
 14 A. Sorry, could you repeat the first question?
 15 Q. Yes, so what I was asking you is: do you accept from
 16 those two bullet points there that what's being said is
 17 that one of the highs at this time is you have
 18 successfully promoted and persuaded the market into
 19 accepting phenolic, including in the over-18-metre
 20 market?
 21 A. It would read that way, yes.
 22 Q. And yet if you look at the lows, do you see the second
 23 bullet point there, it says:
 24 "Struggling with verification of basic properties,
 25 i.e. low lambda and Class 0."

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1 Do you see that there?
 2 A. Yes, I do.
 3 Q. So in Mr Meredith's summary, he is also highlighting to
 4 you that you're struggling to verify the basic
 5 properties, including class 0.
 6 A. That's correct.
 7 Q. Are you saying that at this time you still understood
 8 the new tech to have equivalent fire performance to the
 9 old tech?
 10 A. Well, these reports, obviously they'd be passed up the
 11 line as well to ask for comments from my director as to
 12 the next direction this would go. But I clearly
 13 recognise that we are struggling in the verification of
 14 class 0 there, yes.
 15 Q. Yes, and it was your responsibility, as the person under
 16 the PPDS who had taken responsibility for the
 17 fire testing section, to sign off on the new tech,
 18 wasn't it?
 19 A. Correct, yes.
 20 Q. Do you accept that it was your responsibility to ensure
 21 that the BS 8414 test results you had had from 2005
 22 remained relevant if you were still marketing it for use
 23 above 18 metres?
 24 (Pause)
 25 A. Sorry, could I ask you to --

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1 Q. Do you accept that it was your responsibility to ensure
2 that the BS 8414 test results you had had from 2005
3 remained relevant, given you were still marketing it for
4 use above 18 metres?

5 A. Yes, I do.

6 Q. In 2006, new technology K15 had not been incorporated
7 into any test for BS 8414, had it?

8 A. That's correct.

9 Q. Just while we're in this document, just to pick up on
10 a slightly separate point, but if we look at the second
11 paragraph on page 9 {KIN00005292/9}, just before we
12 leave it, do you see in the middle of that page it says
13 this:

14 "Kingspan Technical were heavily involved in the
15 consultation of the English Fire Regulation Approved
16 Document B. Out of the 250 consultation submissions
17 Kingspan submitted 6 versions under various guises
18 (BRUFMA, EPFA, Company and individuals)."

19 Do you see that there?

20 A. Yes, I do.

21 Q. So it appears that Kingspan, under various guises, has
22 made submissions about the consultation that was carried
23 out to Approved Document B; is that right?

24 A. That's correct, through various of the trade
25 associations we were involved in at the time, yes, we

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1 should --

2 Q. Was that normal practice for Kingspan, to submit
3 numerous consultation responses under the guises of
4 other organisations, such as BRUFMA or the EPFA?

5 A. I think, casting my mind back, there were seats
6 available within the consultation through the various
7 trade associations, and I think through our marketing
8 department we gained -- we did accept the seats that
9 were available to us on those consultations.

10 Q. I see. Okay.

11 Now, moving forward with the chronology, I now want
12 to ask you about the tests in 2007 and 2008 on systems
13 incorporating K15.

14 It's right, isn't it, that Kingspan carried out four
15 tests to 8414-2 at the BRE in 2007 and 2008 on systems
16 incorporating new technology K15?

17 A. Certainly the K15 new technology was used on four tests.
18 I don't know whether all the tests were commissioned by
19 Kingspan. I think some of --

20 Q. I think two were in conjunction with Kingspan Offsite --

21 A. Right.

22 Q. -- the two in 2008, and two were with Sotech and Metsec.

23 A. Right, so -- yes, so they were -- two tests commissioned
24 by Sotech and I presume the other two tests were
25 commissioned by the Kingspan Offsite division at the

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1 time.

2 Q. I see, yes. And Kingspan Offsite, that's another
3 company owned by the Kingspan group; is that correct?

4 A. It was, yes. Yes. It was a business involved in
5 looking at prefabrication, both 2D and 3D modular
6 construction.

7 Q. It's right, isn't it, that none of those systems in
8 those four tests passed and could be classified to
9 BR 135, could they? They were all failures.

10 A. I believe they all failed, yes.

11 Q. Did that have any effect on your view that the fire
12 performance was equivalent?

13 A. It was difficult to say, because obviously they were
14 different -- completely different tests. The two Sotech
15 tests I believe were based on an aluminium cassette,
16 which performs considerably different from the
17 non-combustible test we under -- we carried out in 2005.
18 So, yes, they were completely different tests.

19 I think one of the other Offsite tests was
20 a combustible external cladding material with a render
21 on it, but certainly the two Sotech ones were aluminium,
22 and I believe there was Kingspan tested, but also
23 I think mineral wool was tested in that same series of
24 tests, which also failed.

25 Q. Do I take it from your answer that you didn't have any

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1 concerns about the performance of K15 based on the
2 evidence that was available about these tests?

3 A. I think at the time it was just a huge learning curve
4 with these large-scale tests. I think I've said in my
5 statement, you know, we were very new to this technology
6 and I think the BRE was very new to this technology, and
7 there was reticence from component suppliers to be
8 involved in these tests as well, because they were --
9 obviously they had a share of the market which didn't
10 require them to test.

11 Q. Sorry, just to answer my question: is it right that you
12 didn't have any concerns about the performance of the
13 K15 itself based on these tests?

14 A. I think, based on those tests, I think that's correct.
15 I think we were looking at this as a whole system test,
16 and that the system failed, not just the K15 in this
17 instance.

18 Q. I see. Well, let's keep going with the documents.

19 So, just to put this in context, by the end of 2005,
20 a separate British Standard test, BS 8414-2, had been
21 published. Is it right that by 2007, queries were being
22 raised with Kingspan by customers about the use of their
23 products in high-rise buildings with steel framed
24 systems?

25 A. I believe so, yes.

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1 Q. Yes.
 2 A. The documents I've seen, yes.
 3 Q. If we could go to {KIN00008847}, this is a document
 4 we're going to go through in some detail. This is
 5 an internal report written by Mr Meredith and dated
 6 7 January 2008. Do you see that there?
 7 A. Yes, I do, yes.
 8 Q. For now, I just want to look at the second page
 9 {KIN00008847/2} under the title "Project Stakeholders",
 10 and the second paragraph down. So there we can see he
 11 says:
 12 "This project was run jointly between Sotech, Metsec
 13 and Kingspan with all costs split 3 ways. If it had
 14 been successful Sotech would have included it in their
 15 LPCB approved redbook listing ..."
 16 Then in the next paragraph it says this:
 17 "This information is essential to Kingspan for all
 18 façade sales above 18[m] throughout the UK and Ireland.
 19 Not having evidence that our product performs onto
 20 a steel frame is causing job losses specifically in
 21 Scotland on a daily basis (however we are fighting the
 22 case for each project with the BS 8414-1 (onto masonry)
 23 test data performed in 2005."
 24 Do you see that there?
 25 A. I do, yes.

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1 Q. Did you read this report when it was prepared?
 2 A. I did. I agreed with Ivor that he would commission this
 3 report, because he had concerns, and I asked him to
 4 prepare this report as well. So it was an agreement
 5 between myself and Ivor, so he could actually progress
 6 it up the chain and be discussed at future meetings,
 7 yes.
 8 Q. You said you agreed that Ivor would prepare the report
 9 because he had concerns. Had he told you before you saw
 10 this written report that he had concerns about how K15
 11 itself was performing?
 12 A. Yes, and, you know, he came with this suggestion to
 13 write this report and I agreed he should.
 14 Q. Did you understand how Kingspan was fighting the case
 15 for each project with the 8414-1 test data performed in
 16 2005?
 17 A. I wasn't aware we were fighting for each project.
 18 I knew we were getting enquiries in relation to projects
 19 in general, yes.
 20 Q. Did you ever question how Kingspan could be doing that,
 21 given that you were now selling new technology K15?
 22 A. On reflection, yes.
 23 Q. Does that mean on reflection you didn't question that,
 24 or --
 25 A. No, on reflection I would question that, yes.

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1 Q. Yes, looking at it now?
 2 A. Yes.
 3 Q. Yes.
 4 Then if we go to page 5 {KIN00008847/5}, about
 5 halfway down that page, we can see in the third
 6 paragraph down, about halfway down that page, there's
 7 a paragraph beginning "However", do you see that there?
 8 He says:
 9 "However last year the second version of the BS 8414
 10 series was published. This raised the issue that the
 11 BS 8414-1 data that we were using did not cover steel
 12 frames. Although we continue to use the 2005 test some
 13 fire regulators were asking for evidence to support
 14 BS 8414-2."
 15 Do you see that there?
 16 A. Yes, I do.
 17 Q. Do you agree that it was well understood internally by
 18 Kingspan by this time that the 8414 test data, the
 19 part 1 test data, was not relevant to steel framed
 20 systems?
 21 A. I believe so, at that time, yes.
 22 Q. And yet would you agree that the strategy at this time
 23 was to continue to use that data to support compliance
 24 of the product for over 18 metres on steel framed
 25 systems nonetheless?

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1 A. I think we provided the test report to enquiries in
 2 relation to part 2 for them to understand what we had
 3 tested and, if necessary, for them to seek further
 4 advice.
 5 Q. I see.
 6 If we can go to an email at this point,
 7 {KIN00005243}, this is an email chain from
 8 November 2006. This is where Kingspan had sent the 2005
 9 8414 test report to Baris in order to support the use of
 10 K15 on this particular project.
 11 If we look at page 2 {KIN00005243/2}, there's
 12 an email sent by James Emery of Wintech to
 13 Bob Williamson of Carillion on 30 November at 12.05. Do
 14 you see that there?
 15 A. I do, yes.
 16 Q. If we pick it up, he says:
 17 "After further research the test report [and that's
 18 the 2005 test number] ... is not a valid for the system
 19 constructed by Baris at Buxton Street.
 20 "We believe it has been tested to the wrong part of
 21 BS 8414, it should have been tested to part 2 and not
 22 part 1. Our understanding of the test is that Part 1 is
 23 aimed for a masonry wall construction and part 2 is for
 24 lightweight steel structures etc."
 25 Do you see that there?

40

1 A. Yes.
 2 Q. Then it says:
 3 "The build up of components is not comparable
 4 between the test report and the Buxton Street
 5 construction. To utilise this test as a method of
 6 showing compliance to Building regulations the whole
 7 system needs to be tested i.e. all the components to be
 8 installed at Buxton Street."
 9 Do you see that there?
 10 A. Yes.
 11 Q. We can see from the top email in the chain
 12 {KIN00005243/1} that this was sent to you by Mr Meredith
 13 asking for guidance as to how to answer it. Do you see
 14 that there? He says to you, 1 December 2006:
 15 "Any guidance on this one ... Mr, Wintech does say he
 16 will assist by providing a test though ... this mess is
 17 all Promats fault ... I will copy you with the mail I'm
 18 sending Nigel Morrey as I may need it editing as I'm
 19 angry ..."
 20 Do you see that there?
 21 A. Yes, I do.
 22 Q. "... (we launched their product and they aint helping
 23 us !)."
 24 Would you agree this shows you were well aware that,
 25 when you tried to use the 2005 test data, some

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1 individuals on steel frame projects were questioning
 2 that?
 3 A. From this, yes, yes, I do.
 4 Q. Yes.
 5 Can we look at another email chain, {KIN00003701},
 6 this is from May 2008. At the bottom of the first page,
 7 Mr Meredith emails you on 19 May 2008. Do you see that
 8 at the bottom? He says there to you:
 9 "I'm having big issues with K15 Approval at the
 10 moment. The problems are relating to NHBC jobs. This
 11 causes a lot of concern.
 12 "Perhaps we can chat about it tomorrow."
 13 Do you see that there?
 14 A. Yes.
 15 Q. Then going up the chain, you say in the next email:
 16 "Ok, I'm in & out meetings in London all day, but
 17 will make contact."
 18 Do you see that there?
 19 A. Yes, I do.
 20 Q. It's about a development -- can you see it says
 21 Woolners Way, Stevenage? Do you see that there?
 22 A. Yes.
 23 Q. Then if we go up to the very top email in the chain,
 24 Mr Meredith says this:
 25 "This was with the email I'm worried about ... we

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1 simply do not have the information to support use of K15
 2 above 18metres with steel frames. I'm worried that the
 3 product will be removed from site and the ongoing effect
 4 of such an action I think getting this sorted should
 5 take priority over all other projects as its causing us
 6 to loose(sic) work."
 7 Do you see that there?
 8 A. Yes, I do.
 9 Q. So he seems to be concerned that the product's going to
 10 be removed from site because K15 cannot be used in steel
 11 frames above 18 metres; do you see that there?
 12 A. Yes.
 13 Q. He is absolutely clear with you at this point that there
 14 is no evidence to support the use of K15 above 18 metres
 15 with steel frames; would you agree?
 16 A. At this time, yes.
 17 Q. Can you recall what advice you gave about this use of
 18 K15 on this building?
 19 A. I can't recall what advice I gave to Ivor in relation to
 20 that, no.
 21 Q. Would you accept that Mr Meredith repeatedly raises in
 22 writing a lack of test evidence about the use of K15
 23 above 18 metres, including in steel framed systems?
 24 Would you agree that you had that repeatedly in writing
 25 from Mr Meredith?

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1 A. I would. I think the whole team understood the -- that
 2 situation, yes.
 3 Q. What did you do about those concerns?
 4 A. They would have been discussed at the technical
 5 lamination meetings as to how we would move that
 6 forward.
 7 Q. But what did you do about it? He is concerned that you
 8 can't support the use of K15 on high-rise buildings,
 9 including steel framed systems. You're his manager,
 10 you're manager of the technical department; what did you
 11 do about it?
 12 A. All I did at the time was pass it up to my superiors to
 13 determine if there was -- from a product development,
 14 how we could move that forward.
 15 Q. That's your evidence, is it, that you passed these
 16 concerns up to your superiors? Did you do that?
 17 A. I also discussed with Ivor, you know, how we could --
 18 how we could best move this issue on. You know,
 19 it's ... yeah, with reflection, we may have handled this
 20 different, yes.
 21 Q. Yes.
 22 If we could look at paragraph 7.58 of your witness
 23 statement on page 54 {KIN00020709/54}, and I want to ask
 24 you about the last few lines there, the last four lines.
 25 You say:

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1 "In this period, we did not have a BS 8414-2 test to
2 support this type of system and we were only able to
3 provide evidence of the 2005 BS 8414 Test and suggest
4 that in steel framed systems, a non-combustible
5 substrate should be used to simulate the system tested
6 in 2005."

7 Do you see that there?

8 A. Yes, I do.

9 Q. How did you determine that it was appropriate to suggest
10 to customers to simulate the 2005 test rather than
11 replicate it by using a non-combustible substrate even
12 within a steel framed system?

13 A. Sorry, what ... is there a period of time I'm
14 referencing this at all, or not?

15 Q. Yes. I'm going to take you to some technical literature
16 in May 2009 to just show you this. Maybe we should do
17 that now. This is {KIN00002607}, this is a technical
18 bulletin dated May 2009. Do you see that there? We can
19 see the date in the top right-hand corner, "Insulation
20 for Ventilated Rainscreen Cladding Systems".

21 A. Yes.

22 Q. Can you help us as to who would have drafted this and
23 signed off on this document?

24 A. At the time there was a number of people involved in
25 this technical bulletin within the department.

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1 I believe there was representatives from technical
2 services, Andrew Pack, Ivor, myself, business
3 development, and marketing.

4 Q. If we go to page 2 {KIN00002607/2}, the bulletin says at
5 the top left -hand side, under "Steps to Compliance":

6 "This Technical Bulletin details the route to
7 compliance with Approved Document B2 to the
8 Building Regulations for insulated rainscreen cladding
9 systems fixed to new and existing steel framed or
10 masonry walls."

11 Do you see that there?

12 A. Yes, I do.

13 Q. If you go on to page 3 {KIN00002607/3}, and look in the
14 bottom left, we can see it says there:

15 "For buildings of 18 metres or more in height, as
16 Kingspan Kooltherm K15 ... meets the BR 135 performance
17 criteria when tested to BS 8414-1:2002 with horizontal
18 cavity barriers ... Kingspan Kooltherm K15 ... complies
19 with the requirements of Approved Document B2 [and this
20 is the point] if installed on the cold side of
21 a non-combustible substrate i.e. calcium silicate board
22 or masonry and the maximum vertical distance between
23 cavity barriers is 3.5 metres."

24 Do you see that there?

25 A. Yes, I do.

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1 Q. The literature therefore said that any non-combustible
2 substrate can be used; that's right, isn't it?

3 A. The literature at the time said that?

4 Q. Yes.

5 A. Okay, right.

6 Q. Do you agree, looking at that? It says "if installed on
7 the cold side of a non-combustible substrate".

8 A. On this datasheet, yes, on the technical bulletin, yes.

9 Q. It absolutely does not make clear, does it, that
10 Kingspan's test data is based only on masonry substrate?

11 A. It doesn't. It doesn't. But I know where the -- that
12 reference came from to -- with regards to the calcium
13 silicate board and masonry.

14 Q. Can you help us, where did that come from?

15 A. I think it was -- it came from the SBI, the single
16 burning item test, which classed a non-combustible
17 substrate as calcium silicate, masonry and steel.

18 Q. But Kingspan hadn't tested that solution, had it? It
19 hadn't tested a steel frame with then a calcium silicate
20 board which then the K15 is attached to in a rainscreen
21 system. It hadn't done that, had it?

22 A. We hadn't, no.

23 Q. No. And you said it was based on SBI testing, but
24 that's European classification testing; it's much
25 smaller scale than 8414.

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1 A. It is, it's just the narrative surrounding
2 non-combustible substrate, I think, was ...

3 Q. Was that checked at any stage with a fire engineer to
4 say whether they would agree that that was appropriate
5 for Kingspan to be suggesting?

6 A. No, it wasn't.

7 Q. Did you ever at any stage consider the risks of
8 recommending an untested solution in this way?

9 A. I believe we did, we understood the situation. With
10 hindsight, we would have provided a different document,
11 I believe.

12 Q. If we go on in your witness statement now, and I want to
13 look at paragraph 3.25 on page 16 {KIN00020709/16}.
14 I want to pick it up in the fourth line down. You're
15 talking about the tests in 2007 and 2008, and you say
16 this in the second line:

17 "... I considered the failure of these tests to be
18 indicative of the tested system being unable to meet the
19 performance criteria of BR 135 rather than any
20 particular component being unsuitable, including the new
21 technology K15."

22 Do you see that there?

23 A. Yes, I do.

24 Q. Can you help us as to when you reached that conclusion,
25 that you considered that failure to be indicative of the

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1 tested system rather than telling you anything about any
 2 particular component, including the new tech K15? When
 3 did you reach that considered conclusion?
 4 A. I believe all these large-scale -- they are system
 5 tests, and, you know, I don't believe the results are
 6 allied to one particular component within that -- within
 7 a system. You know, failure can be, from what I can
 8 gather, on a number of levels, and this test was very
 9 complex in that regard.
 10 SIR MARTIN MOORE-BICK: So, Mr Heath, does it follow, then,
 11 that you can't use the system test to indicate the
 12 suitability of any individual component?
 13 A. It's difficult to say, because you might -- you know,
 14 one material might pass in that test and it may not.
 15 There are so many variables with regards to cavity
 16 widths and things like that, so it is ...
 17 SIR MARTIN MOORE-BICK: But isn't that the whole point of
 18 a system test? If it's a system test, you can say
 19 whether the system as a whole passed or failed.
 20 A. Yes.
 21 SIR MARTIN MOORE-BICK: But if the system passed, you can't
 22 extrapolate from that to say that any individual
 23 component of the system is or is not good, because if
 24 you put it together with other components in another
 25 system, you might get a different result.

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1 A. That's correct, yes, yes.
 2 MS GRANGE: Yes.
 3 SIR MARTIN MOORE-BICK: Thank you.
 4 MS GRANGE: Did you consider that these failed tests to
 5 part 2 of 8414 impacted at all on K15's suitability for
 6 use on steel framed systems?
 7 A. Sorry, could you repeat the question again? Sorry.
 8 Q. Did you consider that these failed tests to part 2 of
 9 8414 impacted at all on K15's suitability for use on
 10 steel framed systems?
 11 A. Steel framed systems with those particular external
 12 systems on.
 13 Q. So are you saying that --
 14 A. Within that --
 15 Q. -- you did think that there would be systems using
 16 a steel framed system that K15 would be suitable on
 17 after these tests?
 18 A. Potentially there would have been systems available that
 19 we would have passed, and I think we have subsequently
 20 passed some 8414-2 tests.
 21 Q. What tests are you referring to there?
 22 A. I don't know particularly, but I believe after my tenure
 23 there were some part 2 tests completed and passed.
 24 Q. After the Grenfell Tower fire, is that --
 25 A. No, after my tenure as technical manager.

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1 Q. I see. But you couldn't have known about those at the
 2 time, could you?
 3 A. No, but --
 4 Q. By definition.
 5 A. By definition, but, you know, the testing of -- the two
 6 Sotech tests, you know, it was obviously -- those
 7 systems -- it was obviously difficult to pass those
 8 systems, both with our products and other products,
 9 I believe.
 10 Q. Yes.
 11 Let's go back to Mr Meredith's report and I want to
 12 look at some other sections of it. {KIN00008847}. We
 13 don't need to go to it, but you confirm in your
 14 statement that you did receive this report from
 15 Mr Meredith, and you sent it to Mr Rochefort on
 16 29 January 2008.
 17 Let's move to page 2 {KIN00008847/2}, now, towards
 18 the bottom of the page, under the heading "Result". If
 19 we could look there, it says this:
 20 "By 17 minutes the top fire barrier had breached and
 21 the raging inferno moved up to the top thermocouples and
 22 pushed them past 600 degrees thus failing the simple
 23 criteria of BR 135."
 24 Do you see that there?
 25 A. Yes, I do.

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1 Q. And at the bottom of that page he notes:
 2 "BS 8414-2 does not have a pass or fail it needs to
 3 be cross referenced with BR 135."
 4 Then over the page {KIN00008847/3}, we see at the
 5 top of the page he says this:
 6 "The Phenolic was burning on its own steam and the
 7 BRE had to extinguish the test early because it was
 8 endangering setting fire to the laboratory."
 9 Do you see that there?
 10 A. Yes, I do.
 11 Q. Then there is a heading, "Why did it fail", and then he
 12 says this:
 13 "The new technology Phenolic is very different in
 14 a fire situation to the previous technology which has
 15 passed several similar tests. The old technology would
 16 turn into a light ash and fall away leaving to (sic)
 17 substance to feed the fire."
 18 Do you see that there?
 19 A. Yes, I do.
 20 Q. When you read this report, do you agree that it was
 21 clear from what Mr Meredith was saying that he
 22 considered the fire performance of the K15 itself to be
 23 a matter of significant concern?
 24 A. I do, yes.
 25 Q. And these observations he's made here, the ones on this

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1 page, "The Phenolic was burning on its own steam", "The
2 new technology Phenolic is very different ", he is
3 highlighting those separate from any concerns about the
4 system, isn't he?
5 A. He is, yes.
6 Q. Did you agree with those concerns when you read this?
7 A. I agreed based on the evidence that Ivor was providing,
8 though I'd not obviously witnessed this test, but
9 I could only go on what Ivor was telling me.
10 Q. Yes, and he was your expert in this area by this time,
11 wasn't he?
12 A. He had the expertise, yes.
13 Q. Yes.
14 A. On the large-scale tests, yes.
15 Q. Did you have any basis on which to disagree with him
16 about what he was reporting about the fire performance
17 of the new technology K15?
18 A. I didn't at that time, no.
19 Q. No.
20 Can we just look at the transcript, {Day75/157:7}.
21 This is in Mr Meredith's evidence. I want to pick up at
22 line 7. I ask him there at line 7:
23 "Question: We can see that you're clearly concerned
24 about the way the phenolic burned. Did Philip Heath and
25 Malcolm Rochefort share your concern about the fire

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1 performance of the new technology K15 at this time?
2 "Answer: Like I say, I think this might have been
3 the time that I was criticised for not being very
4 positive about our products -- or, sorry, the Kingspan
5 products.
6 "Question: So does it follow that you didn't think
7 your managers were concerned, or were concerned in the
8 same way as you?
9 "Answer: I don't think they were concerned in the
10 same way as me, no."
11 Do you see that there?
12 A. Yes, I do.
13 Q. Do you agree with what he says there, that you weren't
14 as concerned as he was at the time?
15 A. I disagree with that. I've -- I have to say, I've never
16 criticised Ivor's work or his ... "commitment" is the
17 wrong word, but I've never criticised Ivor for not being
18 positive at all.
19 Q. So you don't ever remember a time when you -- what about
20 when you passed down feedback from someone above you?
21 He talks in another place about a director being
22 negative about him. Did you ever pass on comments to
23 him that others in the company higher up than you
24 thought he was being too negative?
25 A. I would have done, yes, yes, I would have passed those

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1 comments on, but he --
2 Q. And do you remember passing those comments on?
3 A. I don't remember passing those comments on, but I would
4 have done, because I was -- as I say, Ivor -- I had no
5 criticisms of Ivor's work, as -- sorry, I had no
6 criticisms of Ivor's work at all, but I did pass on
7 comments from other people to him, yes. But I was fully
8 supportive of him.
9 Q. Yes. So you say, "I did pass on comments from other
10 people to him"; were they negative comments to him about
11 not being positive enough about K15 at this time?
12 A. There was some criticism in that regard, yes, and
13 that's -- you know, that's why I passed it on, to show
14 that I was fully supporting him.
15 Q. Yes.
16 A. Although there was this criticism, I was fully
17 supporting him.
18 Q. Yes. So even though you yourself weren't saying it, you
19 were passing on comments from your superiors to Ivor to
20 that effect?
21 A. I was, and I was supporting him in relation to that as
22 well.
23 Q. If we carry on, picking it up at line 20, he said:
24 "Answer: I felt a tremendous responsibility for
25 this, because the buck stopped with the technical

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1 department to make sure that it was suitable for the
2 marketplace and we had to do the testing.
3 "Question: After you wrote this, and obviously this
4 report was delivered to the technical team, did you feel
5 at the time that your concerns about the fire
6 performance of new technology K15 were being taken
7 seriously by Philip Heath and Malcolm Rochefort?
8 "Answer: I felt like I wasn't ever heard, actually,
9 when it came to issues like this."
10 Now, do you agree, looking at it now -- and I'll
11 show you some more parts of this report in a moment --
12 that you didn't take Ivor's concerns seriously enough
13 when he raised them with you?
14 A. I personally did, yes.
15 Q. You did take them seriously?
16 A. I did, yeah, I had a lot of respect for Ivor.
17 Q. When you say you took them seriously, what did you do
18 about them?
19 A. These would have been conveyed to Malcolm, and I expect
20 higher up as well. So at the technical meetings,
21 you know, Ivor would present his monthly report, and I'd
22 fully support him in what he was saying.
23 Q. What was the result when you communicated those concerns
24 to those higher up than you?
25 A. I can't recall.

