

# OPUS 2

## INTERNATIONAL

Grenfell Tower Inquiry

Day 80

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1 Tuesday, 1 December 2020  
 2 (10.00 am)  
 3 SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to  
 4 today's hearing. Today we're going to hear from another  
 5 former employee of Kingspan.  
 6 Yes, Ms Grange.  
 7 MS GRANGE: Yes, could we have Dr Malcolm Rochefort, please.  
 8 DR MALCOLM PAUL ROCHEFORT (affirmed)  
 9 SIR MARTIN MOORE-BICK: Thank you very much, Dr Rochefort.  
 10 Would you like to sit down and make yourself comfortable  
 11 there.  
 12 Now, before you start, I notice you have two  
 13 glasses, one of which has some water in. Did that come  
 14 with you?  
 15 THE WITNESS: It came with me. I prepared it in case  
 16 I needed some water.  
 17 SIR MARTIN MOORE-BICK: I just wanted to make sure we hadn't  
 18 left it there by accident.  
 19 THE WITNESS: No, no.  
 20 SIR MARTIN MOORE-BICK: I would be surprised if we had, but  
 21 still, it's better to check.  
 22 THE WITNESS: No, that was me.  
 23 SIR MARTIN MOORE-BICK: Right, thank you.  
 24 Yes, Ms Grange.  
 25 Questions from COUNSEL TO THE INQUIRY

1

1 MS GRANGE: Yes, thank you.  
 2 Can you give the Inquiry your full name, please.  
 3 A. Malcolm Paul Rochefort.  
 4 Q. I would like to thank you very much for coming to give  
 5 evidence today, it's very much appreciated.  
 6 If you have any difficulty understanding anything  
 7 I'm saying, please ask me to repeat the question or put  
 8 the point in a different way.  
 9 If you feel you need a break at any time, please let  
 10 us know.  
 11 If you can keep your voice up for the lady on your  
 12 right, who is taking a transcription of everything  
 13 that's being said, that would be good.  
 14 You have provided one witness statement to  
 15 the Inquiry, if I can take you to that. It's in  
 16 a folder on your desk and it will appear on the screen.  
 17 It's {KIN00008838}. There it is.  
 18 If we can go to page 55 of that statement, we can  
 19 see there it's dated 11 October 2019. Is that your  
 20 signature?  
 21 A. Yes, it is, yes.  
 22 Q. Have you read that witness statement recently?  
 23 A. I have.  
 24 Q. And can you confirm that the contents are true?  
 25 A. They are.

2

1 Q. Have you discussed your statement or the evidence you're  
 2 going to give with anyone before coming here today?  
 3 A. No.  
 4 Q. Thank you.  
 5 So just to start, I want to ask you some questions  
 6 about your background.  
 7 If we can go to paragraph 2.1 of your statement on  
 8 page 2 {KIN00008838/2}, here you tell us a little bit  
 9 about your background. You tell us that you have  
 10 a degree in chemistry; is that right?  
 11 A. That's correct, yes.  
 12 Q. From the University of Wales, Swansea, from 1976. You  
 13 also tell us that you have a PhD in chemistry, and  
 14 specifically, is it right your thesis was on the  
 15 oxidation of mixed phenolic and amino acid systems? Is  
 16 that right?  
 17 A. That's correct.  
 18 Q. Then between 1976 and 1994 you worked at ICI, is that  
 19 right, in a variety of roles?  
 20 A. Yes.  
 21 Q. Those roles included research scientist, process  
 22 engineer, technical planning manager and director of  
 23 research and technology; is that right?  
 24 A. Yes.  
 25 Q. That's also in that same paragraph.

3

1 Then you tell us that, following those years at ICI,  
 2 you joined Kingspan in 1994 as the technical development  
 3 manager.  
 4 A. That's correct, yes.  
 5 Q. We understand from your witness statement that just  
 6 a year later, in 1995, you were promoted to the position  
 7 of technical director; is that right?  
 8 A. That's correct, yes.  
 9 Q. You remained in that role until your retirement almost  
 10 ten years later on 31 December 2014.  
 11 A. 2014, yes.  
 12 Q. Yes.  
 13 As technical director, who did you report to in the  
 14 period from 2001 to the end of 2014?  
 15 A. Oh ... that would have been, I think, Peter Wilson.  
 16 Q. He was the managing director of Kingspan?  
 17 A. Peter was the managing director, yes.  
 18 Q. If we can look at an organogram that Mr Heath has  
 19 provided for us now, that's within his statement at  
 20 {KIN00020709/4}. If you could blow that organogram up,  
 21 there we can see you at the top of this structure.  
 22 A. Mm-hm.  
 23 Q. Is that right? And we can see that Vincent Coppock, the  
 24 research and development manager, Philip Heath, the  
 25 technical manager, and Gwyn Davies, the technical

4



1 manager on the process side, all reported in to you; is  
 2 that correct?  
 3 A. It did vary during our time there. I can't remember if  
 4 that's the period when that was correct. There was  
 5 certainly -- at some point during that period, this  
 6 would have been correct.  
 7 Q. Yes.  
 8 A. But the organisation did change, and Gwyn at one stage  
 9 I know was reporting in to the operations director,  
 10 for example, rather than me.  
 11 Q. Yes, and --  
 12 A. So I'm not -- it's a picture of --  
 13 Q. I see, yes.  
 14 A. -- what happened.  
 15 Q. Is it right, though, that Philip Heath did report to you  
 16 until he moved on in 2010, elsewhere into the business?  
 17 A. That's correct, yes.  
 18 Q. He was the technical manager, and that Tony Millichap  
 19 took his place and would have reported directly to you  
 20 from 2010 onwards?  
 21 A. That's correct, yes.  
 22 Q. Yes.  
 23 We also see a line here from Ivor Meredith round to  
 24 you. Do you see that there?  
 25 A. I do. That's a dotted line, yes.

5

1 Q. Yes. Did Ivor have direct reporting responsibilities to  
 2 you?  
 3 A. Not as a line manager. I think it was for technical  
 4 advice and technical direction.  
 5 Q. I understand, yes.  
 6 Going back to Mr Heath, and then Mr Millichap, how  
 7 would they report to you? How regularly did you see  
 8 them and how regularly did you get reports from them?  
 9 A. Well, there would have been a monthly meeting.  
 10 I usually held -- it came to be called the technical  
 11 lamination meeting, I think, because it was  
 12 predominantly about that, but they would sometimes  
 13 attend. I would get monthly reports from them.  
 14 Q. Yes.  
 15 A. Physically, they were in a different part of the site,  
 16 and often both of them would be travelling for long  
 17 periods of time, as I was in fact.  
 18 Q. Right.  
 19 A. So it would have been a few times a month, maybe.  
 20 Q. Right, yes.  
 21 Is it right that Philip Heath sent you a monthly  
 22 report outlining the activities of those teams under his  
 23 remit?  
 24 A. I believe -- yes. Yes.  
 25 Q. And those were technical services reports; do you

6

1 remember those?  
 2 A. I do remember them, yes.  
 3 Q. If we can look now on page 3, back to your witness  
 4 statement {KIN00008838/3}, paragraph 2.5 on page 3, you  
 5 explain there, you say:  
 6 "In my role as Technical Director, I was responsible  
 7 for everything on the technical side."  
 8 Do you see that there?  
 9 A. Yes.  
 10 Q. Is it right that that included research and development,  
 11 including all matters to do with the development of the  
 12 manufacturing processes and the development of products?  
 13 A. Yes, it did, yes.  
 14 Q. Was that for all Kingspan products, not just for K15,  
 15 which we're interested in?  
 16 A. It was for all the Kingspan insulation products.  
 17 Q. Yes.  
 18 A. Yes.  
 19 Q. And if we look at the bottom of that page, paragraph 2.6  
 20 of your witness statement, you say:  
 21 "My primary responsibility was to oversee the  
 22 technical direction of Kingspan, concentrating on  
 23 advances that could be brought in or developed that were  
 24 beneficial to both Kingspan and the market, including in  
 25 relation to fire, insulation performance and

7

1 cost-effectiveness."  
 2 We can see that there.  
 3 A. Yes.  
 4 Q. Is it right that you were responsible as technical  
 5 director for preparing the overall budget for the  
 6 technical department?  
 7 A. Yes.  
 8 Q. Is it right that it was from January 2001 onwards that  
 9 the technical manager and his teams of technical  
 10 advisers came to fall under your responsibility?  
 11 A. Yes.  
 12 Q. Now, in respect of K15 more specifically, if we look at  
 13 paragraph 4.4 of your witness statement on page 14  
 14 {KIN00008838/14}, you say there that your overall  
 15 responsibilities -- it's at the bottom of that page --  
 16 in respect of K15:  
 17 "... as for all other Kingspan insulation products,  
 18 were looking at whether the product was fit for the  
 19 market in respect of meeting customers' requirements and  
 20 also identifying whether there were any improvements or  
 21 developments that could be made to the product."  
 22 So we can see what you say there.  
 23 What about looking at whether the product was fit  
 24 for market in terms of fire safety? Did that also fall  
 25 under your responsibility?

8



1 A. That would have been via the technical service team,  
 2 yes, that would have been my responsibility.  
 3 Q. Now, at paragraph 3.29 of your witness statement on  
 4 page 13 {KIN00008838/13}, you explain that you were not  
 5 directly involved in the marketing of K15; is that  
 6 right?  
 7 A. That's correct, yes.  
 8 Q. Did you play any part at all in formulating the  
 9 marketing strategy for K15?  
 10 A. Not that I recall, no.  
 11 Q. Did you ever have any role in deciding on the content of  
 12 such marketing material or product literature for K15?  
 13 A. No.  
 14 Q. And who did have responsibility for that?  
 15 A. That would have been the head of marketing or marketing  
 16 director.  
 17 Q. And did Mr Heath and his team also have some  
 18 responsibility for that?  
 19 A. For the -- sorry, for --  
 20 Q. For deciding on the content, the technical content.  
 21 A. Oh, sorry, the technical content, yes, they would have  
 22 had responsibility for that, yes.  
 23 Q. Would you have had any oversight of them in deciding on  
 24 the technical content of marketing material or product  
 25 literature?

9

1 A. What I would have done was leave basically that area to  
 2 the technical manager and their team. They were both  
 3 very experienced people. Phil Heath I think had been  
 4 with the company for three years before I joined, so in  
 5 one sense I was a junior to him in that respect. So  
 6 they would have been responsible in terms of the detail  
 7 that went into any marketing literature.  
 8 Q. What about Mr Millichap, when he took over that role?  
 9 A. Tony Millichap had worked for Phil, in fact I think Phil  
 10 mentored him in the 1990s, and I know that Tony left for  
 11 a few years and then came back into Kingspan, and it was  
 12 some years after he came back he became technical  
 13 manager and replaced Philip Heath.  
 14 Q. Right, yes.  
 15 Were you ever involved in checking the technical  
 16 accuracy of marketing material or product literature for  
 17 K15?  
 18 A. I wasn't directly involved in checking the accuracy, not  
 19 in terms of application.  
 20 Q. In terms of any technical advice which was given by  
 21 Kingspan to customers about the use of K15, is it right  
 22 that you had no involvement or responsibility for that  
 23 either?  
 24 A. No, I think as I say in my statement, occasionally,  
 25 quite rarely, items might be -- come up the chain to me

10

1 that involved talking to a customer.  
 2 Q. Yes.  
 3 A. But if it was a customer on the application side,  
 4 I would always feel a bit uncomfortable because I wasn't  
 5 really very knowledgeable in that area.  
 6 Q. I see.  
 7 A. I was more of a product specialist.  
 8 Q. Yes.  
 9 A. Process specialist.  
 10 Q. If we look at paragraph 4.20 of your witness statement,  
 11 page 18 {KIN00008838/18}, just picking it up, you say  
 12 there:  
 13 "Whilst I had an overarching responsibility for the  
 14 Technical Services team via the Technical Manager who  
 15 reported to me from January 2001, I was not directly  
 16 involved in any of their work and responsibility for the  
 17 technical advice given was fully delegated to the  
 18 Technical Manager and Technical Services Manager."  
 19 So is that the evidence --  
 20 A. That's correct, yes.  
 21 Q. That's consistent with what you just said.  
 22 At paragraph 4.19 of your statement, which is at the  
 23 very top of that page that we're looking at now, you say  
 24 this:  
 25 "My impression at the time was that Kingspan had

11

1 a reputation for providing customers with straight and  
 2 clear advice and was respected within the industry for  
 3 this."  
 4 Do you see that there?  
 5 A. Yes. I think that's true.  
 6 Q. What period of time are you talking about there? You  
 7 say, "My impression at the time".  
 8 A. Well, it has to be at the time I was working for  
 9 Kingspan, which was up until December 2014.  
 10 Q. Did you take any steps at any time to check that  
 11 "straight and clear" advice was being given by the  
 12 technical teams in Kingspan?  
 13 A. I didn't do anything like a secret phone call or  
 14 anything to check, I must confess, I didn't do anything  
 15 like that, but I had no reason to think that advice  
 16 would be incorrect.  
 17 Q. So --  
 18 A. It was a well run team, as far as I could see.  
 19 Q. How had you formed that impression, that they were  
 20 providing customers with straight and clear advice?  
 21 A. That was ... it's a good question in terms of how had  
 22 I actually formed the opinion. I would have possibly  
 23 spoken to other people in Kingspan, people in the  
 24 marketing department or whatever, about the advice. But  
 25 that would have always been my impression anyway.

12



1 Q. I see, yes.  
2 What about the third-party certification of K15?  
3 Did you ever have any involvement in that? So  
4 certification by outside bodies like the BBA or the  
5 LABC.

6 A. No, not directly, no.

7 Q. I see. We might come back to look at the LABC  
8 certificate later, and some emails that were sent on  
9 that.

10 Lastly, on fire testing of K15, and in particular  
11 large-scale testing to BS 8414, if we look at  
12 paragraph 11.5 of your witness statement on page 46  
13 {KIN00008838/46}, you tell us in that first line:

14 "My involvement in testing to BS 8414 was generally  
15 high-level and I was not involved in the day-to-day  
16 coordination of such tests."

17 Is that right?

18 A. That's correct, yes.

19 Q. In the area of fire testing, can we also look at what  
20 you say at paragraph 2.7 of your statement on page 4  
21 {KIN00008838/4}. Let's pick it up four lines down.  
22 Right on the right-hand side, there is a sentence  
23 beginning "For", and you say there:

24 "For example, in relation to fire testing for  
25 applications, other employees, through their past

13

1 experience, had particular knowledge of fire testing and  
2 so these individuals would maintain overall  
3 responsibility for these respective areas and my  
4 involvement would be less."

5 Do you see that there?

6 A. Yes.

7 Q. I want to ask you: who is it that you're referring to  
8 there? You're talking about other employees, through  
9 their past experience, had particular knowledge of  
10 fire testing and they would maintain overall  
11 responsibility for those areas; who are you talking  
12 about there?

13 A. Well, in terms of application testing, it would be  
14 people like -- via Phil or Tony, it would be people like  
15 Ivor Meredith or Justin Davies or Tony Millichap in the  
16 past, and in the lab it would have been Vincent Coppock  
17 or whoever was in the lab at the time.

18 Q. What about testing to BS 476-6 and 7? Those are the  
19 tests for national class 0.

20 A. Yes.

21 Q. Did you have any involvement in that?

22 A. Not in preparing samples or sending samples, et cetera.  
23 Obviously I had some involvement in terms of a period  
24 when we were looking to improve fire properties and work  
25 was done on the BS 476-6 and 7.

14

1 One of the things about that test, it was a British  
2 Standard test, and at the time we were moving over -- or  
3 the impression was that the country was moving over to  
4 European classification for everything. So the European  
5 Standard was something that I would have been more  
6 familiar with, the single burning item test, A1, A2, B,  
7 C, D, E, F.

8 Q. Yes, the EN 13501 classifications?

9 A. Yes.

10 Q. I see, okay.

11 I want to move on now to ask you about your  
12 understanding of the Building Regulations and associated  
13 guidance.

14 In the period 2001 to 2010, let's take that period,  
15 did you ever receive any training in regards to the  
16 Building Regulations or the practical guidance in  
17 Approved Document B?

18 A. No.

19 Q. Did you ever read the practical guidance in Approved  
20 Document B which addresses external wall construction of  
21 buildings, including for over 18 metres?

22 A. I wouldn't have read it cover to cover. I might have  
23 referenced it when items were being discussed.

24 Q. Right, so you don't think you ever read Approved  
25 Document B?

15

1 A. I don't think so, no.

2 Q. What about after 2010? Did you ever read it later,  
3 before you left Kingspan?

4 A. I don't think so, no.

5 Q. No.

6 You were asked by the Inquiry about your awareness  
7 about the risks associated with the use of combustible  
8 materials in buildings over 18 metres in height, and if  
9 we can just look at page 19 {KIN00008838/19} of your  
10 witness statement, paragraph 4.26, you say this:

11 "My recollection is that, because Technical Advisors  
12 were on the front line and often acted as a signpost in  
13 relation to the queries received, training was provided.  
14 I believe that the advisors were aware that the  
15 requirements for using all facade systems on buildings  
16 with a floor over 18 metres were more onerous because of  
17 the limitations of fire-fighting at heights greater than  
18 18m, and they would also have been aware that further  
19 certification was required to ensure compliance with  
20 these requirements. Where buildings were designed with  
21 systems incorporating K15 that met the regulatory  
22 requirements, then there was minimal risk."

23 Do you see that there?

24 A. Yes.

25 Q. When you say there that your recollection was that they

16



1 would have been aware that further certification was  
 2 required, what do you mean by that there? It's three  
 3 lines up from the bottom:  
 4 "... they would also have been aware that further  
 5 certification was required to ensure compliance with  
 6 these requirements."  
 7 What do you mean by that?  
 8 A. I think I would have been referring to the 8414, the  
 9 rainscreen cladding test, of which I had a little bit of  
 10 knowledge because of the trade association connection.  
 11 So I was aware of development work in the 1990s for  
 12 this, but ...  
 13 Q. Right, I see. Yes.  
 14 You also say in your witness statement -- this is at  
 15 paragraph 6.7 at page 26 {KIN00008838/26} -- that in  
 16 2005 your understanding of the testing regime was  
 17 limited. Do you see that there, in the very first line?  
 18 A. I think I say my understanding of the BR 135 testing  
 19 regime was limited.  
 20 Q. I see. So you're saying:  
 21 "In 2005 my understanding of the BR 135 testing  
 22 regime was limited and I was not aware that  
 23 classification to BR 135 could be sought after  
 24 a successful BS 8414 test."  
 25 So is it only in that respect that you're saying

17

1 your understanding of the testing regime was limited?  
 2 A. It's not only that respect, but I think particularly  
 3 that I actually didn't know that a BR 135 was  
 4 required --  
 5 Q. Right.  
 6 A. -- in that time.  
 7 Q. Yes.  
 8 A. We had had discussions about setting up the 2005 test,  
 9 and they'd all been about the 8414 testing, so I was  
 10 aware that that was going to happen, and that it was  
 11 important for the market above 18 metres to get a pass  
 12 in this test, but I wasn't aware that that pass was  
 13 dependent on a BR 135.  
 14 Q. When did you become aware of that, of that separate  
 15 assessment process to the pass/fail criteria in BR 135?  
 16 A. I think -- oh ... I think in terms of the pass/fail  
 17 criteria, I would have relied on what was said to me by  
 18 people like Ivor Meredith. In terms of the requirement  
 19 for the thermocouples at 600 -- not to exceed  
 20 600 degrees, I would have been aware of that as  
 21 a primary requirement.  
 22 Q. I see.  
 23 A. And I would have been aware of the bit about no flaming  
 24 above the rig at the end of the -- before the end of the  
 25 test. So I would have been aware of those sort of

18

1 things.  
 2 Q. Yes.  
 3 A. But not that BR 135 was required.  
 4 Q. Did you understand that that pass/fail criteria was  
 5 contained in BR 135 and not in BS 8414 itself?  
 6 A. I came to understand that later on.  
 7 Q. When you say later on, when?  
 8 A. I'm not sure exactly when, to be honest.  
 9 Q. You also explain in your witness statement -- and we  
 10 don't need to go to this -- at paragraph 5.1 on page 21  
 11 {KIN00008838/21} for the transcript, that you did become  
 12 more familiar with the regulations for the use of  
 13 combustible materials on high-rise buildings as the  
 14 market for such materials increased; is that right?  
 15 A. Yes, yes.  
 16 Q. Actually, let's look at that. Let's look at  
 17 paragraph 5.1 on page 21 of your statement where you say  
 18 that there. So you say over time you came to be more  
 19 familiar, and then at the end of that paragraph you say:  
 20 "My awareness of this area included ..."  
 21 And you've got the BS 8414-1 and 2 fire tests. Do  
 22 you see that there?  
 23 A. Yes.  
 24 Q. Did your awareness include the fact that there was  
 25 a difference between those two tests?