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1 Q. You can't recall?

2 A. I can't recall.

3 Q. Do you actually have a clear recollection of saying to

4 your superiors, "Ivor's really concerned about this fire

5 performance, I'm passing that on to you because this is

6 really important"? Do you ever remember saying that?

7 A. I would have done at the technical meeting, when he

8 provided his monthly report or gone over the aspects of

9 it, I would have fully supported him, yes.

10 Q. I see.

11 Going back to his report, it's at {KIN00008847}, did

12 you study the photographs within the report and contrast

13 those with the photographs of the 2005 test?

14 A. I can't recall whether I would have done or not.

15 Q. Can we go to {KIN00003693}. This is an email chain

16 between the BRE and Mr Meredith around this time.

17 If I go to the bottom half of page 1, there we see

18 Mr Meredith's email to Sarah Colwell and Phil Clark on

19 9 January. Now, you're not copied in to this exchange,

20 but in the first line he says this:

21 "Further to yesterday's viewing of the carnage could

22 you please send the DVD to the address below ASAP. [As]

23 you can imagine there are many senior persons in

24 [Kingspan] wishing to view it."

25 Do you see that there?

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1 A. Yes, I do.

2 Q. Did you yourself watch the recording of that

3 December 2007 test?

4 A. I can't recall whether I did. I would imagine I did,

5 but I've no recollection of it.

6 Q. I see.

7 Then in the second paragraph, he says, picking it up

8 in the second sentence:

9 "Having cross referenced with previous tests it

10 would seem there was more fire spread from the insulant

11 (however please don't quote me on that) and the cavity

12 barrier may have failed slightly. Your 'off the record'

13 and 'on the record' comments may prove helpful."

14 Do you see that there?

15 A. Yes, I do.

16 Q. And you were aware at the time, weren't you, that

17 Ivor Meredith was telling you that there was more

18 fire spread from the insulant itself?

19 A. Yes, I was aware of his comments, yes.

20 Q. Then in the final paragraph of that email, if we look at

21 the very final paragraph of it, beginning "As we are

22 getting", right at the bottom of that page, it says

23 this:

24 "As we are getting some pressure from a certain

25 manufacturer questioning the performance of our product

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1 I need to be confident that the BRE would not write it

2 was the fault of the flame spread on the insulant. From

3 our [discussions] I understand the official statement

4 would(sic) 'system failure'. I will not quote you on

5 this I just need to be confident when we say the

6 material has the ability to pass however whether it does

7 or not can boil down to the system."

8 Do you remember at the time that it was agreed with

9 the BRE that there would be an official statement that

10 this was system failure, and that they wouldn't say

11 anything further about the concerns that they and

12 Mr Meredith had about the performance of the K15?

13 A. I wouldn't at the time, no.

14 Q. You wouldn't have been aware of that at the time?

15 A. I wouldn't, no.

16 Q. Let's go back to Mr Meredith's internal report,

17 {KIN00008847/3}. Under "Why did it fail", we've read

18 the first paragraph. If we look at the next paragraph,

19 it says this:

20 "The Phenolic burnt very ferociously and gave the

21 top cavity barrier a serious hammering"

22 Do you see that there?

23 A. I don't.

24 Q. In the second paragraph. You have got "Why did it

25 fail" --

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1 A. Yes.

2 Q. -- as the heading. We have read the first paragraph.

3 I was reading then the next line in the second

4 paragraph:

5 "The Phenolic burnt very ferociously and gave the

6 top cavity barrier a serious hammering"

7 Do you see that there?

8 A. I do, yes.

9 Q. Then on page 3, about halfway down, we can see it says:

10 "Perforations in the Phenolic foil facers have

11 caused a reduction in the Euroclass when tested in the

12 SBI. Loss of the perforations may help?"

13 Do you see that there?

14 A. Yes, I do.

15 Q. So would you agree that you're also being told in this

16 report that the perforations in the foil have caused

17 a reduction in the Euroclass? Do you see that?

18 A. I do. If I can go back to that other paragraph, though,

19 about, "The Phenolic burnt ferociously".

20 Q. Yes.

21 A. I'm just looking at the second line:

22 "It did however hold out and there was a slim chance

23 that it may have held out long enough for the crib to

24 start burning down and then this test would have been

25 successful."

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1 So this is one of the issues of the test, you know,
 2 sometimes it can look worse than it actually is and
 3 still gain a pass. So I just thought I'd mention that.
 4 Q. Let's look at the bottom of page 3, and we'll do this
 5 and then we'll break. There is a section at the bottom
 6 of page 3 that's headed "Comments from the BRE". Do you
 7 see that there?
 8 A. Yes, I do.
 9 Q. It says this:
 10 "The official line:- It's a system failure, no
 11 individual component can be solely held responsible for
 12 the failure."
 13 Then we see this:
 14 "However (unofficial comments) it was apparent that
 15 the insulation was fully involved in the test. Surface
 16 spread of flame was apparent and the core continued to
 17 burn when the flame source had been extinguished. They
 18 stated they did not remember the product performing like
 19 that last time."
 20 Do you see that there?
 21 A. I do, yes.
 22 Q. Do you remember reading those unofficial comments from
 23 the BRE at that time?
 24 A. With hindsight, yes, I would have read those, but
 25 I cannot recall, but I would have read them, yes.

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1 Q. So it's not just Ivor telling you that it's performing
 2 very differently, the K15 itself; it's also the BRE
 3 telling you that, isn't it?
 4 A. In that narrative, yes, but again, you know, whether the
 5 system and the aluminium contributed to the extra
 6 burning of the phenolic, I couldn't comment. But, yes,
 7 I read what they're saying.
 8 Q. Did you read this report and continue to think that they
 9 had equivalent fire performance, the old tech and the
 10 new tech?
 11 A. Again, it's a system test and correlating the two, so as
 12 I sit here now, it's difficult to say what my opinion
 13 was at the time.
 14 MS GRANGE: I see. Well, we'll ask some more questions
 15 about that after the break.
 16 SIR MARTIN MOORE-BICK: Is that a good moment?
 17 MS GRANGE: Yes.
 18 SIR MARTIN MOORE-BICK: We will have a short break now,
 19 Mr Heath.
 20 THE WITNESS: Okay.
 21 SIR MARTIN MOORE-BICK: We will come back at 11.40, please,
 22 and as I think I said to you on Thursday, while you're
 23 out of the room, please don't talk to anyone about your
 24 evidence or anything relating to it.
 25 THE WITNESS: Right, okay. Thank you.

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1 SIR MARTIN MOORE-BICK: Would you like to go with the usher,
 2 please. Thank you.
 3 (Pause)
 4 Thank you, 11.40, please.
 5 (11.23 am)
 6 (A short break)
 7 (11.40 am)
 8 SIR MARTIN MOORE-BICK: Right, Mr Heath, ready to carry on?
 9 THE WITNESS: Yes.
 10 SIR MARTIN MOORE-BICK: Thank you very much.
 11 Yes, Ms Grange.
 12 MS GRANGE: Yes, thank you, Mr Heath.
 13 This morning you mentioned that you did escalate
 14 Mr Meredith's concerns up to those more senior to you at
 15 Kingspan. Can you recall who it was that you discussed
 16 his concerns with at Kingspan?
 17 A. It would be my direct line manager, Dr Rochefort, and he
 18 would have seen all the correspondence that Ivor had
 19 written, and I would assume Ivor -- Dr Rochefort then
 20 would have also passed that on or reported that at the
 21 divisional board meetings.
 22 Q. You made that assumption, did you? You didn't know
 23 that?
 24 A. I didn't know that, but that was, you know, generally
 25 the protocol. But certainly Malcolm was aware of all

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1 the written correspondence and discussions I'd had with
 2 him in relation to Ivor's concerns, yes.
 3 Q. Okay.
 4 Just on these Sotech/Metsec tests in 2007/2008, can
 5 we look at paragraph 3.22 of your witness statement now
 6 on page 14 {KIN00020709/14}. I want to pick it up in
 7 the fifth line down. You say:
 8 "Having been shown contemporaneous documents in
 9 preparation of this witness statement, it appears that
 10 in January 2008, Metsec and Sotech tested the same
 11 system using mineral fibre insulation in place of K15
 12 and that this also failed to meet the BR 135 criteria."
 13 Do you see that there?
 14 A. I do, yes.
 15 Q. Are you including that in your witness statement because
 16 it was a factor for you in determining the suitability
 17 of K15, that the same system tested had been tested with
 18 Rockwool and had failed?
 19 A. I think I put that into the statement because I think it
 20 just shows that the performance of the aluminium in that
 21 particular 8414 test obviously had impinged greatly on
 22 the overall performance of the system.
 23 Q. But was that actually a factor in your thinking at the
 24 time, thinking back to it?
 25 A. I can't recall.

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1 Q. You can't recall?

2 A. No.

3 Q. Now, going back to Mr Meredith's report again at

4 {KIN00008847/3}, just over halfway down there's

5 a paragraph beginning:

6 "In all honesty ..."

7 Can you see, just over halfway, in the middle of

8 that page, he says this:

9 "In all honesty from what I have seen the way the

10 phenolic burned is of the most concern. Therefore we

11 need to add a fire retardant. Which could also help us

12 get Class 0."

13 Do you see that there?

14 A. Yes, I do.

15 Q. So, just to be clear, you were aware at the time, were

16 you, that Mr Meredith thought this was "of the most

17 concern", how the phenolic had burned?

18 A. From reading that, yes.

19 Q. Did you give any consideration at this time as to

20 whether it was appropriate for Kingspan to keep selling

21 the K15 product, including for jobs that it knew were

22 over 18 metres?

23 A. Sorry, could you repeat that? Sorry, I was just looking

24 back at --

25 Q. Did you give any consideration at this time as to

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1 whether it was appropriate for Kingspan to keep selling

2 the K15 product, including for jobs that it knew to be

3 over 18 metres?

4 A. I don't recall at the time having that opinion. I may

5 have done, I can't recall at the time.

6 Q. Can you help us as to why you didn't say, "Stop all

7 sales of this product, particularly sales over

8 18 metres, we need to do some further investigations"?

9 Why did you not do that?

10 A. I can't recollect why I wouldn't have said that.

11 I don't know why I wouldn't have said that.

12 Q. Did it ever occur to you at the time that that might be

13 something you ought to give consideration to? You're

14 seeing your product perform much worse in fire testing.

15 This is about life safety. Did that not ever occur to

16 you?

17 A. I think we were, again, just looking at that particular

18 system test and coming back to the system, you know. We

19 probably wondered was it just that system that it was

20 failing on at that time, did that impinge on it, so

21 there was a number of things that we were considering at

22 the time as a collective, really.

23 Q. I see.

24 If we go back again to your witness statement,

25 page 14 {KIN00020709/14}, paragraph 3.21, you say this:

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1 "I shared Ivor's internal report with

2 Malcolm Rochefort on 29 January 2008 and suggested that

3 we discuss it at the Technical meeting scheduled for the

4 following day."

5 Then you say this:

6 "It appears from documents shown to [me] in

7 preparation of this witness statement that, as a result

8 of this test, further comparative calorimetry studies

9 were undertaken to understand the difference in fire

10 performance between old technology and new technology

11 K15 ..."

12 Do you see that there?

13 A. Yes, I do.

14 Q. If we can now go to the monthly activity report prepared

15 by Mr Meredith for April 2008. This is {KIN00003698}.

16 What we see in the third bullet point is Mr Meredith

17 reporting back on those indicative calorimeter tests,

18 and he says this:

19 "Indicative Calorimeter tests on new K15 vs old have

20 shown a quicker time to ignition and double the heat

21 output for the newer product thus confirming initial

22 suspicions in respect of Reaction to Fire."

23 Do you see that there?

24 A. Yes, I do.

25 Q. Were those the studies that you were referring to in

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1 your witness statement to understand the difference

2 between old tech and new tech?

3 A. I can't recall whether that was what I was referring to.

4 Q. At that stage, April 2008, now that you have got that

5 data back from those indicative calorimeter tests, you

6 know it's got a quicker time to ignition and double the

7 heat output, can you explain to us why at that stage you

8 don't consider whether or not you need to be withdrawing

9 K15, certainly from the over-18-metre market?

10 A. I think obviously those tests were commissioned by

11 Dr Rochefort, so, you know, I would, at that point, be

12 waiting to see what the comments were from the technical

13 processing team. But on reflection, in relation to your

14 question, yes.

15 Q. Yes, you ought to have been considering withdrawing K15

16 for the over-18-metre market at this point, shouldn't

17 you?

18 A. On reflection, yes, but obviously he was reporting --

19 his third bullet point here is reporting back on his

20 action that he was given from the lamination meeting.

21 Q. In your witness statement, if we can go back to that

22 paragraph 3.23 on page 15 {KIN00020709/15}, picking it

23 up in the fourth line, you're discussing this very

24 passage in that report from April 2008, and you say:

25 "This information would have been included in the

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1 wider Technical Services Report which I shared with
2 Malcolm Rochefort as Technical Director and these
3 indicative results would have been discussed at the
4 monthly Technical meetings as we continued to undertake
5 further small scale product development testing
6 including potentially with versions of K15 with an added
7 fire retardant."

8 Do you see that there?

9 A. Yes, I do, yes.

10 Q. So it's obviously been discussed at the monthly
11 technical meetings. Were there ever any discussions at
12 those meetings about withdrawing K15, particularly from
13 the above-18-metre market, given its markedly different
14 performance in fire?

15 A. Not that I can recall, no.

16 Q. Can you help us as to why not? Why do we never see any
17 consideration of that being given at this time?

18 A. I don't know.

19 Q. Did you yourself ever wonder whether it was appropriate
20 to still sell the new technology K15 product for use
21 over 18 metres once you had this information?

22 A. I would imagine at that time, in 2008, I would have had
23 some concerns about it, yes.

24 Q. You imagine you would; do you not have any recollection
25 of having concerns? This would be quite an important

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1 moment, wouldn't it, for you to realise that the product
2 you're selling performs this way in fire?

3 A. It would. We would -- you know, we would always
4 question. Like I say, it was 12 years ago. You know,
5 I would be looking for a steer as well from Dr Rochefort
6 as to how we would pursue this or how we would move
7 forward, so ...

8 Q. Is the truth that in fact all you were focused on at
9 that time was desperately trying to obtain some other
10 evidence that K15 could be considered appropriate, so
11 that you could maintain the sales you were already
12 achieving in that market?

13 A. I don't believe we were desperate. We certainly wanted
14 to be in that market. I don't believe we were desperate
15 to be in that market, but we certainly wanted to be in
16 that market.

17 Q. You were already in that market, weren't you?

18 A. We were, yes.

19 Q. There are lots of examples of K15 being used on tall
20 buildings before this time.

21 A. On all -- yeah, and below 18 metres as well, yes.

22 Q. Yes.

23 I'm going to ask the question again: in truth,
24 weren't you focused at that time on sales and not
25 focused at all on health and safety?

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1 A. I certainly wasn't focused on sales. My role was
2 managing the technical department, the advisory service
3 and the large-scale tests. My role wasn't
4 sales-orientated.

5 Q. To what extent do you think you were appropriately
6 focused on life safety at this time?

7 A. I think we always -- we were always focused on
8 life safety. Would we do things differently on
9 reflection? I would say yes, we would.

10 Q. Yes.

11 Can we go now to the technical services department
12 monthly report for July 2008. This is at
13 {KIN00008848/2}, under the heading "Projects". So here
14 we can see it says:

15 "A sample of the OP90 (fire retardant) Phenolic has
16 been sent to the BRE for indicative [calorimetry]
17 testing. We hope to find a lower calorific output and
18 slower time to ignition."

19 Do you see that there?

20 A. Yes, I do.

21 Q. Then it says this:

22 "A product with these characteristics is required to
23 maintain our position in the high rise façade market
24 (above 18metres)."

25 Do you see that there?

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1 A. Yes, I do.

2 Q. So do you agree there was no question but that you were
3 fully present in that market and seeking to maintain
4 Kingspan's position in it?

5 A. Yes, I do agree, yes.

6 Q. Then it says below it:

7 "A BS 8414-2 test is being planned for August if the
8 OP90 product shows beneficial characteristics."

9 So that's the fire retardant product, isn't it, the
10 changed product?

11 A. I don't know. I can't recollect what was different with
12 the OP90 development product.

13 Q. Then we can see this, it says:

14 "A definite increase has been seen in TS
15 enquiries ..."

16 Does that stand for technical service enquiries?

17 A. It does, yes.

18 Q. "... questioning phenolic's suitability for use above
19 18metres."

20 Do you see that there?

21 A. Yes, I do.

22 Q. So would you agree that you were also aware at this time
23 that people were beginning to question how this phenolic
24 insulation could be used above 18 metres?

25 A. Reading that, yes. Yes. And I was aware of more

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1 enquiries in relation to rainscreen cladding per se,
 2 yes.
 3 Q. And yet it's your evidence, is it, that you simply
 4 didn't give any consideration to whether or not K15
 5 should be in that market at all?
 6 A. Above 18 metres, with reflection, at that time. Below
 7 18 metres, you know, there was obviously opportunities
 8 for phenolic and other combustible insulation materials.
 9 Q. When you say, "Above 18 metres, with reflection, at that
 10 time", are you saying that, at the time, you simply
 11 didn't give any consideration to whether or not K15
 12 should be in that market?
 13 A. We would have given reflection -- at that time, we would
 14 have considered it, but like I say, with reflection, and
 15 based on all the knowledge we're receiving now, then,
 16 you know, you would maybe have had a different opinion,
 17 yes.
 18 Q. Yes.
 19 I now want to ask you about the Kingspan Offsite
 20 testing. We know that two tests were carried out with
 21 Kingspan Offsite at the BRE to 8414-2 on systems which
 22 incorporated new tech K15. Those were on 9 April and
 23 6 June 2008. Do you remember those?
 24 A. I don't, and, you know, when I wrote my statement, I had
 25 no recollection of them, but obviously with

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1 contemporaneous documents, I have been made aware of it
 2 now, yes.
 3 Q. Do you remember Kingspan Offsite raising concerns about
 4 how the K15 performed in those tests?
 5 A. Within the system they tested, yes.
 6 Q. And do you remember dealing with how to answer those
 7 concerns?
 8 A. Yes.
 9 Q. Those tests in April and June 2008, they were both
 10 failures, weren't they? They couldn't be classified to
 11 BR 135.
 12 A. Yes, that's my understanding.
 13 Q. If we can go now to {KIN00003698}, this is a report from
 14 Ivor Meredith, 4 April 2008, and we can see in the first
 15 bullet point he reports this:
 16 "BS 8414-2 Offsite test with Rendered Versapanel
 17 Rainscreen, 210mm of K15 failed the BS 8414-2 test."
 18 Do you see that there?
 19 A. I do, yes.
 20 Q. I want to ask you about some correspondence in the days
 21 after the second Offsite test that was on 6 June 2008.
 22 Can we go to {KIN00003704} and look at the bottom of
 23 the first page. This is an email on 9 June 2008 to you,
 24 Malcolm Rochefort, Vincent Coppock -- sorry, you're
 25 copied in here. It's to Malcolm Rochefort,

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1 Vincent Coppock, and then you're copied with
 2 Gwyn Davies:
 3 "Malcolm, Vincent,
 4 "The question of K15's bad fire performance is no
 5 longer just an internal one. It would seem Offsite had
 6 a very dramatic test failure."
 7 Do you see that there?
 8 A. Yes, I do.
 9 Q. Then he says:
 10 "Therefore I need to know how soon I can have
 11 samples of the OP90 Phenolic for [business] critical R&D
 12 [research and development]."
 13 Then if we can go over the page {KIN00003704/2}, he
 14 says:
 15 "Once I have reviewed the information I will provide
 16 a more comprehensive report later however the attached
 17 picture shows the most recent K15 test performed by
 18 Offsite and K15 burning under its own steam 10 minutes
 19 after the test was put out.
 20 "Offsite are gravely concerned that we are selling
 21 something that doesn't do what we say it does.
 22 "To validate the new product from a fire point of
 23 view I would need samples of the following sizes."
 24 So he wants various samples, including to do
 25 a part 6 test. Do you see that, two lines down?

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1 A. Yes.
 2 Q. Do you remember receiving this email from Mr Meredith?
 3 A. I don't remember seeing -- receiving it, but obviously
 4 I was copied on it, so I would have read it at the time.
 5 Q. Do you remember being aware that Kingspan Offsite were
 6 "gravely concerned that we are selling something that
 7 doesn't do what we say it does"?
 8 A. Yeah, I believe they were -- "annoyed" is probably the
 9 wrong word, but they certainly had -- they were
 10 concerned that it had failed that particular test, yes.
 11 But the test -- I think the Versapanel is classed as
 12 a combustible cladding material in front of it as well,
 13 so if that played a part in it. But, yes, I was aware
 14 of their concerns.
 15 Q. You say that it had a combustible panel and so that
 16 might play a part of it, but just look at the top part
 17 of this email. Offsite were reporting that K15 was
 18 burning under its own steam ten minutes after the test
 19 was put out. It is entirely consistent with what
 20 Mr Meredith had reported and what the BRE had reported
 21 about the two previous 8414 tests, isn't it?
 22 A. That's correct, yes.
 23 Q. Did you take these concerns seriously, the concerns of
 24 Kingspan Offsite, as communicated to you by Mr Meredith?
 25 A. By copy of this, yes, I would be concerned, and

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1 obviously it was sent to Malcolm and Vince, so it would
 2 be interesting to see how they responded to Ivor's
 3 concerns.
 4 Q. Are you saying because they're copied in, somehow you
 5 didn't need to worry about it, because your bosses are
 6 copied in there? What about from your own position as
 7 technical manager? Were you not concerned yourself that
 8 you were selling something that doesn't do what you say
 9 it does?
 10 A. I was obviously concerned that it was failing these
 11 8414 tests. Obviously I was concerned, yes.
 12 Q. But it wasn't just failing 8414 tests, was it? You
 13 couldn't get it to pass the BS 476-6 test. That's why
 14 you're trying to validate a further new product in this
 15 email. Would you agree?
 16 A. I would agree, yes.
 17 Q. Yes.
 18 Now, moving to the top email in this chain
 19 {KIN00003704/1}, you respond, and you say this, on
 20 9 June 2008:
 21 "Ivor, I think it is important we see the fire test
 22 report from Off-Site whilst also looking at the façade
 23 assembly, cavity [widths] and materials adopted within
 24 the test rig.
 25 "Any response to Off-Site on this matter should be

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1 run past myself before it is sent to the outside world.
 2 As you know, Off-Site are extremely reactionary."
 3 Do you see that there?
 4 A. I do see that, yes.
 5 Q. "With regards their comment 'that we are selling
 6 something that doesn't do what we say it does' what
 7 statements are they referring to?"
 8 Do you see?
 9 Now, first of all, what did you mean by Offsite can
 10 be extremely reactionary? "As you know, Off-Site are
 11 extremely reactionary", why did you say that?
 12 A. They were on a critical path to launching various
 13 systems, Offsite 2D systems into the marketplace, and
 14 obviously any failures would disrupt that critical path,
 15 and by default, yeah, they would express their concerns
 16 that their -- they were being pushed back on their
 17 market-readiness, yeah.
 18 Q. But it wouldn't be reactionary to express concerns about
 19 fire safety, would it?
 20 A. It wouldn't, no, no, but as -- I think overall the term
 21 they were -- they're reactionary because they were on
 22 such a critical path. But, no, they were right to have
 23 concerns.
 24 Q. When you asked Mr Meredith, "What statements are they
 25 referring to?", about that comment that "we are selling

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1 something that doesn't do what we say it does", did you
 2 genuinely not know what Mr Meredith was referring to?
 3 A. No, I would have known what -- the comments they were
 4 making, but whether they were -- they had specific --
 5 their comments were related to actually specifics that
 6 we were saying, I think that's what I was trying to ask.
 7 Q. You were aware, weren't you, at this time, that your
 8 marketing material was promoting K15 including for use
 9 over 18 metres?
 10 A. Yes, I was.
 11 Q. Yes.
 12 In the meantime, Mr Rochefort's responded to
 13 Mr Meredith already. If you look at the email below
 14 this one, he says this:
 15 "Please expedite this trial.
 16 "Ivor, if you're confident that old process will
 17 pass the test, we may have no choice but to provide old
 18 process K15 for Off site until the FR issue is sorted
 19 out."
 20 Just taking that sentence, you're on the next part
 21 of the string, so presumably you saw this email. Can
 22 you help us as to what you understood him to mean, "we
 23 may have no choice but to provide old process K15 for
 24 Off site until the FR issue is sorted out"? What did
 25 you think Mr Rochefort was suggesting there?

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1 A. He was obviously suggesting that if we could go back to
 2 the old process K15, we might have an increased chance
 3 of passing the particular Offsite fire test.
 4 Q. Did you take him as suggesting that you could provide
 5 some old process K15 for the purpose of some further
 6 Offsite testing?
 7 A. Sorry, could you just repeat that again, sorry?
 8 Q. Yes. Did you take him as suggesting that you could
 9 provide some old process K15 for the purpose of some
 10 further Offsite testing?
 11 A. Yes, whether that was material we had available or we
 12 could switch the technology, because at that time we did
 13 have the capability to switch the technology, because
 14 some products were still being made, I believe, under
 15 the old technology. So whether it was material we had
 16 available or whether he could produce further product
 17 just for Kingspan Offsite going forward -- I presume not
 18 just for the test, but going forward as a bespoke
 19 product.
 20 Q. I see. What, go back to producing old tech K15 for what
 21 use?
 22 A. Reading that now, I would assume he's thinking of
 23 producing old technology K15, both to test and supply to
 24 Offsite going forward.
 25 SIR MARTIN MOORE-BICK: Can you just explain, you were

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1 providing K15 to Offsite for their manufacturing
 2 purposes, is that what was going on?
 3 A. Yes, they were, for all intents and purposes, an OEM,
 4 and they were -- outside engineered manufacturer. So
 5 basically we were just a component within their system.
 6 SIR MARTIN MOORE-BICK: Right.
 7 A. So we manufactured K15 and they would then assemble it
 8 in their 2D or 3D wall or building assembly.
 9 SIR MARTIN MOORE-BICK: Thank you, yes.
 10 MS GRANGE: In the next sentence there at the end of that
 11 email, he says:
 12 "Gwyn, I know this is a nightmare for processing,
 13 but we can't carry on providing something that we know
 14 fails a fire test."
 15 Do you see that there?
 16 A. Yes, I do.
 17 Q. Specifically to whom did you think he meant the product
 18 could not continue to be provided?
 19 A. I think "we" is Kingspan.
 20 Q. Yes, but providing to who? To Kingspan Offsite or to
 21 someone else?
 22 A. It could be read in a number of ways, that. It could be
 23 to Offsite or in general.
 24 Q. Can you help us as to how you understood it at the time?
 25 A. I can't recall how I would have understood it at the

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1 time. I would assume at the time maybe I would have
 2 inferred Offsite is what he was referring to.
 3 Q. Right.
 4 If we can go now to {KIN00020913/4}. This is
 5 another email chain from that same chain in June 2008,
 6 and on page 4 there's an email from Ivor Meredith,
 7 9 June 2008 at 18.01. Do you see that there? It's to
 8 Gwyn Davies, Malcolm Rochefort, Vincent Coppock, and you
 9 are copied. He says this:
 10 "Your(sic) correct the old process I recently tested
 11 unfortunately also failed. However the New process
 12 would not have had a chance.
 13 "Whereas old process will self extinguish, new
 14 process has proven itself in a vertical situation to
 15 continue to burn when the flame source is removed. We
 16 do have a paper trail that shows considerably better
 17 performance with old tech however this cannot be applied
 18 to steel frame facade situations which is 80% of the
 19 market.
 20 "I don't (currently) suggest we revert to old
 21 technology yet just give top priority to getting the
 22 OP90 trialed."
 23 Do you see that there?
 24 A. Yes, I do.
 25 Q. Were you yourself aware of the paper trail showing

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1 considerably better performance for old technology K15
 2 than the new technology K15 at this time?
 3 A. I would have done at the time.
 4 Q. Yes. It's the paper trail we've just been looking at
 5 this morning, isn't it?
 6 A. I believe it is, yes.
 7 Q. Yes.
 8 Do you agree that this shows that, in June 2008,
 9 Kingspan did not have a K15 product which it considered
 10 capable of passing a large-scale fire test when tested
 11 as part of a cladding system?
 12 A. We were certainly struggling on some aspects of K15 on
 13 the 8414 tests we had undertaken, yes, I agree.
 14 Q. Going back in this thread, the email culminates, if we
 15 look at pages 3 to 4, there is a plan then made to
 16 conduct testing on the research and development
 17 fire retardant K15 with a different resin. That's if
 18 you look at the 10 June 2008 at 11.08.
 19 A. 12 June, is it?
 20 Q. 10 June 2008, sorry. If we go to the bottom of page 3.
 21 A. I'm ...
 22 Q. Do you see there, 10 June 2008 and at 11.08, and if we
 23 go over the page to page 4, Vincent Coppock says:
 24 "As the passing BS476 Part 6 low heat release data
 25 achieved with OP920 present in R330UF foam has only been

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1 with black Lamtec foil at 20mm thickness, any further
 2 insight into heat release by calorimetric technique
 3 compared to standard new technology foam without OP920
 4 would be of benefit.
 5 "How big a sample do you need? I have OP920
 6 modified phenolic foam ... that is undergoing lambda
 7 ageing."
 8 So Vincent is suggesting a different form of K15
 9 that could be tested in the future; do you agree?
 10 (Pause)
 11 A. Without the OP920, is that what you're referring to?
 12 Q. Yes, what I'm suggesting is that the thrust of this
 13 email is he's discussing what products you could test in
 14 the future, including with this OP920, which is --
 15 A. Yes --
 16 Q. -- the fire retardant.
 17 A. Yes, with and without the OP920, yes.
 18 Q. Yes. And the R330UF, can you help us as to what that
 19 is?
 20 A. I've no idea, I'm afraid, no.
 21 Q. If you go to the top of page 1 {KIN00020913/1}, on
 22 13 June at 2.19, after there has been some discussion
 23 about what you have got in stock and what you can kind
 24 of develop for testing, you say:
 25 "Thanks Vince, this does seem the best route in the

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1 short term.”
 2 So do you agree that you approved this approach of
 3 doing some more research and development and trying to
 4 find another formulation of K15 that might pass
 5 a large-scale fire test?
 6 A. I did agree with the route forward. With regards to the
 7 formulations, I couldn't pass a comment, but the concept
 8 he put forward did seem at the time the best route
 9 forward in the short term.
 10 Q. Yes.
 11 Now, Mr Meredith, we've seen, has raised concerns
 12 repeatedly about the fire performance of the new
 13 technology K15. We've seen that in a number of these
 14 documents.
 15 Would you agree that in fact what the emails show is
 16 that you dismissed his concerns about the fire
 17 performance of the current product, and just pressed on
 18 with trying to find a different product that might pass
 19 in the future?
 20 A. I did have concerns, it would be wrong to say I didn't
 21 have concerns, what Ivor was telling me. I think it
 22 was -- the discussion to move forward and continue with,
 23 you know, development of products was made as
 24 a collective, not by an individual.
 25 Q. Let's look at some more emails linked to the

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1 Kingspan Offsite episode.
 2 Do you remember that, in 2008, you,
 3 Malcolm Rochefort and Mr Meredith continued to be
 4 involved in dealing with queries from Kingspan Offsite
 5 about the tests that they'd done to 8414-2?
 6 (Pause)
 7 Do you remember that?
 8 A. Oh, sorry, I was waiting -- I do recall it, only through
 9 contemporaneous documents.
 10 Q. Yes. Let's go to {KIN00020917/2} at the bottom,
 11 an email from Mark Stevens of Kingspan Offsite, and in
 12 this email he asks a series of questions about the fire
 13 performance of K15. His email is dated July 2008 and he
 14 says:
 15 "I am concerned with the lack of response with
 16 regard to the performance of the K15 product on the
 17 BS 8414 tests that we have completed. I have a further
 18 four tests booked as you are aware, and at this time
 19 I am unsure of the way forward in terms of detailing the
 20 samples to pass the test. We have the samples built
 21 here at Sherburn, insulated with material from the same
 22 batch as the previous failed tests [and he asks these
 23 questions]: is the material appropriate to use on the
 24 future tests? Is the reason for the failure specific to
 25 a batch of K15, to the current formulation of K15 or to

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1 the details that we used? Is it normal for K15 to
 2 continue to burn for in excess of 30 minutes from the
 3 removal of the ignition source?"
 4 Do you see that there?
 5 A. Yes, I do.
 6 Q. So he's raising, would you agree, some pretty pertinent
 7 questions relevant to the testing that they've been
 8 doing on K15 under 8414 tests?
 9 A. Yes.
 10 Q. And he's saying in the first lines that he's concerned
 11 with the lack of response; do you see that there?
 12 A. I do, yes.
 13 Q. Can you remember why he was saying that to you and
 14 Ivor Meredith in this email? Had there been a lack of
 15 response?
 16 A. I can't recall.
 17 Q. Did you have any evidence at that time to suggest that
 18 the failure was specific to a particular batch of K15?
 19 A. I can't recall at the time. I think Malcolm may have
 20 been involved in these discussions as well at some
 21 point. But I can't recall at the minute whether I had
 22 any concerns about a particular batch.
 23 Q. There were problems, though, with the current
 24 formulation of K15 as he's enquiring, were there not?
 25 We've just been looking at document after document which

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1 sets out those problems. Would you agree?
 2 A. It does, but it's not related to -- those were not
 3 related, as far as I'm aware, to a faulty production
 4 batch.
 5 Q. No, I agree. What I'm suggesting to you is that you
 6 were aware by this time, July 2008, that there were
 7 problems more generally with new technology K15.
 8 A. Yes, I agree.
 9 Q. And you were also aware of previous large-scale tests in
 10 2007 and 2008 where the K15 had done the same thing, it
 11 had continued to burn after the removal of the ignition
 12 source; do you agree?
 13 A. Yes, I do agree.
 14 Q. And you respond to Mark Stevens, this is the next email
 15 up on the same page, on 2 July at 16.52, and you say
 16 this:
 17 "Mark,
 18 "As you are aware, there are always inconsistencies
 19 in relation to fire tests, both large and small scale.
 20 You have seen the results achieved by Kingspan
 21 Insulation with regards K15, both with a 'generic'
 22 cladding and without cladding and the result were
 23 similar, with the temperature of the thermocouples being
 24 within the guidelines of the standard."
 25 Pausing there, it's right, isn't it, that those

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1 tests you're referring to with a generic cladding and
 2 without cladding, you must be referring to the 2005
 3 tests; yes? The 2005 test to 8414.
 4 A. Yes, I would have been.
 5 Q. Yes. Then you say:
 6 "The burn pattern of the K15 was also identical in
 7 each instance with no continuation of the burning seen
 8 in your test."
 9 Do you see that there?
 10 A. Yes, I do.
 11 Q. "As with all companies within the Group we are always
 12 striving to improve the performance of our products.
 13 With this in mind we are currently waiting confirmation
 14 of the availability of formulation additive that we
 15 believe may improve the fire performance of K15. Our
 16 resin suppliers are working to understand the viscosity
 17 increase that may be seen with this addition to the
 18 formulation which may or may not affect our processing."
 19 Then you say that's standard practice in resin
 20 manufacture. Then you go on:
 21 "In short we are waiting confirmation of timescales,
 22 but would envisage a month to 2 months before we see raw
 23 material to trial on the line. We would then undertake
 24 small scale tests to confirm our expectations. With
 25 regards the reason for failure, this is difficult for us

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1 to determine, especially having already had some success
 2 with BS8414, I would suggest only the BRE technicians
 3 can confirm if it was due to details that were adopted.
 4 In consideration of the above, together with the
 5 official report/observations you may decide to wait
 6 until this modified product is available or continue
 7 with your planned testing programme."
 8 Do you see that there?
 9 A. Yes, I do.
 10 Q. Why didn't you tell him that the tests you're referring
 11 to there from 2005 were on a different product?
 12 A. I don't know why I wouldn't have advised him that.
 13 Q. Why didn't you tell him that when tests had been carried
 14 out in 2007 and 2008 on the new tech K15, it performed
 15 very differently to how it had performed in 2005?
 16 A. I think with those two tests there's a lot of
 17 confidentiality involved, so it is difficult to actually
 18 discuss those with a third party.
 19 Q. But this is about fire safety.
 20 A. It is, but --
 21 Q. It's about life safety.
 22 A. Absolutely.
 23 Q. Why would confidentiality prevent you from sharing with
 24 Kingspan Offsite, a partner company?
 25 A. I agree, on the outside it might look that way, but,

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1 you know, there are confidentiality agreements in place
 2 and, you know, I think it was always the assumption we'd
 3 have a better product. You know, this letter was
 4 clearly written not just with my input, there would be
 5 input here from the processing side as well, so I think
 6 in respect ... it is difficult to highlight failed tests
 7 in that regard to another third person.
 8 Q. You talk about confidentiality; why couldn't you --
 9 forget sending him the test reports from 2007 and
 10 2008 -- just describe that Ivor Meredith, the BRE, had
 11 seen K15 performing very differently, and make that
 12 clear? That wouldn't have breached any form of
 13 confidentiality to anyone else, would it?
 14 A. It wouldn't, but we were testing a different system here
 15 with Offsite as well, so it wasn't the aluminium
 16 cassette that had failed in the past, so whether that
 17 was playing a part in our thinking as well.
 18 Q. Why didn't you tell Mr Stevens about the quicker time to
 19 ignition and the double heat output that you knew the
 20 new version of K15 was showing in the small-scale tests?
 21 A. I don't know why I wouldn't have told him that.
 22 Q. If we can go to {KIN00009031}, where this continues.
 23 Can we go to the top of the page. We can see what you
 24 have done is forward the email that you have sent below
 25 to Gwyn Davies. Do you see that there?

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1 A. I do, yes.
 2 Q. On 2 July 2008, and you say this:
 3 "I'm spinning so much I'm dizzy!!!"
 4 Do you see that there?
 5 A. I do, yes.
 6 Q. What did you mean by that comment?
 7 A. I think basically there's two issues: one, extremely
 8 busy, but also the contents of the email that was
 9 written by the team was trying to provide us with more
 10 time to get a product that we feel we could pass with
 11 Offsite.
 12 Q. Mr Heath, you're spinning because you're not telling the
 13 whole truth; that's right, isn't it?
 14 A. No, I think it's basically inferring that we were trying
 15 to give ourselves time or the production people time to
 16 actually develop a product that would pass the test.
 17 I don't think it was spinning in relation to leave
 18 things out; I think it was basically we're trying to
 19 create a delay with Offsite so we had a more robust
 20 product that they could test within their system.
 21 Q. But he's asked you direct questions, very pertinent
 22 questions, given the information you had about the
 23 performance of K15, and as we've just discussed, you
 24 haven't told him any of that pertinent information.
 25 A. I haven't, no, and that was probably, I would say, under

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1 advice as well from the processing team.
 2 Q. I would suggest to you that the reason you have said
 3 "I'm spinning so much I'm dizzy" is because you're
 4 effectively showing off to Gwyn Davies that you have
 5 spun a tale to Mark Stevens which you know not to be the
 6 entire truth; do you agree?
 7 A. No, I don't agree, no. I think it was purely in
 8 relation to -- we were trying to delay the tests and
 9 wait for this next development product to come through.
 10 I don't think it was malicious in any way to say I was
 11 withholding information back, no.
 12 Q. I didn't say it was malicious; I was saying that you
 13 weren't telling the full truth to Mark Stevens and you
 14 knew that when you sent that email.
 15 A. Looking at it now, there's certainly gaps that you
 16 would -- you would provide more information, but at the
 17 time, from the team, like I say, it was felt we just
 18 wanted more time to develop another product for testing
 19 in their particular assembly.
 20 Q. Can we look at another email linked to this,
 21 {KIN00020916}. This is Mr Meredith responding to you on
 22 2 July 2008. He's obviously seen your email below to
 23 Mark Stevens and he says, "nice one - political genius";
 24 do you see that there?
 25 A. I do, yes.

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1 Q. Would you agree that that's entirely consistent with the
 2 fact that you haven't told the entire truth to
 3 Mark Stevens in your email below?
 4 A. As I said before, you know, there is gaps in there now
 5 that, you know, with hindsight we would have filled, but
 6 at the time we were just trying to delay until we had
 7 a product available. So it was a political letter.
 8 Q. On the next day, Mr Meredith emails you, if we can go to
 9 {KIN00020917}. Looking at the email at the bottom of
 10 that page, he emails and he says:
 11 "Help - I'm getting seriously grilled now based on
 12 this email ... I'm currently on the phone.
 13 "We need to ensure continuity of our answers
 14 otherwise we will destroy our relationship and never be
 15 taken seriously again - also I may get accused of being
 16 a liar if we change our story.
 17 "Are we saying that the product supplied which
 18 failed their test is the same product that we got to
 19 pass the test?"
 20 Would you agree that's a key question, isn't it,
 21 whether you are saying that or you aren't, as had been
 22 asked of you by Mark Stevens?
 23 A. Yes, you could assume that, yes.
 24 Q. Then he says:
 25 "I have been working closely with the BRE

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1 technicians and they are currently helping us understand
 2 why old tech worked and new tech doesn't and whether
 3 OD90 will have a chance."
 4 Then he goes on. Do you see that there?
 5 A. I do, yes.
 6 Q. Then you respond up the page, "Who are you getting
 7 grilled by?" Then Mr Meredith says, "Aidan and Mark",
 8 up the page. Then you say, "Is this since my email",
 9 and he says "Yes", and then you say finally:
 10 "Forward emails and or ask them to put concerns in
 11 writing."
 12 Do you see that there?
 13 A. I do, yes.
 14 Q. What was your answer to Mr Meredith's question where he
 15 says, "Are we saying that the product supplied which
 16 failed their test is the same product that we got to
 17 pass the test?" What was your answer to Ivor's
 18 question?
 19 A. I can't recall if I answered him or not.
 20 Q. The answer is no, isn't it? The real answer: no, the
 21 product which passed in 2005 is not the same as the one
 22 you supplied to them, was it?
 23 A. On reflection, correct.
 24 Q. Did you ever tell Kingspan Offsite that at any stage?
 25 They've raised concerns with you, they've asked

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1 questions; did anyone ever get transparent with
 2 Kingspan Offsite and tell them exactly what the true
 3 picture was?
 4 A. I can't recall. We had various conversations,
 5 face-to-face meetings as well up at Sherburn, but
 6 I can't recall the specifics.
 7 Q. Aidan Wilkinson of Kingspan Offsite does put his
 8 concerns in writing. This is at {KIN00003714/2}.
 9 Page 2, in the bottom email, Mr Meredith to
 10 Kingspan Offsite. Ivor Meredith is there saying to
 11 Mark Stevens and Aidan Wilkinson on 14 July:
 12 "Gents,
 13 "I have received the DVD footage from the disaster
 14 fire test today. It would help me a lot if you put your
 15 specific concerns in writing so I can pass on the
 16 message."
 17 That's what we see there.
 18 A. Yes.
 19 Q. Then moving up to the bottom of page 1 {KIN00003714/1},
 20 Aidan Wilkinson's questions are in the same vein as
 21 those we've already seen by Mark Stevens.
 22 A. Yes.
 23 Q. "Following the recent fire tests ... we have the
 24 following concerns:-
 25 "After the heat source was extinguished the K15

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1 continued to burn on for considerable time in fact it
 2 was in excess of 30 minutes."
 3 Then he goes on:
 4 "Is this what is expected of this material, is it
 5 normal for K15 to continue to burn for in excess of
 6 30 minutes after the removal of the ignition source?
 7 "Is the reason for the failure specific to
 8 a batch ..."
 9 So pretty much identical questions to those they
 10 were asking previously.
 11 Then going up the chain, following that, you say to
 12 Ivor Meredith, Malcolm Rochefort and Vincent Coppock:
 13 "Good evening,
 14 "We need to be careful how we answer the concerns of
 15 Off-Site, any suggestions?"
 16 You needed to be careful, didn't you, because there
 17 was an awful lot that was relevant that you weren't
 18 telling them; do you agree?
 19 A. I think that was one of the reasons why I asked Ivor to
 20 ask them to put it in writing, so that Ivor and I could
 21 actually elevate their queries as well, so everybody
 22 could understand what the concerns of Offsite were. So
 23 that's one of the reasons I did ask Ivor to ask
 24 Kingspan Offsite to put their comments in writing.
 25 Q. We can see this chain carries on, {KIN0008844/2}. About

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1 halfway down we see the same email from you saying "We
 2 need to be careful", sent on 16 July, and then above
 3 that we can see Ivor Meredith's response sent the next
 4 day, 17 July at 11.29. It starts at the bottom of
 5 page 1, if we can just see that. 17 July 2008 there.
 6 Then if we go over, he says:
 7 "Aidan is pushing me for a meeting so we can work
 8 together on getting a pass for Offsite. This collective
 9 work could be of great benefit but first we need to
 10 agree what can be disclosed."
 11 Do you see that there?
 12 A. I do. Who is this addressed to, this email, sorry?
 13 Q. Yes, sorry, it's spanning two pages. If we go right at
 14 the bottom of page 1, it's to you, Malcolm Rochefort and
 15 Vincent Coppock.
 16 A. Right.
 17 Q. Do you see that there?
 18 A. Yes. Was there cc's as well, sorry?
 19 Q. Yes, Gwyn Davies is cc'd.
 20 A. Right.
 21 Q. He says Aidan is pushing for a meeting, "first we need
 22 to agree what can be disclosed", and do you agree he is
 23 saying that because, thus far, Kingspan Offsite haven't
 24 been told about the problems with the fire performance
 25 of K15 new tech; yes?

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1 A. Yes, there was gaps in my response, yes.
 2 Q. Yes. Then he says in the next paragraph:
 3 "I have inserted some answers below, however believe
 4 we should tread very carefully here. By Offsite going
 5 all out for LPCB approval with their first tests (i.e.
 6 fully witnessed) has not been wise and this move could
 7 be responsible for a lot of the questions we are now
 8 getting from industry."
 9 Do you see that there?
 10 A. Yes, I do.
 11 Q. Then he says:
 12 "I think we should at least discount the product
 13 previously supplied as an especially bad batch
 14 however ..."
 15 Then he goes on:
 16 "Having reviewed the video the problems seemed to
 17 occur ... at 22minutes ..."
 18 Then he goes on to make some observations about the
 19 test. Do you see that there?
 20 Who would have decided what could be disclosed to
 21 Kingspan Offsite?
 22 A. That would have been Malcolm.
 23 Q. And what were the questions which you understood at the
 24 time Kingspan were receiving from industry?
 25 Ivor Meredith's referring there to "questions we are now

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1 getting from industry"; what did you understand those
 2 questions to be?
 3 A. I think it was in relation to its suitability. The
 4 questions we did get were fairly bespoke as to the
 5 suitability in certain applications above 18 metres.
 6 Q. Did you share Mr Meredith's view that it was not wise
 7 for Offsite's tests to have been fully witnessed?
 8 A. Fully witnessed by the LPCB or --
 9 Q. Yes.
 10 A. I don't --
 11 Q. Who are the LPCB, just help us?
 12 A. It's the Loss Prevention Certification Board, I believe.
 13 Q. Yes.
 14 A. Yeah, I think ... yes, I think that's the acronym.
 15 Q. If we go back to the chain -- sorry, we're dotting about
 16 because these chains are all in different emails, but if
 17 we go now to {KIN00003714}, 17 July 2008 at 9.19, you
 18 have asked for any suggestions and this is
 19 Malcolm Rochefort. He says:
 20 "I think the best response at the moment is to say
 21 that we are investigating possible reasons for the
 22 failure and will come back to them as soon as we are
 23 clearer on what caused it. Meanwhile we recommend they
 24 do not test the other material they have used to
 25 fabricate the installations as that was the same batch

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1 and may suffer from a similar problem.
 2 "If necessary I suppose we could send old
 3 formulation material for the testing if you think this
 4 has a better chance and they are pressing, but this is
 5 undesirable for several reasons and I'd rather delay and
 6 get the new FR product made as soon as Hexion can supply
 7 material ..."
 8 Do you see that there?
 9 A. Yes, I do.
 10 Q. Were you content with that way of responding to
 11 Kingspan Offsite?
 12 A. At that time, I would have been.
 13 Q. Did anyone, as far as you were aware, ever tell
 14 Kingspan Offsite anything more about the K15 that they'd
 15 been testing and the differences you had observed?
 16 A. I can't recall whether we did or we didn't.
 17 Q. I now want to look at some marketing material for K15
 18 during the period that you were the technical manager.
 19 If we just pick up the very first product literature for
 20 K15, just to flash it up on the screen, {KIN00020720},
 21 it's from March 2001, and there are various editions of
 22 this marketing material. It's not until the seventh
 23 edition in March 2007 that any reference is made to the
 24 8414 testing carried out in May.
 25 If we bring that up, it's at {KIN00002580}. So

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1 that's the May 2007 marketing literature, we can see
 2 that from the top right-hand side. Do you see that
 3 there?
 4 A. Yes. Yes, I do.
 5 Q. Then if we go to page 2 {KIN00002580/2}, we can see
 6 three pictures on the left-hand side. The first depicts
 7 an unspecified cladding panel on a masonry wall. Do you
 8 see that there, figure 1?
 9 A. Yes.
 10 Q. Then below that is a masonry backed system with
 11 a terracotta clay tile external finish, and then the
 12 third is a steel framed system. Do you see that there?
 13 A. Yes, I do.
 14 Q. K15 had never been tested, as at May 2007, as part of
 15 an external façade system clad in terracotta clay tile
 16 panels, had it?
 17 A. No. I believe this literature does cover all
 18 applications, ie above and below the 18 metres.
 19 Q. I see.
 20 It's right that K15 had never been tested in
 21 May 2007 as part of a system fixed to a steel frame, had
 22 it?
 23 A. Not as far as I'm aware, no.
 24 Q. If we go to page 6 {KIN00002580/6} and look in the
 25 bottom left-hand corner, under the heading "Fire

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1 Performance", do you see there, if we can blow up the
 2 bottom of that page and look at the left-hand column, we
 3 can see an assertion is made about class 0 and being low
 4 risk in the technical standards in Scotland. Then below
 5 that a number of tests are referred to, including we see
 6 the BS 8414 test. Do you see that at the bottom of that
 7 table?
 8 A. That's correct, yes.
 9 Q. We can see it says 8414:2002. It doesn't say whether
 10 it's part 1 or part 2.
 11 A. No, but by 2002 it infers it is part 1, because I think
 12 the part 2 came out later than 2002.
 13 Q. This is 2007, this product literature, March 2007.
 14 A. Yes, but, sorry, I'm just referring to where it says
 15 BS 8414:2002, it can only be part 1.
 16 Q. I see, okay.
 17 Then it says:
 18 "Successfully tested - Kingspan Kooltherm K15 ...
 19 does not contribute to fire propagation/spread within
 20 a cladding system."
 21 Do you see that there?
 22 A. Yes, I do.
 23 Q. By this time, we've got the new product K15 being sold,
 24 haven't we, the new tech K15?
 25 A. Yes, we have.