19

1 A. I understood that when the 2005 was done, there was just  
 2 the single test, the 8414, and I understood that later  
 3 on another test had been developed, so they became  
 4 8414-1 and 2, specifically for steel-frame rainscreen  
 5 cladding systems.  
 6 Q. Did you understand that the part 1 test was for masonry  
 7 structures?  
 8 A. I understood it -- my thinking at the time would have  
 9 been it was for non-combustible surfaces, but ...  
 10 Q. Right, yes.  
 11 You also talk about BR 135, which we've just talked  
 12 about there.  
 13 Just back to that difference between part 1 and  
 14 part 2, can you help us about when it was that you  
 15 became more familiar with the difference between part 1  
 16 and part 2?  
 17 A. Well, certainly by the time that Ivor started looking to  
 18 do a part 2, so that presumably would have been some  
 19 time -- I'm trying to think -- in 2007, I would have  
 20 thought.  
 21 Q. Yes, I see.  
 22 Now, as far as you were aware -- let's take your  
 23 knowledge in 2005 first -- if you carried out a test to  
 24 BS 8414 and that system met the relevant criteria, would  
 25 that allow you to use any system other than the system

20



1 tested on a building with a floor above 18 metres?  
 2 A. I think my understanding was that if you did the test  
 3 with something that was at the -- in terms of cladding,  
 4 was the most vulnerable cladding system, then that  
 5 would ... effectively that system would be suitable for  
 6 anything that had a less vulnerable cladding system. So  
 7 presumably if you had something that was very thin, then  
 8 that would qualify you -- if it was non-combustible,  
 9 that would qualify you for anything that was thicker  
 10 than that, and in that way I understood ... the system.  
 11 Q. Where did you get that understanding from? Where did  
 12 that come from?  
 13 A. That would have been from discussions with Ivor and  
 14 possibly Phil, but certainly Ivor.  
 15 Q. Did your understanding of that change or develop at any  
 16 stage between 2001 and the end of 2014?  
 17 A. Erm ... I'm trying to think if it -- my  
 18 understanding ... I don't think it did, really. I think  
 19 it was still my understanding that you could qualify for  
 20 something that was at the bottom end in terms of  
 21 combustibility, and it would automatically -- the system  
 22 would be acceptable for anything that was a more  
 23 onerous -- sorry, a more robust combustibility.  
 24 Q. I see. But what are you talking about there in terms of  
 25 something at the bottom end? Are you talking about the

21

1 outer cladding panels?  
 2 A. Yes, sorry, I'm talking about the outer cladding, and  
 3 the whole construction, the way the construction's done.  
 4 So, for example, I know there were -- you have  
 5 firebreaks, for example. I mean, if, for example, you  
 6 tested something with, I don't know, a firebreak every  
 7 foot going up, then one, you would require that for  
 8 the -- the system would require that if it was used in  
 9 practice, and that would only qualify you for that, and  
 10 anything that was used either -- whether it was 1 foot  
 11 apart or 6 inches apart, in other words anything in the  
 12 system that was changed, if it was changed in a way that  
 13 was likely to make the result worse, then in that case  
 14 that would not be acceptable. In other words, it has to  
 15 be the lowest point that you're testing.  
 16 Q. When you say, "if it was changed in a way likely to make  
 17 the result worse" --  
 18 A. Yes.  
 19 Q. -- who was making those assessments about whether  
 20 something might make it worse or not?  
 21 A. Sorry, this is my understanding you were asking.  
 22 Q. Right.  
 23 A. That was my understanding.  
 24 Q. Yes.  
 25 A. I --

22

1 Q. But who would, on your understanding, determine whether  
 2 the system was making it worse or better, compared with  
 3 what you had tested?  
 4 A. Well, certainly for the initial test, my understanding  
 5 was that Ivor had put that together with the -- after  
 6 discussion with the BRE and come up with a system that  
 7 was the most vulnerable in terms of the outer cladding,  
 8 a non-combustible outer cladding.  
 9 Q. How was that the most vulnerable if it was  
 10 a non-combustible outer cladding?  
 11 A. No, obviously a combustible outer cladding would be much  
 12 more vulnerable, so that wouldn't be acceptable. So if  
 13 he's trying to pass a test that gives you acceptance for  
 14 all non-combustible claddings, you choose the least  
 15 robust outer cladding in order to do the test, and  
 16 I think that's why this one was chosen for the 2005  
 17 test.  
 18 Q. I see. We'll come back to that 2005 test in a little  
 19 while.  
 20 If we can go within your witness statement to  
 21 paragraph 5.3 on page 22 {KIN00008838/22}, you say this:  
 22 "My understanding was that the complexity of such  
 23 a large scale fire test meant that the criteria of a  
 24 BR 135 classification could be somewhat subjective, in  
 25 the sense that decisions in respect of this

23

1 classification are dependent on the skills and  
 2 experience of the fire engineer who is drawing the  
 3 conclusion. This means that there is a degree of  
 4 reliance on people with experience in this area to make  
 5 consistent decisions and to ensure that a consistent  
 6 assessment is made of whether the criteria are met in  
 7 each circumstance."  
 8 Do you see that there?  
 9 A. Yes.  
 10 Q. Now, when did the matters that you have set out there  
 11 come to your knowledge? When did you come to understand  
 12 that?  
 13 A. I think that was one of the fire tests that was done,  
 14 possibly one of the ones in 2014 --  
 15 Q. Right, yes.  
 16 A. -- where we had an instance where there was some dispute  
 17 or disagreement between Kingspan and BRE as to whether  
 18 it had passed the criteria or not.  
 19 Q. Yes.  
 20 A. So that's where that understanding would have come from.  
 21 Q. I see, yes.  
 22 Would you agree with me that, as you spent longer at  
 23 Kingspan, you became more and more aware of the  
 24 complexity of this large-scale fire testing and all the  
 25 different factors that might affect whether a system

24



1 passes or not?  
 2 A. I did, yes.  
 3 Q. It's not as simple, is it, as saying, "Well, there's  
 4 a very thin vulnerable outer skin, so we can simply,  
 5 you know, extrapolate from that and assume other systems  
 6 with different skins might work", is it?  
 7 A. No, I agree, it isn't, but I think that was our  
 8 understanding at the time.  
 9 Q. So is it fair to say that you perhaps had a more  
 10 simplistic understanding of this system testing which  
 11 then developed, certainly by the time the 2014 tests  
 12 were carried out?  
 13 A. I think that would be a fair assessment, yes.  
 14 Q. Yes.  
 15 The matters that you have referred to there in your  
 16 statement, you have said you think you became aware of  
 17 this in 2014. Do we take it from that that, therefore,  
 18 you wouldn't have been aware of this, the need for,  
 19 you know, an assessment, there's a degree of reliance on  
 20 people with experience in this area -- just to be clear,  
 21 are you saying you wouldn't have been aware of that back  
 22 in 2005?  
 23 A. I don't think I would have been, no.  
 24 Q. Were you aware of these matters before you met Wintech  
 25 in late 2013? We're going to come to some

25

1 correspondence that shows that you were involved in  
 2 a meeting with Wintech to discuss the use of K15 in the  
 3 external construction of high-rise buildings. Do you  
 4 think you understood that before you met Wintech?  
 5 A. I don't think I did. In fact, I think meeting Wintech  
 6 and sitting down with them was an education for me.  
 7 Q. I see, yes. Well, we'll come back to that and I'll ask  
 8 you about that.  
 9 I want to ask you now about the phrase "limited  
 10 combustibility", which is also a matter you were asked  
 11 about in your witness statement.  
 12 If we look at paragraph 5.8 of your statement on  
 13 page 23 {KIN00008838/23}, you're asked the question:  
 14 "What was your own understanding of the meaning of  
 15 the phrase 'limited combustibility'?"  
 16 You say:  
 17 "I can no longer recall what my understanding of  
 18 this would have been during my employment with  
 19 Kingspan."  
 20 Do you see that there?  
 21 A. Yes.  
 22 Q. Can you help us as to what you mean by that, "I can no  
 23 longer recall what my understanding of this would have  
 24 been"?  
 25 A. Well, the trouble is I am basically a scientist, so

26

1 I look at figures more than -- and systems for  
 2 organising things rather than the words. So I would see  
 3 a term of -- that says "limited combustibility" and  
 4 think: what does that mean?  
 5 Now, having looked at it subsequently and tried to  
 6 remind myself of the Euroclass, I see that technically  
 7 it's defined in the Euroclass as -- an A2 would be  
 8 a limited combustibility. So an A1 would be  
 9 non-combustible, A2 is limited combustibility, and  
 10 classes B down to F would be combustible.  
 11 Q. Yes.  
 12 A. So I understand that now, but at the time -- my  
 13 understanding at the time -- I think I would have just  
 14 looked at the phrase "limited combustibility" and not  
 15 known exactly what was meant by it.  
 16 Q. I see. And that knowledge you have just explained by  
 17 reference to the Euro classifications, how recently did  
 18 you obtain that knowledge?  
 19 A. Well, I looked at it in preparation for this Inquiry,  
 20 I looked at it again, and I saw a chart that said --  
 21 that gave the Euro classifications, and a definition  
 22 beside them, and as I looked at it I thought, "Oh, well,  
 23 maybe I remember that", but it wasn't something that  
 24 would have been front of mind at the time, I don't  
 25 think.

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1 Q. Right.  
 2 Whilst you were employed by Kingspan, did you  
 3 understand Kingspan's range of phenolic, PIR and PUR,  
 4 polyurethane, insulation products to be combustible?  
 5 A. Yes. Yes, I mean ... I think there was a -- the reason  
 6 I'm qualifying this, I think there was a range of  
 7 combustibility. If you look at something like a PU,  
 8 PIR, that would be an E or an F generally. A PIR would  
 9 be a D, and phenolic would be a C or a B.  
 10 Q. Right. But the point I'm asking is whether you knew  
 11 they were combustible insulation products.  
 12 A. Yes. They're organic materials, so they have carbon,  
 13 hydrogen, and if it's hot enough, they will burn, yes.  
 14 Q. Did you know at any time during your tenure as technical  
 15 director that the phrase "limited combustibility" was  
 16 defined as a concept in Approved Document B?  
 17 A. I think it might have been pointed out to me, but  
 18 I wouldn't have been aware of it.  
 19 Q. When you say you "think it might have been pointed out  
 20 to me", why do you say that?  
 21 A. I think it might have been pointed out to me when -- it  
 22 was being described when something was being described.  
 23 Q. Yes, okay.  
 24 A. But ...  
 25 Q. Did you ever become aware that there was a table at the

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1 back of Approved Document B where specific definitions  
 2 can be found, including what tests and what criteria you  
 3 have to meet to be defined as limited combustibility?  
 4 A. No, I wasn't.  
 5 Q. Had you ever heard of the BS 476-11 tests, which are the  
 6 national test which is relevant for limited  
 7 combustibility? Either that or 476-4, which is  
 8 non-combustible. Were you ever aware of those tests  
 9 during your time as --  
 10 A. I can't recall being aware of BS 476-11, but I may have  
 11 been and forgotten it. But I can't recall being aware  
 12 of it.  
 13 Q. Is it right that you did understand that there were more  
 14 onerous requirements in the Building Regulations and in  
 15 the guidance in the approved documents for the use of  
 16 combustible insulation materials for buildings over  
 17 18 metres?  
 18 A. Yes. Yes, I understood that part.  
 19 Q. Why did you think that was at the time?  
 20 A. I thought it was because above 18 metres it had been  
 21 described to me that the problem was the fire ladders  
 22 were generally limiting at that height, and therefore if  
 23 there was a fire and if it took hold, it was necessary  
 24 to make sure it couldn't progress with any rapidity up  
 25 the --

29

1 Q. Yes, yes.  
 2 I want to ask you some questions now about the test  
 3 to 8414-1 which was carried out at the BRE on  
 4 31 May 2005.  
 5 If we can go to paragraph 11.25 of your statement on  
 6 page 51 {KIN00008838/51}, you say there:  
 7 "From my review of the contemporary documents ...  
 8 I can see that I was aware that a BS 8414 test was  
 9 planned, originally scheduled for April 2005."  
 10 Do you see that there?  
 11 A. Yes.  
 12 Q. We know that it happened in May 2005.  
 13 Then you go on to say:  
 14 "At a strategic level, we had identified expansion  
 15 of the phenolic market as an important opportunity in  
 16 2004, and the test would have been commissioned to  
 17 improve the market possibilities for K15 if the test was  
 18 passed."  
 19 Do you see that there?  
 20 A. Yes.  
 21 Q. Who is the "we" there? Who had identified this area as  
 22 one for expansion?  
 23 A. I think that would have been probably the board of  
 24 Kingspan Insulation, I would think.  
 25 Q. Did you sit on the board as technical director?

30

1 A. Yes.  
 2 Q. So you think it was at board level that that decision  
 3 was made?  
 4 A. I think so, yes. I think that would have been ...  
 5 Q. Just to be clear, was that expansion in order to ensure  
 6 a move into the high-rise market?  
 7 A. Yes, I think that was identified as a potential market.  
 8 Q. Who was it that initiated the project to test K15 in  
 9 a system to BS 8414?  
 10 A. I can't recall who actually initiated it.  
 11 Q. Can you help us as to the way in which you understood,  
 12 prior to the test being carried out in May 2005, that it  
 13 would improve the market possibilities for K15? How did  
 14 you think that test was going to be relevant to that?  
 15 A. I thought that a pass would enable us to go into that  
 16 market, as I said before, with the appropriate cladding  
 17 and system.  
 18 Q. And when you say "with the appropriate cladding", what  
 19 was your understanding about how you were entering the  
 20 market and with what system?  
 21 A. I understood that it would be for non-combustible  
 22 cladding materials.  
 23 Q. Right, and all non-combustible cladding?  
 24 A. I think that would have been my understanding, yes,  
 25 definitely.

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1 Q. Who would have told you that?  
 2 A. It would have been Ivor, as we were preparing, Ivor or  
 3 Phil.  
 4 Q. Right, yes.  
 5 Had you read BS 8414-1 prior to the first test in  
 6 May 2005?  
 7 A. I can't recall whether I ever would have read it word  
 8 for word. I think it would have been pointed out to me  
 9 and I think I probably would have seen diagrams of the  
 10 test. And I think the concept would have been described  
 11 to me and I would have had some inkling of that through  
 12 work that was done, as I say, in the 1990s on developing  
 13 façade testing.  
 14 Q. Are you aware that that 2005 test report has very  
 15 recently been withdrawn by Kingspan on the basis that  
 16 the K15 that was tested was not representative of what  
 17 was subsequently sold in the marketplace?  
 18 A. I did see that in the opening statement, yes.  
 19 Q. Was that the first time you were made aware of that?  
 20 A. Of it being withdrawn?  
 21 Q. Yes.  
 22 A. Yes, it was, yes.  
 23 Incidentally, sorry, the fact that it's withdrawn  
 24 14 years or 15 years after it was issued wasn't  
 25 a surprise either. I mean --

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1 Q. Yes. Can you help us as to why it wasn't a surprise?  
 2 A. Well, it's a long time after the test, so it would be  
 3 prudent to withdraw and to re-test.  
 4 Q. Just to be clear, let's just look at the letter that was  
 5 written on this. {KIN00024104}. This is a letter from  
 6 Kingspan to the BRE dated 23 October 2020.  
 7 On page 1, you can see in the first paragraph  
 8 they're writing with reference to a number of 8414 test  
 9 reports, and then in paragraph 2 it states:  
 10 "As you may be aware, Kingspan is currently involved  
 11 as a core participant in the Grenfell Tower Public  
 12 Inquiry. As part of our co-operation with requests for  
 13 information from the Inquiry we have undertaken  
 14 a comprehensive review of all past and current test data  
 15 which relates to K15, including BS 8414 tests.  
 16 "Through our review we have now concluded that tests  
 17 carried out in 2005 and 2014 featured product that was  
 18 not sufficiently representative of the product currently  
 19 sold into the market place. We have listed these  
 20 reports and a small summary of their construction  
 21 build ups below."  
 22 So just to be clear, Dr Rochefort, they haven't been  
 23 withdrawn on the basis that they're simply old tests and  
 24 just due to their age they've expired; they've been  
 25 withdrawn because it's said there the featured product

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1 was not sufficiently representative of the product  
 2 currently sold into the marketplace. Do you see that  
 3 there?  
 4 A. Yes, I think I had seen this, this document, and I would  
 5 have taken that to mean, when they say "not sufficiently  
 6 representative of the product currently sold into the  
 7 market place", that that meant currently sold in  
 8 23 October 2020, when the letter was sent. That would  
 9 have been my understanding. I may be wrong in that, but  
 10 that was my understanding.  
 11 Q. I see.  
 12 Did you ever become aware, after the 2005 test, that  
 13 the K15 product changed to become a different product?  
 14 A. I did, yes, I was aware of that, although at the time  
 15 I am not sure I was completely clear on which product  
 16 had been tested in 2005, because I think you're going to  
 17 be talking about the change between what we called the  
 18 old technology and the new technology.  
 19 Q. Yes.  
 20 A. And for some time I wasn't perfectly clear that it had  
 21 been apparently old technology that was tested.  
 22 Q. Right.  
 23 A. But I was aware that the new technology was introduced  
 24 in late September 2006.  
 25 Q. I see.

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1 A. But, of course, the changeover period had been quite  
 2 a long time. It had been about two years.  
 3 Q. Okay, we will come on to that, and we'll come on to look  
 4 at some documents relevant to that.  
 5 Just to be clear, this letter does acknowledge that  
 6 the product that was sold was not representative of the  
 7 product sold since September 2006.  
 8 A. Where does it say --  
 9 Q. The letter goes on.  
 10 A. I mean, probably -- I'm sure you're right, but I can't  
 11 see it saying that, that's all.  
 12 Q. We will get the reference in the letter, but that's our  
 13 understanding of what's being said by the withdrawal of  
 14 all these reports. I'll get the reference.  
 15 Just thinking back to at the time of the 2005 test,  
 16 and you have already said that your understanding was  
 17 that once you had tested that system, you could then use  
 18 that to say that K15 could be used in other  
 19 non-combustible systems; is that right?  
 20 A. That was my understanding, yes.  
 21 Q. Again, where did that understanding come from? Did  
 22 somebody tell you that?  
 23 A. It would have been from talking to Ivor, as I say, Ivor  
 24 and possibly Phil, but certainly Ivor.  
 25 Q. Did you later come to understand that in fact the exact

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1 system tested would have to be replicated if you were to  
 2 rely on an 8414 test?  
 3 A. I don't think I ever understood that the exact cladding  
 4 would have to be replicated. I understood that the way  
 5 the system was set up, the framing, the firebreaks, that  
 6 would have to be, and the way that the product was  
 7 mounted.  
 8 Q. Yes.  
 9 A. But I don't think I ever understood that it would have  
 10 to be exactly the same product.  
 11 Q. Right.  
 12 A. Because that would have led to an awful lot of tests.  
 13 Q. If we go to page 2 of this letter {KIN00024104/2} and  
 14 look at paragraph 4. If you look two paragraphs down,  
 15 do you see it's talking about "Test report 220876 dated  
 16 8th December 2005". Do you see that there?  
 17 A. Yes, I do, yes.  
 18 Q. It says in the second paragraph:  
 19 "On a full review of raw materials and the  
 20 manufacturing processes, it became apparent that the K15  
 21 manufactured in 2005 would not be representative of the  
 22 product currently sold on the market from 2006 to today.  
 23 While both products are still phenolic foams, Kingspan  
 24 is now of the view that there are sufficient differences  
 25 to consider withdrawing this test report."