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1 Q. And that description wouldn't be appropriate for that,
 2 would it?
 3 A. Not entirely, no. No, it is -- with hindsight, you
 4 would use a different narrative now, I agree.
 5 Q. Then if we look in the paragraph below the table, it
 6 says:
 7 "Kingspan Kooltherm K15 ... meets the criteria
 8 within BR 135 ... and is therefore acceptable for use
 9 above 18 metres in accordance with ..."
 10 Do you see that there?
 11 A. I do, yes.
 12 Q. So it's suggesting here that the product, K15, meets the
 13 criteria within BR 135 and is acceptable for use. You
 14 would accept that that's not entirely accurate, is it?
 15 It's not a product that meets those standards; it's
 16 a system, isn't it?
 17 A. It is a system that does meet those standards, yes,
 18 I agree.
 19 Q. Then if we go to the eighth issue of the product
 20 literature, {KIN00009703/2}, dated November 2008, and if
 21 we look on the second page, we've got the same three
 22 diagrams there of the systems, including the
 23 steel framed system at the bottom of that page.
 24 By November 2008, K15 had been tested as part of
 25 an external façade system affixed to a steel frame

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1 system four times by that stage, hadn't it? Twice with
 2 the Metsec/Sotech tests, and twice by Kingspan Offsite.
 3 Do you agree?
 4 A. I agree, yes.
 5 Q. And all of those were failures, we have already
 6 established that.
 7 Then if we go down again to page 6 {KIN00009703/6},
 8 we can see the exact same section, "Fire Performance",
 9 and would you agree that neither of these issues of the
 10 product literature, either in 2007 or 2008, mention what
 11 system was actually tested to BS 8414? Do you agree?
 12 A. I do agree, and also, you know, with hindsight, perhaps
 13 the literature should have been in two parts, up to
 14 18 metres and above 18 metres.
 15 Q. It doesn't mention that the test was to 8414-1 only,
 16 does it?
 17 A. Only that it references the 2002 standard.
 18 Q. It doesn't say that the results can only apply to
 19 systems affixed to masonry substrates, does it?
 20 A. It doesn't, no. No, it's not included in the narrative,
 21 but that standard is referenced without putting part 1
 22 in, for whatever reason.
 23 Q. It doesn't state, does it, that the results wouldn't be
 24 relevant to any other system other than that tested,
 25 does it?

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1 A. It doesn't, no.
 2 Q. Or, more fundamentally, it doesn't mention that the K15
 3 now being sold is an entirely different product to the
 4 one that went through that 8414 test you're referencing
 5 here in 2008?
 6 A. It is a different product. Not entirely different, but
 7 it is a different product, I agree.
 8 Q. Yes, but we can agree it performed very differently in
 9 fire, didn't it?
 10 A. From what we're seeing, yes.
 11 Q. Would you agree that this product literature is
 12 misleading?
 13 A. On reflection, yes.
 14 Q. And there should be a number of qualifications in this
 15 literature, should there not, even if the 2005 test is
 16 going to be relied on?
 17 A. As I said, there should have been some more caveats and,
 18 you know, perhaps more differential between what you can
 19 and can't do above and below 18 metres.
 20 Q. How can you explain to us how this product literature
 21 came to be issued? Can you explain to us how it came to
 22 be issued?
 23 A. No, again, it was -- you know, it would have been done
 24 on a collective. There was a procedure to go through
 25 the literature, a sign-off procedure, so ...

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1 Q. You accept in your witness statement that everyone
 2 needed to be happy with the text of the marketing
 3 documents, and you worked together collaboratively to
 4 achieve the technical accuracy of it; yes?
 5 A. Absolutely, as much as we could, absolutely, with people
 6 who were available at the time, yes.
 7 Q. That was paragraph 4.15 on page 22 of your statement
 8 {KIN00020709/22}, for the transcript.
 9 The technical accuracy of marketing documents is
 10 particularly critical where it relates to fire
 11 performance and matters of life safety, would you agree?
 12 A. It does have its part to play, yes, but also the advice
 13 of the technical services as well. So the literature we
 14 have or had is fairly standard format, and hopefully the
 15 idea was that it would lead enquirers to the technical
 16 services department for further details. So I --
 17 Q. But you didn't achieve technical accuracy, did you, in
 18 the way you were describing?
 19 A. On reflection, no.
 20 Q. Are you prepared to accept that that was deliberate,
 21 that Kingspan fully intended the reader of these
 22 documents to think that they were suitable for use over
 23 18 metres without qualification?
 24 A. No, I don't believe it was deliberate. I think the --
 25 like I say, the literature was in a standard format to

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1 encourage the reader to ring for further advice, to
 2 contact us. I don't believe it was deliberate at all.
 3 Q. Can we look at an email, {KIN00005377}. This is
 4 an email between you, Mr Meredith and others in
 5 February 2009 about the language to be used in
 6 NBS specification documents. If we can blow up that top
 7 email, it's from Ivor Meredith to you and to others, and
 8 he says:
 9 "I have checked the Class 0 text throughout the
 10 Kooltherm range - please adopt the same text as used in
 11 the K8 literature issue May 2007
 12 "For K15 I would mention the BS 8414 test but not
 13 use the terminology out of the current literature as
 14 this is a bit dodgy."
 15 Do you see that there?
 16 A. Yes, I do.
 17 Q. "Perhaps state 'K15 has been [successfully] tested to
 18 BS 8414 to assess suitability for its use ..."
 19 Do you see that there?
 20 A. Yes, I do.
 21 Q. Did you agree with Mr Meredith when you received this
 22 that the current literature was "a bit dodgy"?
 23 A. I can't remember what I would have said to Ivor at the
 24 time, but as I mentioned previously, I think, you know,
 25 on reflection, it could have been written better.

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1 Q. Now, it's right, isn't it, that many of those who were
 2 considering specifying K15 did in fact contact Kingspan
 3 for further information and advice? That's right, isn't
 4 it?
 5 A. We did get enquiries for K15, obviously, yes.
 6 Q. And we're going to look now at some of that
 7 correspondence.
 8 In general, is it fair to say that such
 9 correspondence was not normally answered by you, but
 10 that you would provide guidance to your team wherever
 11 that was needed?
 12 A. I think that's a fair comment, yes.
 13 Q. And is it right that, as technical manager, you would
 14 have the final word on how queries were to be responded
 15 to, particularly where it was talking about its
 16 suitability for use over 18 metres; would you agree?
 17 A. Yes, I would. I might have sought further advice from
 18 other people if necessary, but, yes, I agree with your
 19 statement.
 20 Q. I want to pick this up in 2006. You were asked by
 21 the Inquiry if you had at any stage been made aware of
 22 any concerns about the K15 product, and you mention in
 23 your witness statement Wintech, who were façade
 24 consultants. They raised concerns about K15, didn't
 25 they?

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1 A. We did have correspondence with Wintech, I think, on
 2 a particular project whilst I was technical manager,
 3 yes.
 4 Q. And Wintech expressed concerns that K15 was not of
 5 limited combustibility, didn't they?
 6 A. They did ask -- I can't recall if they had concerns, but
 7 they certainly did ask the question, from memory, yes.
 8 Q. Let's look first at some 2006 correspondence, again
 9 about the Buxton Street project constructed by Baris,
 10 which involved Wintech. This is at {KIN00005243}. So
 11 Kingspan had sent the 2005 8414 test report to Baris to
 12 support the use of K15 on the project, and then on
 13 page 2 {KIN00005243/2}, James Emery on 30 November 2006
 14 at 12.05 --
 15 A. Sorry, could you just go back to the previous letter to
 16 Baris, or the letter from Baris?
 17 Q. Yes. That's what I'm taking you to now.
 18 A. Oh, right, sorry.
 19 Q. We have looked at this already this morning, because
 20 Wintech were raising concerns about the test, 220876
 21 mentioned there, which is the 2005, not being a valid
 22 test for the system at Baris, because they needed it to
 23 part 2. Do you remember looking at that with me this
 24 morning?
 25 A. Yes.

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1 Q. They're saying in the third paragraph:
 2 "The build up of components is not comparable ..."
 3 Do you see that there?
 4 A. Yes.
 5 Q. And in the final paragraph they say:
 6 "Therefore the test report is not relevant and
 7 Building regulation compliance is outstanding."
 8 What he's written there is entirely correct, isn't
 9 it, that in order to use it on a project with
 10 a steel frame system, it needed to have been tested to
 11 part 2 of 8414? It was an entirely legitimate concern
 12 to be raising, wasn't it?
 13 A. It was.
 14 Q. Then if we go one email down at the top of page 1
 15 {KIN00005243/1}, it was sent by Steve Robinson of Baris
 16 to Ivor Meredith requiring an urgent response. Do you
 17 see that there? So they want an urgent response. Then
 18 at the top of the page he sends it on to you asking for
 19 guidance on "this mess". He is talking about "this
 20 mess" in the first line; do you see that there?
 21 A. I do, yes.
 22 Q. Can you remember, what was the response to Baris and
 23 Wintech in 2006? What advice did you give to
 24 Mr Meredith when he asked you for, "Any guidance on this
 25 one"?

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1 A. I can't recall. I can't recall off the top of my head.
 2 Q. If we go, then, to 2008, I want to look at some more
 3 examples, and look at a chain of emails from May 2005,
 4 {KIN00003701}, this is an email between Kingspan and
 5 LSC Limited, which discusses two different projects,
 6 Ice developments in Stevenage and Wakering Road.
 7 If we can start at page 2 {KIN00003701/2} in the
 8 middle of the page, from Malcolm Wallace of
 9 Higgins Homes to Emily Vaughan on 16 May, they ask for
 10 the test results to 8414, and they say:
 11 "We are currently unable to sell units on the site
 12 until this matter is resolved. Will you please forward
 13 this information to me as a matter of urgency."
 14 Then going up to the top of page 2 and the bottom of
 15 page 1, Emily Vaughan forwards the email to
 16 Ivor Meredith on 19 May asking for assistance about how
 17 to respond.
 18 Then if we go to the bottom of page 1
 19 {KIN00003701/1}, Ivor Meredith forwards the email to you
 20 and says this:
 21 "I'm having big issues with K15 Approval at the
 22 moment. The problems are relating to NHBC jobs. This
 23 causes a lot of concern."
 24 Then there are some back and forth emails planning
 25 a discussion about this, and at the very top of page 1,

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1 there is another email from Ivor Meredith to you saying:
 2 "This was the email I'm worried about... we simply
 3 do not have the information to support use of K15 above
 4 18metres with steel frames. I'm worried that the
 5 product will be removed from site and the ongoing effect
 6 of such an action"
 7 Do you see that there?
 8 A. Yes.
 9 Q. He says:
 10 "I think getting this sorted should take priority
 11 over all other projects as its causing us to [lose]
 12 work."
 13 Can you remember what advice you gave to Mr Meredith
 14 at this point?
 15 A. No, I can't recall, I'm afraid.
 16 Q. You can't recall?
 17 A. No.
 18 Q. Would you agree that this email shows that members of
 19 your team were concerned and worried about the
 20 justification they were being instructed to give as to
 21 how K15 could be used above 18 metres?
 22 A. Yeah, no, I agree.
 23 Q. Not only Ivor Meredith, but Emily Vaughan also, she too
 24 expresses concern about how to properly reply; do you
 25 agree?

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1 A. I do agree, yeah, because Ivor would have been the
 2 contact, so Emily would have passed this on.
 3 Q. Did you take those concerns seriously?
 4 A. I would have done at the time, yes.
 5 Q. Can we now go to {KIN00005363}. This is quite a long
 6 series of emails from October 2008.
 7 If we start on page 8 {KIN00005363/8}, there is
 8 an email sent by you at 2.25, 14.25, on 15 October 2008
 9 to Matt Craig and then also Neil Brook. I think they're
 10 of Bowmer + Kirkland. You have attached a copy of
 11 a BBA certificate. You can see that in the second line.
 12 A. Yes.
 13 Q. And this email chain, to help you, relates to the
 14 City Park project, which was a building over 18 metres
 15 to be clad in open-jointed ceramic stone. Can you
 16 remember that?
 17 A. I can't recall the cladding material, no.
 18 Q. About halfway down that email, you say:
 19 "Kooltherm K15, although not classed as
 20 non combustible, it is classified as Class 0 or 'low
 21 risk' as defined by the documents."
 22 Do you see that there?
 23 A. Yes, I do.
 24 Q. So you're saying that even though you knew it was
 25 struggling to pass BS 476-6, didn't you, by this time?

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1 A. Yeah, that was based on the position it had in relation
 2 to the Kesteren technology, yes.
 3 Q. Then you talk about the BBA certificate, which I'm going
 4 to be asking you about this afternoon.
 5 Can you help as to why the 2005 test and the
 6 BBA certificate meant that K15 was suitable for use on
 7 the City Park project, given it was an open-jointed
 8 ceramic stone system?
 9 A. It was probably just reference to ceramic stone being
 10 non-combustible and considering the 2005 test was also
 11 a non-combustible cladding.
 12 Q. So you were extrapolating from that 2005 test?
 13 A. We were, yes.
 14 Q. Even though you're selling new technology K15 by this
 15 time?
 16 A. That's correct.
 17 Q. Yes.
 18 Moving up the chain, if we look at page 6
 19 {KIN00005363/6} at the bottom of the page, and over to
 20 page 7, Neil Brook from Bowmer + Kirkland responds on
 21 16 October 2008 and he says:
 22 "Philip,
 23 "Further to my conversations with Ivor and your
 24 email below, I would note that to date you have not
 25 substantiated as to on what basis the Kooltherm K15 is

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1 suitable for buildings over 18 meters and appear to be
 2 relying wholly on the BRE test result on a mock up
 3 consisting of a cement particle board to a height less
 4 than this as per the Agreement Certificate that you have
 5 supplied."
 6 He is absolutely right, isn't he, in what he says
 7 there?
 8 A. He is, yes. I'm not sure about the mock-up, but the
 9 context of his paragraph is correct, yes.
 10 Q. Yes. Then if we can go to page 1 now, please, you send
 11 Neil Brook's response on to Keith Lynch, Steve Mace and
 12 Ian Clay on the next day, 17 October, at 11.46. Can you
 13 see that? 17 October ...
 14 A. No.
 15 Q. Actually it's not 11.46 ...
 16 A. Oh, sorry, yes, I can, 10 -- no.
 17 Q. Oh, sorry, it's another document I need to go to now,
 18 {KIN00009066}. Sorry, it's another chain but in the
 19 same string.
 20 A. Right.
 21 Q. If we go to page 1, yes, in the middle of that page,
 22 sorry, on 17 October 2008, at 11.46, you send
 23 Neil Brook's response on to, can you see, Keith Lynch --
 24 A. I can.
 25 Q. -- Steve Mace, Ian Clay.

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1 A. Yes.
 2 Q. Do you see those people?
 3 A. Yes.
 4 Q. Can you help us, who are they?
 5 A. Right, firstly, I can only apologise for the contents of
 6 this email at the time made in 2008. Keith was a dear
 7 friend of mine who was terminally ill at the time, and
 8 I was just forwarding him an email just to give him
 9 a snapshot of some of the work I was working on.
 10 You know, there's comments made in that email that were
 11 basically said because I was in a dark place with Keith
 12 being terminally ill, and addressing the issues of
 13 Bowmer Kirkland weren't top of my priority at that time.
 14 Ian Clay and Steve Mace were also close friends of
 15 Keith, and we used to try and keep him in touch with
 16 what we were doing on a day-to-day basis, so I can only
 17 apologise for the contents of that email.
 18 Q. I see. So what you say is:
 19 "I think Bowmer & Kirkland (multi national blue chip
 20 main contractor) are getting me confused with someone
 21 who gives a dam(sic).
 22 "I'm trying to think of a way out of this one,
 23 imagine a fire running up this
 24 tower !!!!!!!!!!!!!!!!!!!!!
 25 "Any ideas ...?"

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1 "Phil
 2 "P.S. I don't do technical on a Friday."
 3 Do you see that there?
 4 A. Yes, yes, yes, and as I say, I was in a dark place,
 5 you know, as I say, Keith was terminally ill, and just
 6 trying to give him a snapshot of what was happening. It
 7 had no reflection on how I felt, it was just trying to
 8 lighten his load and lighten my load a bit at the time.
 9 Q. But was it right that you didn't give a damn about
 10 Bowmer + Kirkland's concerns?
 11 A. No, it's not correct. What I meant there is, you know,
 12 there were other priorities, you know, Keith's pending
 13 death. You know, that put everything in perspective,
 14 that, you know, Keith was more important at that time
 15 than me answering a technical question.
 16 Q. I see.
 17 When you say, "I'm trying to think of a way out of
 18 this one, imagine a fire running up this tower", what
 19 did you mean by that?
 20 A. I just meant -- you know, it was just -- making light of
 21 it is wrong, it's just that, you know, I was just
 22 explaining to Keith, who wasn't in construction, just
 23 some of the implications and things that technical were
 24 dealing with, just so, like I say, he could see what was
 25 going on in the wider world.

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1 Q. You had tried to mislead that contractor, hadn't you,
 2 about the test evidence you had and whether it was
 3 suitable to support the use of K15 on that building? Do
 4 you agree?
 5 A. In relation to which -- when I misled him, what ...
 6 Q. By relying on the 2005 test data.
 7 A. I was -- we were sending him that data so he could
 8 actually -- you know, he could use that or make
 9 an assessment or pass it to other people who could make
 10 assessment based on what we'd tested in 2005. I don't
 11 think we were trying to mislead, just provide him with
 12 information that him and his team could make a decision
 13 about.
 14 Q. Well, they're coming back to you and saying you have not
 15 substantiated why K15's suitable for use on 18 metres,
 16 and you appear to be relying on a BRE test result which
 17 you knew for a number of reasons was not supportive of
 18 the K15 you were selling at the time. Do you agree?
 19 A. Sorry, can you put that email up again, because
 20 obviously --
 21 Q. So at the bottom of that page --
 22 A. Oh, right.
 23 Q. -- Neil Brook is saying to you:
 24 "... you have not substantiated as to on what basis
 25 the ... K15 is suitable ... and appear to be relying

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1 wholly on the BRE test result ..."
 2 A. That's correct, we were, yes.
 3 Q. If you go to the top of this chain, you describe this
 4 situation as a nightmare. Do you see that there?
 5 A. I do, and again, that was -- you know, Keith had
 6 responded, and this was just, you know, correspondence
 7 between myself and a dear friend who was terminally ill,
 8 so it was ... you know, I ...
 9 MS GRANGE: Mr Chairman, I would just like to finish this
 10 chain, if I could.
 11 SIR MARTIN MOORE-BICK: That's all right, go on.
 12 MS GRANGE: If we go back now to {KIN00005363/2} at the
 13 bottom, we can see that Neil Brook of Bowmer + Kirkland
 14 has asked Wintech for their view now on this issue.
 15 A. Yes.
 16 Q. So Wintech become involved, and then Greg Sinclair of
 17 Wintech responds on the same day, and this is the email
 18 on pages 2 and 3 sent on 16 October at 17.10, do you see
 19 that there? This is Greg Sinclair, and if we go over to
 20 page 3 {KIN00005363/3}, and if you look at the middle of
 21 that page, he says this:
 22 "Kingspan keep repeating that the product has been
 23 tested to BS8414 and therefore is suitable for use in
 24 buildings over 18 metres. What they fail to say is that
 25 it is suitable for use only in the configuration as

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1 tested i.e with cavity barriers and a cement board outer
 2 face ..."
 3 Do you see that there?
 4 So, again, that was an entirely legitimate point for
 5 Greg Sinclair of Wintech to be raising, wasn't it?
 6 A. Yes, we had tested it with just the cement board outer
 7 face, that's correct, yes.
 8 Q. Then if we look two paragraphs on from that, if we go
 9 down the page, he says there in the middle there:
 10 "The rainscreen system being installed at City Park
 11 (and to the hotel development next door!) is an open
 12 jointed system (therefore external fire breakthrough
 13 into the concealed cavity will be easier than the test
 14 sample) and is being installed without fire barriers.
 15 As such, the installation has no resemblance to the
 16 tested sample and therefore, test data is not relevant."
 17 Now, again, those were entirely legitimate points
 18 for Wintech to be making at that time, were they not?
 19 A. They were. There were some points in there that --
 20 yeah, without cavity barriers, yes, I agree.
 21 Q. Yes, and he goes on:
 22 "It is my understanding that the test data ... is
 23 only applicable to the system as tested and BRE are not
 24 prepared to offer any opinion on other system
 25 designs ..."

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1 Then if we go to the next email up {KIN00005363/1},
 2 Neil Brook of Bowmer + Kirkland writes to Kingspan again
 3 on 17 October 2008 at 8.07, he says:
 4 "Further to my email of yesterday and the reply
 5 received from Andrew Pack, I have attached below
 6 a detailed response from Greg Sinclair at Wintech."
 7 Do you see that there?
 8 Then if we could go down in his email --
 9 A. Sorry, could you just go back? Sorry.
 10 Q. Sorry. So what he is saying is, "I have attached below
 11 a detailed response from Greg Sinclair at Wintech", and
 12 that's forwarded to you, Ivor Meredith and Andrew Pack.
 13 Do you see that there?
 14 A. Yes, I do.
 15 Q. He says, if we go over, in that top paragraph
 16 {KIN00005363/2}:
 17 "I requested in my email yesterday that you give
 18 specific guidance with regards to the use of cavity
 19 barriers ... the Agreement Certificate that I was
 20 forwarded made clear that guidance should be sought from
 21 the certificate holder ..."
 22 And that is why he is coming to you. And then he
 23 says:
 24 "It is clear that the BRE test does not relate to
 25 the situation that we have, in that the rainscreen is

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1 significantly different and therefore I would again
 2 request that you clarify on what basis the material is
 3 suitable for use ..."
 4 Then at the penultimate paragraph:
 5 "Your responses to date have failed to provide any
 6 assurances on this matter and have continued to rely on
 7 test data from a different system ..."
 8 Do you see that there?
 9 A. Yes, I do.
 10 Q. Then if we go up the chain, we can see an internal email
 11 from you on 17 October 2008 {KIN00005363/1} saying:
 12 "In the event you [haven't] answered AM email
 13 [Ivor], AP and I are currently preparing a detailed
 14 response, that we will then adopt as standard issue."
 15 We will come back to that letter.
 16 Then Ivor says:
 17 "I'm having a few issues on my test at moment
 18 therefore would appreciate the help. Wintech are
 19 digging their heels in with a couple of projects and
 20 without putting ourselves in a legal situation it's
 21 getting tricky ..."
 22 Then you say this:
 23 "Wintech can go f#ck themselves, and if they are not
 24 careful we'll sue the a#se [off] them."
 25 Do you see that there?

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1 A. Yes, I do.
 2 Q. Can you explain why you wrote that, given that Wintech
 3 were giving entirely accurate advice to their customers?
 4 Why did that warrant that response from you?
 5 A. No, it was totally unprofessional at that time, and,
 6 you know, with -- on reflection, I wouldn't have sent
 7 that. I think it was just frustration that we were
 8 going round in circles with them. So it was totally
 9 unprofessional and it was based on the fact we were
 10 going round in circles with them.
 11 Q. Would you agree that this reflected a culture within
 12 Kingspan as a company at the time in terms of its
 13 response to these kind of requests?
 14 A. No, I don't believe so. You know, like in any
 15 organisations, you know, you have your good times and
 16 your difficult times, and I think, like I say, we were
 17 just going round in circles with Wintech, and I think
 18 there was just a bit of frustration came out there on
 19 a Friday. So it was totally unprofessional of me.
 20 Q. Why didn't you take Wintech's concerns seriously given
 21 the potential impact on life safety? Why brush them off
 22 in this way to your colleagues?
 23 A. I think we did -- we did take life safety seriously. We
 24 provided -- those(?) were provided Wintech with the data
 25 we had for them to make the appropriate analysis to say

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1 whether it, based on this, yes, it was acceptable, or
 2 no, it wasn't, and we move on.
 3 Q. Was threatening legal action a common way for Kingspan
 4 to respond to those who questioned the suitability of
 5 K15 for use above 18 metres?
 6 A. No, not in my time, not at all. Like I say, it was
 7 totally unprofessional.
 8 MS GRANGE: Mr Chairman, thank you for letting me finish
 9 that chain.
 10 SIR MARTIN MOORE-BICK: Is that a good point?
 11 MS GRANGE: That's a good moment, thank you.
 12 SIR MARTIN MOORE-BICK: I think it's time we stop for some
 13 lunch, so we will break there. We will come back and
 14 continue at 2.05, please.
 15 THE WITNESS: Okay.
 16 SIR MARTIN MOORE-BICK: No discussing your evidence, please,
 17 while you're out of the room.
 18 THE WITNESS: No. Thank you.
 19 (Pause)
 20 SIR MARTIN MOORE-BICK: Thank you. 2.05, please.
 21 (1.07 pm)
 22 (The short adjournment)
 23 (2.05 pm)
 24 SIR MARTIN MOORE-BICK: Right, Mr Heath, ready to carry on?
 25 THE WITNESS: I am, yes.

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1 SIR MARTIN MOORE-BICK: Thank you very much.
 2 Yes, Ms Grange.
 3 MS GRANGE: Yes, thank you.
 4 Can we go back to the email chain we were looking
 5 at, {KIN00005363} and your response at the top of that
 6 email chain. I just want to look at who is on that
 7 chain. It's your response to Ivor Meredith, but you
 8 have also copied that in to Gareth Mills, who was
 9 beneath Ivor Meredith, wasn't he, in the chain of
 10 seniority?
 11 A. Yes, he was.
 12 Q. And also Andrew Pack, do you see that there?
 13 A. Yes.
 14 Q. He was also part of your team, junior to you, wasn't he?
 15 A. He was.
 16 Q. I asked you right at the outset of your evidence today
 17 about the culture and whether you took care to engender
 18 a culture of taking life safety issues seriously.
 19 What I want to ask you is: how did you think those
 20 below you, who were copied in on emails like this, would
 21 take life safety issues seriously when you sent emails
 22 like that?
 23 A. As I said, it was completely unprofessional of me and
 24 not sort of wording I would normally use, and it was
 25 purely out of frustration on that particular Friday.

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1 So, you know, I've worked with Ivor, Gareth and
 2 particularly Andrew for a particular -- long time, and
 3 they would also know that that would not be typical of
 4 myself.
 5 Q. I see. Can we look at the letter that you wrote on this
 6 project. I mentioned that there was a letter, it's at
 7 {KIN00009067}. Can you see, it's to Bowmer + Kirkland,
 8 17 October 2008, and it's about this City Park project
 9 in Manchester. Do you see that there?
 10 A. Yes.
 11 Q. If we look at the end of the letter, on page 2
 12 {KIN00009067/2}, do you see that you have signed this
 13 letter?
 14 A. Yes.
 15 Q. Do you see that there?
 16 Would you have written this letter, or would that
 17 have been written by somebody else and you signed it?
 18 A. Could you just go back to the first page again, please?
 19 Q. Yes. So perhaps we can go through it. If we could blow
 20 up the first half of it. You say:
 21 "In response to recent items of correspondence in
 22 relation to the above development, we have pleasure
 23 detailing our appropriate rational, conclusions and
 24 recommendations."
 25 You refer to ADB, and you direct as follows:

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1 "Step 1 ... refer you to Section 9 Table 13 ...
 2 Kooltherm is ... Class 0 ..."
 3 And you talk about the maximum dimension of
 4 cavity barriers.
 5 Step 2, you refer to paragraph 9.3 about closing
 6 cavities, including around openings.
 7 Then in the next paragraph, you say:
 8 "In addition to Steps 1 and 2 above, due to the
 9 nature of the construction, further guidance may need to
 10 be sought from Section 12 ... External wall
 11 construction ..."
 12 You set out there some of that. Then in the fourth
 13 line up from the bottom of that paragraph, you say:
 14 "As Kooltherm K15 is not designated a material of
 15 limited combustibility in accordance with
 16 paragraph 12.7 ... the designer can then follow the route
 17 to compliance through the guidance of BR 135 for
 18 a building with a storey 18 meters or more above ground
 19 level."
 20 Then you say below that:
 21 "Therefore, evaluating the test data from
 22 BS 8414-1:2002 against BR135, cavity barriers should be
 23 provided ..."
 24 Do you see that there?
 25 A. I do, yes.

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1 Q. If we could go on within the letter {KIN00009067/2}, you
2 say:

3 "However, in this instance the end use application
4 for Kooltherm K15 is somewhat outside the normal scope,
5 this being due to the lack of openings other than those
6 at low level."

7 Do you see that there?

8 A. Yes, I do.

9 Q. Can you help us as to what you meant, "somewhat outside
10 the normal scope due to the lack of openings other than
11 those at low level"?

12 A. No, I can't recall why that would have been put in the
13 letter.

14 Q. Then you say:

15 "Therefore, the reasoning behind the recommendation
16 of the Local Authority Building Control (LABC) would
17 seem well qualified, in that, in this instance there is
18 no requirement for cavity barriers other than around the
19 low level openings, due to the nature of the
20 construction ..."

21 So you are advising on the cavity barriers:

22 "Kingspan Insulation Limited can concur with the
23 LABC requirements which will ensure the façade complies
24 with appropriate legislation and therefore, one would
25 assume your contractual obligations."

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1 Do you see that there?

2 A. I do, yes.

3 Q. Then:

4 "With regards the detailed specification as to how
5 cavity barriers should be formed ...

6 "We trust you will find this information meets with
7 your specific requirements."

8 On what basis did you consider yourself qualified to
9 be making this assessment of its compliance, this
10 façade, with the relevant regulatory requirements,
11 including requirements for cavity barriers?

12 A. Okay, well, firstly, just your previous question, if
13 I may just answer it, I think that letter was probably
14 written by myself with contribution from Ivor Meredith
15 as well.

16 Q. I see, yes.

17 A. With regards to the cavity barriers, I don't think I was
18 particularly offering advice, I think I was just
19 agreeing with the advice that he's obviously received
20 from the LABC in relation to where the cavity barriers
21 should go. I think that was what we were trying to say.

22 Q. Yes, you're concurring with the LABC "which will ensure
23 the façade complies with appropriate legislation and
24 therefore, one would assume your contractual
25 obligations"; you see that?

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1 A. I do, yes.

2 Q. Why have you ignored all of Bowmer + Kirkland and
3 Wintech's comments about the fact that Kingspan's test
4 results to BS 8414-1 were irrelevant to the compliance
5 of this very different system? Why have you ignored
6 that in this letter?

7 A. Well, I think they've highlighted that previously, and
8 we've just followed it up with a secondary letter in
9 relation to our comment, so I can only assume we thought
10 those concerns were highlighted to the client.

11 Q. Sorry, you can only assume that the concerns were
12 highlighted to the client?

13 A. I think the concerns of Wintech -- was not the email
14 from Wintech also addressed to this gentleman?

15 Q. So you're saying that was dealt with separately in the
16 emails?

17 A. That's the only cause I can think of why we didn't
18 mention it in here if that was the case, yes.

19 Q. Might I suggest that the reason you didn't mention it is
20 that their concerns were absolutely pertinent. You
21 didn't have any relevant test evidence to support the
22 use of K15 on this system, did you?

23 A. I concur with the comments made by Wintech. Like I say,
24 we're just adding additional information here. But,
25 yes, I agree.

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1 Q. I want to move now to ask you about the BBA certificate
2 for K15, which was first issued in October 2008, so
3 around the same time that this was all being discussed
4 and written over.

5 At paragraph 7.1 on page 40 of your statement
6 {KIN00020709/40} -- we don't need to go to it -- you
7 confirm that it was you who kick-started the project to
8 obtain BBA certification for K15; is that right?

9 A. I would have had the initial meeting or telephone
10 conversation with the sales manager at the BBA at the
11 time, yes.

12 Q. In terms of the purpose and importance of obtaining that
13 certificate, you explain that in your witness statement,
14 where you explain that, without a BBA certificate, many
15 architects would be reluctant to specify a particular
16 product because of the lack of it; that's right, isn't
17 it?

18 A. That's correct. I mean, historically -- I mean, I have
19 been in the industry for a while -- I think initially
20 the purpose of the BBA certificates was to assess
21 products that weren't covered by a British Standard.

22 Q. Yes.

23 A. And then obviously it moved on to be accrediting
24 systems, et cetera. But it was a requirement generally
25 from architects, and historically as well the

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1 BBA certificate was a document that was deemed to
 2 satisfy Building Regulations, but obviously they
 3 actually dropped that reference at the beginning of the
 4 century, I believe.
 5 Q. Right, yes.
 6 You tell us in that same paragraph of your statement
 7 that the BBA certificate facilitated wider specification
 8 by architects and was very important from a marketing
 9 and technical perspective; would you agree with that?
 10 A. Certainly from a technical perspective, it was
 11 a necessity by and requirement from architects and
 12 building controls to agree with. With regards to the
 13 marketing benefits of it, I'm sure that the marketing
 14 team would concur that it is a benefit, because people
 15 ask for it --
 16 Q. Yes.
 17 A. -- yes.
 18 Q. Before we come to look at that BBA certificate from
 19 October 2008, I just want to put to you something that
 20 Mr Meredith said in his evidence. If we can go to the
 21 transcript, {Day76/12:6}. This is where we're
 22 discussing the BBA certificate and I say this:
 23 "Question: What I'm going to suggest to you is
 24 that, far from any of this wording ever being
 25 an oversight, in fact the wording was always very

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1 carefully checked by Kingspan, and they pushed as hard
 2 as they could to get the most favourable wording for its
 3 sales of its product; would you agree with that?
 4 "Answer: I would agree that it was always the case
 5 that -- the BBA certificate was intrinsic to any sales,
 6 so it was very important that the text within it was
 7 suitable for the marketplaces we were in. So, yes.
 8 "Question: But it's more potent than that, isn't
 9 it? It's that you're trying to push the BBA as far as
 10 possible to say things that are going to maximise the
 11 sales of K15, even if they're not true. That's right,
 12 isn't it?
 13 "Answer: That's what we were doing, yes."
 14 Now, I want to ask you about whether you agree with
 15 that.
 16 Would you agree that you pushed the BBA as far as
 17 possible to say things that were going to maximise the
 18 sales of K15 even if they were not true?
 19 A. I don't believe that to be the case. We had
 20 a relationship with the BBA. Like any manufacturer, you
 21 had an opportunity to put forward your comments in
 22 relation to the drafts. Now, the BBA, you know, were
 23 seen and are seen as the deans of the industry.
 24 You know, they can either accept the alternative wording
 25 that you put in the drafts or they don't, but, you know,

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1 they are seen as the experts in the field.
 2 Q. Yes, Mr Heath, but that's not an answer to my question.
 3 What I want to ask you is what Kingspan were doing about
 4 this BBA certificate, and I want to know whether you
 5 agree with Mr Meredith when he accepted that Kingspan
 6 was trying to push the BBA as far as possible to say
 7 things that were going to maximise the sales of K15 even
 8 if they were not true?
 9 A. No, I don't agree. Like I say, we provided -- we asked
 10 for an opportunity -- or we were given an opportunity to
 11 put forward text or any amendments to the certificates.
 12 You know, it was up to the BBA, as the experts, to
 13 decide whether they accepted that -- those amendments to
 14 the draft or not. I don't think -- I don't agree with
 15 his comments there, that we pushed them to the nth
 16 degree, no.
 17 Q. I see. So you said:
 18 "We were given an opportunity to put forward text or
 19 any amendments ... it was up to the BBA, as experts, to
 20 decide whether they accepted that ..."
 21 Do you accept that, at times, you were putting
 22 forward statements about K15 which were not entirely
 23 accurate?
 24 A. In relation to --
 25 Q. To its fire performance.

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1 A. Again, with, you know, hindsight and reflection,
 2 you know, we submitted information, but again, you know,
 3 we would be looking at the BBA to interpret that
 4 accordingly. They'd either accept that information or
 5 they wouldn't.
 6 Q. You say with hindsight and reflection; what I'm putting
 7 to you is that at the time you knew full well that you
 8 were pushing the BBA to make statements that you knew
 9 were not entirely true.
 10 A. At the time, we probably weren't aware of that at the
 11 time.
 12 Q. I see.
 13 Can you help us as to whether the BBA were ever
 14 informed that there had been a transfer to new
 15 technology K15 in 2006?
 16 A. I wouldn't, haven't, or didn't formally advise them, but
 17 the reason being, you know, the BBA would audit our
 18 facility every 12 weeks, three months or so, and would
 19 look through all the factory production control data,
 20 and they would know there was alternative suppliers,
 21 they would know the machine had been changed to
 22 incorporate new technology. So from a technical
 23 services aspect, we would have thought that the BBA
 24 would have fully appreciated those changes to the
 25 technology.

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1 Q. I see.
 2 A. You know they're looking --
 3 Q. Did you ever tell the BBA that what was being sold to
 4 the public was a different K15 to the K15 which passed
 5 the large-scale fire test in 2005?
 6 A. We didn't, but they would have known we'd changed
 7 technology.
 8 Q. What, so you expected them to somehow work out that that
 9 2005 test was on a different product?
 10 A. I don't think it was worked out -- during the course of
 11 the audits, they would have been informed by the
 12 processing department of the changes in the technology.
 13 When they looked at the manufacturing of the product,
 14 they would see a change in the technology that we'd
 15 adopted. So I would have thought the BBA were fully
 16 aware of the change of technology that we'd adopted at
 17 that time.
 18 Q. Did you ever tell the BBA that the new technology
 19 phenolic was performing very differently in a fire
 20 situation to old technology K15? Did you ever tell them
 21 that?
 22 A. Not at that time, I don't believe we did.
 23 Q. Did you ever tell them that tests on the new technology
 24 K15 had shown a quicker time to ignition and double the
 25 heat output?

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1 A. No, we didn't, but at the time we didn't feel it was
 2 relevant, or we didn't feel the need to actually tell
 3 the BBA at that time that those tests had failed when we
 4 applied for the BBA certificate.
 5 Q. Did you ever tell the BBA that new technology K15 had
 6 been incorporated in four tests to 8414-2, none of which
 7 passed, all of which failed, and none of which could be
 8 classified to BR 135?
 9 A. Not to my knowledge, no.
 10 Q. Let's look at the wording of the certificate that was
 11 issued in October 2008. This is at {BBA00000038}. So
 12 this is issue 1, it's on 27 October 2008 that it was
 13 issued. We see that in the bottom left-hand corner.
 14 Then under "Key factors assessed", we can see three
 15 topics down in bold text it says, "Behaviour in relation
 16 to fire". Do you see that there?
 17 A. Yes, I do.
 18 Q. It says:
 19 "The boards will not contribute to the development
 20 stages of a fire or present a smoke or toxic hazard ..."
 21 Do you see that there?
 22 A. Yes, I do.
 23 Q. Now, leaving aside the smoke and toxic hazard, can you
 24 tell me what those words mean, "will not contribute to
 25 the development stages of a fire"?

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1 A. I think it's a standard format, but I believe it's in
 2 relation to, you know, the product as a thermoset
 3 material will not melt or run in a -- when affected by
 4 heat. I think that's what the inference is there.
 5 Q. Did you think that was correct when you read it, given
 6 what you had seen of K15's performance once the new tech
 7 came in?
 8 A. I think in relation to the early development stages of
 9 a fire, that's probably true, in the early development
 10 of a fire.
 11 Q. What test evidence did you have to base that upon?
 12 A. I don't know what test evidence they had, the BBA had,
 13 in relation to that statement, but it was, I think,
 14 a reflection of a lot of certificates in relation to
 15 thermoset materials.
 16 Q. If we go to section 7 now, which starts at the bottom of
 17 page 5 {BBA00000038/5}. This is the section that deals
 18 in detail with K15's fire performance.
 19 At section 7 we have a description of the system
 20 that was tested to 8414-1 in 2005. Do you see that
 21 there?
 22 A. Yes, I do.
 23 Q. But the date of the test is not given. Can you help us
 24 as to why that was? It doesn't say that was May 2005,
 25 that test.

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1 A. I've no idea why -- I've no recollection of why that
 2 wouldn't have been in, and whether it was in other
 3 certificates for other products as well, whether the --
 4 I don't know if the BBA dated them in other
 5 certificates.
 6 Q. If we then go to the final words under that first bullet
 7 point, we can see, starting three lines up right on the
 8 right-hand side, it says:
 9 "Within the stated test time the temperature at the
 10 level 2 thermocouples did not exceed 600°C, therefore
 11 displaying limited fire spread away from the fire source
 12 and that the product meets the criteria stated within
 13 BRE 135."
 14 Do you see that there?
 15 A. Yes, I do.
 16 Q. We have agreed, haven't we, that no product can meet the
 17 criteria stated within BR 135, can it; it's a system
 18 test?
 19 A. Correct, yes.
 20 Q. So do you agree that that was misleading in that
 21 certificate?
 22 A. I don't know if it's misleading or just an oversight,
 23 but it's -- you know, we're very much a system test
 24 business, you know, we're only a component within
 25 a wall, roof or a floor. So, yeah, I think that that

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1 would -- that would have been an oversight at the time.
 2 Q. It was also fundamentally misleading, wasn't it, because
 3 by this time, in October 2008, you knew that the K15 was
 4 behaving very differently in fire, wasn't it?
 5 A. It was. Misleading? I think it was just an omission or
 6 an oversight in what either the BBA wrote or we wrote to
 7 include in that certificate. I don't know --
 8 SIR MARTIN MOORE-BICK: That won't really do, though, will
 9 it, Mr Heath? Because it might be the word has been
 10 included by way of an oversight, but the effect of
 11 including it is to give the impression that the product
 12 has met some sort of compliance with a BRE certificate
 13 form.
 14 A. I would agree it does, yes, but I would expect
 15 an architect or a professional reading this to
 16 understand that it was a product within a system.
 17 SIR MARTIN MOORE-BICK: All right. Thank you.
 18 MS GRANGE: Yes, but even if they understand that, what they
 19 can't tell from this certificate, can they, is that you
 20 have changed the product since that test, and they're
 21 not told that what you have seen is a worse fire
 22 performance once you had changed it.
 23 Wasn't that fundamental information that the BBA
 24 should have been aware of, and anybody reading that
 25 certificate should have also been aware of?

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1 A. Certainly -- I come back to my previous answer --
 2 I believe the BBA were aware we'd changed technologies.
 3 With regards to the end user or the enquirer or the
 4 architect, yes, I agree with you.
 5 Q. The BBA might be aware you have changed technologies,
 6 but unless you tell them that the performance in fire is
 7 very different, they wouldn't know that, would they?
 8 A. They wouldn't, no, but --
 9 Q. No.
 10 A. I'm not sure if they would have made a judgement as well
 11 in that respect, but you're right, yes.
 12 Q. Well, there was no test evidence provided to the BBA,
 13 was there, that would have enabled them to make that
 14 judgement? They weren't provided with the 2007 and 2008
 15 failed tests, were they?
 16 A. No, they weren't.
 17 Q. Or any of the small-scale tests that Mr Meredith had
 18 done that showed a quicker ignition time and double the
 19 heat output. They weren't provided with that either,
 20 were they?
 21 A. We did not provide them with that, no.
 22 Q. And what I'm putting to you is that was very important
 23 information about the behaviour in relation to fire of
 24 this performance that Kingspan deliberately withheld
 25 from the BBA.

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1 A. I don't believe we deliberately held it from the BBA,
 2 I just -- at that time, I don't feel we felt it was
 3 important or relevant to do so in relation to this
 4 particular certificate.
 5 Q. If we go to section 7.3 on page 6 {BBA00000038/6}, we
 6 can see that it reads:
 7 "In buildings with a floor more than 18m above
 8 ground level, advice should be sought from the
 9 Certificate holder."
 10 Now, do you agree that that clause was seen as very
 11 advantageous to Kingspan as being included in this
 12 certificate because it meant that Kingspan would get
 13 an "in" to over-18-metre projects to be able to sell its
 14 product?
 15 A. I can see why someone would believe that, yes.
 16 Q. And Mr Mills has told us in his oral and written
 17 evidence that that wording was inserted because Kingspan
 18 wanted the BBA to omit some standard wording from the
 19 certificate that said that the product definitely could
 20 not be used on buildings with a floor above 18 metres.
 21 Did you know that at the time?
 22 A. Not that I recall.
 23 Q. In your statement, if we look at paragraph 7.35 on
 24 page 48 {KIN00020709/48}, you say:
 25 "Having reviewed this statement in preparation of

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1 this witness statement, I note that the BBA certificate
 2 should have said that the 'system' rather than the
 3 'product' meets the criteria stated within BR 135
 4 although I was not aware of this error at the time the
 5 BBA certificate was issued."
 6 Now, does that remain your evidence, that you
 7 weren't aware of that error prior to preparing your
 8 witness statement for this Inquiry?
 9 (Pause)
 10 A. Based on my memory at the time of the -- of writing that
 11 statement.
 12 Q. And what's your memory now? Were you aware at
 13 an earlier time that the certificate should have said
 14 that the system rather than the product met the
 15 criteria?
 16 A. I can't recall what my opinion was at the time, whether
 17 it should have said system or product, but -- it would
 18 have said system, but yeah, I can't recall.
 19 Q. You say at paragraph 7.21 of your statement on page 44
 20 {KIN00020709/44}, if we could go to that:
 21 "The BBA was responsible for drafting the technical
 22 content of the certificate although we would provide
 23 input for the BBA's consideration. In relation to the
 24 K15 BBA certificate, when a draft was received,
 25 Gareth Mills would circulate it internally for comment

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1 and, together with others, I would provide any comments
 2 I had. These would then be collated ..."
 3 Do you see that there?
 4 A. Yes, I do.
 5 Q. Presumably that did happen with the very first issue of
 6 the certificate --
 7 A. I believe --
 8 Q. -- that we just looked at?
 9 A. I believe so. That would be the normal format, yes.
 10 Q. Is it your evidence that you somehow missed that
 11 fundamental point about whether it could apply to
 12 a system or a product? Did you just miss that at the
 13 time?
 14 A. I can't recall whether it was just missed off or --
 15 yeah, I just can't recall.
 16 Q. Let's look at an email from around this time,
 17 {KIN00024474}, dated 7 June 2008. I think it was
 18 disclosed today. 27 June 2008 to Gareth Mills and you
 19 from Ivor Meredith. Do you see that there?
 20 A. Yes, I do.
 21 Q. He says:
 22 "Just to confirm I have sorted everything with
 23 Warrington Fire ..."
 24 That's in line 1. Then:
 25 "The same applies to K15 - Incidentally we should be

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1 getting the cavity barrier data off Mark Stevens on
 2 Monday as well."
 3 Then he says this:
 4 "(I may be opening a can of worms here but) Are
 5 there any other issues in respect of fire and the BBA???"
 6 "I have seen the BBA draft for K15 and the
 7 restrictions on use above 18 metres. If this gets
 8 published it would be a disaster.
 9 " Realistically how much longer have we got before it
 10 is ready to be issued? I believe that this is one
 11 situation where we do not want to go to print unless we
 12 have the BS 8414-2 information."
 13 Then he says this:
 14 "I know the original plan was to slip the existing
 15 BS 8414 data in at the last minute so they didn't have
 16 much time to look over it and pick holes however I
 17 believe it would be foolish of us to think that they
 18 wouldn't go over it with a fine tooth comb in respect of
 19 the current industry issues about the 18metre rule and
 20 any insulation product."
 21 Do you see that there?
 22 A. I do, yes.
 23 Q. So you appear to be being told by Ivor at the time that
 24 there's a plan to slip the existing 8414 data in at the
 25 last minute so they -- presumably that's the BBA,

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1 yes? -- didn't have much time to look over it and pick
 2 holes; do you see that there?
 3 A. I presume he means the BBA, yes.
 4 Q. Do you remember that plan being formulated to do that
 5 with that first certificate?
 6 A. I've no recollection of that, I'm afraid, no. No.
 7 Q. Can you remember going back to Mr Meredith and saying,
 8 "No, that's not the plan, we mustn't do that, that would
 9 be inappropriate"?
 10 A. No, I mean, Gareth was managing the project, but
 11 I've ... I can't recall a decision being made to that
 12 respect.
 13 Q. Yes.
 14 Can we look at another email from a little bit later
 15 in July 2008, {KIN00024476}. This is you to
 16 Gareth Mills, Friday, 11 July 2008, and this is
 17 "Comments on Draft 1", and you say:
 18 "ALL,
 19 "Suggest we try and amend the wording below as
 20 detailed remove blockwork and insert non combustible,
 21 might allow us to use a little spin in future."
 22 Do you see that there?
 23 A. I do, yes.
 24 Q. So we've got the word "spin" again. What did you mean
 25 by "might allow us to use a little spin in future",

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1 Mr Heath?
 2 A. I suppose, as mentioned before, although it was on
 3 a non-combustible or on a brickwork backing, we were
 4 using the phrase out of the other standard in relation
 5 to non-combustible substrates, could be assumed to be
 6 other materials.
 7 Q. I see. But why didn't you want to keep in the word
 8 "blockwork", given that that was more accurate, wasn't
 9 it, it was more precise?
 10 A. It was, and as I said in my statement, it was to give us
 11 a greater scope.
 12 Q. I see.
 13 Now, after the publication of the first version of
 14 the certificate, the BBA wrote to Kingspan around
 15 two months later on 24 December 2008 proposing to amend
 16 the wording on K15 and its fire performance. Do you
 17 remember that?
 18 A. Yes, I do, from --
 19 Q. Let's look at that. This is {KIN00002093/2}. There is
 20 an email from George Lee of the BBA dated
 21 24 December 2008, and he says to Gareth Mills:
 22 "Hi Gareth,
 23 "We have recently received a number of comments on
 24 the K15 certificate in relation to the clarity of
 25 wording used as part of this certificates fire section.