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1 A. This was what you were referring to earlier, and I can  
 2 see that now, yes, in this letter.  
 3 Q. Thank you.  
 4 Did you read the test report for the May 2005  
 5 8414 test at the time it was received from the BRE? So  
 6 that test report came in December 2005. Did you read  
 7 that?  
 8 A. I must have done at the time, but I can't recall it.  
 9 Q. Did you note that the outer surface of that test was  
 10 a building board or cement particle board or fibre  
 11 cement board? Did you note that?  
 12 A. I don't think it stuck in my memory. I think --  
 13 I remembered it as a combustible material and as the  
 14 least robust combustible material we could use in that  
 15 application.  
 16 Q. Sorry, you say there you remembered it as a combustible  
 17 material; I thought you said earlier a non-combustible?  
 18 A. Sorry, I said I'm not good with words, non-combustible  
 19 material, and therefore that that would be -- the reason  
 20 it had been used was that it was the least robust of the  
 21 non-combustible cladding materials.  
 22 Q. How did you understand it was the least robust of the  
 23 non-combustible --  
 24 A. Because that would have been the reason for doing the  
 25 test. You're doing a test to justify being able to use

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1 it on products that are actually more robust. That was  
 2 my -- as I said before, that was my understanding of the  
 3 way the test was done.  
 4 Q. But was that an assumption you made, or was that  
 5 something somebody actually told you, that it was the  
 6 least robust of the non-combustible external surfaces?  
 7 A. That was certainly my understanding at the time, and it  
 8 would have been gained from talking -- as I said,  
 9 talking to Ivor and possibly Phil.  
 10 Q. Right.  
 11 Are you aware that a classification report for the  
 12 May 2005 test to BR 135 was only issued ten years later,  
 13 so after your retirement?  
 14 A. Only as a result of doing background reading for  
 15 the Inquiry did I become aware of that, yes.  
 16 Q. If we could go back to your witness statement,  
 17 paragraph 6.7 on page 26 {KIN00008838/26}, you say there  
 18 your understanding was that a successful 8414 test was  
 19 sufficient to show compliance of the product being  
 20 tested:  
 21 "I did not become aware the BR 135 Classification  
 22 Report could be obtained until later on and I was not  
 23 aware that a Classification Report did not exist for  
 24 a system incorporating BR 135 between 2005 and 2014."  
 25 Do you see that there?

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1 A. Yes.  
 2 Q. Can we look at {KIN00006001}. So these are some emails  
 3 that I want to show you first up from 2014.  
 4 If we can go to the top of page 2 {KIN00006001/2},  
 5 we see an email from Paul Ashford of the Caleb Group  
 6 sent to you on 15 May 2014 at 6.20. Do you see that  
 7 there?  
 8 A. Mm-hm.  
 9 Q. In the middle paragraph, he makes reference to tests to  
 10 BS 8414. He said:  
 11 "He also mentioned that he thought that tests had  
 12 been done by Kingspan in Europe on board product to  
 13 BS 8414 (at least for phenolic)."  
 14 Do you see that there?  
 15 A. Yes.  
 16 Q. He asks in the final line of his email:  
 17 "Do you have recollections of European data being  
 18 available on BS 8414?"  
 19 Do you see that?  
 20 A. Yes, I do, yes.  
 21 Q. Your response is in the email above that, at the very  
 22 bottom of page 1 {KIN00006001/1}, sent on the same day.  
 23 You say there back to him:  
 24 "We have a BS 8414 part 1 result and have recently  
 25 completed an 8414 part 2, both on Kooltherm K15, for

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1 which we are awaiting the test report from the BRE. As  
 2 you are probably aware, the BS8414 doesn't result in  
 3 a direct pass/fail, but has to be interpreted by a fire  
 4 engineer or the BRE using BR 135."  
 5 Do you see that there?  
 6 A. Yes.  
 7 Q. So by 2014 we can see that you are clearly aware that  
 8 the pass/fail criteria are there in BR 135 and there has  
 9 to be some form of assessment to that criteria. You  
 10 were aware of that then.  
 11 A. Yes, I think as I said, following the meeting with  
 12 Wintech I became much more aware about what was  
 13 required.  
 14 Q. So does it follow that at some point before that you  
 15 must have come to learn that there was no BR 135  
 16 classification report for the 2005 test?  
 17 A. I don't know that that ... it looks like I'm talking  
 18 about the 8414-2 in this email.  
 19 Q. Yes, I appreciate that, but I'm just trying to establish  
 20 at what point before you send this email you had become  
 21 aware of the need for an assessment under BR 135?  
 22 A. Well, at least by 31 October 2013, which I think was the  
 23 meeting with Wintech. I think that would have made me  
 24 much more aware of it.  
 25 Q. I see. And did it never occur to you to ask before that

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1 point, "Where is the BR 135 assessment for the 2005  
2 test?"  
3 A. I don't think it would have done, no.  
4 Q. I see.  
5 If we look at an email in the top of this chain,  
6 this is Mr Meredith's email to Mr Ashford. Do you see  
7 that there?  
8 A. Yes.  
9 Q. You're copied in to this.  
10 A. Yes.  
11 Q. This is 21 May 2014, and Mr Meredith says:  
12 "Paul,  
13 "Sorry for the delay I'm a week behind ...  
14 "I have attached the BS 8414 part 1 test.  
15 I slightly disagree with Malcolm's comments though as  
16 BR 135 (copy attached for information) describes the  
17 pass/fail criteria so as long as the test data supports  
18 the criteria set in the document we can claim that it  
19 meets the criteria of BR 135."  
20 Do you see that there?  
21 A. Yes.  
22 Q. Do you remember reading that?  
23 A. I don't, to be honest, but obviously I must --  
24 Q. Do you ever remember discussing with Mr Meredith what  
25 you calls a slight disagreement with you about BR 135

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1 and what's necessary in terms of an assessment to  
2 BR 135?  
3 A. No, but I wouldn't have been surprised that Ivor didn't  
4 agree with me, because he was the expert in this area,  
5 so if I'd made a mistake -- I think that's probably why  
6 I copied Ivor in.  
7 Q. I see.  
8 A. Or I was copied on Paul Ashford's email.  
9 Q. Yes.  
10 A. I think Paul was a consultant who worked for -- well, he  
11 did quite a bit of work in Europe ...  
12 Q. We can see that Mr Meredith has attached the BS 8414-1  
13 test. Do you see that there?  
14 A. Yeah.  
15 Q. So that must have been the 2005 test; yes?  
16 A. Yeah.  
17 Q. But it didn't occur to you at that stage to say,  
18 "Where's our BR 135 assessment for that 2005 test?"  
19 A. No, it didn't, no.  
20 Q. Did you agree with the approach that Mr Meredith was  
21 advocating in this email, "as long as the test data  
22 supports the criteria set in the document we can claim  
23 that it meets the criteria of BR 135"? He seems to be  
24 saying, "You don't need to have that separate assessment  
25 done, we can just claim it as long as we can see it

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1 meets the criteria ". Did you agree with that?  
2 A. As I said, I would have regarded Ivor was the expert in  
3 the area, so if that's what he thought, I would have  
4 assumed that that was correct.  
5 Q. I see.  
6 Let's go back to the period after the 2005 test had  
7 been carried out. I want to go to a monthly report for  
8 February 2006. This is a monthly technical services  
9 report, {KIN00005152}.  
10 Now, you confirmed earlier in your evidence that  
11 these were the reports that you would have received  
12 monthly from Mr Heath and his team; yes?  
13 A. Yes, almost certainly. What I used to do with these,  
14 I think, I would précis them, usually, and they'd go  
15 into a technical report for the technical department.  
16 Q. I see.  
17 A. So I would have one from TS and one from the processing  
18 side.  
19 Q. Okay.  
20 We can see that this one is from February 2006, and  
21 just to put it in context, the 8414 test report dated  
22 from December 2005, so this is a couple of months after  
23 that.  
24 A. Okay.  
25 Q. If we look at page 2 {KIN00005152/2} in the section

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1 headed "Projects" at the bottom of that page, do you see  
2 that there, it says this:  
3 "BS 8414-1. K15 fire test is being assessed by the  
4 BRE to make full advantage of the results. Also a next  
5 test is being discussed to see if we can cover all types  
6 of Cladding and substrates."  
7 Do you see that there?  
8 A. Yes.  
9 Q. Would you have read this report at the time?  
10 A. I would have.  
11 Q. Were you aware at the time that the 8414 test was being  
12 assessed by the BRE to make full advantage of the  
13 results?  
14 A. I would have assumed that because it was listed here  
15 that that was what was happening, yes.  
16 Q. What did you understand by the next sentence to mean:  
17 "Also a next test is being discussed to see if we  
18 can cover all types of Cladding and substrates."  
19 A. I don't think I would have known in detail what he's  
20 referring to. I'd presume he's referring to an 8414-2,  
21 but I don't know. But it was a logical step to go from  
22 a simple non-combustible to something more complicated  
23 and test that.  
24 Q. What Mr Meredith has told us, and Mr Heath agreed with  
25 this, was that it was a programme of testing to 8414

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1 which started with a naked test with just the insulation  
 2 on; were you aware of that?  
 3 A. I was, yes, I was aware of that, yes.  
 4 Q. Then this next test in 2005 just had a building board on  
 5 the outside, a fibre cement board or cement particle  
 6 board, but no rainscreen outer layer, whether that be  
 7 a render or another form of rainscreen system; and then  
 8 it was planned that there would be another test after  
 9 this to actually replicate a full rainscreen system.  
 10 Now, was that your understanding at the time, that  
 11 this was part of a planned programme of 8414 testing?  
 12 A. It wasn't my understanding at the time that it was --  
 13 there was any need to do it on the same system,  
 14 I thought that covered us for any non-combustible  
 15 cladding. I'd assumed -- I would have assumed, looking  
 16 at this, at the time -- that it was, as I said, for  
 17 different types of cladding. Covers all cladding and  
 18 substrates, so presumably a different type of mounting.  
 19 Q. What I'm going to suggest to you is that everybody  
 20 understood at the time that that 2005 test wasn't  
 21 a fully representative system, and it was just one step  
 22 along a planned programme of tests in order to actually  
 23 get to the point of testing a full rainscreen system.  
 24 That's what I want to put to you.  
 25 A. That wasn't my understanding at the time, no.

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1 Q. I now want to ask you about the changes to the K15  
 2 product that happened, including the change in 2006.  
 3 If we go to paragraph 3.6 on page 6 of your witness  
 4 statement {KIN00008838/6}, you say this:  
 5 "In or around 2003, Kingspan acquired a Dutch  
 6 company by the name of Marec. The purpose of the  
 7 acquisition was to use their technology to produce  
 8 better insulating phenolic foam which could be produced  
 9 at a better rate of productivity. The object was to use  
 10 Marec technology (also known as 'new technology' or  
 11 'Kesteren technology', because of the location of the  
 12 plant in Kesteren, Netherlands) for all of the Kooltherm  
 13 range."  
 14 Do you see that there?  
 15 A. Yes.  
 16 Q. Then you tell us that a programme was started to  
 17 transfer the production of all products to the new  
 18 technology production process.  
 19 A. That's correct.  
 20 Q. For the transcript, that's at paragraph 3.11 on page 7  
 21 of your statement {KIN00008838/7}.  
 22 That included K15, didn't it, that transfer over to  
 23 the new technology?  
 24 A. It would have been for every product we were making at  
 25 the time.

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1 Q. Yes.  
 2 A. The intention would have been to make it with the new  
 3 technology, because --  
 4 Q. Yes.  
 5 A. -- I think as I explained, it's a better insulating  
 6 material, the new --  
 7 Q. In terms of its thermal performance?  
 8 A. In terms of its thermal performance, yes.  
 9 Q. It's a better insulating material?  
 10 A. Yes.  
 11 Q. In terms of timing, you tell us at paragraph 3.16 on  
 12 page 9 {KIN00008838/9} of your statement, if we go to  
 13 that, that the transfer process, you say it was assigned  
 14 a reference, a PPDS reference. Can you help us, what  
 15 was PPDS?  
 16 A. That was the product and process development system.  
 17 I introduced it, I think, shortly after I came to  
 18 Kingspan. It was something I'd inherited really from my  
 19 time at ICI.  
 20 Q. Yes.  
 21 A. It was a way of looking at -- when you're changing  
 22 products, when you're developing projects -- products  
 23 for the market, it was important that everyone was  
 24 involved in looking at it. That's from production --  
 25 Q. Yes.

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1 A. -- technical, marketing, sales, that they were happy  
 2 with the product, or if it was a major variation they  
 3 were happy with that.  
 4 Q. You go on to say you have seen, in the third line,  
 5 a screenshot of data that was captured through that  
 6 relating to transfer of the new tech for all phenolic  
 7 products, and you then explain that this shows that:  
 8 "... this process was signed off by me in January  
 9 2006 and ultimately signed off by the Operations  
 10 Director on 29 September 2006."  
 11 Do you see that there?  
 12 A. Yes, I do, yeah.  
 13 Q. Can you help us as to exactly when it was that the new  
 14 technology K15 was actually placed on to the market for  
 15 sale? Our understanding is that it was some time in  
 16 2006. Is that right?  
 17 A. My understanding, it was some time in 2006. I mean, at  
 18 the time, I don't think I would have been -- when  
 19 I wrote this, which was almost a year ago, I think,  
 20 I wouldn't have been aware of that, and I had to look at  
 21 a lot of background information to find out when. But  
 22 I think that we deduced that it was probably  
 23 September 2006 that it came in.  
 24 Q. Now, if we can look back, picking it up at paragraph 3.7  
 25 of your witness statement on page 6 {KIN00008838/6},

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1 from paragraph 3.7 onwards, you explain the difference  
 2 between the old technology and the new technology.  
 3 A. Yes.  
 4 Q. You say:  
 5 "... the original Kooltherm product had tiny pores  
 6 in the cells it was made up from; this meant that, over  
 7 a long period of time, blowing agent in these cells  
 8 would leak out or air would leak in, which could affect  
 9 the insulation quality of the product."  
 10 A. Yes.  
 11 Q. Then you explain {KIN00008838/7}:  
 12 "The Marec technology, or 'new' technology was  
 13 better because the key differences between the old and  
 14 new technology were that a) the new technology had no  
 15 pores in the cell walls which gave better insulating  
 16 properties; this kept the blowing agent trapped in the  
 17 product; and b) the product was quicker and more  
 18 cost-effective to produce."  
 19 Do you see that there?  
 20 A. Yes.  
 21 Q. You explain in your witness statement that those were  
 22 the key differences; is that right?  
 23 A. Yes.  
 24 Q. You go on, if we look now at 3.10, just below that, we  
 25 can see you say this:

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1 "Both the old and new technology products are  
 2 chemically very similar."  
 3 A. Yes.  
 4 Q. But it's right, though, that they're not the same; would  
 5 you agree?  
 6 A. Oh. They're not the same, but they were phenol  
 7 formaldehyde resin products; in other words, the vast  
 8 bulk was composed of a polymer between phenol and  
 9 formaldehyde, and that's produced by reacting them in  
 10 a controlled way in water. So at the end of that  
 11 reaction, you're left with a liquid which has a lot of  
 12 what's called oligomers or dimers in it, ie partially  
 13 polymerised parts of phenolic.  
 14 Q. Right.  
 15 A. And that is then taken and converted to a phenolic solid  
 16 with a catalyst, usually an acidic catalyst, but the  
 17 basic constituents are the same.  
 18 Q. Right. But is it right that a different chemical mix  
 19 was used as the blowing agent as between old tech and  
 20 new tech?  
 21 A. Yes, if I remember by this time I think we were using  
 22 pentane in the old tech, zero ODP.  
 23 Q. And isopropyl chloride was used in the new tech; is that  
 24 right?  
 25 A. It was a mix of pentane and isopropyl chloride, yes.

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1 Q. Right. So is this right: that the old tech had used  
 2 just a pentane-based blowing agent --  
 3 A. Mm-hm.  
 4 Q. -- and the new tech was a mix of isopropyl chloride and  
 5 pentane?  
 6 A. Yes.  
 7 Q. Right.  
 8 A. So the new -- on that basis, the new product, that would  
 9 be slightly less flammable than pure pentane.  
 10 Q. Right.  
 11 You also explain in that paragraph that there was  
 12 a difference in the base resin molecular weight and  
 13 a different water content; is that right?  
 14 A. Yes, that's correct. It was all part of the process.  
 15 I think this technology was developed -- oh ... I want  
 16 to say in the 1970s, in the States. So it used the same  
 17 general principles, you took what's called a resol,  
 18 which was the partially polymerised phenol  
 19 formaldehyde --  
 20 Q. Yes, but what I'm seeking to get at is that although  
 21 they may have been, in essence, to some extent the same,  
 22 there were also differences, weren't there?  
 23 A. There were slight differences in the molecular weight of  
 24 the original material, but when you polymerise that, you  
 25 would get the very high molecular weight polymer.

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1 Q. And there were differences in terms of the resin that  
 2 were used.  
 3 A. Sorry?  
 4 Q. There were differences in terms of the resin that were  
 5 used?  
 6 A. The resin is the resol, and that is purely a phenol  
 7 formaldehyde oligomer, as I described.  
 8 Q. I see. I thought we heard from Mr Heath yesterday that  
 9 there had been a process of trying to ensure that the UK  
 10 arm of Kingspan could replicate the same resin that had  
 11 been used in Kesteren --  
 12 A. No.  
 13 Q. -- when the product transferred across. Is that not  
 14 right?  
 15 A. I think that's a misunderstanding. I think the basic  
 16 resol was very similar. As I say, there were some  
 17 molecular weight differences. But the one used -- this  
 18 is between new tech and old tech. The resol used in  
 19 Kesteren was exactly simulated for the plant at  
 20 Pembroke. In other words, it used exactly the same  
 21 resol. I think for reasons of logistics, we got another  
 22 supplier to make it, as an additional supplier, in  
 23 South Wales, to produce the product. But the product  
 24 itself was -- we specified what the product would be.  
 25 They didn't decide what it was going to be, we said what

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1 we wanted.

2 Q. Yes, so you simulated it based on what was being used at

3 Kesteren, but it was not the same as the resol which had

4 been used in the old tech, was it?

5 A. No, it wasn't. It was actually the same company we

6 used, and we said, "No, we don't want that, we want this

7 one", we just got a --

8 Q. Yes. No.

9 A. I can't remember if it had a -- I think it had

10 a slightly lower molecular weight and a higher -- and

11 a lower water content, I think.

12 Q. Yes.

13 As far as you were aware, was there any change to

14 anything about the facers of the product?

15 A. No, I think it was the same facing material. It was

16 a 25-micron foil on a glass -- it was adhered to a glass

17 mat.

18 Q. Was that facer perforated or unperforated?

19 A. I think for the new products it was -- initially it was

20 just perforated on one side of the product, and the

21 perforations were needed in the new process in order to

22 facilitate the drying step of processing, because there

23 was always a little bit of water left in the product,

24 and it was better properties if you could dry it out.

25 Q. Yes.

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1 A. Now, the perforations were of the order, I think, of

2 0.5 millimetres or less, and originally they were about

3 7 millimetres apart, I think, in a square section. So

4 they would have comprised less than half a percent of

5 the surface area.

6 Q. Right, but there were perforations in the new

7 technology --

8 A. Yes.

9 Q. -- which there hadn't been in the old tech, which had

10 been unperforated; do you agree?

11 A. Yes, the old tech I think was unperforated.

12 Q. Yes, and that's consistent with what we have been told

13 by Kingspan.

14 A. Yes.

15 Q. Now they've done a schedule of major changes for us, and

16 what we have been told is it was a perforated facing.

17 A. Yes.

18 Q. That's a physical change to the product, isn't it? It

19 may not be a change to the chemical composition, but

20 it's a key difference between the old tech and the new

21 tech, would you agree, that it had perforations in the

22 foil facing?

23 A. The product was very, very similar. The perforations --

24 you weren't actually changing the facing at all; you

25 were just, as I say, putting about half a percent, maybe

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1 0.8 a percent --

2 Q. Can you help us, why did you not mention that change

3 anywhere in your witness statement? You are giving us

4 a very detailed explanation in your statement of all the

5 changes. Why did you not mention the change from

6 unperforated to perforated?

7 A. I thought I had mentioned perforations in the witness

8 statement.

9 Q. Right.

10 A. I'm not sure where, but I think I had mentioned it.

11 Q. I see. If I have missed that, then I'm sure someone

12 will point that out.

13 Can we go to the schedule that --

14 A. Incidentally, sorry, if I did miss it, that was

15 an oversight, because I was certainly aware that

16 perforations were --

17 Q. Yes.

18 A. But I thought I had mentioned it.

19 Q. Right.

20 Can we go to the changes spreadsheet, {KIN00022307},

21 that Kingspan have provided to us, and it's row 7. We

22 need the native version under the "Major changes" tab.

23 (Pause)

24 A. It's a very tricky spreadsheet to look at, this one,

25 I tried looking at this --

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1 Q. When you say it's a tricky spreadsheet to look at --

2 A. It's just -- I'm sorry, I'm --

3 Q. -- have you seen this spreadsheet before?

4 A. Yes. Yes, I saw this. This is part of my --

5 Q. When did you see this spreadsheet?

6 A. I saw this ... well, certainly it's one of the hearings

7 this came up.

8 Q. I see, okay.

9 Let's look at row 7 where we see the change to the

10 new Kesteren technology in September 2006. Do you see

11 that there --

12 A. Yes.

13 Q. -- on the left-hand side? We've got the Kesteren

14 technology.

15 I want to then look at column N in this spreadsheet,

16 which gives various details about the names of

17 particular individuals involved in considering,

18 assessing or testing the new technology foam. Can you

19 see, it says that:

20 "The PPDS shows that Vincent Coppock (R&D Manager)

21 was the Project Manager. His role was to work with the

22 Dutch manufacturer to understand the Kesteren Technology

23 and bring that technology to Pembridge ..."

24 Then it says this:

25 "Malcolm Rochefort (Technical Director) updated the

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1 status of the PPDS confirming that fire testing was  
2 required for this project. Philip Heath (Technical  
3 Services Manager) signed off the part of the PPDS to  
4 confirm that physical/fire tests and certification were  
5 completed ..."

6 Do you see that there?

7 A. Yes, I do, yeah.

8 Q. Now, if we can look now at your witness statement,  
9 paragraph 3.16 on page 9 {KIN00008838/9}, you tell us  
10 there in the third line that you have seen a screenshot  
11 of the data that was captured through this PPDS process  
12 relating to the transfer of new technology for all  
13 phenolic products.

14 A. Mm-hm.

15 Q. Then after you have explained that it was signed off by  
16 you in January 2006 and ultimately signed off by the  
17 operations director on 29 September 2006, you say this:

18 "This process did include a section in relation to  
19 fire 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, yes.

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1 Q. Can you explain to us how it came to be that the new  
2 technology product was being sold two years before the  
3 section of the PPDS relating to fire testing had been  
4 signed off in February 2008?

5 A. I think in this case it would have been -- you tried to  
6 get everything signed off before it went out, but in  
7 practice it was very difficult to do, and as long as the  
8 testing was taking place then that was deemed to be --  
9 and there were no obvious problems with it, that was  
10 deemed to be sufficient.

11 Now, in this --

12 Q. Can you explain --

13 A. If I can just finish the explanation.

14 Q. Yes, carry on.

15 A. In this case, the primary test that would have been  
16 required I think was for the CE marking of the product,  
17 which would have required a fire test result, and  
18 I think it was a C-s1, d0 on the Euroclass, and that  
19 would have been printed on the labels of the product as  
20 it went out.

21 So I assume by this time that C -- it must have  
22 been -- the C-s1, d0 must have been on the product,  
23 otherwise we couldn't have been selling it.

24 Q. I see. You say you made that assumption about the  
25 CE marking for the product; what about other claims that

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1 were being made by the K15 product, that it was national  
2 class 0, that it had been successfully tested to  
3 BS 8414-1? What about those? How can you sell  
4 a product when you haven't completed the suite of  
5 fire tests on which you are basing your marketing  
6 material?

7 A. Well, regarding the 8414-1, that's not really for the  
8 product, that's for the system, so that wouldn't have  
9 been for the product.

10 Q. Well, hang on, you change your K15, you've got  
11 a different product from the one you tested; do you not  
12 accept that there then ought to have been 8414 tests  
13 with the new technology K15?

14 A. Yes, yes, no, I take your point there, because that was  
15 part of it, that probably should have been part of  
16 this --

17 Q. What about the national class 0 test to 476-6 and 7?

18 A. I think, as I said, as far as I know, it still had the  
19 part 6 and part 7 result.

20 Q. Were you at all concerned during that period that you  
21 were selling a product which hadn't been signed off by  
22 Philip Heath in terms of relevant fire testing?

23 A. I think, with all these sign-offs, it acted as  
24 a bureaucratic system, and essentially I was the  
25 bureaucrat trying to get people to sign off and chivvy

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1 them to do it. So for that to be a late -- that's quite  
2 late, but it wasn't unusual for people to take their  
3 time before they signed off on something.

4 Q. But fire safety is a matter of life safety. This is not  
5 about its appearance or its thermal performance, is it,  
6 it's about life safety?

7 A. No, I agree with you absolutely there, but --

8 Q. Did you ever think about that during that period? Did  
9 it ever occur to you that it was a potentially very  
10 unwise move to be selling a product where you hadn't  
11 signed off on the fire testing relating to that new  
12 product?

13 A. As I said, the product would have had to have the  
14 European classification or we couldn't have sold it, so  
15 that was a necessary requirement. I think you make  
16 a valid point about the 8414, but I don't think that  
17 would have been front of mind at the time.

18 Q. Or about the national class 0? It's there on all of  
19 Kingspan's marketing literature.

20 A. I believe it had -- as far as I know, it had class 0.  
21 It --

22 Q. Yes, the old technology did, but --

23 A. No, I think the new technology -- I mean, apart from  
24 anything else, if I remember correctly, you can read  
25 across from a C-s1, d0, and that was deemed to be

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1 equivalent to a BS 476 class 0.  
 2 MS GRANGE: Okay. We will come back to that topic.  
 3 Mr Chairman, I think that's a good moment for  
 4 a break.  
 5 SIR MARTIN MOORE-BICK: Yes, very well, thank you very much.  
 6 We're going to have a short break now, Dr Rochefort.  
 7 We will come back at 11.40, and we will see what counsel  
 8 has to ask you then.  
 9 THE WITNESS: Okay.  
 10 SIR MARTIN MOORE-BICK: Can I ask you, please, while you're  
 11 out of the room, don't discuss your evidence or anything  
 12 relating to it with anyone else, please.  
 13 THE WITNESS: Certainly.  
 14 SIR MARTIN MOORE-BICK: Thank you very much. If you would  
 15 like to go with the usher.  
 16 (Pause)  
 17 Right, 11.40, then, please.  
 18 (11.20 am)  
 19 (A short break)  
 20 (11.40 am)  
 21 SIR MARTIN MOORE-BICK: Right, Dr Rochefort, ready to carry  
 22 on? Thank you.  
 23 Yes, Ms Grange.  
 24 MS GRANGE: Yes, Dr Rochefort, we were talking about the  
 25 PPDS process --

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1 A. Yes.  
 2 Q. -- in relation to the transfer over to new technology  
 3 K15.  
 4 Can you just help us to precisely what steps you  
 5 took before the product was first sold to market to  
 6 ensure that its fire performance was equivalent and  
 7 certainly no worse than old technology K15?  
 8 A. Well, it would have been -- as I said, there was  
 9 a requirement for Euro classification to sell it, so it  
 10 would have been to ensure that it had the C-s1, d0  
 11 classification. But I wouldn't be doing that  
 12 personally. I would have taken that as being  
 13 a requirement on the fire classification.  
 14 Q. Did you yourself ever check that the Euro classification  
 15 had not worsened in terms of the product's performance?  
 16 A. I ... did I personally check? No, I didn't personally  
 17 check, but the product would have been tested.  
 18 Q. So does it amount to this, and is this fair: that  
 19 effectively you left it to Mr Heath and his team to  
 20 determine that the appropriate fire testing was carried  
 21 out as part of that PPDS?  
 22 A. I think Phil was responsible for fire certification on  
 23 that PPDS, so, yes, that would be -- that's the way it  
 24 worked.  
 25 Q. But nevertheless you were content to begin selling the

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1 product while that fire testing process was ongoing;  
 2 yes?  
 3 A. Yes. As I say, it would have been classified to the  
 4 European classification, otherwise we couldn't have sold  
 5 it.  
 6 Q. Right.  
 7 If we go back to your witness statement now, at  
 8 page 7 {KIN00008838/7}, paragraph 3.10. I want to look  
 9 again just at the last three lines which we didn't look  
 10 at before. You say this:  
 11 "The differences between the products gave me no  
 12 indication on a chemical level that there should be  
 13 significant difference in the fire performance of the  
 14 two products, particularly given that both had the same  
 15 facers."  
 16 Do you see that there?  
 17 A. Yes.  
 18 Q. Now, I think we can agree now, can we, that the facers  
 19 were not the same, perforations had been introduced?  
 20 I appreciate you think that's minor, but can we agree  
 21 that perforations were new in the new technology K15?  
 22 A. As far as I recall, perforations were new, because  
 23 I recall there was a process by which we got a patent  
 24 for pre-perforating the facing.  
 25 Q. Yes. So that part of your statement is not correct, is

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1 it, where you say "particularly given that both had the  
 2 same facers"?  
 3 A. Well, it's correct in the sense that they were exactly  
 4 the same facers, it's just one had very small holes in  
 5 it.  
 6 Q. Right.  
 7 A. As I say, the purpose was to dry out the water over  
 8 a long period of time in an oven, so we're talking  
 9 about -- it would be hours, five, ten hours, half day in  
 10 an oven. You just need to very gently dry it out,  
 11 basically.  
 12 Q. Did you ever get an assessment that looked at whether  
 13 the perforations made a difference in terms of the  
 14 product's fire performance?  
 15 A. I think as we looked into it later on with the fire  
 16 focus group, I think there was quite a bit of work done  
 17 on that, yes.  
 18 Q. But why wasn't that work done before you started selling  
 19 the product?  
 20 A. Why wasn't it done?  
 21 Q. Yes.  
 22 A. As I say, because it had the Euro classification, so it  
 23 would have been tested and it would have passed that,  
 24 so ...  
 25 Q. Right. When you say a pass, what do you mean, to the

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1 Euro classification ? We know there's a sliding scale .  
 2 A. It's a sliding scale , but --  
 3 Q. What do you mean by "pass"?  
 4 A. That product needed to be a C, a C classification , so it  
 5 had --  
 6 Q. I see.  
 7 A. And it was a C-s1, minimum smoke, no droplets.  
 8 Q. Okay.  
 9 When you say there that there should be no  
 10 significant difference -- you say:  
 11 "The differences between the products gave me no  
 12 indication on a chemical level that there should be  
 13 significant difference in the fire performance ..."  
 14 Can you take us through what factors led you to make  
 15 that assessment and reach that conclusion?  
 16 A. I think probably it comes from my experience with  
 17 phenolics, that they are inherently very good in fire  
 18 situations because they're resistant to fire , they don't  
 19 burn easily , and they give off very low smoke, and this  
 20 was a phenolic. Neither of them had fire retardants  
 21 added, so there was no difference in that sense. If  
 22 anything, the blowing agent was slightly less flammable  
 23 with the new technology. So there was nothing -- and as  
 24 far as I recall , the Kesteren product had C-s1, d0 and  
 25 a BS 476-6 and 7, so there was nothing obviously that

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1 meant that there would be a difference .  
 2 Q. When you say there that the products are inherently very  
 3 good in fire situations because they're resistant to  
 4 fire , they don't burn easily --  
 5 A. Correct.  
 6 Q. -- where did you get that information from?  
 7 A. I'd known that for many years. When I worked with ICI,  
 8 I worked on a product for part of the time, it was  
 9 called Modar, which I think was a polyurethane acrylic  
 10 thermosetting resin, and the chief competitor at the  
 11 time were phenolics, and they were used for making  
 12 things like cable trays in tunnels. They were also used  
 13 in Navy applications where fire and smoke are extremely  
 14 important in terms of fire safety. So I would have had  
 15 a very positive view of phenolic.  
 16 Q. I see.  
 17 I appreciate you're saying that -- so you're talking  
 18 about a positive view both in terms of fire and smoke,  
 19 or just a positive view in terms of smoke?  
 20 A. Fire and smoke, very good in that sense.  
 21 Q. I see. If that was your view, why was there a need to  
 22 do any further fire testing?  
 23 A. Well, you obviously do need to do some fire testing .  
 24 I mean, as I've said, you would need to do the Euroclass  
 25 to make sure that it passed that so you could sell the

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1 product.  
 2 Q. Yes, and you would need to do any testing , national  
 3 testing , wouldn't you, such as class 0 or 8414 testing,  
 4 if you were representing your product as having met  
 5 those tests?  
 6 A. If that was a marketing requirement, yes, you would.  
 7 Q. Yes.  
 8 You also make a similar point, just for  
 9 completeness, at paragraph 11.22 of your witness  
 10 statement on page 50 {KIN00008838/50}, in the final  
 11 three lines of that paragraph. You say, picking it up  
 12 four lines up on the right-hand side:  
 13 "Both old and new technology products were basically  
 14 phenol formaldehyde foams, neither containing fire  
 15 retardant additives , so a significant difference in the  
 16 fire performance was not expected."  
 17 Do you see that there?  
 18 A. Yes.  
 19 Q. Was that not expected by you or not expected by others  
 20 at Kingspan?  
 21 A. I don't think it was expected by me or anyone else, as  
 22 far as I know.  
 23 Q. Did you consider any effects that the change in resin  
 24 might have had on the fire performance when you reached  
 25 that conclusion?

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1 A. As I said, the resin was -- basically it's the same as  
 2 phenol formaldehyde resin. It was made in the same way.  
 3 The difference was the water content and the  
 4 pre-polymerisation molecular weight, so I wouldn't have  
 5 expected any difference in the resin .  
 6 Q. Now, the new technology K15, as at 2006, had not been  
 7 incorporated into any test to BS 8414, had it?  
 8 A. No, I don't think it had, no.  
 9 Q. Can we agree that that May 2005 8414-1 test report  
 10 should never have been relied on to demonstrate  
 11 compliance after that point, given it wasn't carried out  
 12 on the new technology K15?  
 13 A. I think, again, with this Inquiry, and looking at the  
 14 paperwork at the time, then that was a mistake, yes. It  
 15 shouldn't have been used. But it wasn't our  
 16 understanding at the time.  
 17 Q. Can you explain why that wasn't your understanding at  
 18 the time? Can you explain why it was your understanding  
 19 that you could carry on referring to that May 2005  
 20 8414 test, even though you knew that there had been  
 21 a change in the technology of the product since that  
 22 time?  
 23 A. When you say carry on referring ...  
 24 Q. For many years, and we will see it in documents, it's  
 25 that one 8414 test that Kingspan are relying on again

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1 and again and again, with the BBA, the LABC, with advice  
 2 to customers, many, many times. Can we agree that,  
 3 given the change in technology, that shouldn't have been  
 4 relied on after 2006?  
 5 A. I think in retrospect it was a mistake. After -- I do  
 6 know that tests were carried out subsequently, and the  
 7 system passed with terracotta tiling. So it wasn't --  
 8 there wasn't an actual risk in fact, but I think it  
 9 should have been assessed, yes, it should have been.  
 10 Q. When you're saying tests were carried out, and there was  
 11 terracotta tiling, are you talking about the July 2014  
 12 test?  
 13 A. No, I know that there were some in 2015 and 2016, tests  
 14 were carried out.  
 15 Q. Right, but you didn't know those at the time, did you --  
 16 A. No, no.  
 17 Q. -- that you were selling K15 between 2006 and 2014,  
 18 while you were the technical director?  
 19 A. No.  
 20 Q. No.  
 21 Now, moving forward to 2007 and 2008, Kingspan  
 22 carried out four tests to BS 8414-2 on a steel-frame  
 23 structure at the BRE in 2007 and 2008. Two of those  
 24 were carried out in December 2007 and April 2008 in  
 25 partnership with Sotech and Metsec --

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1 A. Yeah, I understand.  
 2 Q. -- and two were carried out in partnership with  
 3 Kingspan Offsite. That was in April 2008 and June 2008.  
 4 You were aware, weren't you, at the time that all  
 5 four tests were failures and the system couldn't be  
 6 classified to BR 135?  
 7 A. I was aware that there was a system failure in each  
 8 case, yes.  
 9 Q. Yes.  
 10 Now, can we go to an internal report that was  
 11 written by Mr Meredith dated 7 January 2008. This is  
 12 {KIN00008847}.  
 13 Just to be clear, you confirm in your witness  
 14 statement -- this is at paragraph 3.1, page 9  
 15 {KIN00008838/9} -- that you did receive this report from  
 16 Philip Heath on 29 January 2008.  
 17 A. Correct, yes.  
 18 Q. So you would have received this report. Did you read it  
 19 when it was sent to you?  
 20 A. Yes, I would have read it, yes.  
 21 Q. Let's look first at the second page of the report  
 22 {KIN00008847/2}, under the title "Project Stakeholders".  
 23 Do you see under "Executive Summary", three headings  
 24 down, it says:  
 25 "This project was run jointly between Sotech, Metsec

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1 and Kingspan with all costs split 3 ways. If it had  
 2 been successful Sotech would have included it in their  
 3 LPCB approved redbook listing therefore K15 would have  
 4 got into the Redbook."  
 5 Then in the next paragraph it says this:  
 6 "This information is essential to Kingspan for all  
 7 façade sales above 18 [metres] throughout the UK and  
 8 Ireland. Not having evidence that our product performs  
 9 onto a steel frame is causing job losses specifically in  
 10 Scotland on a daily basis (however we are fighting the  
 11 case for each project with the BS 8414-1 (onto masonry)  
 12 test data performed in 2005."  
 13 Do you see that there?  
 14 A. Yes.  
 15 Q. Do you remember being aware of that at the time, when  
 16 you received the report?  
 17 A. Yes, that was my understanding, that if we wanted  
 18 a steel-frame construction, then it was important to  
 19 carry out the 8414-2.  
 20 Q. Yes.  
 21 What did you think he meant by, "however we are  
 22 fighting the case for each project with the BS 8414-1  
 23 (onto masonry) test data"? What did you understand him  
 24 to mean by that?  
 25 A. I would have assumed that what he was talking about was

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1 where there were constructions that were masonry or  
 2 a non-combustible substrate, that the product was  
 3 acceptable.  
 4 Q. I see. So you didn't read that any more broadly, "we  
 5 are fighting the case for each project" with that? So  
 6 you assumed, did you, that you were only fighting the  
 7 case for masonry projects? Was that your understanding?  
 8 A. That was my understanding, yeah.  
 9 Q. I see.  
 10 A. I mean -- well, whatever's -- however masonry's --  
 11 I would have seen masonry as a non-combustible  
 12 cementitious base or ...  
 13 Q. Is that because you're referring to the fact that  
 14 Kingspan goes on to advise its customers that as long as  
 15 the K15 has a non-combustible substrate behind it, you  
 16 can use it even in a steel-frame system? Is that why  
 17 you're saying that?  
 18 A. That wasn't -- my understanding at this stage would have  
 19 been that it was actually on a wall that was a masonry  
 20 wall or a cementitious wall anyway.  
 21 Q. Yes, and was it your clear understanding at this point  
 22 that that was the only basis upon which K15 could be  
 23 used over 18 metres, where there was a masonry wall  
 24 behind it?  
 25 A. Where there was a non-combustible masonry, cement,

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1 concrete, brick wall behind it, yeah, that would have  
 2 been my understanding.  
 3 Q. Yes.  
 4 Now, if we can look at the bottom of this page under  
 5 the heading "Result", we can see there it says:  
 6 "By 17 minutes the top fire barrier had breached and  
 7 the raging inferno moved up to the top thermocouples and  
 8 pushed them past 600 degrees thus failing the simple  
 9 criteria of BR 135."  
 10 Then you're told at the bottom there:  
 11 "BS 8414-2 does not have a pass or fail it needs to  
 12 be cross referenced with BR 135."  
 13 Pausing there, can we agree that, by the time you  
 14 read this report, you would have been aware that BR 135  
 15 contained the pass/fail criteria?  
 16 A. I would have been -- yes, from that reference, yes.  
 17 Q. Yes, so this is January 2007.  
 18 Then we go over to page 3 {KIN00008847/3} where we  
 19 get more details --  
 20 A. Sorry, this is January 2008, I believe, isn't it?  
 21 Q. No, it's 2007. Sorry, it's 2008.  
 22 A. I believe it's 2008, yes.  
 23 Q. I beg your pardon, yes. Sorry, the test was in 2007.  
 24 Then if we look over the page at the top, it says  
 25 this:

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1 "The Phenolic was burning on its own steam and the  
 2 BRE had to extinguish the test early because it was  
 3 endangering setting fire to the laboratory."  
 4 Do you see that there?  
 5 A. Yes.  
 6 Q. Then he says under "Why did it fail":  
 7 "The new technology Phenolic is very different in  
 8 a fire situation to the previous technology which has  
 9 passed several similar tests. The old technology would  
 10 turn into a light ash and fall away leaving [the]  
 11 substance to feed the fire. Please refer to Archive  
 12 test pictures 47 and 48 which clearly shows this."  
 13 Do you see that there?  
 14 A. Yes. Yes.  
 15 Q. Now, it's clear from what he says there, isn't it, that  
 16 what had been tested previously, and he has included  
 17 photographs in this report of that 8414 report, was old  
 18 technology K15; yes?  
 19 A. In retrospect, I can see that that's true. Whether it  
 20 occurred to me immediately at the time, I don't know,  
 21 but I would say that was referring to old technology.  
 22 I mean, he makes the point ...  
 23 Q. You told us earlier this morning that you weren't aware  
 24 whether the 2005 test was done on old technology or new  
 25 technology K15. Would you agree that, upon receiving

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1 this report --  
 2 A. Oh, yes, on this report, yes, I would have -- this would  
 3 have certainly alerted me to the fact it was old  
 4 technology.  
 5 Q. Yes, and he has even included pictures giving  
 6 a comparison of the 2005 test --  
 7 A. Yeah.  
 8 Q. -- with this test. Do you remember that?  
 9 A. The pictures, if you're looking at the pictures,  
 10 wouldn't tell you whether it's old technology or new  
 11 technology; his wording would.  
 12 Q. Well, it's this wording. He says:  
 13 "The old technology would turn to a light ash and  
 14 fall away leaving [the] substance to feed the fire.  
 15 Please refer to Archive test pictures ... which clearly  
 16 shows this."  
 17 That's very clear, isn't it? He is telling you that  
 18 in those pictures you can see old technology.  
 19 A. Yeah, I'm sorry, I didn't -- what I was referring to was  
 20 the fact that just looking at the pictures wouldn't tell  
 21 you it's old technology. From Ivor's description here,  
 22 that's clearly what he's trying to tell you.  
 23 Q. Yes, and I would say he is not just trying to tell you,  
 24 it's very clear what he is telling you in that  
 25 paragraph; would you agree?