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1 "In response to this we have a suggested amendment
2 to the text which we wish to make. This amendment we
3 will make at no cost to yourselves and as an improvement
4 to the certificate, which I hope you will agree will
5 improve how this certificate will read in the future."

6 Then you can see the changes he proposes, and in the
7 second bullet point, under "Key factors assessed -
8 Behaviour in relation to fire", what he is proposing to
9 add is:

10 "The product has been tested to BS 8414-1 for
11 a specific construction on masonry walls."

12 Do you see that there?

13 A. I do, yes.

14 Q. At that time, did you consider there to be anything
15 incorrect about that proposed amendment by Mr Lee?

16 A. I think I responded to George Lee in relation to this,
17 and from memory, and looking at contemporaneous
18 documents, he actually wrote back and he commented that
19 these were minor changes. So, yes.

20 Q. That's not my question.

21 At the time, did you consider there to be anything
22 incorrect about what Mr Lee was proposing there?

23 A. Fundamentally, no.

24 Q. No, it was entirely correct, wasn't it?

25 A. Correct.

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1 Q. And a better description of the system that had been
2 tested for a specific construction on masonry walls; do
3 you see that?

4 A. I do.

5 Q. Now, did that prompt you to go back and read the
6 certificate, the first issue of the certificate,
7 carefully?

8 A. We would have cross-referenced those amendments, 7.2,
9 7.1, et cetera, and the two bullet points above, we
10 would reference that back, yes.

11 Q. Let's look at your response to Mr Lee which you sent on
12 5 March 2009. So it's at page 1 in the same string
13 {KIN00002093/1}. So he writes to you on
14 24 December 2008, and you respond on 5 March 2009:

15 "Good afternoon George,

16 "Gareth Mills has brought to my attention your
17 recent emails in relation to our BBA certificate for
18 K15.

19 "Firstly, may we register our concern at the
20 proposal to re-issue this certificate so soon after
21 publication, when we have waited some considerable time
22 for its issue."

23 Do you see that there?

24 A. I do, yes.

25 Q. Then if you go on {KIN00002093/2}:

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1 "Secondly, your request is receiving our attention,
2 however, we are determining the implications to Kingspan
3 of this speedy re-issue, as documentation has been
4 published that refers to the current certificate and the
5 wording therein. Therefore, there could be cost
6 implications to Kingspan that we would have no option
7 but to pass on the BBA, if we are in agreement to your
8 request. Once we have completed our audit to determine
9 the implications for Kingspan Insulation, we will be
10 back to you."

11 Do you see that there?

12 A. Yes.

13 Q. First point, why does it take so many months? You don't
14 respond until 5 March 2009 when he has written to you on
15 24 December the previous year. Can you explain that
16 delay?

17 A. I can't. Obviously George wrote to Gareth. I don't
18 know why there was a delay between December and March,
19 was it, that it was brought to my attention.

20 Q. Were you stalling because the original certificate
21 wording was very favourable to Kingspan and you knew you
22 had been at least in part found out, given the proposed
23 wording that they were suggesting in this amendment?

24 A. I don't believe we were stalling. Gareth was very busy
25 at the time, and I think it was probably just in his

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1 pile of emails to highlight to me. So I don't believe
2 Gareth sat on this intentionally for three months.

3 Q. Is it right that the request was receiving your
4 attention at the time?

5 A. It was. I was discussing with our marketing department
6 as to what the implications would be down the tracks of
7 this change.

8 Q. Why didn't you respond straight away saying, "You're
9 absolutely right, that ought to be clarified, it's
10 an accurate limitation of the system because this is
11 just a system test"? Why don't you do that?

12 A. I think because I just wanted clarification of what the
13 implication would be on costs. You know, we don't
14 disagree with the BBA in that format, we're just saying
15 I just need time to evaluate with -- basically it was
16 marketing to see what costs we would incur changing
17 presentations, literature, et cetera.

18 Q. With respect, Mr Heath, let's go back and look at the
19 first part of the email. That's not what you say, is
20 it? You say:

21 "Firstly, may we register our concern at the
22 proposal to re-issue this certificate so soon after
23 publication, when we have waited some considerable time
24 for its issue."

25 A. Yes.

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1 Q. You're not saying, "Fair point, you have raised
2 an accurate limitation, but we just need to consider the
3 cost consequences"; you're actually registering concern
4 that they want to amend the certificate, aren't you?
5 A. No, it wasn't concern that they wanted to amend it, it
6 was just the concern that after a number of years of
7 going through the process of K15, they wanted to amend
8 it so soon afterwards, I think it was three months or so
9 after it was released. So we weren't concerned at the
10 amendments they were going to add, you have to accept
11 those by fact, it was just our concern that, you know,
12 it was being -- we were asked to amend it so soon
13 afterwards when I think it's generally three or
14 four years after where they're amended, rather than just
15 three months.
16 So I don't think we had any objections to the
17 revised content, it was just the timing of it was so
18 soon after the original document.
19 Q. Really? That's honestly -- that's your evidence, is it,
20 your recollection, that you didn't have any concerns
21 about the proposed amendment?
22 A. No, I wouldn't have had any concerns.
23 Q. Can we go now to {KIN00009103}, and at the bottom of
24 page 1 we will see a copy George Lee's email, then one
25 email up we get your email back to him that we've just

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1 looked at, then we go to the top of this string, you
2 email Andrew Pack, Ivor Meredith, Gareth Mills, copying
3 in Gwyn Davies and you say, "Let the file gather dust
4 guys" --
5 A. Yes.
6 Q. "Regards, Phil"; do you see that?
7 A. I do. Could we just go back to the email that
8 George Lee sent me in response to mine?
9 Q. I can't take you back to that at the moment.
10 A. Oh, right, okay. Because George -- I've seen some
11 documents in relation to this, and George did come back
12 to me and say, "These are minor amendments to the
13 certificate", and now with regards to, "Let the file
14 gather dust", that was while I did explore with
15 marketing what the implications were for this. So it's
16 just I suppose some slang, for want of a better word,
17 back to the team to say I was dealing with it, and we
18 would move it forward when I got the information back
19 from marketing in relation to the implications.
20 Q. What we see here is two minutes after you have sent the
21 email to George Lee, you are emailing your team and
22 telling them to, "Let the file gather dust guys". You
23 were doing that, weren't you, because you knew the
24 amendments to be much more unfavourable to Kingspan;
25 that's right, isn't it?

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1 A. No, I don't believe that's the case, no.
2 Q. You don't believe it's the case?
3 A. I don't, no.
4 Q. You were stalling for time, weren't you, because you
5 wanted that certificate to remain in circulation, given
6 how favourable it was to Kingspan? That's right, isn't
7 it?
8 A. No, I don't believe that's the case.
9 Q. So what did you mean when you said, "Let the file gather
10 dust"?
11 A. Basically, I was managing -- I was going to take it
12 forward and, like I say, discuss with marketing what the
13 implications were to the cost, and also the implications
14 to presentations and other marketing material we had,
15 and then we would go back to George, and I think we did
16 accept those amendments going forward with George.
17 Q. I see.
18 Is it right that you considered these amendments to
19 be disruptive because marketing literature had by then
20 been produced by Kingspan?
21 A. I don't believe it was disruptive, we were just
22 concerned that after 12 weeks of being issued the
23 certificate, we were being asked to amend it. I don't
24 think there was ... no, I don't believe so.
25 Q. Do you agree that a certificate which said it had been

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1 tested to 8414-1 for a specific construction on masonry
2 walls would have a very different impact on the end use
3 of the product over 18 metres?
4 A. I mean, that was -- we were looking at that to extend
5 the scope of the approval, yes, I agree that.
6 Q. Yes, that was not a minor amendment, was it, regardless
7 of what the BBA said to you? That was a major
8 amendment, wasn't it, to make clear that it was for
9 a specific construction on masonry walls?
10 A. Well, they were considering it a minor amendment. Like
11 I say, I don't think there was any rue on our part to
12 actually stall the amendments of this going through.
13 Q. If we look at paragraph 11.47 on page 81 of your witness
14 statement {KIN00020709/81}, you say this:
15 "As described in paragraph 7.37 above, in 2009
16 I instructed members of my team not to proactively
17 respond to the BBA's request for amendments to be made
18 to the October 2008 K15 BBA certificate: I did not
19 consider this to be 'a policy or strategy of delay in
20 terms of the compliance, testing and/or the
21 certification of K15, in order to continue to be able to
22 supply and/or to promote K15 for use'"
23 Do you see that there?
24 A. Yes, I do.
25 Q. What distinction are you drawing between a deliberate

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1 strategy of delay and an instruction not to proactively
 2 respond? Can you help us with that?
 3 A. Sorry, can you ask the question again? Sorry.
 4 Q. You're saying in the first two lines that you instructed
 5 members of your team not to proactively respond. Do you
 6 see that?
 7 A. I do, yes, sorry, yes.
 8 Q. But you're denying that that was a policy or strategy of
 9 delay, and I want to understand how you're saying that.
 10 A. I think basically I'm referring there that I've -- with
 11 regards to this amendment, that I'm taking it forward.
 12 That I'll ... obviously Gareth passed it to me, so it
 13 was probably instructing my members of the team,
 14 predominantly Gareth and the rest of the team, that
 15 I wouldn't be -- that I would be handling it and they
 16 shouldn't request -- shouldn't be offering to offer the
 17 amendments. It was a single point contact with the BBA,
 18 basically.
 19 Q. I see.
 20 A. So it was in hand with myself. I don't think there was
 21 anything to say -- "proactively" is perhaps the wrong
 22 word, but the team not to respond to the BBA.
 23 Q. Are you aware that in fact it was not until July 2013
 24 that Mr Lee's proposed amendments made it into
 25 a published BBA certificate for K15?

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1 A. Only through contemporaneous documents that I've seen
 2 that, so I wasn't aware previously.
 3 Q. I see.
 4 I want to ask you now some questions about the LABC
 5 system approval certificate which was obtained by
 6 Kingspan for K15 and was issued in May 2009, so shortly
 7 after this.
 8 If we can start by looking at that certificate, it's
 9 at {KIN00005705}. This is the first page here. We can
 10 see the certificate holder is Kingspan Insulation there,
 11 and the system title is "Kingspan Kooltherm K15
 12 Rainscreen Board" in section 2. Do you see that there?
 13 A. Yes, I do.
 14 Q. If we go over to page 3 {KIN00005705/3}, there we see
 15 a section, "Overview":
 16 "Kooltherm ... is a rigid phenolic insulation board
 17 incorporating foil composite facings. It is intended
 18 for use as a thermal insulation layer ..."
 19 Do you see that there?
 20 A. Yes.
 21 Q. Then if we go on to the fourth page {KIN00005705/4},
 22 under the heading, "Requirement B - Fire Safety
 23 Considerations", it says there:
 24 "K15 has been tested in accordance with ..."
 25 Then we have BS 8414-1:2002; do you see that there?

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1 A. Yes, I do.
 2 Q. Now, that would be the 2005 test, wouldn't it, to
 3 part 1?
 4 A. That's correct.
 5 Q. Which had been done on old technology K15, hadn't it?
 6 A. Correct.
 7 Q. So that was no longer relevant to new technology K15,
 8 was it?
 9 A. No, not fundamentally, no.
 10 Q. Not at all, no, was it?
 11 Then we get a British Standard EN 1364,
 12 fire resistance tests for non-load-bearing elements, and
 13 then we get BS 476 and 7. Those are the tests that are
 14 relevant to national class 0, aren't they?
 15 A. That's correct.
 16 Q. Were those part 6 tests for K15 in its new technology
 17 configuration? They couldn't have been, could they,
 18 because you were struggling to get those?
 19 A. That's correct, it would have still been in relation to
 20 the Kesteren results.
 21 Q. Pre-Kesteren results, is that what you mean?
 22 A. Yeah, I mean the results that came out of the test at
 23 Kesteren.
 24 SIR MARTIN MOORE-BICK: Well, I'm sorry, are we talking
 25 about new technology or old technology?

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1 A. New technology or the technology that came out of
 2 Kesteren/Marec.
 3 SIR MARTIN MOORE-BICK: Produced in Holland?
 4 A. Yes.
 5 SIR MARTIN MOORE-BICK: But you had told us earlier tested
 6 in England?
 7 A. No, I wasn't sure where it had been -- I wasn't sure
 8 where it had been tested. It could have been in a Dutch
 9 laboratory or a UK laboratory.
 10 SIR MARTIN MOORE-BICK: Right, but not produced from the
 11 production facility in this country?
 12 A. That's correct.
 13 SIR MARTIN MOORE-BICK: Right. Thank you.
 14 Sorry, Ms Grange.
 15 MS GRANGE: No, that's fine.
 16 Then below that list of test methods, we see this
 17 sentence:
 18 "From the results, it can be considered as
 19 a material of limited combustibility and meets the
 20 criteria for Class 0 classification for surface spread
 21 of flame."
 22 Do you see that there?
 23 A. Yes, I do.
 24 Q. So it's being said it can be considered a material of
 25 limited combustibility and meet the criteria for

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1 class O.
 2 Just looking at that sentence now, do you agree that
 3 the most natural reading of it is that K15 can be
 4 considered to be a material of limited combustibility?
 5 A. No, I mean, we've never said it's a material of limited
 6 combustibility, and there's no test method listed in
 7 relation to that, and I'm assuming this just relates to
 8 as within the system within the 8414 test, that it's
 9 considered a material of limited combustibility when
 10 considered within the overall assembly.
 11 Q. How do you get to that, Mr Heath?
 12 A. Because --
 13 Q. How do you get a limited combustibility product out of
 14 an 8414 test on a different product to the one you're
 15 selling?
 16 A. Well, I think in that -- in that relation, it is
 17 a system approval, the 841 -- whether it's old or new
 18 technology aside, I think just as the -- it is a system
 19 approval, and obviously within that system approval and
 20 the construction we'd tested, they're considering that
 21 the material is of limited combustibility within that
 22 system and everything else combined within it.
 23 Q. But that just makes no sense, does it, because we know
 24 that the tests to get limited combustibility are very
 25 different tests, much more onerous tests, small-scale

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1 test to BS 476-11, or under the European classification
 2 system EN 13501, you have to get A1 or A2. You told us
 3 you knew that --
 4 A. That's correct.
 5 Q. -- at the outset of your evidence.
 6 A. That's correct.
 7 Q. So can you explain why you didn't, the moment you saw
 8 this, immediately write back to the LABC and say,
 9 "There's a mistake here, this is wrong, you can't state
 10 that it's considered a material of limited
 11 combustibility or even imply that it is, because it
 12 isn't"? Why didn't you do that?
 13 A. I think, again, we just thought they were considering it
 14 as within an overall system, that the whole system was
 15 non-combustible, it could be considered a system that's
 16 non-combustible. It wasn't in relation to the board, we
 17 were considering the whole system.
 18 Q. But do you agree that it would lead readers to believe
 19 that K15 itself was a material of limited combustibility
 20 as defined in Approved Document B?
 21 A. I think potentially it could be seen that way, yes.
 22 Q. Yes.
 23 A. Yes. But I --
 24 Q. If we go on to page 5 {KIN00005705/5}, to the top of the
 25 page, in the next section, "Requirement B4; External

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1 Fire Spread", it says this:
 2 "Since K15 can be considered a material of limited
 3 combustibility, it is suitable for use in all situations
 4 shown on Diagram 40 of Approved Document B Volume 2,
 5 including those parts of a building more than 18m above
 6 the ground. In the latter circumstances, the cladding
 7 system and the substrate to which the insulation is
 8 applied must also meet the requirement for limited
 9 combustibility."
 10 Do you see that there?
 11 A. I do, yes.
 12 Q. Would you agree with me that that makes it even clearer
 13 that what this certificate is conveying is that K15 is
 14 a material of limited combustibility?
 15 A. I can see why people would think that now, yes, I can
 16 see that -- why that -- but again, we were looking at it
 17 within a system and, as they mentioned there, in the
 18 latter circumstances the cladding system and the
 19 substrate, they're also mentioned, must also be limited
 20 combustibility. So I can see why that's being
 21 considered, yes.
 22 Q. Are you saying that, at the time you first saw this
 23 certificate, you didn't think that readers could take
 24 from it that K15 was a material of limited
 25 combustibility? Is that your evidence?

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1 A. On reflection, I can see that now. At the time, we
 2 didn't, because there's other tests we do around the
 3 world where, you know, all the material is combustible,
 4 all the materials we produce are combustible, there's
 5 aspects where some test houses and insurance companies
 6 see the whole thing as non-combustible if it passes
 7 a certain test. So that's the way we were thinking,
 8 that it was a system test, and within that it was seen
 9 as non-combustible if used within those parameters.
 10 Q. That's really how you saw it at the time, is it?
 11 A. I believe it was, yes.
 12 Q. It's right, isn't it, that as technical manager you held
 13 overall responsibility for certification by the LABC of
 14 K15; yes?
 15 A. Yeah, we had a project team. Andrew Pack ran the
 16 project for me, and I had overall responsibility for it.
 17 Q. And it was you who took the decision to approach
 18 Herefordshire LABC for certification in the first place;
 19 that's right, isn't it?
 20 A. Following consultations with the marketing and the sales
 21 and business development, it was seen as a route
 22 forward. We'd previously worked with Herefordshire
 23 Council on other LABC system approvals.
 24 Q. Let's look at paragraph 8.16 of your witness statement
 25 at page 59 {KIN00020709/59}. You tell us there that you

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1 can recall one meeting with the Herefordshire Council
 2 building control department which was held at the
 3 Kingspan offices in Pembridge:
 4 "The meeting I recall was a kick off meeting for the
 5 project of obtaining K15 LABC System Approval. I do not
 6 recall the meeting in detail but Andrew Pack would have
 7 been in attendance as the person leading on the
 8 project."

9 So it's right, isn't it, that you and Andrew Pack
 10 had a meeting with Herefordshire Council
 11 building control department at Kingspan's offices in
 12 Pembridge; yes?

13 A. Yes, I believe it was in Pembridge, yes. From memory
 14 I think there was just three of us in attendance.

15 Q. That was my next question: can you recall whether anyone
 16 else from Kingspan attended that meeting or was it just
 17 you and Mr Pack?

18 A. I believe -- I'm trying to recall it. I believe it was
 19 just myself, Andrew and a gentleman from the LABC in
 20 Hereford.

21 Q. Can you help us as to when that meeting took place?

22 A. I think it was post the BBA certificate, but I couldn't
 23 be sure the exact date of when that meeting was.

24 Q. So after October 2008 but before May 2009, when the
 25 certificate --

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1 A. I'd be guessing, but I'm assuming so, yes.
 2 Q. Although you describe it there as a kick-off meeting,
 3 can you recall whether there were any other meetings at
 4 any time prior to the issue of the LABC certificate in
 5 May 2009?
 6 A. I don't recall I had another meeting with LABC. I'm not
 7 sure whether Andrew had another meeting with the LABC or
 8 not in Hereford. He may have done, but I certainly was
 9 only party to that first meeting, I believe.
 10 Q. At that meeting, is it right that you and Mr Pack met
 11 with David Jones, who was a building control surveyor
 12 with Herefordshire Council, who would be the eventual
 13 author of the certificate for K15?
 14 A. I knew it was a David, I can't recall his surname.
 15 Q. You tell us in your statement -- for the transcript,
 16 this is at paragraph 8.8 on page 57 {KIN00020709/57} --
 17 that the purpose of Kingspan obtaining a system approval
 18 from the LABC was to facilitate and increase the sale of
 19 K15 over 18 metres and generally aid the product's
 20 credibility in the market; do you agree with that?
 21 A. I do, but also it was to help it -- because we got a lot
 22 of questions in relation to building control, and
 23 I think it was also to facilitate its route through
 24 various building control departments as well, because
 25 obviously the regulations are open to interpretation, so

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1 it was seen as a way forward, or LABC system approvals
 2 per se is seen as facilitating a way forward through
 3 building control.

4 Q. And it was a way forward for the over-18-metre market,
 5 wasn't it?

6 A. It certainly covered the over-18 market, yes.

7 Q. Yes. We've got the recollections of Mr Jones in his
 8 witness statement, which I would like to take you to
 9 now. This is {HBC00000029/10}. If I could just start
 10 with reading the top paragraph on this page, he says:

11 "The Kingspan representatives gave an overview of
 12 the product and its properties, and how/where it was
 13 intended to be used. In particular, the technical
 14 representatives were enthusiastic about the fire testing
 15 that Kingspan had commissioned for K15, and the fact
 16 that it had been shown to be suitable for use in
 17 buildings with storeys over 18m."

18 Do you see that there?

19 A. I do, yes.

20 Q. Do you remember that? Do you remember being
 21 enthusiastic about the fire testing that Kingspan had
 22 commissioned and that it had been shown to be suitable
 23 for use in buildings with storeys over 18 metres?

24 A. I can't recall being enthusiastic, but I can recall the
 25 meeting, but ...

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1 Q. Well, what fire testing might you have been talking
 2 about? Forget enthusiastic for a moment. What
 3 fire testing did you talk to them about that showed that
 4 it was suitable for use in buildings with storeys over
 5 18 metres?
 6 A. Obviously we provided them with the 2005 accreditation
 7 and the BBA certificate, and the -- and I think one
 8 other test maybe.
 9 Q. But, Mr Heath, you knew that that 2005 by that time
 10 couldn't be relied on for a number of reasons, including
 11 the fact that the new technology was now what was being
 12 sold, didn't you?
 13 A. On reflection, yes.
 14 Q. Yes, and you knew that the fire performance was very
 15 different. Did you ever tell Mr Jones that?
 16 A. Not that I'm aware, no.
 17 Q. No. Did you ever tell him about the failed 8414 tests
 18 in 2007 and 2008?
 19 A. Not to my knowledge, no.
 20 Q. Did you tell him about the increased heat output and the
 21 quicker time to ignition of the new technology K15?
 22 A. We didn't, because we were still obviously working on
 23 that development. So, no, we didn't.
 24 Q. Did you tell him that you were now selling a different
 25 product that you were still doing fire testing on to try

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1 and ascertain its true performance?

2 A. No, we didn't. Like I said earlier, you know, the fire

3 test continues -- even the present day, we're

4 undertaking fire tests. But, no, we didn't.

5 Q. If you look at the second paragraph, he says:

6 "I asked what Kingspan hoped to achieve from the

7 LABC type approval process, given the supporting

8 information they already had in the form of test results

9 and a BBA certificate. The response was that it was

10 very much a marketing aim to have the LABC brand

11 associated with their product, and they wanted the

12 opportunity to further emphasise the suitability of K15

13 in buildings over 18m, again for marketing purposes."

14 Do you see that there?

15 A. I do, yes.

16 Q. Do you recall emphasising the suitability of K15 for use

17 in buildings over 18 metres?

18 A. I don't recall emphasising it, but obviously we -- the

19 approval we were looking for was, you know, both above

20 and below 18 metres, but I don't regard -- I don't

21 remember emphasising it as such.

22 Q. During the meeting, did you tell him at any time that

23 8414 was a system test and you had only tested one

24 system and gave him the details of the system you had

25 tested?

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1 A. From memory, and from documents I've seen, I think we

2 only provided him -- we provided him with that 8414 test

3 report.

4 Q. Did you explain that that test data would only be

5 relevant if the same build-up of the same materials was

6 replicated precisely on a building?

7 A. I can't recall whether we would have said that or not.

8 Q. If we go to page 5 {HBC0000029/5} of this statement, in

9 the penultimate paragraph, Mr Jones has made clear at

10 the time, if we look at the third line down:

11 "I had no training specific to the use of materials

12 in buildings over 18m, or in the testing and

13 certification of building products and materials."

14 Do you see that there? He goes on and says:

15 "Please note that there were no buildings with

16 storeys over 18m in Herefordshire, for me to gain any

17 'on-the-job' training in areas of design relevant to

18 such buildings."

19 When you met him, did Mr Jones reveal his lack of

20 experience in dealing with buildings over 18 metres? Do

21 you remember discussing that with him?