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1 A. I think he's referring to the archive pictures as a way  
 2 of illustrating his point, yes.  
 3 Q. Yes.  
 4 Now, it's clear from those observations, just  
 5 pausing there, that Mr Meredith considered the  
 6 performance of the new technology K15 to be a matter of  
 7 significant concern; do you agree?  
 8 A. I agree, although he did come up with some other  
 9 possibilities as to what could be causing the problem.  
 10 Q. Were you concerned when you read this report,  
 11 Dr Rochefort?  
 12 A. I was concerned when I read this report because it was  
 13 the first really negative report I'd seen on new  
 14 technology's -- on a test involving new technology.  
 15 Q. Did you have any basis on which to disagree with his  
 16 assessment there, that the new technology phenolic is  
 17 very different in a fire situation to the previous  
 18 technology?  
 19 A. In this test, I don't think that shows that. I think  
 20 he's saying ... sorry, it's very different in a fire  
 21 situation, I've just re-read his words. In the sense  
 22 that it's very different in a fire situation, and he's  
 23 illustrating it with those pictures, it would show that  
 24 there is a difference in the performance, yes.  
 25 Q. Yes, and it's in the performance of the phenolic. He is

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1 not just highlighting that a different system has  
 2 failed, is he? He is saying the new technology phenolic  
 3 is very different in a fire situation, and he actually  
 4 gives you a description of how he's seen that  
 5 difference. It doesn't turn to light ash and fall away.  
 6 Do you see that there?  
 7 A. I do see that, but this is a different system, it was --  
 8 I can't remember exactly what it was, I think it was  
 9 an aluminium cassette, and that in itself would perform  
 10 differently to the cementitious product that was used in  
 11 the original test, and I think that is also discussed in  
 12 his report as a possibility for how it turned out  
 13 differently.  
 14 Q. You're right, it is a different system, and he does  
 15 discuss the differences in the system in this report.  
 16 But can we also agree that he is highlighting that in  
 17 his assessment -- and you have said before that he is  
 18 one of the experts within Kingspan, you know, who had  
 19 day-to-day involvement with this -- his assessment was  
 20 that the phenolic itself performed very differently,  
 21 having observed that test. Can we agree on that?  
 22 A. Yes, I think the purpose that Ivor wrote this report --  
 23 and this is his report, it's not from the BRE, as  
 24 I understand it -- was to make us sit up and take notice  
 25 that there was an issue here.

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1 Q. When you say it's his report, not from the BRE, are you  
 2 saying that you weren't aware of observations that were  
 3 made by the BRE about the performance of the phenolic  
 4 foam at this time?  
 5 A. I didn't have any direct contact. I think later on in  
 6 the report he does refer to off-the-record conversations  
 7 with them.  
 8 Q. Yes, he does. We'll come to those in a moment.  
 9 Did you ever study any of the photographs that he  
 10 refers to in the report?  
 11 A. I think I would have at the time, although I wouldn't  
 12 remember them now.  
 13 Q. Did you carry out the exercise of comparing and  
 14 contrasting the photographs from the two tests?  
 15 A. I probably would have at the time, but I can't recall  
 16 that.  
 17 Q. Did you watch the video recording of that December 2007  
 18 test?  
 19 A. Again, I can't recall if I saw that. I know I have seen  
 20 an 8414 test at some point, but I can't recall if it was  
 21 a video or actually whether I was present or not.  
 22 Q. If you go further down page 3, beginning "Perforations",  
 23 do you see he says this:  
 24 "Perforations in the Phenolic foil facers have  
 25 caused a reduction in the Euroclass when tested in the

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1 SBI [single burning item]. Loss of the perforations may  
 2 help?"  
 3 Do you see that there?  
 4 A. I do see that, yeah.  
 5 Q. Can you see that he is clearly telling you his view that  
 6 perforations have caused a reduction in the Euroclass  
 7 when tested to the single burning item tests?  
 8 A. As far as I know, the product still had the same  
 9 Euroclass, C-s1, d0, so I'm not sure that's correct, but  
 10 it's one of the hypotheses that Ivor puts forward.  
 11 Q. Well, you told us earlier that you hadn't expected there  
 12 to be any change in the fire performance. Do you agree  
 13 that he's telling you here it has caused a reduction in  
 14 the Euroclass, and what basis did you have to question  
 15 that? You're not involved day-to-day in the testing,  
 16 are you?  
 17 A. No, but I know that the product couldn't have been sold  
 18 if the Euroclass had been lower than C-s1, d0, so --  
 19 Q. Were you concerned --  
 20 A. -- he might be talking about some tests that were  
 21 carried out separately, some development tests.  
 22 Q. Well, he might be, he might not be.  
 23 Were you concerned when you read that, that the  
 24 perforations have caused a reduction in the Euroclass  
 25 when tested in the SBI? Did that concern you?

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1 A. I think when -- if I remember correctly, when looking at  
 2 this, there were a number of possible things that could  
 3 have gone wrong, and that was certainly one of them that  
 4 could have caused a problem, so it had to be looked at.  
 5 Q. With respect, he is not saying it's a possibility, is  
 6 he? He is saying "have caused a reduction in  
 7 the Euroclass". It's very definite language, isn't it,  
 8 that he's using?  
 9 A. I know he's saying that, yeah, but I don't know where  
 10 he's getting that from.  
 11 Q. Let's look below this on page 3. We have touched on  
 12 this already, but there are included in Mr Meredith's  
 13 report some comments from the BRE. Do you see that  
 14 there, in the middle of the page? It's saying:  
 15 "Comments from the BRE:  
 16 "The official line:- It's a system failure no  
 17 individual component can be solely held responsible for  
 18 the failure.  
 19 "However (unofficial comments) it was apparent that  
 20 the insulation was fully involved in the test. Surface  
 21 spread of flame was apparent and the core continued to  
 22 burn when the flame source had been extinguished. They  
 23 stated they did not remember the product performing like  
 24 that last time."  
 25 Do you see that there?

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1 A. Yes.  
 2 Q. Did you disagree with those unofficial comments from the  
 3 BRE?  
 4 A. I couldn't agree or disagree. I wasn't present at the  
 5 test, so that was their opinion.  
 6 Q. Were you concerned when you read this report that not  
 7 only was it Mr Meredith's assessment that the insulation  
 8 had performed badly, but also the BRE's assessment that  
 9 it continued to burn when the flame source had been  
 10 extinguished?  
 11 A. I think, assuming that was correct, then clearly that  
 12 would be of concern. And I don't want to belittle this  
 13 report, it was quite a dramatic report, and I think we  
 14 took notice of it, and said, "Hang on a minute, what's  
 15 going on here?" So it wasn't that we ignored it  
 16 completely.  
 17 Q. When you say you said, "Hang on a minute, what's going  
 18 on here?", what action did you actually take on the back  
 19 of this report?  
 20 A. Well, if I remember correctly, there were a number of  
 21 other 8414 tests planned, so the plan was to see if we  
 22 got the same performance, because it was distinctly  
 23 possible that this was a result of the system being  
 24 tested rather than the product, and that it may be  
 25 possible to get a pass with another test.

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1 Q. I see.  
 2 Did you give any consideration upon receipt of this  
 3 report to stopping sales of K15, certainly for buildings  
 4 over 18 metres, given how it was described by the BRE  
 5 and by Mr Meredith in this report?  
 6 A. Not on this one, but I think after another test I did.  
 7 I think there was another test in April, and I think  
 8 I said something at that one, that I was concerned and  
 9 should we go back to the old technology, if that was  
 10 causing the problem.  
 11 Q. When you say, "If that was causing the problem" --  
 12 A. I have to say that --  
 13 Q. -- what led you to think that it might not be causing  
 14 the problem, given what's said here in these comments?  
 15 A. Because it's a system, it's a system test, and if the  
 16 system fails in such a way that it let's more air in --  
 17 I mean, you need oxygen for a fire, and you need  
 18 something that can be oxidised. So if it's failing in  
 19 such a way that let's more air in than would with  
 20 a non -- a rigid non-combustible cladding, then clearly  
 21 that could be a system problem, or if there were other  
 22 issues with the system that cause --  
 23 Q. Dr Rochefort, one of the things you're being told  
 24 here -- and we'll see it in some later reports -- is  
 25 that the core continued to burn when the flame source

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1 had been extinguished. How were you in a position to be  
 2 able to explain that away on the basis that it was  
 3 a system test?  
 4 A. No, it -- I'm not explaining it away in that -- what I'm  
 5 doing is looking at possibilities that could have  
 6 happened, and you've got effectively a chimney in the  
 7 gap between the insulation and the cladding, and, as  
 8 I say, it is -- phenolic, like any organic material,  
 9 it's got carbon, hydrogen, and it will react with oxygen  
 10 and, at a sufficient temperature, once the temperature's  
 11 reached, it will burn.  
 12 Q. So is it your evidence that, upon receiving this report,  
 13 you thought to yourself, "Well, this is a system test,  
 14 there could have been all sorts of reasons for this,  
 15 therefore we can carry on selling K15 at this time"?  
 16 A. My thought would have been this is a system test, there  
 17 were quite a few reasons why it may not be a product  
 18 issue. Obviously it started in my mind the thought, "We  
 19 need to keep an eye on this".  
 20 Q. Right.  
 21 If we go two paragraphs up from the BRE comments,  
 22 can you see Mr Meredith said this:  
 23 "In all honesty from what I have seen the way the  
 24 phenolic burned is of the most concern. Therefore we  
 25 need to add a fire retardant. Which could also help us

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1 get Class 0."  
 2 Do you see that there?  
 3 A. I do, yes.  
 4 Q. So do you agree that Mr Meredith could not have been  
 5 clearer how concerned he was about the performance of  
 6 the phenolic itself in this report?  
 7 A. Oh, I think Ivor definitely was concerned, we knew that,  
 8 yes.  
 9 Q. Yes. And that statement, "Therefore we need to add  
 10 a fire retardant. Which could also help us to get  
 11 Class 0", you told us in your witness statement -- for  
 12 the transcript, this is at 3.20 on page 10  
 13 {KIN00008838/10} -- that you don't understand this  
 14 comment:  
 15 "My understanding is that we did have Class 0 on  
 16 both old and new technology ..."  
 17 A. That's correct, I think we did have class 0 on old and  
 18 new technology.  
 19 Q. Well, would you agree that what Mr Meredith is telling  
 20 you there is that you haven't got class 0 for the new  
 21 technology at this time? Why would he be writing that  
 22 if you already had class 0?  
 23 A. I don't know, but I think what he might be referring to  
 24 is there were some tests done with the product and  
 25 facing that didn't get class 0, so I think he's

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1 referring to that.

2 Q. Yes, you have just said "tests done with the product and

3 facing", ie tests done of K15 as it's sold with the foam

4 and its facing, and you're saying it didn't get class 0.

5 A. I understand that's what he is probably talking about

6 there.

7 Q. Yes.

8 Did you ever check and speak to your colleagues in

9 the marketing department and say, "By the way, we

10 haven't got class 0 for the new technology, we're

11 struggling to get it, please don't include that on what

12 we're saying about its fire performance"? Did you ever

13 say that, as technical director, to them?

14 A. As far as I understand, the product had class 0 by dint

15 of surface spread of flame and fire propagation, and it

16 was allowable on the surface material.

17 Q. Okay. How is what Mr Meredith's written there

18 consistent with that understanding?

19 A. He's obviously thinking about a different test.

20 Q. What different test?

21 A. It would be a test with the product, with the facing on

22 it.

23 Q. Well, isn't that your product that you're selling?

24 A. As far as I understand, the class 0 -- and remember,

25 this was not something that the product was required to

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1 meet. But as far as I understand, that was acceptable

2 if the surface material had a class 0.

3 Q. Okay, but I'm asking you about what Mr Meredith is

4 telling you here. He says, "Which could also help us

5 get Class 0". Does that not tell you that you don't

6 have it at this point?

7 A. It certainly implies that we don't have it at that

8 point.

9 Q. Yes.

10 Did you understand him to mean that, in order to get

11 it, you would need to add a fire retardant to achieve

12 class 0?

13 A. I think, as I say, the phenolic foams did not have

14 fire retardants in them, and did not normally need

15 a fire retardant. I think it's a possibility that he

16 wants to look at, and I think we did look at the various

17 fire retardants later on.

18 Q. We know that there was a technical meeting the next day,

19 after this report was delivered, so on 30 January 2008.

20 If we can go to the minutes of that meeting, it's

21 {KIN00022466}. We can see this is "Technical meeting

22 (lamination) minutes", do you see that there,

23 "30th January 2008, Pembridge"?

24 A. Yes.

25 Q. We can see that you're present. Do you see that there?

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1 A. Yes, yes.

2 Q. In fact, it looks like you have taken the minutes.

3 A. I've taken the minutes for this one, yes. I think we

4 rotated the minutes on these.

5 Q. Do you see, under "Urgent Topics for Discussion", under

6 item 1.1, "Phenolic fire performance" --

7 A. Yes, it says, "Metsec façade test failure (though

8 mineral wool also failed with this cladding)".

9 Q. I'm sorry, Dr Rochefort, can you just let me finish.

10 It says that in item 1, but I want to ask you about

11 little bullet 3 there. It says:

12 "BS476 part 6 still elusive for certain

13 formulations: look at DEEP, TEP, Exolit, OL920."

14 Do you see that there?

15 A. No, I don't, actually.

16 Q. So under "Phenolic fire performance", the first

17 sentence --

18 A. Oh, bullet point, sorry, I was looking for a number 3.

19 Q. -- "Metsec façade test failure", then "IM concerned on

20 reproducibility of lab test", and then, "BS476 part 6

21 still elusive for certain formulations". Do you see

22 that there?

23 A. Yes, I see that now.

24 Q. Then he says, "look at DEEP, TEP ..."

25 A. Yes.

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1 Q. What did you understand him to mean, or what did you

2 mean when you wrote these minutes, "BS476 part 6 still

3 elusive for certain formulations"?

4 A. That for certain formulations it was still elusive,

5 therefore something needed to be looked at.

6 Q. Did you appreciate at the time that BS 476-6 was a key

7 part of national class 0 testing?

8 A. Yes, I would have understood that, yeah.

9 Q. And then, "look at DEEP, TEP", et cetera. Are those

10 fire retardants to be added?

11 A. DEEP is a fire retardant. TEP is a fire retardant. The

12 Exolit OL920 is a fire retardant. ATH is an alternative

13 mineral in place of the calcium carbonate which is added

14 to neutralise the acid. Boric acid --

15 Q. Yes, so are we agreed that they're all some kind of

16 fire retardants to try and help with the BS 476-6 test?

17 A. Yes, yes.

18 Q. You state in your witness statement that you didn't know

19 that new technology K15 did not have class 0, yet you

20 were present at this meeting where it was discussed, and

21 you took the minutes which clearly record that part 6

22 was elusive.

23 Can you explain why you have said in your witness

24 statement you didn't know that new tech K15 didn't have

25 class 0?

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1 A. I think what I said was that the class 0 -- the product  
 2 always had class 0, and it was acceptable to test the  
 3 facing material and get a class 0 that way. That was  
 4 acceptable. I think what this is concerned about is: is  
 5 there an issue around the foam itself, the foam-facing  
 6 combination?  
 7 Q. When you say you thought it was acceptable to test the  
 8 facing material and get a class 0 that way, is that you  
 9 referring to the fact that Kingspan do some tests on  
 10 just the foil facer alone, not with the foam attached,  
 11 and claim class 0 on the basis of that testing?  
 12 A. Yeah, I think those were done in, I think, 2007, I think  
 13 they were done.  
 14 Q. And you thought that that was acceptable, did you?  
 15 A. That was acceptable for the BS 476-6. That was a way of  
 16 getting --  
 17 Q. Did you ever check BS 476-6 and check whether it says  
 18 clearly in that standard that the test must be carried  
 19 out on whatever substrate is used in the end-use  
 20 conditions? Did you ever check that for yourself?  
 21 A. I didn't check personally, no.  
 22 Q. Did you ever ask anybody else to check the BS 476-6  
 23 standard to ensure that that was an appropriate way of  
 24 carrying out that test?  
 25 A. That was my understanding, that it was an appropriate

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1 way. That's why it was used.  
 2 Q. Now, if we go to paragraph 3.22 of your statement at  
 3 page 11 {KIN00008838/11}, you tell us in the final five  
 4 lines of that paragraph -- just picking it up, you say  
 5 five lines up:  
 6 "... but given these concerns, testing (such as  
 7 indicative calorimeter tests on both new and old  
 8 technology products) continued with Ivor Meredith and  
 9 Philip Heath's team to understand the fire performance  
 10 of the new technology product and clarify if  
 11 improvements were necessary."  
 12 Do you see that there?  
 13 A. Yes.  
 14 Q. Did you approve that course of action, to carry out  
 15 further testing to understand the fire performance of  
 16 the new technology product and clarify if improvements  
 17 were necessary?  
 18 A. Yes.  
 19 Q. So is it right that there was a significant enough  
 20 concern about the fire performance of the new product to  
 21 require investigation by way of further fire testing?  
 22 A. Well, I think the -- I mean, this is a -- certainly  
 23 partly a result of the test result from the previous  
 24 day, if that's what it was, that there was a concern.  
 25 Q. How did you satisfy yourself as technical director that

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1 it was safe to continue to sell the product at a time  
 2 when you were undertaking testing and investigations to  
 3 find out whether the fire performance of the new  
 4 technology product required improvements in terms of  
 5 fire performance?  
 6 A. Well, I think this was a logical way of looking at ways  
 7 that the product can be improved, and anything that  
 8 would have been developed could have been used in the  
 9 future.  
 10 Q. Did you, as technical director, ever give consideration  
 11 to taking K15 off the market, or certainly off the  
 12 market in terms of over-18-metre sales?  
 13 A. I think certainly later on, I'm saying, you know, we ...  
 14 I'm just trying to ... certainly that we looked at the  
 15 possibility of moving back to the old process. I think  
 16 I actually recommended that at one point.  
 17 Q. I'm asking you at this stage. You have decided you're  
 18 going to carry out some more tests to understand the  
 19 fire performance. You have had a report from  
 20 Mr Meredith that expresses his concerns in the strongest  
 21 possible terms. Did you at any stage give consideration  
 22 to taking K15 off the market, or certainly off the  
 23 over-18-metre market?  
 24 A. I don't think personally I did. Well, I'll rephrase  
 25 that. I think I certainly considered moving back to the

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1 old process at this stage. I think testing carried on.  
 2 I think the intention was to come up with a product that  
 3 was obviously more fire -- had a better fire  
 4 performance, if that was possible.  
 5 Q. Did you tell anybody that you were considering going  
 6 back to the old process? Who did you communicate that  
 7 to?  
 8 A. I communicated that on a couple of emails, I think.  
 9 It's ...  
 10 Q. Right.  
 11 Can we look at the monthly activity report prepared  
 12 by Mr Meredith for the period 4 April 2008. This is at  
 13 {KIN00003698}. So this is Mr Meredith's monthly report  
 14 for April 2008.  
 15 Can you remember reading this report at the time?  
 16 A. I must have read it at the time. I can't remember now  
 17 having read it, but I must have, I presume. Did this  
 18 definitely come to me?  
 19 Q. We can't tell for sure that it did come to you.  
 20 A. Yes, I can't remember it, but it's likely I did, but  
 21 normally these reports went to ... was this a tech  
 22 service report, or was it a report just internal for the  
 23 technical department?  
 24 Q. It seems to be a monthly activity report.  
 25 A. Right. I probably saw it, is all I can say at the

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1 moment.

2 Q. If we look in the third bullet point here, it says this:

3 "Indicative Calorimeter tests on new K15 vs old have

4 shown a quicker time to ignition and double the heat

5 output for the newer product thus confirming initial

6 suspicions in respect of Reaction to Fire."

7 Do you see that there?

8 A. I do, yeah. That's Ivor's wording, isn't it? I --

9 Q. Sorry, can I ask: now, those would be, wouldn't they,

10 the results of the tests undertaken to understand the

11 difference in fire performance between old and new

12 technology; do you agree?

13 A. I'm not sure who -- I'm not sure what that indicative

14 calorimeter test was, actually. The wording's a bit odd

15 in that a calorimeter normally combusts the whole of the

16 product that's being tested. So if you were to put in

17 a piece of foam that weighed so many grams and test it,

18 the total heat output would be the same if the foam was

19 of the same weight, it doesn't matter what the fire

20 performance of it is. So the fact that there was double

21 the heat output suggests to me that you had double the

22 amount of material, if that's correct, if it's a --

23 Q. I see.

24 A. So it's an odd result.

25 Q. Did you go back to Mr Meredith and say to him, "This is

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1 an odd result, can you explain this to me, what tests

2 have you done, how have you got to the conclusion that

3 it's quicker time to ignition and double the heat

4 output?" Did you do that?

5 A. I think I would have done, if I saw this. I honestly

6 don't know if I did see this or not, but I would have

7 done.

8 Q. So you can't remember ever being aware that further

9 investigations had shown a quicker time to ignition and

10 double the heat output? Were you never aware of that?

11 A. I wasn't aware of that, and it doesn't make sense, as

12 I say, because the same amount of material should give

13 the same heat output. So I think you would need to see

14 the actual test result to draw --

15 SIR MARTIN MOORE-BICK: Would it make sense if one read it

16 as meaning double the rate of heat output?

17 A. It could do, yes, that is possible, that that's what he

18 meant.

19 MS GRANGE: Could it have been bomb calorimeter tests that

20 were being carried out by Mr Meredith at this time?

21 A. Well, that's what I'm assuming, and a bomb calorimeter

22 normally combusts the entire item, so you would get

23 a complete calorific value for the whole item.

24 Q. Did you have that level of knowledge about the testing

25 system at that time? Is that your evidence?

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1 A. I knew a lot about -- things like bomb calorimeters

2 I knew from previous jobs.

3 Q. Right.

4 A. That sort of thing I would have known about. It's not

5 specific to insulation testing.

6 Q. So your evidence is you're not sure whether you saw this

7 and, if you did see it, you think it's a bit odd; yes?

8 A. I think it's a bit odd, and I think I would have

9 questioned Ivor about it at the time, but I don't recall

10 doing that.

11 Q. Let's go now to the technical services department

12 monthly report for July 2008 which is exhibited to your

13 witness statement. Let's start at paragraph 3.21 of

14 your statement on page 10 {KIN00008838/10}.

15 A. Yes.

16 Q. You say there, four lines up from the bottom:

17 "I can see from the Technical Services Department

18 Monthly Report from July 2008 that there was a workshop

19 held with Metsec 'to discuss the challenging fire

20 requirements high-rise facades."

21 Do you see that there, in the last four lines?

22 A. Yes, I'm just reading it at the moment.

23 Q. "I can see from the Technical Services Department

24 Monthly Report from July 2008 that there was a workshop

25 held with Metsec 'to discuss the challenging fire

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1 requirements high-rise facades."

2 Then you say:

3 "It appears therefore that the concern was in

4 relation to the system that was tested as opposed to

5 a particular issue with K15."

6 Do you see that there?

7 A. Yes.

8 Q. Is that a conclusion that you reached recently or

9 something that you actually concluded at the time, that

10 the concern was in relation to the system tested as

11 opposed to a particular issue with K15?

12 A. I think this was a conclusion I reached having -- a year

13 ago, having read the information that I was shown from

14 the tech services report, et cetera. So I don't know

15 what I would have thought at the time.

16 Q. I see.

17 Let's look at that technical services report now for

18 July 2008. {KIN00008848}. Do you see that there?

19 A. Yes.

20 Q. This is a report you exhibit to your witness statement,

21 and if you go down on page 2 {KIN00008848/2} under the

22 heading "Projects", we see that it says this:

23 "A sample of the OP90 (fire retardant) Phenolic has

24 been sent to the BRE for indicative [calorimetry]

25 testing. We hope to find a lower calorific output and

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1 slower time to ignition . A product with these  
 2 characteristics is required to maintain our position in  
 3 the high rise façade market (above 18metres)."  
 4 Do you see that there?  
 5 A. Yes.  
 6 Q. So regardless of whether you saw the earlier report from  
 7 Mr Meredith, do you agree that, once you saw this  
 8 report, you knew that there were problems around the  
 9 calorific output and time to ignition of the new  
 10 product?  
 11 A. Well, again, this is the same test that he's hoping to  
 12 do calorimetry testing on, so I don't know that that was  
 13 specifically the issue.  
 14 I think he's highlighting that there might be  
 15 an issue with K15, and his final sentence is, yeah,  
 16 "A product with these characteristics required to  
 17 maintain our position in the high rise façade market".  
 18 I would have tied that in with the next paragraph, where  
 19 he is talking about a BS 8414-2 test.  
 20 Q. When you say, "I would have", Dr Rochefort, are you  
 21 giving us the evidence as to what you would have thought  
 22 when you read this, or are you giving us an analysis now  
 23 that you have come up with?  
 24 A. I don't know what I would have thought when I read this  
 25 at the time.

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1 Q. What I'm suggesting to you is that you certainly would  
 2 have been aware at this time that there was a problem in  
 3 terms of calorific output and time to ignition ,  
 4 otherwise why were you sending a fire retardant sample  
 5 for indicative calorimetry testing; do you agree?  
 6 A. I believe it's Ivor sending this sample in to the BRE.  
 7 Q. Yes.  
 8 A. So I think it's part of an investigation . It was  
 9 a normal part of an investigation that you would do.  
 10 Q. But then that sentence at the end as you have already  
 11 highlighted :  
 12 "A product with these characteristics is required to  
 13 maintain our position in the high rise façade market  
 14 (above 18metres)."  
 15 It couldn't be clearer, could it? You haven't got  
 16 a product that satisfies those requirements, and you're  
 17 having to do this work in order to identify a product  
 18 that can maintain your position in that market; do you  
 19 agree?  
 20 A. I don't think it necessarily says that. I think he's  
 21 saying that that -- how I would have taken that, that  
 22 that is one way of looking at the approach to the 8414-2  
 23 and to test a product with, if it's got it, improved  
 24 fire characteristics .  
 25 Q. Can you explain how you understood that sentence at the

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1 time? What did you understand it to mean? Forget what  
 2 he might have meant by it; what did you actually take  
 3 from that?  
 4 "A product with these characteristics is required to  
 5 maintain our position in the high rise façade market  
 6 (above 18metres)."  
 7 What did you understand by that?  
 8 A. I would have understood that he's looking for a product  
 9 with improved fire performance, as he says.  
 10 Q. Well, let's read the next paragraph. He says:  
 11 "A BS 8414-2 test is being planned for August if the  
 12 OP90 product shows beneficial characteristics .  
 13 A definite increase has been seen in TS [technical  
 14 services] enquiries ..."  
 15 A. Yes.  
 16 Q. "... questioning phenolic's suitability for use above  
 17 18metres."  
 18 Do you see that?  
 19 A. Yes.  
 20 Q. So what I put to you is that when you read that  
 21 paragraph with the one above, you could have been in no  
 22 doubt that you didn't have a product that could satisfy  
 23 the over-18-metre market, and questions were being asked  
 24 about the suitability of K15 for use above 18 metres?  
 25 A. I don't think that's true. I think what we didn't have

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1 was a system test to 8414-2 that passed. That's what we  
 2 didn't have.  
 3 Q. But all of this work over a fire retardant version of  
 4 K15, do you not agree that that was because you didn't  
 5 have a K15 product that you thought could pass as part  
 6 of a system test because you had seen it perform so  
 7 badly in the 2007 test?  
 8 A. I think that was one possibility . The other possibility  
 9 was that the test itself was in some way causing the  
 10 failure , the set-up of the test . So we were  
 11 investigating --  
 12 Q. What conclusion did you reach at the time?  
 13 A. Sorry?  
 14 SIR MARTIN MOORE-BICK: Sorry, had you finished your answer?  
 15 A. No, I --  
 16 SIR MARTIN MOORE-BICK: You've now forgotten it, I'm sorry.  
 17 A. I've lost my track now. Sorry, please ask the question.  
 18 MS GRANGE: Sorry.  
 19 What conclusion did you reach at the time upon  
 20 reading this?  
 21 A. That he was -- I mean, just what's said: he wants  
 22 an 8414 part test with the OP920 as one of the ways that  
 23 we're looking at to improve -- to get a system that  
 24 works.  
 25 Q. What did you understand him to mean when he says,

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1 "A definite increase has been seen in [technical  
2 services] enquiries questioning phenolic's suitability  
3 for use above 18metres?"  
4 A. Again, I don't know what I would have thought, but  
5 I would have -- I mean, looking at it now, it looks like  
6 he's saying that there is some concern because  
7 presumably someone's heard about the failures in April  
8 and December. That's how I would have read that.  
9 Q. Were you aware at the time that K15 was being marketed  
10 as suitable for use over 18 metres?  
11 A. As far as I was aware it was being marketed for use  
12 above 18 metres on a masonry or cementitious substrate.  
13 Q. Right.  
14 Now, moving on, the two tests were then carried out  
15 in partnership with Kingspan Offsite at the BRE on  
16 9 April and 6 June 2008, and again, neither system after  
17 testing could be classified to BR 135, could it? They  
18 were failures.  
19 A. Can you just give me the dates again, sorry?  
20 Q. Yes, sorry, that was April and June 2008. These were  
21 the Kingspan Offsite tests.  
22 A. Yes.  
23 Q. Or the ones in partnership with Kingspan Offsite.  
24 A. Yes, no, I remember.  
25 Q. I want to ask you about some correspondence in the days

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1 after the second unsuccessful test on 6 June 2008.  
2 A. Yes.  
3 Q. If we could go to {KIN00003704}, and look at the bottom  
4 of the email chain at the bottom of the first page. So  
5 this is Mr Meredith to you and Vincent Coppock, copying  
6 in Philip Heath and Gwyn Davies. Do you see that there?  
7 A. Yes.  
8 Q. He says this:  
9 "Malcolm, Vincent,  
10 "The question of K15's bad fire performance is no  
11 longer just an internal one. It would seem Offsite had  
12 a very dramatic test failure.  
13 "Therefore I need to know how soon I can have  
14 samples of the OP90 Phenolic for [business] critical  
15 R&D."  
16 He goes over the page {KIN00003704/2}, he says:  
17 "Once I have reviewed the information I will provide  
18 a more comprehensive report later however the attached  
19 picture shows the most recent K15 test performed by  
20 Offsite and K15 burning under its own steam 10 minutes  
21 alter the test was put out.  
22 "Offsite are gravely concerned that we are selling  
23 something that doesn't do what we say it does.  
24 "To validate the new product from a fire point of  
25 view I would need samples of the following sizes."

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1 One of the things he asks for there, do you see, two  
2 items down, is a part 6 test?  
3 A. Yes.  
4 Q. Then at the end he says:  
5 "In respect of using just one perforated side on the  
6 structural foil faced [phenolic foams] it was agreed at  
7 the meeting that this could happen but how do we put it  
8 in place and make sure it happens?"  
9 "Is this a PPDS situation? does anyone know the cost  
10 implications?"  
11 Do you see that there?  
12 A. Yes.  
13 Q. Do you accept that it was clear from this email that  
14 K15's bad fire performance was a matter which was known  
15 internally within Kingspan?  
16 A. I accept that the bad performance in these tests was  
17 known, yes, but we've discussed that.  
18 Q. It had performed in a similar way, hadn't it, to the  
19 tests in 2007 and 2008 which had also been failures in  
20 terms of carrying on burning under its own steam?  
21 A. It looks like they're similar. I think they were  
22 different products, but -- I think it was different  
23 thickness involved in this, but ...  
24 Q. I see. Is that what you thought at the time, that you  
25 put that down to different thicknesses?

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1 A. No, I don't think I put it down to -- I think this was  
2 part of an effort to try and make sure we had a system  
3 that worked for 8414-2, and how do we get that? That  
4 was what the investigation was about.  
5 Q. Looking at that top paragraph on that page, where he has  
6 put "K15 burning under its own steam" in bold, are you  
7 sure that you took from this that it was just you didn't  
8 have a system that worked for 8414-2 as opposed to being  
9 aware that there were concerns about K15 itself?  
10 A. If I can just take a little bit of a side issue here.  
11 When we tested the product in the laboratory, we ran  
12 a blow lamp against the product, that was how we tested  
13 different formulations, et cetera, for ten minutes, and  
14 generally K15 would not burn through in that time, and  
15 when you turned the blow lamp off, it would not carry on  
16 burning. So, I mean, that's the sort of fire resistant  
17 product it is. So when he says it's burning under its  
18 own steam, that says to me that the temperature reached  
19 and the supply of oxygen is such that we've got  
20 conditions for it burning. As I said before, that can  
21 be a result of the way the test is set up.  
22 So, yes, it could be a product issue, but it's the  
23 system that's failing.  
24 Q. When you say, "When we tested the product in the  
25 laboratory, we ran a blow lamp against it", et cetera,

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1 and you say that, on the basis of that, K15 would not  
 2 burn through, when did you do that test?  
 3 A. We did that all the time. That was a standard -- sorry,  
 4 when I say a standard test, it wasn't a standard test,  
 5 it was one we did regularly in the laboratory, looking  
 6 at samples.  
 7 Q. Why do we see no reference to that in any of  
 8 Mr Meredith's emails?  
 9 A. Ivor wasn't in the laboratory. He was several buildings  
 10 away, as far as I know.  
 11 Q. Why do we see no email back from you to Ivor saying,  
 12 "You have got this wrong, we have been testing this and  
 13 it doesn't burn under its own steam. We have tested it  
 14 under laboratory conditions and it does this, this and  
 15 this"? Why do we not see that anywhere in the  
 16 documents?  
 17 A. Ivor may have been aware of that. I mean, he is talking  
 18 about a particular problem here with the 8414-2 test,  
 19 and I'm not going to dispute the fact that he has seen  
 20 it performing that way in that test. What I'm saying is  
 21 that that's not a normal behaviour of K15.  
 22 Q. Is there any documentation around these other tests that  
 23 you did in the laboratory which you say disprove this?  
 24 A. If I can rephrase that, I'm not saying it disproves  
 25 this, because I've just -- I did say that, given

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1 a sufficient supply of oxygen and enough temperature, it  
 2 could burn under its own steam. What I'm saying is that  
 3 in a normal test result, I didn't have any real concern  
 4 about the performance of the product as in that sense.  
 5 It didn't easily burn under its own steam.  
 6 SIR MARTIN MOORE-BICK: Can I just ask, isn't there  
 7 a difficulty here that you're describing the performance  
 8 of this material under laboratory testing conditions --  
 9 A. Yes.  
 10 SIR MARTIN MOORE-BICK: -- Mr Meredith is describing the  
 11 performance of the product under conditions which are  
 12 intended to replicate use in practice, the chimney,  
 13 availability of oxygen from the surrounding atmosphere,  
 14 and so on and so forth.  
 15 A. Yes.  
 16 SIR MARTIN MOORE-BICK: So it's not really possible to say  
 17 this isn't normal, is it? All you can say is this does  
 18 not reflect what you found in the laboratory, but it may  
 19 be normal for the way it performs under something  
 20 approximating to actual use in a building?  
 21 A. Clearly it seems to be doing it in this particular test,  
 22 so you would have to say that that is happening in the  
 23 8414-2 systems that have been set up.  
 24 SIR MARTIN MOORE-BICK: Yes, and this was at least the  
 25 second such test of this kind because you had had the

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1 one at the BRE --  
 2 A. Yeah, I think we'd had -- it might have even been the  
 3 third or fourth.  
 4 SIR MARTIN MOORE-BICK: Right. So it's starting to generate  
 5 a pattern of normality, one might perhaps say.  
 6 A. It's certainly of concern, which is why work is being  
 7 done on the fire retardant possibilities.  
 8 SIR MARTIN MOORE-BICK: Thank you very much.  
 9 Yes, Ms Grange.  
 10 MS GRANGE: When you say it's certainly of concern, were you  
 11 concerned at the time about the use of K15 on buildings  
 12 over 18 metres given what this large-scale fire testing  
 13 was showing?  
 14 A. I wasn't, which -- the reason I wasn't was my  
 15 understanding was it was being used against a masonry  
 16 substrate per what had happened in the 8414-1 test.  
 17 That was my understanding of how it was being used.  
 18 This, as I saw it, was a different test. This was  
 19 a steel-frame test. There's a possibility that you can  
 20 get oxygen into it in a different way. So it was  
 21 a different test. So I wasn't concerned that what was  
 22 going out there and what was being recommended was  
 23 a problem. But clearly we needed to pass this test if  
 24 we were to get the -- that was my understanding -- if we  
 25 were to get the steel frame business.

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1 Q. But the masonry test you have just referred to was on  
 2 a different K15 product, wasn't it?  
 3 A. It was on, as we now know, the old technology product.  
 4 Q. Yes.  
 5 A. Which is why I say: should we try the old technology  
 6 product and see how that performs in a test?  
 7 Q. Did you understand why Ivor was asking, "Is this a PPDS  
 8 situation?" Can you understand why he was asking that?  
 9 A. I would imagine if we had put a fire retardant in, it  
 10 would be a PPDS situation, so ...  
 11 Q. I see.  
 12 Moving up the email chain {KIN00003704/1}, we can  
 13 see you responded five minutes later at 9.42 on  
 14 9 June 2008, and you say 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 Do you see that there?  
 21 A. Yes, yes.  
 22 Q. Now, did you mean by that that you'd have no choice,  
 23 until you'd sorted this out, but to provide old  
 24 technology K15 to Offsite for the further tests that  
 25 they'd got coming up?

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1 A. Anything we provided to them for a test would have to be  
 2 used, if that's -- whatever performed in the test would  
 3 be what you had to sell. That would be normal.  
 4 Q. So what did you mean? When you said, "we may have no  
 5 choice but to provide old process K15 for Off site until  
 6 the FR issue is sorted out", are you talking there about  
 7 providing it to Offsite for their testing?  
 8 A. No, it's providing it, and if it pass -- the implication  
 9 there is -- okay, it's shortened, but the implication  
 10 is: provide it to Offsite for the test; if it succeeds  
 11 in the test, then you would obviously provide that --  
 12 carry on providing that.  
 13 Now, if we move to Offsite, you would have to do the  
 14 whole K15 because I don't think you can -- you can't  
 15 distinguish one from the other, so you'd have to --  
 16 everything would have to -- every K15 product you made  
 17 would have to be old technology. Hence I say, "I know  
 18 it's a nightmare for processing", switching between the  
 19 two technologies. And I'm saying, "we can't carry on  
 20 providing something we know fails a fire test". That's  
 21 self-evident.  
 22 Q. Yes, so -- and I think you explain this in your witness  
 23 statement, which we'll come to -- you're saying that  
 24 this email shows that you were worried about providing  
 25 K15 to market; is that your evidence?