22 A. I don't recall a conversation of that, no.

23 Q. Did his lack of experience in this area become apparent

24 to you at any stage during the meeting?

25 A. Not at all, no.

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1 Q. Now, you have said in your statement that you can't

2 recall exactly what documents were provided, and it

3 would likely have been Andrew Pack who provided any

4 additional documentation.

5 At this point, can we look at an email you send.

6 It's {KIN00020714}. If we go to the bottom email in the

7 chain, you send an email to various technical services

8 addresses, together with other named individuals. "LABC

9 System Approval Certificate", is the heading, "for

10 Kooltherm K15", 7 May 2009:

11 "GREAT NEWS!

12 "Please find attached Local Authority Building

13 Control Approval for K15 Rainscreen Board."

14 Then you explain what it is, what LABC approval is.

15 Then under "Benefits", one paragraph down, you say:

16 "Having a building type (housing, commercial, or

17 industrial) or a complete building element - a 'system'

18 - approved by LABC means that it can be used without the

19 full plans approval process happening repetitively

20 around the country at each site. This saves time and

21 money for developers, designers, engineers, contractors

22 and builders.

23 "The highlight of this Certificate and supporting

24 documentation is the Requirement under B4 of AD B -

25 External Fire Spread."

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1 Then you set out what it says, and you highlight in

2 bold the words "material of limited combustibility". Do

3 you see that?

4 A. I do, yes.

5 Q. At the end of that paragraph you say:

6 "N.B. This statement does not differ from anything

7 KIL states."

8 Do you see that there?

9 A. I do, yes.

10 Q. What did you mean by that sentence?

11 A. Again, I just -- it's -- I mean, a lot of that is cut

12 and pasted from the LABC website, the first two

13 paragraphs, I believe, but with regards to the statement

14 "does not differ from anything KIL states", again it's

15 reference to the product within that system that was

16 tested. You know, we'd never have said the material is

17 of limited combustibility either in our technical

18 advice, our literature ...

19 Q. No, that's right. You hadn't ever said before --

20 A. No.

21 Q. -- that the material was of limited combustibility.

22 A. No.

23 Q. Because you simply couldn't have said that, could you?

24 A. No, but I think the inference here is within that tested

25 system.

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1 Q. Well, it doesn't say that, does it, with respect?
 2 A. It doesn't, no, and that's an oversight, but as
 3 a business, you know, we know the material is not of
 4 limited combustibility.
 5 Q. Sorry, Mr Heath, did you just say that the inclusion of
 6 these words was an oversight?
 7 A. No, what I'm saying is the statement "doesn't differ
 8 from anything KIL states", and that that does differ,
 9 but what I was trying to get across there is that within
 10 a system, in the tested system, it could be considered
 11 as that material of limited combustibility.
 12 Q. Where had Kingspan said that before?
 13 A. I think just the inference of testing it within that
 14 system is that it -- you know, if you look at the ADB,
 15 you know, you're either non-combustible or you're
 16 a combustible product, and once you've got to the end --
 17 or a combustible system or combustible product, should
 18 I say, but once you have got through the various stage
 19 gates of the 8414, you're then into the same area as
 20 a non-combustible insulation and follow those paths.
 21 Q. With respect, Mr Heath, that is not what Approved
 22 Document B says, does it? It does not say if you have
 23 a product that's been in a successful 8414 test, you can
 24 then separately claim that that product is of limited
 25 combustibility.

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1 A. No, I'm not saying that. As I said, within the overall
 2 aspects of the system, I think the LABC felt within that
 3 system tested it could be considered as a material of
 4 non-combustibility. I don't believe they thought the
 5 phenolic Kooltherm was a material of limited
 6 combustibility because we hadn't done the 476 --
 7 appropriate 476 test.
 8 Q. I see.
 9 Just going on with your email, you thank Mr Pack for
 10 his consistent endeavours in driving this forward. We
 11 may need to go to the top of the next page
 12 {KIN00020714/2}. You say:
 13 "K15 remains the only insulation board that has
 14 successfully met the requirements of the BBA and LABC
 15 System Approval.
 16 "All the relevant documents surrounding the LABC
 17 System Approval Certificate are attached.
 18 "Special thanks go to Andrew Pack for his consistent
 19 [endeavours] driving this forward with the LABC and for
 20 the time being this should complete the tool kit for K15
 21 Rainscreen Board.
 22 "In the event you require further information on
 23 this please contact either Andrew or myself."
 24 Do you see that there?
 25 A. I do, yes.

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1 Q. Then if we move up the same document to Mr Rochefort's
 2 email response to you after you have sent this
 3 {KIN00020714/1}, he says this, so it's just to you:
 4 "Out of curiosity, which fire test result(s) did we
 5 use to get this?"
 6 So Mr Rochefort is obviously not clear what
 7 fire test results you have used to get that, and your
 8 response to him is this:
 9 "We can be very convincing when we need to be, we
 10 threw every bit of fire test data we could at him, we
 11 probably blocked his server, in the end I think the LABC
 12 convinced themselves Kooltherm is the best thing since
 13 sliced bread. We didn't even have to get any real ale
 14 down him!"
 15 Now, I would suggest that that response to
 16 Mr Rochefort entirely supports what we see earlier in
 17 the email, that you knew there wasn't any test data to
 18 support the limited combustibility statement, but
 19 effectively you had managed to pull the wool over his
 20 eyes, hadn't you?
 21 A. No, I don't believe that's the case.
 22 Q. What was your response to Mr Rochefort's question?
 23 Because you haven't answered it there. "Which fire test
 24 result(s) did we use to get this?" Which fire test
 25 results did you use to get a statement from them which

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1 said "can be considered a material of limited
 2 combustibility"? That's the statement you have said is
 3 great news.
 4 A. I probably rang Malcolm or went down to his office and
 5 informed him of the information that David at the
 6 Hereford Council went away with, ie the various
 7 certificates.
 8 Q. What was that? What was that information that supported
 9 it being considered a material of limited
 10 combustibility?
 11 A. I think it was merely the fire test that we'd -- the
 12 2005 fire test and other data we'd done in relation to
 13 full-scale wall tests that we'd provided him.
 14 Q. Did you know at the time that Approved Document B
 15 defined in its appendix materials of limited
 16 combustibility including by reference to 476-11 or Euro
 17 tests A1 or A2?
 18 A. Absolutely, yes.
 19 Q. You knew that?
 20 A. Yes.
 21 Q. But you're saying, what, that it just didn't occur to
 22 you that people would read that certificate and think it
 23 had passed those tests, given the statement that was
 24 made?
 25 A. With hindsight, I agree. At that time, no, we didn't,

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1 because, like I say, we'd done other tests globally
 2 where an assembly is seen, even with a combustible
 3 material, to be of limited combustibility. So we
 4 thought it was related to purely the system because it
 5 was a system approval.
 6 Q. You say with hindsight, but, Mr Heath, we can see you
 7 knew full well at the time, based on the "Great news"
 8 email and you putting in bold just those words,
 9 "a material of limited combustibility". You knew that
 10 at the time, didn't you?
 11 A. I can see -- I didn't -- I can see why people see that
 12 now, absolutely, yes.
 13 Q. But is that right, that at the time you realised it was
 14 mistakenly saying it could be considered a material of
 15 limited combustibility?
 16 A. I knew at that time that it wasn't a product of limited
 17 combustibility.
 18 Q. Yes.
 19 A. As a standalone product, yes.
 20 Q. And I'm suggesting to you that you knew at the time that
 21 the certificate was utterly misleading?
 22 A. At the time, I don't believe it was, but on reflection
 23 and reading it now, I can see that, yes.
 24 Q. If we can look at Mr Jones' witness statement again,
 25 {HBC00000029/37}, and I want to look at the final

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1 paragraph on that page. He's asked the question, if we
 2 blow up the bottom of that page:
 3 "As far as you are aware, did any employee or
 4 ex-employee of Kingspan, at any stage, state that K15
 5 was a material of limited combustibility, whether
 6 verbally or in writing? If so, please give full
 7 details, including the date and the name of any relevant
 8 individual and information ..."
 9 Then he says:
 10 "If this happened it would have been in my initial
 11 meeting with Kingspan at the start of the Herefordshire
 12 Council assessment. However I cannot from memory recall
 13 exact wording, or who said what, and so on that basis it
 14 would be wrong of me to say that anybody used the
 15 specific phrase 'limited combustibility.' I can say
 16 with some certainty however that I left that meeting
 17 with the clear impression that this is what K15 was.
 18 I recall thinking that this was consistent with
 19 a general opinion among building control surveyors I had
 20 known that Kingspan products would not really burn but
 21 would char slowly and self-extinguish once the ignition
 22 source was removed."
 23 Do you see that there?
 24 A. I do see that, yes.
 25 Q. Did you ever tell Mr Jones during that meeting that K15

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1 was a material of limited combustibility?
 2 A. Absolutely not.
 3 Q. Did you ever tell him that the test to BS 8414 in 2005
 4 meant that it could be considered to be a material of
 5 limited combustibility?
 6 A. No, I wouldn't have said that, no.
 7 Q. Did you ever give Mr Jones the impression that K15 was
 8 suitable for use over 18 metres without qualification?
 9 A. No, I didn't.
 10 Q. Did you tell Mr Jones at that meeting or at any other
 11 time that the only successful test to 8414 on a system
 12 with K15 had been carried out in May 2005 using old
 13 technology K15, which was no longer being produced or
 14 sold?
 15 A. That was the certificate that we provided him, yes.
 16 Q. Yes, so you agree that you told him that the only
 17 successful test had been carried out in May 2005 using
 18 old tech, which was no longer being produced or sold?
 19 Did you tell him that?
 20 A. I can't recall whether we told him that or not, but I'd
 21 imagine we just referred back to the 2005 test.
 22 Q. Do you accept that that would have been relevant
 23 information for him to have known?
 24 A. On reflection, yes.
 25 Q. Together with what you had subsequently learnt about the

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1 fire properties of K15 in 2007 and 2008?
 2 A. In relation to the large-scale tests?
 3 Q. And small-scale testing. You'd learnt that it had
 4 a very different fire performance, but you didn't tell
 5 him that, did you?
 6 A. We didn't tell him that, no.
 7 Q. Do you accept that your strategy in terms of LABC
 8 certification was to obtain as broad and wide
 9 an approval for K15 as possible, irrespective of the
 10 technical accuracy of what was stated in that system
 11 approval?
 12 A. I think we always wanted to -- as I said in my
 13 statement, want a wide scope of approval.
 14 Sorry, can you repeat the second part of the
 15 question?
 16 Q. Yes. Do you accept that your strategy in terms of LABC
 17 certification was to obtain as broad and wide
 18 an approval for K15 as possible, irrespective of the
 19 technical accuracy of what was stated in that system
 20 approval?
 21 A. No, I don't agree to the second part, but certainly the
 22 first part.
 23 Q. Do you accept that you misled Mr Jones about K15's fire
 24 performance in that meeting?
 25 A. I don't specifically think we misled him, no.

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1 MS GRANGE: I see.
 2 Mr Chairman, I think that's a good moment for
 3 a break.
 4 SIR MARTIN MOORE-BICK: Yes, very well.
 5 MS GRANGE: I'm midway through this topic, but we're doing
 6 well and I think that would be a good moment for me to
 7 take stock.
 8 SIR MARTIN MOORE-BICK: If that's convenient to you, we will
 9 have a break now.
 10 We're going to have another short break now,
 11 Mr Heath. We will come back at 3.35, please.
 12 THE WITNESS: Okay.
 13 SIR MARTIN MOORE-BICK: Again, please don't discuss your
 14 evidence with anyone over the break.
 15 THE WITNESS: Okay. Thank you.
 16 SIR MARTIN MOORE-BICK: Thank you very much. Would you like
 17 to go with the usher, please.
 18 (Pause)
 19 Right, 3.35, please. Thank you.
 20 (3.20 pm)
 21 (A short break)
 22 (3.35 pm)
 23 SIR MARTIN MOORE-BICK: Right, Mr Heath, all ready to go on?
 24 THE WITNESS: I am.
 25 SIR MARTIN MOORE-BICK: Thank you very much.

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1 Yes, Ms Grange.
 2 MS GRANGE: So we were in the middle of discussing the LABC
 3 certificate from May 2009, and I want to take you now to
 4 page 62 your witness statement [KIN00020709/62],
 5 paragraph 8.26. You say this:
 6 "Although in hindsight I appreciate the intended
 7 system-specific context of this statement could have
 8 been clearer in the LABC document, I consider that this
 9 context and intended meaning would have been clear to
 10 parties reviewing and relying on the LABC System
 11 Approval as they would have been sophisticated users
 12 such as architects and cladding engineers who would have
 13 appreciated that as a phenolic insulation, K15 could not
 14 be a material of limited combustibility and that the
 15 listed test standards were not in any case the relevant
 16 standards by which limited combustibility could be
 17 determined."
 18 So that's the position as set out in your witness
 19 statement.
 20 Now, can you tell us if I've got this right: is the
 21 position that now, with hindsight, you do appreciate
 22 that the certificate could have been clearer? Is that
 23 how you put it?
 24 A. Yes.
 25 Q. But you're not prepared to accept that the certificate

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1 was wholly inaccurate?
 2 (Pause)
 3 A. There were improvements that could have been made.
 4 I don't believe it was wholly inaccurate, but there
 5 could have been improvements made, certainly.
 6 Q. And those improvements would have been deleting the
 7 reference "considered to be a material of limited
 8 combustibility"; yes?
 9 A. Absolutely, yes.
 10 Q. Is it right at the time you had no concerns and
 11 considered it would have been clear to sophisticated
 12 users that the assertions regarding limited
 13 combustibility were intended to be made in
 14 a system-specific context only; is that your evidence?
 15 A. It is, yes.
 16 Q. And is it right that at the time you had no concerns and
 17 simply read those sections of the certificate we have
 18 been referring to as referring to a system; is that
 19 right?
 20 A. I believe so, yes.
 21 Q. If that's truly the position, what was the "great news"
 22 which we saw you announcing to colleagues internally on
 23 7 May 2009? What was there to celebrate about
 24 a certificate which said nothing more, in your mind at
 25 the time, than that this product is suitable for use

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1 over 18 metres in one particular tested configuration
 2 and no other?
 3 A. I think as part of the, you know, portfolio of marketing
 4 information we had, it was important, but also at that
 5 time it was great news and really a pat on the back for
 6 Andrew Pack, because he was a very hard worker and he
 7 didn't -- he never got the praise that he deserved. He
 8 was -- you know, he just got on with his work and there
 9 wasn't that much praise coming towards Andrew. So it
 10 was really an opportunity for me to praise Andrew in the
 11 work that he'd done at the time.
 12 Q. Sorry, that's not an answer to my question.
 13 What was there to celebrate about a certificate that
 14 said nothing more than that this product is suitable for
 15 use in one particular tested configuration?
 16 A. I just think it was great news, it was -- you know, as
 17 an organisation, you know, any accreditation we get is
 18 great news, whether it's a BBA certificate or
 19 accreditation on a flat roof, you know, it's great news
 20 for the business and great news for the people who were
 21 involved in running those projects.
 22 Q. What I will suggest to you is that you knew at the time
 23 that that certificate was misleading, and you celebrated
 24 it because it was an automatic ticket to put K15 on tall
 25 buildings, wasn't it?

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1 A. I don't believe that was the case then, no.
 2 Q. It's right, isn't it, that queries about the compliance
 3 of K15 for use over 18 metres decreased significantly
 4 following the issue of this LABC type approval, didn't
 5 they?
 6 A. I don't know, I've no recollection of that.
 7 Q. If we could go to an email chain, {KIN00009135}. This
 8 is a chain between you, Mr Meredith and a number of
 9 others in August 2009, and I want to look at the second
 10 email in the chain dated 28 August 2009 at 10.29 from
 11 Mr Meredith to you. Do you see -- sorry, it's to
 12 Richard Bromwich, Mark Swift and then it's to the
 13 technical helpdesk. Do you see that there?
 14 A. I do, yes.
 15 Q. Would you have received that as part of that technical
 16 helpdesk email?
 17 A. I can't recall whether I was on that circulation list or
 18 not or whether ... yeah, I can't recall.
 19 Q. Then he says:
 20 "I have given Steve a courtesy call apparently this
 21 is a very small area behind brass cladding ..."
 22 So he is talking about K15 being used at the top of
 23 a building, and then second paragraph:
 24 "It's Stuart Taylor at Wintech whom is raising
 25 concerns and we know as being pro mineral wool.

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1 "Apparently the lower areas of the job went to
 2 rockwool ..."
 3 Then he says this:
 4 "It may be a nice job to market as its definitely
 5 over 18metres and its one of the bigger apartment blocks
 6 in the UK.
 7 "Also Beetham Towers in Manchester which is another
 8 high rise job that went to K15 (I think) ... can we do
 9 some case studies??? I know these enquiries have died
 10 out since we obtained the LABC approval however it would
 11 be good to get as much supporting evidence of successful
 12 jobs in the portfolio while we have the chance."
 13 Do you see that there?
 14 A. I do, yes.
 15 Q. Does that help you remind yourself that queries had died
 16 out since the LABC approval was obtained?
 17 A. Ivor may have had less enquiries passed to him from the
 18 front of house technical advisers, yes.
 19 Q. And he would know, wouldn't he?
 20 A. He would know, from -- yeah.
 21 Q. Yes.
 22 A. Pre and post the approval, yes.
 23 Q. If all the sophisticated users you are talking about had
 24 understood the LABC certificate as system-specific only,
 25 why would such enquiries have died out?

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1 A. It may have been to do with that approvals or --
 2 you know, it's difficult to say, but it's certainly --
 3 by looking at that, the LABC document did reduce and the
 4 BBA certificate potentially did reduce the number of
 5 enquiries.
 6 Q. Absolutely it did, didn't it?
 7 Did you think at the time they were all replicating
 8 the exact configuration of the 2005 test to 8414-1?
 9 A. No.
 10 Q. So, again, that illustrates how persuasive that LABC
 11 certificate was in systems other than the one you had
 12 tested, doesn't it?
 13 A. It does show it had an effect on reducing the number of
 14 enquiries potentially, yes.
 15 Q. Yes, and that's why your "great news" email is
 16 effectively celebrating the LABC certificate, isn't it?
 17 A. Well, the "great news" email came out before obviously
 18 we -- it did reduce the number of enquiries. I mean --
 19 Q. Yes, but you knew it would reduce the number of
 20 enquiries, didn't you?
 21 A. I don't believe we knew it would, because as
 22 a commercial organisation, we encouraged architects and
 23 specifiers to call us, so it wasn't something we set out
 24 to do, to reduce the number of enquiries.
 25 Q. Let's go to another email you wrote, {KIN00005382},

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1 11 May 2009. This is an email with the heading
 2 "Subject: Phenolic Fire Focus Group", and attached is
 3 the LABC system approval certificate for Kingspan
 4 Kooltherm K15.
 5 You say this:
 6 "Following the success of receiving the attached
 7 LABC accreditation that now satisfies the requirements
 8 for K15 being installed above 18mts, we should cease any
 9 further fire tests for Ventilated Rainscreens."
 10 Pausing there, that shows you absolutely knew,
 11 didn't you, at the time, that having got that
 12 certificate, it was going to satisfy the requirement for
 13 K15 being installed above 18 metres without limitation?
 14 That's correct, isn't it?
 15 A. I think with regards to "cease further fire tests",
 16 you know, that was a collective decision, it was --
 17 Q. No, I'm not asking you about that part yet.
 18 A. Right.
 19 Q. I'm asking you about the initial part where you say,
 20 "now satisfies the requirements for K15 being installed
 21 above 18mts". Why did you say that?
 22 A. No, I think we believed it did at the time, yes.
 23 Q. Yes, because it was representing that K15 was a material
 24 of limited combustibility, which would mean that it
 25 could be used on all buildings over 18 metres without

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1 question, didn't it?

2 A. Potentially, readers could have seen it that way, yes.

3 Q. Then you go on. So you say:

4 "... we should cease any further fire tests for

5 Ventilated Rainscreens. At in excess of £15k/test both

6 the sales and business development teams should be adept

7 enough to use their tool kit to the full."

8 What do you mean there by "use their tool kit to the

9 full"?

10 A. It was the marketing -- when we say toolkit, it means

11 the marketing information they've got, the

12 BBA certificate, LABC, presentations ...

13 Q. I'd suggest to you that what that means, "adept enough

14 to use their tool kit to the full", is the BBA

15 certificate and the LABC certificate, which when sent on

16 jobs was an automatic passport to getting K15 on tall

17 buildings; would you agree?

18 A. I don't believe it was an automatic passport, because

19 after the BBA we still got queries, and we still got

20 queries after the LABC to some degree, but I don't

21 believe it was seen as a passport for all end-use

22 applications for K15.

23 Q. But if it was considered a material of limited

24 combustibility, that's what it would mean under Approved

25 Document B, wouldn't it, that if it's limited

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1 combustibility, you can use it on any building above

2 18 metres?

3 A. If it was read that way, yes.

4 Q. But you're saying you weren't sure it was going to be

5 read that way, are you?

6 A. As I said earlier, at that time, you know, for us it was

7 always a system -- it was a system aspect, but I can see

8 now why people would have read it that way.

9 Q. You go on:

10 "The pressure is on other component suppliers of

11 this method of construction to obtain similar statements

12 or prove their non combustible statements."

13 Do you see that there?

14 A. I do, yes.

15 Q. What did you mean by that?

16 A. It was in relation to -- you know, if we undertake

17 further tests, obviously at circa £15,000 at the time,

18 it was expensive, and we wanted other component

19 suppliers to approach us or we'd be party to them

20 through either the Rainscreen Works group to be involved

21 in the tests, whether it was steel frame systems,

22 fire barriers or manufacturers of rainscreen cladding

23 panels.

24 Q. This was a get-out-of-jail card, wasn't it? You had

25 been coming under some pressure prior to this

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1 certificate to justify the use of K15, particularly on

2 steel frame buildings, and then this falls into your lap

3 and it buys time, doesn't it, during which K15 can carry

4 on being put on high-rise buildings? That's the

5 reality, isn't it?

6 A. The two certificates certainly helped, but the reality

7 wasn't -- because we were still undertaking, I think

8 even -- we're still undertaking fire tests in relation

9 to K15 from the processing department. So tests were

10 continuing. It wasn't we completely stopped, tests were

11 continuing.

12 SIR MARTIN MOORE-BICK: Well, I have to say, Mr Heath,

13 I find that a little difficult to understand. If you

14 read the first sentence of this email as a whole, it

15 looks as though what you're saying is, "Now we've got

16 accreditation that satisfies the requirements for using

17 K15 above 18 metres, we should stop doing any more

18 fire testing". In other words, "We've done all we need

19 to do". Is that --

20 A. I think that's correct, I think in relation to

21 large-scale tests, we were stopping testing until we had

22 other parties who would undertake the tests with us.

23 From a technical process side of things, there were

24 still small-scale tests being undertaken.

25 SIR MARTIN MOORE-BICK: Well, lab tests?

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1 A. I believe we mentioned it before, the calorimeter tests

2 and things, yes, just small-scale tests, whether it be

3 in our laboratory or at Exova or BRE or whatever. So

4 there was small-scale tests still being undertaken.

5 SIR MARTIN MOORE-BICK: Yes. Thank you.

6 MS GRANGE: But you were saying to your team, "Stop any

7 further large-scale fire tests", weren't you?

8 A. I was, yes.

9 Q. Even though you didn't have a test which showed that K15

10 as part of a tested system could pass BS 8414-2, did

11 you?

12 A. That's correct.

13 Q. Yes.

14 Can we go to paragraph 3.26 of your witness

15 statement on page 16 [KIN00020709/16]. You say this:

16 "In October 2008 we received the BBA certificate for

17 K15 and in May 2009 we received a System Approval

18 certificate from the Local Authority Building Control

19 ... approving the use of K15 in non-combustible systems

20 ... In my view these documents, which evidenced third

21 party consideration of K15's suitability for use over

22 18 metres and confirmation as to its suitability for use

23 in non-combustible systems in this application, were

24 sufficient to support Kingspan's promotion of the

25 product for use in non-combustible systems over

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1 18 metres. My opinion was therefore at this stage that
2 further testing and development of K15 was unnecessary
3 and that if cladding manufacturers or other component
4 suppliers wished to specify K15 in systems which were
5 not covered by the 2005 BS 8414 Test, they could do
6 their own system testing to demonstrate suitability."

7 Do you see that there?

8 A. Yes, I do.

9 Q. So you're confirming there it was your decision, your
10 instruction, to stop testing to 8414, wasn't it?

11 A. There was a collective agreement to cease those
12 large-scale tests, yes. It wasn't a decision I made by
13 myself.

14 Q. That last part that I read there, where you say, "if
15 cladding manufacturers or other component suppliers wish
16 to specify K15 in systems which were not covered by the
17 2005 ... Test, they could do their own system testing to
18 demonstrate suitability", that's not what you said in
19 the email we just looked at, was it? There you say the
20 certificate satisfies the requirement for K15 being
21 installed above 18 metres. Would you agree?

22 (Pause)

23 A. Sorry, I'm not seeing the conflict at the minute, sorry.

24 Q. You're saying there that if individuals wished to use
25 K15 in systems -- so if you look four lines up from the

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1 bottom, you say:

2 "... if cladding manufacturers or other component
3 suppliers wished to specify K15 in systems which were
4 not covered by the 2005 ... Test, they could do their
5 own system testing to demonstrate suitability."