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1 A. Yes, if this was the cause of the problem, if it fails  
 2 a fire test.  
 3 Q. What I would suggest to you is there is another way this  
 4 email can be read, which is that what you're proposing  
 5 to do is go back to providing old process K15 to Offsite  
 6 just for their testing --  
 7 A. No.  
 8 Q. -- until you have sorted out what you're going to do  
 9 about the new technology K15.  
 10 A. No, that is not what I meant. I meant -- if you provide  
 11 old process K15, you would have to provide it, that  
 12 would have to be the product you were providing. When  
 13 I say "until the FR issue is sorted out", what I mean is  
 14 if a fire retardant is the answer, then in the future  
 15 you can go back to new technology with that  
 16 fire retardant.  
 17 Q. Well, I would suggest to you that a more natural reading  
 18 of this email is exactly as I just put to you, that what  
 19 you're saying is, "We have no choice but to provide  
 20 Offsite with some old process K15 for their testing  
 21 until we can sort out what we're doing with the new  
 22 technology K15, and although that's a nightmare for  
 23 processing because you're going to have to do an old  
 24 technology batch, you can't carry on providing something  
 25 to Offsite that you know fails a fire test". That's

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1 what I would suggest to you is the natural reading of  
 2 that email.  
 3 A. No, I don't agree. I think what I'm looking at there is  
 4 if we've got to go back to the old technology, then  
 5 that's what you have got to do, and if that's the  
 6 reality, you have to do it.  
 7 Q. Are you saying that in this email you're actually  
 8 suggesting moving back to old process K15 for the entire  
 9 market? Is that what you're saying?  
 10 A. It would have to be, because you can't distinguish. You  
 11 can't make a batch -- practically you can't really make  
 12 a batch for one person that's labelled up for them,  
 13 because you're -- when you're making a batch, you're  
 14 doing a run, and it's -- it would give you logistical  
 15 problems, it would give you all sorts of selection  
 16 problems in the warehouse. If you change, you change.  
 17 Q. But is that what you're actually saying to your  
 18 colleagues in this email? Did you think that at the  
 19 time, that you were suggesting moving back to old  
 20 process K15 for the entire market?  
 21 A. Absolutely, yeah.  
 22 Q. And you hoped they understood that, did you, at the  
 23 time?  
 24 A. Yes. Yes, I think if you go with the next email up, you  
 25 will see -- oh, well, maybe it's not this one, but there

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1 was certainly a comment from Gwyn at one stage that says  
 2 the old process had also failed, which ...  
 3 Q. Yes, there is, I think, in the email chain. If we go up  
 4 the email chain ...  
 5 We'll come to that in a moment. I think that might  
 6 be in a separate email chain, we can come back to there.  
 7 A. Yeah, I do recall that.  
 8 Q. Just back to your email, this is a direct instruction  
 9 from you to expedite the production of samples of the  
 10 OP90 fire retardant phenolic for testing; is that  
 11 correct?  
 12 A. Yes.  
 13 Q. Did you consider that to be a matter of urgency at the  
 14 time?  
 15 A. I did, yeah.  
 16 Q. We know from having looked at the July report already  
 17 that your instruction was followed, and that those trial  
 18 samples were sent to the BRE for indicative calorimetry  
 19 testing; yes?  
 20 A. I believe so, yes.  
 21 Q. Did you ever raise any concerns about the risks of  
 22 supplying customers with new technology K15 outside of  
 23 this email chain?  
 24 A. I'm not sure.  
 25 Q. What other action did you take if public safety was

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1 genuinely your concern at this time?  
 2 A. Well, we were working on looking for a more FR,  
 3 fire resistant, version, if that was the problem.  
 4 As I say, I seem to recall on this email chain that Gwyn  
 5 came back and said, "Hang on a minute, there was  
 6 a problem with the old process", and I think that's why  
 7 it didn't -- we didn't move back to the old process.  
 8 Q. If you really were concerned about public safety, why  
 9 not do an awful lot more than we see in this email  
 10 string?  
 11 A. Well, I'm concerned about the potential. This is ...  
 12 the potential for public safety. But, again, we're  
 13 testing a system here, and it's the system that's  
 14 failed. It's not necessarily the product.  
 15 Q. There is no reference there by you or by anyone else in  
 16 this string to the public, to safety, to fire safety, to  
 17 general sale, is there?  
 18 A. Well, we're discussing a technical issue, development  
 19 issue, so we wouldn't normally put that in an email.  
 20 Q. But if you were concerned, why weren't you doing more,  
 21 given the clear pattern that you have seen of how the  
 22 new technology K15 is performing, and the fact that you  
 23 have still not got to a point of having a new technology  
 24 K15 that everyone's comfortable with?  
 25 A. Well, I ... in terms of how it's performing, I'm

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1 suggesting, you know, let's go back to the old  
 2 technology, if that's the issue. And then I'm hearing  
 3 that the old technology is also giving a problem, so  
 4 that sounds like it's not the issue, it sounds like the  
 5 issue was actually something else to do with the test.  
 6 SIR MARTIN MOORE-BICK: Dr Rochefort, if this product was  
 7 being supplied to the market for use above 18 metres, it  
 8 was obviously going to be incorporated into other  
 9 systems, wasn't it?  
 10 A. As far as I understood it, it was only going to be used  
 11 with a non-combustible cladding on a masonry substrate,  
 12 so --  
 13 SIR MARTIN MOORE-BICK: I see. So it was your understanding  
 14 that those limitations were being made clear to any  
 15 potential purchaser?  
 16 A. That was certainly my understanding of the market.  
 17 SIR MARTIN MOORE-BICK: Right. Maybe that answers my next  
 18 question, which was going to be: did you have any  
 19 concerns about its performance when used in other  
 20 systems, given what you had learned about its  
 21 performance in the two systems which had been --  
 22 A. Clearly --  
 23 SIR MARTIN MOORE-BICK: -- tested?  
 24 A. Sorry. Clearly there's a problem in this system, with  
 25 the 8414, with whatever the cladding was in the system,

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1 there's a problem, so I would be concerned if it was  
 2 used in this system.  
 3 SIR MARTIN MOORE-BICK: And other systems?  
 4 A. Well, if they had a non-combustible cladding, then  
 5 I wouldn't -- and it was on a masonry substrate,  
 6 I wouldn't have been concerned at this stage.  
 7 SIR MARTIN MOORE-BICK: Thank you.  
 8 Yes, Ms Grange.  
 9 MS GRANGE: What was it that allayed your concerns about the  
 10 fire performance of the new technology K15 which meant  
 11 that it was sufficient for the product to go on being  
 12 sold to market?  
 13 A. I think it was comments that the old process was also  
 14 giving problems in the same test. So, again, it's  
 15 pointing to the fact that it's a test issue rather than  
 16 the product issue.  
 17 Q. If we move forward with the story, we know that in 2008  
 18 you, Philip Heath and Mr Meredith continued to be  
 19 involved in dealing with queries from Kingspan Offsite  
 20 about the failed tests in systems incorporating K15.  
 21 On 16 July 2008, Aidan Wilkinson of Kingspan Offsite  
 22 put his concerns in writing. If we can just go to that,  
 23 this is at {KIN00003714}. We can see at the bottom of  
 24 that page Mr Wilkinson has put his concerns in writing  
 25 about the performance. Do you see he says:

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1 "Following the recent fire tests at the BRE we have  
 2 the following concerns:-  
 3 "After the heat source was extinguished the K15  
 4 continued to burn on for considerable time in fact it  
 5 was in excess of 30 minutes. It was only extinguished  
 6 when the BRE applied water to it at the end of the one  
 7 hour duration. (the heat source had been extinguished at  
 8 22 minutes)  
 9 "Is this what is expected of this material, is it  
 10 normal for K15 to continue to burn for in excess of  
 11 30 minutes after the removal of the ignition source?  
 12 "Is the reason for the failure specific to a batch  
 13 of K15, to the current formulation of K15 (bearing in  
 14 mind that this batch was specifically manufactured for  
 15 these test samples) or to the details that we used?  
 16 "We are concerned with the lack of response with  
 17 regard to the performance of the K15 product on the  
 18 BS 8414 tests that we have completed. We have a further  
 19 four tests booked as you are aware, and at this time we  
 20 are unsure of the way forward in terms of detailing the  
 21 samples to pass the test.  
 22 "We have the samples built here at Sherburn,  
 23 insulated with material from the same batch as the  
 24 previous failed tests: is the material appropriate to  
 25 use on the future tests? You have now had the official

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1 video so can see first hand the issue with performance.  
 2 Having performed this test yourselves in the past and  
 3 achieved a pass is this what you would have expected.  
 4 "Please contact us by return ..."  
 5 Do you see that there?  
 6 A. Yes.  
 7 Q. Now, above that, going up the chain, Mr Heath then sends  
 8 an email to you, to Mr Meredith, Mr Coppock, cc'ing  
 9 Gwyn Davies, and he says this:  
 10 "Good evening,  
 11 "We need to be careful how we answer the concerns of  
 12 Off-Site, any suggestions?  
 13 "Regards  
 14 "Phil."  
 15 Can you help us, why did you think there was a need  
 16 to be careful how the concerns of Offsite were answered?  
 17 A. I'm not sure exactly what Phil means in this email.  
 18 I think it's -- I mean, it's just one to be -- we need  
 19 to consider the details of this email and how do we  
 20 address them, that's how I would have taken it.  
 21 Q. Can I suggest that the reason Mr Heath was saying you  
 22 need to be careful is because Offsite hadn't been told  
 23 that there had been a change in technology of the K15  
 24 and that you had already observed a worsening of the  
 25 fire performance in the tests that Kingspan had carried

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1 out with Metsec and Sotech; that's right, isn't it?  
 2 A. I don't know if it's right. I mean, that's your  
 3 suggestion. I don't know that that's what he meant.  
 4 Q. Is it possible that that's what he meant, looking back  
 5 and thinking back now?  
 6 A. I don't know what he meant there.  
 7 Q. Were Kingspan Offsite, so far as you were aware, ever  
 8 told about the change in the technology and about what  
 9 Kingspan itself had observed about its change in fire  
 10 performance?  
 11 A. I don't know.  
 12 Q. Well, this email is being written to you. Were you not  
 13 concerned to find out?  
 14 Mr Wilkinson is clearly raising significant concerns  
 15 about the way that K15 has performed. As the technical  
 16 director, did you not take it upon yourself to find out  
 17 exactly what they had and hadn't been told and make sure  
 18 they were told the truth?  
 19 A. I think the email was actually not to me originally, it  
 20 was from Aidan Wilkinson to Ivor.  
 21 Q. Yes, but then you're clearly --  
 22 A. Philip then copies me in --  
 23 Q. -- being forwarded that email --  
 24 SIR MARTIN MOORE-BICK: Sorry, one at a time.  
 25 A. Sorry?

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1 SIR MARTIN MOORE-BICK: Sorry, you hadn't finished your  
 2 answer.  
 3 A. I've just said that the email's written from  
 4 Aidan Wilkinson to Ivor Meredith and then Philip Heath  
 5 has copied me in.  
 6 MS GRANGE: So would you have read that email below when he  
 7 copied you in?  
 8 A. I think I would have read it, yes.  
 9 Q. Let's look at the top of the chain. Here we can see  
 10 your response to Mr Heath, Mr Meredith and Mr Coppock,  
 11 and you say this:  
 12 "I think the best response at the moment is to say  
 13 that we are investigating possible reasons for the  
 14 failure and will come back to them as soon as we are  
 15 clearer on what caused it. Meanwhile we recommend they  
 16 do not test the other material they have used to  
 17 fabricate the installations as that was the same batch  
 18 and may suffer from a similar problem.  
 19 "If necessary I suppose we could send old  
 20 formulation material for the testing if you think this  
 21 has a better chance and they are pressing, but this is  
 22 undesirable for several reasons and I'd rather delay and  
 23 get the new FR product made as soon as Hexion can supply  
 24 material - which we are waiting on."  
 25 Do you see that there?

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1 A. I do, yes.  
 2 Q. Why are you suggesting to your colleagues that you tell  
 3 them that you're investigating possible reasons for the  
 4 failure and you'll come back to them in circumstances  
 5 where you had a growing body of evidence about the poor  
 6 performance of K15 at this time?  
 7 A. I think what I'm saying here is -- because the question  
 8 was, from Phil: how do we respond to Offsite? So what  
 9 I'm saying is the best response at the moment is to say  
 10 that we are investigating possible reasons, that's  
 11 correct, for the failure and come back to them, and to  
 12 recommend they don't test the other material as it was  
 13 from the same batch and may suffer a problem -- until we  
 14 understand what the issue is, then that's what we should  
 15 do. Clearly whatever was supplied to them was not  
 16 passing their fire test, so we need to look at what can  
 17 be supplied that could pass a fire test.  
 18 And as again I go on to say, we could supply the old  
 19 formulation for the testing, "if you think this has  
 20 a better chance and they are pressing". If the old  
 21 formulation works, then we would have to, as I said  
 22 before, make all the K15 product out of the old  
 23 technology product, which is why I say, "this is  
 24 undesirable for several reasons ... I'd rather delay and  
 25 get the FR product made as soon as Hexion can supply

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1 material". So that was the thinking at the time.  
 2 Q. Dr Rochefort, I would suggest that what you put is the  
 3 second sentence of that first paragraph is misleading:  
 4 "Meanwhile we recommend they do not test the other  
 5 material they have used to fabricate the installations  
 6 as that was the same batch and may suffer from a similar  
 7 problem."  
 8 A. Yes.  
 9 Q. You're proposing to tell them that it might be about the  
 10 batch, but it's right, isn't it, that you knew full well  
 11 by this time that there were serious problems with the  
 12 performance of K15? You had seen it in the tests that  
 13 had been done in 2007, 2008 and in the calorimeter  
 14 testing; do you agree?  
 15 A. I agree there was a problem with the performance of K15  
 16 in the 8414-2 testing that we'd done to date, yes.  
 17 Q. Yes, so why not tell Kingspan Offsite that?  
 18 A. It's the system -- the system test gave similar results  
 19 or ... in terms of what was happening. So clearly it  
 20 didn't make any sense to provide them with more material  
 21 from the same -- of the same product.  
 22 Q. Why not tell them that you had experienced very similar  
 23 failures? Why not be open with them and say, "Well,  
 24 actually, as it happens, we have had similar problems,  
 25 K15 continuing to burn under its own steam. We did

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1 these tests, they were failures, we have had the same  
 2 problem, we are looking at a research and development  
 3 product? Why not be open with them about this? Why  
 4 suggest that it might be down to a bad batch?  
 5 A. Yeah, I see what you're getting at there. I think it  
 6 was because -- my concern would have been at the time  
 7 that we don't alarm them unnecessarily if it wasn't the  
 8 K15 that was causing the problem, until we understand  
 9 what is causing the problem, which is why I suggest  
 10 sending the old formulation material for it.  
 11 Now, that was the suggestion. It wasn't desirable,  
 12 but it was a suggestion. If we did that, we'd have to  
 13 supply that in the future for K15.  
 14 MS GRANGE: Mr Chairman, I have some more questions on this,  
 15 but I think it's a good moment to break.  
 16 SIR MARTIN MOORE-BICK: Yes?  
 17 MS GRANGE: Yes.  
 18 SIR MARTIN MOORE-BICK: It probably is.  
 19 Dr Rochefort, we will have a break now so everyone  
 20 can get some lunch. We will come back at 2.05, please.  
 21 THE WITNESS: Okay.  
 22 SIR MARTIN MOORE-BICK: Again, please don't talk to anyone  
 23 about your evidence or anything relating to it while  
 24 you're away.  
 25 THE WITNESS: No.

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1 SIR MARTIN MOORE-BICK: All right, thank you very much.  
 2 THE WITNESS: Thank you.  
 3 (Pause)  
 4 SIR MARTIN MOORE-BICK: Thank you, 2.05, please. Thank you.  
 5 (1.05 pm)  
 6 (The short adjournment)  
 7 (2.05 pm)  
 8 THE WITNESS: Good afternoon.  
 9 SIR MARTIN MOORE-BICK: All right, Dr Rochefort?  
 10 THE WITNESS: Yes.  
 11 SIR MARTIN MOORE-BICK: Ready to carry on? Yes, thank you.  
 12 Yes, Ms Grange.  
 13 MS GRANGE: Yes, thank you.  
 14 We were in an email chain relating to the concerns  
 15 that had been raised by Kingspan Offsite. If we can go  
 16 back to that, {KIN00003714}, and if we can look closely  
 17 at that email you send at the top of that page.  
 18 Now, I had asked you about that first paragraph, but  
 19 I now want to just look at the second paragraph. You  
 20 say:  
 21 "If necessary I suppose we could send old  
 22 formulation material for the testing if you think this  
 23 has a better chance and they are pressing, but this is  
 24 undesirable for several reasons and I'd rather delay and  
 25 get the new FR product made as soon as Hexion can supply

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1 material - which we are waiting on."  
 2 Do you see that there?  
 3 A. Yes, I do.  
 4 Q. What were the reasons which would make it undesirable to  
 5 send old formulation foam to Kingspan Offsite for their  
 6 testing?  
 7 A. I think I covered them earlier. It's several reasons.  
 8 I think originally Gwyn Davies had queried, I think, the  
 9 performance of the old material, so what -- it wasn't  
 10 certain it would work in this system. Changing over to  
 11 the old material would mean the whole production line  
 12 would have to -- well, the whole production line for K15  
 13 at least would have to change over, and therefore if --  
 14 unless Ivor was saying that that was definitely the  
 15 route to go, I would rather delay for this particular  
 16 fire test sequence, get the new FR product.  
 17 Q. Was one of those reasons also that it was not the  
 18 product Kingspan were in fact manufacturing and selling  
 19 at the time? I think that follows from what you have  
 20 just said about you would have to transfer over at least  
 21 the whole K15 process to the old tech. That would be  
 22 extremely burdensome, wouldn't it, and costly?  
 23 A. It would be logistically just quite difficult to do, but  
 24 it would be possible. I mean, if Ivor was saying, "Yes,  
 25 that's the way", then we could have done it.

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1 Q. Can we agree that you're not in this email saying to  
 2 your colleagues, "I'm really concerned that we're  
 3 selling something that hasn't passed these tests"?  
 4 A. I'm not saying that, but again, it's a system being  
 5 tested, so I still don't know if it's the system that's  
 6 giving the problem or the product.  
 7 Q. So far as you are aware, after this, did anyone ever  
 8 tell Kingspan Offsite anything about the fact that the  
 9 K15 they had been testing was a different K15 from the  
 10 one with which Kingspan had had some success?  
 11 A. I don't know. I know there were meetings with Offsite,  
 12 I think, with Aidan Wilkinson after this, but I don't  
 13 think I was involved in them.  
 14 Q. You said in your witness statement, and we looked at it  
 15 earlier this morning, that in your experience Kingspan  
 16 always gave straight and clear advice, from which you  
 17 consider Kingspan was respected within the industry.  
 18 Did you think it was giving straight and clear  
 19 advice to recommend that potentially the problems were  
 20 in the same batch and might suffer from a similar  
 21 problem back to Kingspan Offsite?  
 22 A. I think this was in terms of internally coming up with  
 23 a reason to pause and say, "Well, what's up with the  
 24 fire test, with this particular fire test?", and that  
 25 was probably the best way to do it at that time. But,

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1 as I say, there were separate discussions with Offsite,  
 2 so I don't know what was discussed.  
 3 Q. I see.  
 4 Can we agree that the only tests that you could rely  
 5 on at this stage, even remotely, to support Kingspan  
 6 being used over 18 metres was the 2005 test that had  
 7 been done on old technology?  
 8 A. It was the 2005 test that we were relying on, yes.  
 9 Q. I just want to put at this stage some passages to you  
 10 from Mr Meredith's oral evidence that he gave to this  
 11 Inquiry, to get your response to those.  
 12 If we can go first to {Day75/179:14}. This is where  
 13 we had been discussing the Kingspan Offsite emails. So  
 14 I say at 14:  
 15 "Question: Just putting this email to one side for  
 16 the moment and just thinking generally, did Mr Rochefort  
 17 ever raise any concerns with you about supplying  
 18 customers with new technology K15, given the fire risk  
 19 it posed?  
 20 "Answer: I don't think -- as far as I recollect,  
 21 Malcolm didn't raise issues with me, it would be me  
 22 raising issues with him. I would always go to him with  
 23 my problems, not vice versa. So ... I can't recollect,  
 24 unfortunately."  
 25 Do you see that there?