6 Do you see that there?

7 A. I do, yes.

8 Q. But that's absolutely not what you're saying in that
9 email of 11 May 2009, is it, that you just discussed
10 with the Chairman, where you say the certificate
11 satisfies the requirements for K15 being installed above
12 18 metres; do you see?

13 A. I do, yes. I do see that conflict now, yes.

14 Q. But the two positions can't be right, can they?

15 A. No.

16 Q. No.

17 A. No.

18 Q. It's right, isn't it, there was no instruction to
19 colleagues that customers were to be sold to do their
20 own testing if they wished to specify a different
21 system, was there?

22 A. I believe it was recognised within the team that,
23 you know, if somebody approached us who wanted to
24 undertake a test with one of their components, we'd be
25 willing to do so. So, you know, I think it was common

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1 knowledge in the business that, you know, it was -- we
2 were undertaking these tests at our own expense to the
3 benefit of other associated product manufacturers. So
4 I think it was a decision made, and it was well known
5 within the organisation, that we wouldn't turn down any
6 offers to undertake a system test with other component
7 suppliers who wished to come to the table.

8 Q. I see.

9 Mr Meredith had sent an invite out on 30 April 2009
10 to the first meeting of the phenolic fire focus group.
11 He sends that email invite to you, Malcolm Rochefort,
12 Vincent Coppock, Gwyn Davies and Justin Davies, and then
13 the meeting is scheduled for 18 May 2009. I want to go
14 to the minutes of that meeting, that's {KIN00020737}.

15 So this is, from what we can see, the first meeting
16 of this phenolic fire focus group. We can see who is
17 present and then you have sent your apologies. Do you
18 see that there?

19 A. Yes, I do.

20 Q. Are you likely to have reviewed the minutes of this
21 meeting at some point during your time as technical
22 manager?

23 A. I would have done. Yes, I was splitting my time
24 a little bit in other markets at that time, but yes,
25 I would have read that.

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1 Q. So if we look under "Background" on that very first
2 page, we can see it says:

3 "The meeting was called to organise, agree and
4 understand the current fire testing requirements and
5 mandatory product development of our New technology
6 Kooltherm. There are several fire performance
7 requirements that are crucial for sales of Phenolic
8 however in some areas on development Phenolic products
9 we are falling just short of the mark. This group was
10 originally pulled together as we believed we must have
11 the BS 8414-1 & 2 (the façade test for [masonry] and
12 steel frame) fire propagation test on Kooltherm K15.
13 Following the recent release of the K15 BBA and the LABC
14 Lantac Approval this urgent requirement has been relaxed
15 as the documents are working to cover the regulatory
16 desires for specific system approval. Other areas of
17 concern relate to the surface spread fire performance of
18 the product that we are concerned may have reduced, this
19 can be seen in recent BS 476 Part 7 tests ..."

20 Do you see that there?

21 A. Yes, I do.

22 Q. So it's clearly being stated there, isn't it, that the
23 urgent requirement for 8414 testing, including for
24 steel frames, has now been relaxed because those two
25 documents, the BBA and LABC certificates, are working to

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1 cover the regulatory desires; do you see that there?
 2 A. I do, yes.
 3 Q. Was that your understanding at the time, that that's
 4 what was happening?
 5 A. I did believe -- as we said, the LABC and the BBA
 6 approval had provided us with reduced enquiries, so,
 7 yes, that narrative I'd say is correct, yes.
 8 Q. Yes.
 9 If we can go down and look at item 2 of these
 10 meeting minutes, still on page 1, we can see there,
 11 under "Kooltherm K15 façade test", it says this:
 12 "Following discussions it was agreed that we still
 13 need to look at developing a product that will be able
 14 to pass a BS 8414-2 test as a back up to the LABC
 15 documentation."
 16 Do you see that there?
 17 A. Yes, I do.
 18 Q. Then it says:
 19 "Current fire propagation levels with ATH filled and
 20 OP920 development products are not adequate for this
 21 test. Thus currently we are not in a situation to test
 22 due to the prolonged levels of after-burn which are
 23 experienced."
 24 Do you see that there?
 25 A. Yes.

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1 Q. So would you agree that this sentence clearly shows that
 2 Kingspan knew at this time that K15 could not pass
 3 a large-scale fire test as part of a system tested to
 4 8414-2?
 5 A. Within the systems we'd tested up to now, at that time,
 6 yes. I mean, it's -- his comments there can only be
 7 related to the systems that we'd failed, yes.
 8 Q. Do you agree that the minutes also make clear that the
 9 improved trial products being developed were also
 10 thought unlikely to be able to pass as part of
 11 a successful system test?
 12 A. From his comments, yes.
 13 Q. Is that why you then specifically and deliberately
 14 decided to stop testing and wait until Kingspan were
 15 challenged?
 16 A. I don't believe so, no.
 17 Q. If we go back to the email at {KIN00005382}, on
 18 30 April 2009, Ivor's writing to a number of you, and
 19 you're copied in. He says:
 20 "The purpose of this Technical group is to
 21 concentrate on understanding and developing the fire
 22 performance of our phenolic insulation."
 23 Do you see that there?
 24 A. Yes.
 25 Q. Then just going on with that email {KIN00005382/2}:

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1 "Primarily targets for this group are as
 2 follows ..."
 3 And then he's got:
 4 "Understand why alternative Phenolic formulations
 5 may have yielded better fire test results. [New
 6 technology] vs. Old."
 7 Do you see that there?
 8 A. Yes, I do.
 9 Q. The toolkit that was being used at the time, where we
 10 saw reference to that in the email, is it right that
 11 that toolkit would have involved the BBA certificate,
 12 the LABC certificate and the one 8414 test from 2005?
 13 Is that right?
 14 A. That's correct, as well as other marketing material,
 15 yes.
 16 Q. If we go then back to your email of 11 May 2009,
 17 {KIN00005382}, after you have said that the pressure is
 18 on other component suppliers, you say this:
 19 "This saving will allow other applications and the
 20 Kooltherm brand to achieve a similar focus to that given
 21 to K15 over recent years and look at how the sales in
 22 this have grown.
 23 "Therefore, the focus on this group should be other
 24 Kooltherm applications where we do not have the complete
 25 sales tool kit. We should also be considering fire

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1 tests, smoke tests etc; that may not be relevant for
 2 either construction or the end use application, provided
 3 it has a good marketing story, these should be tabled."
 4 Do you see that there?
 5 A. Yes, I do.
 6 Q. Is that an instruction from you to fill marketing
 7 material with test results that are essentially
 8 irrelevant?
 9 A. No, this was a recommendation that came from my director
 10 as to what other fire tests we could use to market to
 11 show, you know, low smoke emissions, et cetera, from
 12 phenolic. So that was a line I put into that email that
 13 was given to me by another person in the organisation.
 14 Q. And who was that?
 15 A. That would have been the managing director at the time.
 16 Q. Who was that?
 17 A. Peter Wilson.
 18 Q. So are you saying that he wanted you to add into this
 19 email:
 20 "We should also be considering fire tests, smoke
 21 tests etc; that may not be relevant for either
 22 construction or the end use application, provided it has
 23 a good marketing story, these should be tabled."
 24 Are you saying he asked you to add that in?
 25 A. That's correct, yes.

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1 Q. On what basis were you content to put that in? Did you
2 think that that was an appropriate marketing strategy?
3 A. It was really to -- from a Kooltherm point of view,
4 a lot of people weren't aware of some of the benefits of
5 phenolic, the smoke emission tests and things like that,
6 so it was -- you know, there are other tests in the
7 industry where it may have been relevant to test them,
8 say, for food processing areas, cold stores and things
9 like that. So ... yes.
10 Q. But, Mr Heath, you are specifically talking there about
11 tests that "may not be relevant for either construction
12 or the end use application, provided it has a good
13 marketing story, these should be tabled". Can you
14 explain why you thought that comment was appropriate?
15 A. It was basically to see if we could have a test to
16 determine whether there was a marketing story in it to
17 confirm the benefits of phenolic.
18 Q. Did you consider this to be responsible behaviour at the
19 time on the part of Kingspan?
20 A. At the time it's probably -- you know, we're looking at
21 over ten years ago or so. You know, it was important at
22 the time to have good "stories", in inverted commas, for
23 the marketing department to draft.
24 Q. Yes, stories which weren't always true, were they?
25 A. Or case studies, even. I don't know if they weren't

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1 true, but it's, you know, to pass a test, whether it's
2 relevant to construction or not, provided you test it,
3 it was seen as an opportunity to market phenolic, to
4 explain the benefits of it.
5 Q. If we carry on within this email, you say after that
6 first few paragraphs:
7 "With regards Kooltherm applications that require
8 specific attention, my recommendation would be to
9 concentrate on the following:
10 "Closure on the Class 'O' project, if it hasn't been
11 already."
12 Do you see that there?
13 A. Yes.
14 Q. What does that mean, "Closure on the Class 'O' project,
15 if it hasn't been already"?
16 A. It was basically to ensure we had the class O
17 accreditation boxed off.
18 Q. Yes, because you knew, didn't you, that you were
19 struggling to get class O on the basis of the new
20 technology? That's right, isn't it?
21 A. I knew we were struggling with it previously. I don't
22 know if at that time we'd achieved class O. I knew
23 years leading up to that we'd used the results out of
24 Kesteren.
25 Q. Did you know that that claim, "has national class O",

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1 continued to be repeated in all of Kingspan's marketing
2 literature nonetheless, throughout this whole period?
3 A. I did, yes.
4 Q. Yes.
5 A. Yes, and --
6 Q. Yet you knew that it was struggling to get class O on
7 the new technology; yes?
8 A. I did, but obviously, you know, we submitted --
9 I presume we submitted that as part of the BBA approval
10 as well, and with the BBA undertaking regular audits,
11 they knew we had changed over the technology. I assume
12 with -- the BBA accepted it, then it was acceptable.
13 Q. Was class O testing stopped here at this stage on your
14 instruction?
15 A. I doubt whether it would have been, no.
16 Q. You doubt it, but is that what you intended by this
17 email? You said:
18 "... my recommendation would be to concentrate on
19 the following:
20 "Closure on the Class 'O' project ..."
21 A. Closure on the class O if we had achieved class O. Like
22 I say, that was a project being run by the technical
23 process team, so it was only closure on it if they'd
24 achieved class O.
25 Q. But if they hadn't achieved it, would you have expected

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1 them to have taken that claim out of the marketing
2 literature?
3 A. Well, they were still relying on the Kesteren test.
4 Q. Yes, old --
5 A. Yes.
6 Q. -- tests.
7 A. Old tests, yes.
8 Q. Mr Meredith writes to you about your decision to stop
9 testing. Let's go to that. It's at {KIN00005387/2},
10 I want to look at the bottom email in the chain on
11 page 2. This is on 17 June 2009. He says:
12 "Please provide comment on the K15 minute agreed at
13 the meeting.
14 "I would like to make sure you are happy with this
15 as we didn't get your input on this issue."
16 Do you see that there? And he says, "Thanks".
17 A. Oh, sorry --
18 Q. Then if you go to the next email up {KIN00005387/1} --
19 sorry, this is a little bit confusing how it came out on
20 the emails -- he then cuts and pastes the section of the
21 meeting minutes. He says:
22 "Phil,
23 "This is what [we] called about yesterday morning.
24 "I have dropped it into the body text just in case
25 you are working off your ipaq(sic).

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1 "As [it] conflicts with your prior stance I wanted
2 to get your opinion before it's minuted. Malcolm wants
3 to make the product now to reduce trial costs however we
4 are not in a position to test until we are confident
5 that it is better than the norm."

6 Do you see that there?

7 A. I do, yes.

8 Q. And he's set out the minute that we looked at previously
9 where, if we go down the next page to see the rest of
10 that minute, it was recorded:

11 "Thus currently we are not in a situation to test
12 due to the prolonged levels of after-burn ..."

13 Do you see that there?

14 "IM presented the findings of recent [single burning
15 item] and some ad-hoc lab tests ..."

16 Then:

17 "In Annexe 'A' some pictures have been added to
18 illustrate the visible properties. It was agreed to
19 make enough K15 for a full scale test and some small
20 scale indicators with the R336 and RN modified resins."

21 So it would appear that what Ivor's asking you for
22 is your input on whether they can carry on making some
23 K15 for a full-scale test; do you see that there?

24 A. I do, yes.

25 Q. Then if you move up the chain, he is saying this

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1 conflicts with your prior stance, he wanted to get your
2 opinion before it's minuted.

3 Then we see your response above at 10.29 the same
4 day, and you say this:

5 "As I previously stated the LABC doc ticks the
6 box's(sic) at the moment, and until we are challenged we
7 should cease all K15 façade tests and focus our effort
8 elsewhere.

9 "Regards

10 "Phil."

11 Do you see that there?

12 A. I do, yes.

13 Q. What boxes did the LABC document tick other than the one
14 system covered by the 8414-1 test in May 2005?

15 A. The only other boxes it would tick would be to simplify
16 it through the building control and to -- yeah, to
17 facilitate it through building control.

18 Q. Yes, by showing that it was a material of limited
19 combustibility as per the LABC certificate; yes?

20 A. With hindsight, yes.

21 Q. Not just with hindsight, Mr Heath, that's your thinking
22 at the time, isn't it, as we can obviously see from this
23 email?

24 A. Well, the LABC is a -- it's an important document
25 whichever product it is, but I can see why people would

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1 think that, yes.

2 Q. What did you mean by "until we are challenged"?

3 A. I'm not sure.

4 Q. If you believed this course of action to be wholly
5 legitimate, on what basis do you appear to be
6 anticipating challenge in this email?

7 (Pause)

8 A. I'm not sure what I'm relating to there, whether it's
9 the ... yeah, I'm not sure why I put "challenged" within
10 that.

11 Q. Would you agree that you were well aware that the
12 certificate was fundamentally misleading on this key
13 aspect of suitability for use over 18 metres, and that
14 Kingspan would almost certainly be challenged on it?

15 A. Reading that, I would say yes.

16 Q. In deciding on this course of action, to stop all K15
17 façade tests and let that LABC document tick the boxes,
18 what consideration was given to the life safety risks
19 posed by K15?

20 A. We were obviously concerned about the life safety risks
21 of what the business said. Unfortunately at that time,
22 you know, it was obviously -- we misinterpreted what the
23 LABC regarded Kooltherm as.

24 Q. When you say, "We were obviously concerned about the
25 life safety risks", would you agree that in all the

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1 emails I've shown you that we have been through today,
2 not once do you see you saying, "We need to be really
3 careful here because there are life safety consequences
4 if we recommend our product for use above 18 metres?"
5 Would you agree that?

6 A. On reflection, I can see that, yes.

7 Q. Yes, it's there in black and white, isn't it? We see
8 a complete absence of any consideration of life safety;
9 that's right, isn't it?

10 A. I don't believe that was the mindset of Kingspan at that
11 time, but on reflection I can see why we think that,
12 yes.

13 Q. Why do you not believe it was the mindset of Kingspan at
14 that time?

15 A. It wasn't. I mean, life safety is fundamental.

16 Q. Do you accept that there existed no valid test evidence
17 throughout the entire period, 2006 to 2010, while you
18 were technical manager, based on which the K15 which was
19 actually being sold could comply with the
20 Building Regulations for use over 18 metres? Do you
21 accept that?

22 A. I think we put too much reliance on that test and the
23 BBA and the LABC interpretation. I believe we put
24 potentially too much reliance on that.

25 Q. I'm going to ask the question again: do you accept that

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1 there existed no valid test evidence throughout the
 2 entire period, 2006 to 2010, while you were technical
 3 manager, based on which K15 which was actually being
 4 sold could comply with the Building Regulations for use
 5 over 18 metres?
 6 A. I can see why that's suggested -- yes, I can understand
 7 that. You know, we used the class 0 surface spread of
 8 flame from Kesteren, rightly or wrongly, and that was
 9 approved by the BBA as well. So, yeah, with hindsight
 10 I can see why that -- why you've made that comment, yes.
 11 Q. What I would suggest to you is that you directed that as
 12 a position that Kingspan were taking, and you endorsed
 13 it at the time.
 14 A. I believe there was a collective within the overall
 15 technical department to -- and a belief in that respect.
 16 It wasn't just a single person.
 17 Q. But are you prepared to take some responsibility for the
 18 role you played as technical manager in that position
 19 between 2006 and 2010?
 20 A. Yes.
 21 Q. Now, you have confirmed at the outset of your evidence
 22 that you still work at Kingspan. Have you ever been
 23 investigated or disciplined by Kingspan for any actions
 24 you took in relation to the K15 product?
 25 A. I haven't, no.

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1 Q. Has anyone ever spoken to you about what occurred with
 2 K15 and whether the testing and marketing of that
 3 product was appropriate during the time you were
 4 responsible for that? Leave aside any conversations you
 5 might have had in the context of this Inquiry. Has
 6 anyone within Kingspan spoken to you about whether the
 7 marketing at that time and your actions were appropriate
 8 during the time you were technical manager?
 9 A. No, they haven't.
 10 Q. Just finally, the handover process.
 11 You handed over to Mr Millichap; is that right?
 12 A. That's correct, the end of 2009.
 13 Q. Yes.
 14 A. Certainly in the last -- yeah, the last quarter,
 15 because, yes, my --
 16 Q. Did you have a period of overlapping with him so that
 17 you could bring him up to speed with K15, for example?
 18 A. I think at the time Tony was in an office next to me, so
 19 there was continued discussion as to the projects that
 20 were involved, and meetings between myself and Tony and
 21 Andrew Pack individually, and I think Tony and Ivor as
 22 well.
 23 Q. Did you bring him up to speed with the history of the
 24 testing of K15 and what you had discovered about its
 25 fire performance?

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1 A. I think we brought him up to speed with regards to what
 2 tests we undertook. He'd have been made aware of the
 3 tests that were required, and I'm not sure if he was
 4 copied on the technical lamination minutes as well so he
 5 could see all the projects that were going on at the
 6 time.
 7 Q. Did you -- sorry?
 8 A. No, I was just saying he may have been copied with the
 9 technical lamination meeting minutes at the time as
 10 well, I'm not sure.
 11 Q. Did you tell him about the change in fire performance
 12 that you had noticed or that Mr Meredith had noticed,
 13 the BRE had noticed, Kingspan Offsite had noticed, when
 14 the K15 was tested in 2007 and 2008?
 15 A. I can't recall whether I did or not during that
 16 handover.
 17 Q. Did you tell him that the test you had done in 2005 to
 18 8414-1 was with a different K15 product, the old
 19 technology product?
 20 A. I can't recall, but I doubt whether I would have
 21 mentioned the difference between old and new technology,
 22 because we were well into the new technology then.
 23 MS GRANGE: Mr Chairman, I've come to the end of my
 24 questions.
 25 SIR MARTIN MOORE-BICK: Right.

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1 MS GRANGE: But if we could have the customary break to see
 2 if there are any further questions.
 3 SIR MARTIN MOORE-BICK: Yes, thank you very much.
 4 Well, Ms Grange has said she has got to the end of
 5 her questions, but at this stage we have a short break,
 6 both to enable counsel to check they haven't overlooked
 7 anything, and also to give an opportunity for those who
 8 aren't present to suggest other questions that might be
 9 put to you.
 10 THE WITNESS: Right.
 11 SIR MARTIN MOORE-BICK: So we're going to break now. We
 12 will come back at 4.30 and see whether there are further
 13 questions that we would like you to deal with.
 14 THE WITNESS: Okay.
 15 SIR MARTIN MOORE-BICK: So would you like to go with the
 16 usher, and again, please don't talk to anyone about your
 17 evidence while you're out of the room.
 18 THE WITNESS: No, okay. Thank you.
 19 SIR MARTIN MOORE-BICK: Thank you very much.
 20 (Pause)
 21 I think ten minutes ought to be enough, oughtn't it?
 22 MS GRANGE: Yes, I hope so.
 23 SIR MARTIN MOORE-BICK: 4.30, then, please. Thank you.
 24 (4.20 pm)
 25 (A short break)

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1 (4.30 pm)
2 SIR MARTIN MOORE-BICK: Right, Mr Heath. Well, we will see
3 if there are any more questions for you.
4 THE WITNESS: Okay.
5 SIR MARTIN MOORE-BICK: Yes, Ms Grange, any questions?
6 MS GRANGE: Yes, just a few.
7 If we could go to another email string, please,
8 {KIN00005274}, and what I want to do is look at the
9 email three down on that page from you to Mr Meredith,
10 26 March at 10.50. Do you see that there?
11 26 March 2007, 10.50, to Ivor. You say:
12 "Ivor, we are coming under pressure from both
13 Metal-Con and Gene ..."
14 Is Metl-Con Kingspan Offsite? Is that another
15 phrase for them?
16 A. Yeah, it could well be, yes.
17 Q. Yes, and Gene, would that be Gene Murtagh, the CEO of
18 Kingspan?
19 A. I would presume so, yes.
20 Q. "... to undertake BS8414 tests with a raft of
21 alternative rainscreen solutions, basically going 50:50
22 on cost of £230k with them. Both mine and Peter's
23 argument is that we have basically got it boxed off from
24 the [Kingspan] stand point and have hence drafted the
25 following. Please check and comment as you feel fit."

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1 Do you see that there?
2 A. Yes.
3 Q. Then you say in your draft to Gene Murtagh:
4 "Good morning Gene,
5 "May I refer to your meeting last Friday with Peter
6 and Malcolm ..."
7 Is that with Peter Wilson and Malcolm Rochefort?
8 A. I can only assume so, yes.
9 Q. Yes:
10 "... during which the issue of fire testing
11 ventilated rain screens insulated with Kooltherm K15 was
12 discussed.
13 "We have already undertaken a number of facade tests
14 to the large scale BS8414-1, these included testing the
15 facade with and without a ventilated rainscreen to
16 determine if we could achieve correlation between
17 a facade without rainscreen cladding and one with."
18 Pausing there, are those the tests from 2004 and
19 2005, the naked test and then the 2005 8414 test?
20 A. I would assume so, yes.
21 Q. Yes. Then you say:
22 "We attempted to keep the actual rainscreen
23 'generic' by using cement particle board fixed to the
24 steel frame with the appropriate gaps between the sheets
25 to simulate a 'Trespa' type solution. The end result

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1 was we achieved correlation, in that flame spread across
2 the K15 was similar with and without the effect of the
3 cladding material.
4 "These two tests have allowed [Kingspan] to market
5 the system against BS8414 and to date we have not been
6 requested to undertake the test bespoke to a particular
7 rainscreen solution."
8 Do you see that there?
9 A. I do, yes.
10 Q. So what we see in this email exchange, in 2007, is --
11 assuming you sent that email. Do you remember whether
12 you sent it?
13 A. I don't recall whether I sent that draft that was
14 prepared, no.
15 Q. But you appear to be giving advice to the likes of
16 Gene Murtagh and others about whether or not further
17 testing should be carried out. Do you see that there?
18 And what you have got from the testing so far.
19 So what I want to put to you is that far from you
20 being told by seniors what to do about the Kingspan K15
21 testing, you were integral to the advice that was being
22 given at different stages about whether to keep testing
23 or not. Do you see that?
24 A. I do see that, yes.
25 Q. And would you agree that that's correct, you were

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1 integral to the decision-making?
2 A. There was a collective, I didn't work alone in making
3 those decisions. If you see the email above, you know,
4 we drafted a letter together, so I was part of
5 a collective that made those decisions.
6 Q. Do you mean with Mr Meredith?
7 A. No, with the other directors of the business.
8 Q. I see. But you accept that you gave advice to those
9 higher up about whether or not you should test K15 at
10 different stages; you would accept that, yes?
11 A. I was -- in that narrative, I was certainly briefing
12 them as to where we were and where we'd got to and how
13 we were using those tests, yes.
14 Q. Thank you.
15 Just a final question: we have been through an awful
16 lot of material, both on Thursday afternoon and during
17 the course of today. What would you have done
18 differently if you had the chance to do it again?
19 A. I think as a manager I would have highlighted my
20 concerns more to the collective team, and not accepted
21 the recommendations and advice from the BBA and the
22 LABC, who were -- and the BRE -- who were seen as the
23 experts or the deans at the time in the industry.
24 So ...
25 MS GRANGE: I see.

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1 Mr Chairman, thank you, those are all the questions.
 2 SIR MARTIN MOORE-BICK: Good.
 3 Well, Mr Heath, it just remains for me to thank you
 4 on behalf of the panel for coming to give your evidence.
 5 It's been very useful to hear from you, and we're very
 6 grateful to you for coming along to tell us what you
 7 know. Thank you very much indeed.
 8 THE WITNESS: No, thank you, and it's very important.
 9 SIR MARTIN MOORE-BICK: Now you're free to go.
 10 THE WITNESS: Thank you.
 11 SIR MARTIN MOORE-BICK: Thank you.
 12 (The witness withdrew)
 13 SIR MARTIN MOORE-BICK: Good, thank you. Well, that's it
 14 for the day.
 15 MS GRANGE: It is. Tomorrow we have hopefully Mr Rochefort
 16 of Kingspan.
 17 SIR MARTIN MOORE-BICK: Right, thank you very much.
 18 Well, we'll sit again then tomorrow at 10 o'clock.
 19 Thank you very much.
 20 (4.40 pm)
 21 (The hearing adjourned until 10 am
 22 on Tuesday, 1 December 2020)
 23
 24
 25

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