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1 A. I see his response, yes.  
 2 Q. Do you agree with that, that it was him raising issues  
 3 with you and problems about K15 with you, rather than  
 4 you ever going to him and saying, "If we've got problems  
 5 with K15, what should we do about it?" Do you agree?  
 6 A. No, I don't agree. I think clearly you can see that I'm  
 7 saying that, "Look", to Ivor, "If the old process is the  
 8 product you think we need to supply for this, then let's  
 9 do it", so ...  
 10 Q. Well, we've talked about that email and --  
 11 A. But that is talking to Ivor, and I would have said the  
 12 same in person as well, so ...  
 13 Q. Yes, and we've discussed whether or not that email might  
 14 actually be read as you providing old process K15 for  
 15 the testing to Kingspan Offsite; yes?  
 16 A. No, we wouldn't have done that. It would have been --  
 17 Q. Right.  
 18 Can we look at {Day75/157:8}, now. So this was  
 19 earlier in his questioning, when we'd been discussing  
 20 his report about how the phenolic burned, and if you  
 21 pick it up at line 8, I say:  
 22 "Question: Did Philip Heath and Malcolm Rochefort  
 23 share your concern about the fire performance of the new  
 24 technology K15 at this time?  
 25 "Answer: Like I say, I think this might have been

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1 the time that I was criticised for not being very  
 2 positive about our products -- or, sorry, the Kingspan  
 3 products."  
 4 Do you see that there?  
 5 A. Yes.  
 6 Q. Were you ever made aware that Mr Meredith was criticised  
 7 for not being positive enough about Kingspan products?  
 8 A. No, I wasn't aware of that.  
 9 Q. That didn't come ever from you as technical director?  
 10 A. No, I wouldn't -- I appreciated the openness of Ivor.  
 11 I mean, he wasn't a -- he wasn't the most stable of  
 12 characters, but he was very dedicated, he did  
 13 an excellent job on the whole and I very much  
 14 appreciated it.  
 15 Q. Then it carries on. I put the question at line 14:  
 16 "Question: So does it follow that you didn't think  
 17 your managers were concerned, or were concerned in the  
 18 same way as you?  
 19 "Answer: I don't think they were concerned in the  
 20 same way as me, no.  
 21 "Question: Yes.  
 22 "Answer: I felt a tremendous responsibility for  
 23 this, because the buck stopped with the technical  
 24 department to make sure that it was suitable for the  
 25 marketplace and we had to do the testing."

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1 Do you see that there?

2 A. Yes.

3 Q. Would you agree that you weren't concerned in the same  
4 way that he was about the fire performance of K15?

5 A. I think we were concerned about the results from the  
6 fire tests, from the system tests, and I think we were  
7 looking at K15 as one of the possible causes of that  
8 problem.

9 Q. Right.

10 A. So I think we -- I have to look at it in an objective  
11 way.

12 Q. If we carry on, at line 24 I ask:

13 "Question: After you wrote this, and obviously this  
14 report was delivered to the technical team, did you feel  
15 at the time that your concerns about the fire  
16 performance of new technology K15 were being taken  
17 seriously by Philip Heath and Malcolm Rochefort?

18 "Answer: I felt like I wasn't ever heard, actually,  
19 when it came to issues like this.

20 "Question: Did you actually have conversations with  
21 them as well as writing this in which you said, 'I'm  
22 really concerned about how K15 performs, given the  
23 testing we've just done, how it performs in fire'? Did  
24 you have those conversations with them?

25 "Answer: We were always -- there was always a new

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1 solution on the horizon, we could try this, or we could  
2 do this, so I was constantly being -- you know, there  
3 was something round the corner that could help us move  
4 forward. So I guess I was always hoping that that would  
5 be the end of it, really."

6 Do you see that there?

7 A. I see that, yeah.

8 Q. Just going back to that earlier part at line 4, he says  
9 he felt he wasn't ever heard when it came to issues like  
10 this. Are you prepared to accept, looking at it now,  
11 that you didn't hear him properly about the concerns he  
12 was expressing?

13 A. No, I think we did hear, I think it was one of the  
14 factors we had to take into account.

15 Q. Is it right that, in reality, everyone was always just  
16 looking to the new solution on the horizon, the next  
17 possible test that might validate the use of K15 on tall  
18 buildings? Is that the reality of how it was at the  
19 time?

20 A. I don't know if it was a general -- if that was  
21 a general issue. I think my propensity, because of my  
22 job, was -- I'm a chemist -- to look for possible  
23 chemical solutions. That would be the sort of thing  
24 I would do. So that would be the way my mind would  
25 work.

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1 Q. But as technical director, was it not part of your  
2 responsibility to make sure that you weren't selling  
3 something which was being misdescribed from a technical  
4 point of view? Was that not part of your  
5 responsibility, not just to look for the next solution  
6 but to check that what you were selling was safe?

7 A. I think we had, in general, in terms of the fire  
8 testing, et cetera, carried out the tests. I think this  
9 particular system test was raising concerns and we were  
10 looking at it and saying, "How can we solve this issue?"

11 Q. I see.

12 Then if we carry on, at line 17:

13 "Question: But do you actually have a specific  
14 recollection of raising concerns with them?

15 "Answer: I raised concerns on numerous occasions  
16 when it came to new technology.

17 "Question: About its fire performance?

18 "Answer: Yeah.

19 "Question: But you didn't think you were listened  
20 to; is that what you're saying?

21 "Answer: I might have been listened to, but they  
22 certainly didn't respond to it."

23 Do you see that there?

24 A. Mm-hm.

25 Q. Then I go on:

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1 "Question: You said earlier that you thought it was  
2 around this time that you were criticised for being too  
3 negative. Who was it who criticised you for being too  
4 negative?

5 "Answer: It would have been the managing director.

6 "Question: So who was that, Malcolm?

7 "Answer: Peter Wilson.

8 "Question: Okay."

9 Were you ever made aware that Peter Wilson was  
10 criticising Ivor Meredith for being too negative about  
11 K15's fire performance?

12 A. No, I wasn't.

13 Q. Mr Heath also said in his evidence yesterday that  
14 Mr Meredith's concerns were conveyed to you. We can see  
15 that in writing.

16 A. Yes.

17 Q. I asked him that and he confirmed that they were  
18 conveyed to you.

19 Can you explain why you didn't take those concerns  
20 seriously at the time?

21 A. Sorry, I think we did take them seriously. I think we  
22 were looking -- we were doing a lot of work to see if we  
23 could solve those problems.

24 Q. Did you ever take steps to check that in fact you were  
25 only ever selling K15 on high-rise buildings for those

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1 with masonry substrates? Did you ever check that for  
 2 yourself?  
 3 A. I don't think I did. I would have relied on the sales  
 4 and TS to make sure that happened.  
 5 Q. Why not? Once you realised that K15's performed so  
 6 badly in steel-framed systems, that's your evidence,  
 7 that it was the system that was so concerning, why not  
 8 check that what you're selling is only ever for masonry  
 9 substrates?  
 10 A. I would have trusted the system and the people involved  
 11 in it.  
 12 Q. I see.  
 13 I want to go on now to ask you about the LABC system  
 14 approval certificate that was issued in 2009, and you  
 15 make clear -- just for the transcript, it's  
 16 paragraph 8.4 of your statement, page 36  
 17 {KIN00008838/36} -- that you had no direct involvement  
 18 in any interaction with the LABC in 2009 in relation to  
 19 that certificate. That's right, isn't it?  
 20 A. That's correct, yes.  
 21 Q. Who was responsible, so far as you were aware, for  
 22 obtaining that document, that LABC system certification?  
 23 A. As far as I know, it was Philip Heath.  
 24 Q. When did you first see the final issued document? It  
 25 was issued in May 2009. Did you see it straight away,

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1 do you remember?  
 2 A. I don't know that I actually saw the document. I mean,  
 3 presumably at some stage I would have looked at it, but  
 4 I don't recall looking through the document.  
 5 Q. What did you understand to be the purpose of Kingspan  
 6 obtaining this LABC certificate?  
 7 A. I understood the purpose was as a way of ensuring that  
 8 K15 could be used on façades above 18 metres.  
 9 Q. Yes.  
 10 A. Yes.  
 11 Q. And generally on façades over 18 metres; that's right,  
 12 isn't it? Not just on masonry systems.  
 13 A. I don't think it says that. I mean, I've looked at it  
 14 subsequently. I don't think it says that, does it?  
 15 Q. Don't think it says what?  
 16 A. That it can generally be used on -- I think it's all in  
 17 terms of non-combustible.  
 18 Q. Well, let's look at an email that you're sent about  
 19 this, {KIN00020714}, the first email in the chain, three  
 20 emails down on page 1. It's an email from Mr Heath, and  
 21 you are cc'd in to it. Do you see that at the top?  
 22 A. Yes, yes.  
 23 Q. 7 May 2009, and he says this:  
 24 "GREAT NEWS!  
 25 "Please find attached Local Authority Building

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1 Control Approval for K15 Rainscreen Board.  
 2 "What is LABC Approval?  
 3 "Under agreement by all local authorities in England  
 4 and Wales, design approvals for 'building types' and  
 5 'building systems' can be issued by one local authority  
 6 and accepted by all other local authorities providing  
 7 there are no changes in design, implementation,  
 8 construction or site specific variables. This approval  
 9 covers compliance with the Building Regulations.  
 10 A register of approved designs is kept by LABC ..."  
 11 Then he says:  
 12 "Benefits:  
 13 "Having a building type (housing, commercial, or  
 14 industrial) or a complete building element - a 'system'  
 15 - approved by LABC means that it can be used without the  
 16 full plans approval process happening repetitively  
 17 around the country at each site. This saves time and  
 18 money for developers, designers, engineers, contractors  
 19 and builders.  
 20 "The highlight of this Certificate and supporting  
 21 documentation is the Requirement under B4 of AD B -  
 22 External Fire Spread. 'Since K15 can be considered a  
 23 material of limited combustibility, it is suitable in  
 24 all situations shown on Diagram 40 of Approved  
 25 Document B Volume 2, including those parts of a building

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1 more than 18m above ground. In the latter  
 2 circumstances, the cladding system and the substrate to  
 3 which the insulation is applied must also meet the  
 4 requirement for limited combustibility. Where the  
 5 substrate is a metal-framed wall system rather than  
 6 masonry or concrete, non-combustible lining board must  
 7 be specified to the external face of the metal frame  
 8 wall (e.g. calcium silicate board or similar  
 9 performing). N.B. This statement does not differ from  
 10 anything [Kingspan] states."  
 11 Then he goes on, if we can go to the next part  
 12 {KIN00020714/2}:  
 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] ..."  
 20 Do you see that there?  
 21 A. Yes.  
 22 Q. Going back to the answer you gave earlier, and if we  
 23 just look at the extract he has put into there, if we go  
 24 back a page {KIN00020714/1}, it is saying that you can  
 25 use K15 on all situations shown on diagram 40. It then

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1 says:  
 2 "... the cladding system and the substrate to which  
 3 the insulation is applied must also meet the requirement  
 4 for limited combustibility. Where the substrate is  
 5 a metal-framed wall system rather than masonry ...  
 6 non-combustible lining board must be specified ..."  
 7 Do you see that there?  
 8 A. Yes.  
 9 Q. What test evidence did you have that you were aware of  
 10 that supported that text in that certificate?  
 11 A. I wasn't aware of what test there was. I think I asked  
 12 for what he'd done to get the approval.  
 13 Q. Yes, we'll look at that in a minute. But looking at it  
 14 now, what test evidence could there have been to support  
 15 the use of K15 in a metal-framed wall system provided  
 16 you use a non-combustible lining board? Where is that  
 17 test evidence?  
 18 A. I don't know. I mean, I would have looked at this and  
 19 I wouldn't have understood it -- probably in the way  
 20 that I understand it now, I wouldn't have understood it  
 21 then. So I think that would have passed me by. I would  
 22 have just said, "Well, that makes sense", if it's -- if  
 23 there's a non-combustible lining board is internal  
 24 instead of a masonry or concrete wall. That would have  
 25 made sense to me at the time.

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1 Q. What, even though you had no test evidence to support  
 2 that?  
 3 A. I wasn't that aware of what the -- in terms of what the  
 4 steel-framed test was, in the sense that I wouldn't have  
 5 been aware what was on the inside.  
 6 Q. But we've looked at documents that show that you were  
 7 fully aware in 2007 and 2008 that there were tests to  
 8 8414-2, the steel-framed structure, and you had been at  
 9 pains to emphasise that you recognise those were  
 10 failures in that particular system.  
 11 A. In those systems, yes.  
 12 Q. In the light of that, how could you be satisfied that it  
 13 was appropriate to say that you can use K15 in  
 14 a metal-framed wall system, when you knew that system  
 15 that's being described there had not been tested and  
 16 certainly hadn't passed?  
 17 A. I didn't know that that described what was actually  
 18 tested, and I still don't know actually if that  
 19 described what was tested, because it does say  
 20 non-combustible lining board must be specified to the  
 21 external face of the metal-frame wall. So I assumed  
 22 that this was a requirement that LABC had put in, or  
 23 were happy with, that enabled that type of construction.  
 24 Q. Would you agree that clearly this certificate was  
 25 a cause for celebration within Kingspan?

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1 A. Well, yes, Philip Heath says "GREAT NEWS!", so ...  
 2 Q. Looking at the part in bold, "material of limited  
 3 combustibility", what did you understand that to mean?  
 4 A. As I said, my complete understanding of material of  
 5 limited combustibility was limited, but clearly Phil had  
 6 considered it important because he highlighted it, so  
 7 I would have assumed that that was correct.  
 8 I mean, since then I've looked at it and  
 9 I understand that there's more than one route you can  
 10 go, and that that would be a requirement that was met by  
 11 another test, but at the time I would have taken that as  
 12 being correct.  
 13 Q. You said your understanding was limited, but at the  
 14 time, did you consider: well, what test evidence was  
 15 that based on?  
 16 A. Well, I did ask Phil what tests he'd used.  
 17 Q. Yes, we'll come to that in a moment, and that was  
 18 an important question for you to ask, wasn't it?  
 19 A. Yes.  
 20 Q. "What test evidence is this based on?"  
 21 A. Yes.  
 22 Q. Let's look at that.  
 23 SIR MARTIN MOORE-BICK: Are we going to leave this document  
 24 now?  
 25 MS GRANGE: We are going to come to another email string

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1 where we still have that there, but, Mr Chairman, if you  
 2 want to ask anything more about --  
 3 SIR MARTIN MOORE-BICK: I would just like to ask  
 4 Dr Rochefort: would you consider K15 to be a material of  
 5 limited combustibility?  
 6 A. Now I wouldn't, because I know --  
 7 SIR MARTIN MOORE-BICK: But would you then?  
 8 A. I wouldn't have -- it wouldn't have struck me as odd,  
 9 shall I just say that, because as far as I was  
 10 concerned, my mindset was: it's phenolic, it's the best  
 11 performing polymeric insulant thermoset around, maybe  
 12 that's what it could be. So it could have been  
 13 referring to the material, as far as I was concerned, at  
 14 that stage.  
 15 SIR MARTIN MOORE-BICK: I mean, you did know it was  
 16 combustible, because you --  
 17 A. Yes, yes.  
 18 SIR MARTIN MOORE-BICK: -- very early on.  
 19 A. But that distinction between limited combustibility --  
 20 if it had said, for example, "Since K15 can be  
 21 considered an A2 Euroclass material", I would have said,  
 22 "Hang on, it isn't that".  
 23 SIR MARTIN MOORE-BICK: Yes.  
 24 A. But a material of limited combustibility wouldn't have  
 25 stood out to me, and subsequently I would have

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1 understood that you had to do some tests in order to be  
 2 considered.  
 3 SIR MARTIN MOORE-BICK: I'm just wondering whether at the  
 4 time you would have described it yourself to anyone else  
 5 as a material of limited combustibility?  
 6 A. I don't think it's a term I would generally use.  
 7 I would try to be more specific about what tests were  
 8 passed.  
 9 SIR MARTIN MOORE-BICK: Yes, thank you.  
 10 Yes, Ms Grange.  
 11 MS GRANGE: Yes.  
 12 As technical director, were you not curious to  
 13 understand precisely what was meant by material of  
 14 limited combustibility?  
 15 A. No, I mean, I would have taken the whole paragraph and  
 16 thought: yeah, great, that's good. LABC, as far as  
 17 I was concerned, are a reputable authority, considered  
 18 the product was suitable above 18 metres, therefore  
 19 that's good news.  
 20 Q. If we can look at the top of this email chain on this  
 21 page, we can see that about an hour later on the same  
 22 day, 16.10, you email just Mr Heath and you say:  
 23 "Out of curiosity, which fire test result(s) did we  
 24 use to get this?  
 25 "Regards,

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1 "Malcolm."  
 2 Do you see that there?  
 3 A. Yes, yes.  
 4 Q. I think we have agreed that was a very important  
 5 question, wasn't it?  
 6 A. With retrospect, it is a very important question. I was  
 7 curious as to what he'd used. The fact it was an hour  
 8 later, I don't know whether that's significant or not,  
 9 because we were in different places, I could have been  
 10 doing other things, so ...  
 11 Q. Then we see Mr Heath's response to you at the top of  
 12 that page later that day, and he says this:  
 13 "We can be very convincing when we need to be, we  
 14 threw every bit of fire test data we could at him, we  
 15 probably blocked his server, in the end I think the LABC  
 16 convinced themselves Kooltherm is the best thing since  
 17 sliced bread. We didn't even have to get any real ale  
 18 down him!  
 19 "Phil."  
 20 Do you see that there?  
 21 A. Yes, I do, yeah.  
 22 Q. Would you agree that that email conveys the impression  
 23 that he was surprised at how convincing he'd been with  
 24 the LABC?  
 25 A. Not necessarily. I think I was aware that he and

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1 Andrew Pack were working on this, purely from the email  
 2 from Phil, and I know Andrew is a very detailed guy and  
 3 would know his stuff back to front. So if Andrew was  
 4 involved along with Phil, I would have thought all the  
 5 necessary information was provided to the LABC.  
 6 Q. Were you surprised yourself at the sections relating to  
 7 the use of K15 in buildings over 18 metres in height?  
 8 A. No, that was what the certificate clearly -- it states  
 9 there in Phil's email.  
 10 Q. But you have been telling us that you knew that you  
 11 still needed to keep on testing to find an 8414-2 test  
 12 that you could pass; yes?  
 13 A. Yes, that's correct, because --  
 14 Q. You knew that?  
 15 A. Because we'd failed in those system tests, yes, and  
 16 there was clearly still a problem there that needed  
 17 sorting.  
 18 Q. Yes. So you knew, didn't you, that the only bit of  
 19 fire test data you had was the 2005 test at this point;  
 20 yes? That was all that there was in Kingspan's file.  
 21 A. No, I didn't know that. I assumed there were other  
 22 fire tests that he'd used.  
 23 Q. Which other fire tests?  
 24 A. I don't know. That was my assumption. I --  
 25 Q. Because the fire tests you have been told about --

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1 sorry, let me finish my question.  
 2 A. Sorry.  
 3 Q. -- in 2007 and 2008 were all failures. You have been  
 4 told you can't get the Euroclass, you have been told you  
 5 can't get the national class 0, and you have been about  
 6 told about four failures to 8414.  
 7 So how did you think that there was other testing  
 8 which had justified this result?  
 9 A. Sorry, we did have Euroclass, we had Euroclass C-s1, d0.  
 10 Q. You were told that you couldn't achieve --  
 11 SIR MARTIN MOORE-BICK: Let Dr Rochefort answer the  
 12 question.  
 13 MS GRANGE: Sorry.  
 14 A. We had Euroclass s1 -- C -- d0 --  
 15 Q. What I was referring to there, sorry, if I can clarify,  
 16 was that you had been told that you were struggling to  
 17 get the same Euroclass. Do you remember we saw that in  
 18 Ivor's document?  
 19 A. That was one comment from Ivor, and I don't know if that  
 20 was reality or not, or one test that Ivor did on  
 21 an unknown product that gave that result, so I had no  
 22 proof one way or the other.  
 23 I don't know what other tests they were doing at the  
 24 time, at this time. But the way Phil phrases that, he  
 25 says, "We threw every bit of fire test data we could at

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1 him". So that to me says there is an awful lot of other  
 2 fire test data that has gone into it. I don't know what  
 3 that was, but that was the way he phrased the answer.  
 4 SIR MARTIN MOORE-BICK: So should we understand that it was  
 5 your view at the time that a lot of fire testing was  
 6 going on of which you weren't aware?  
 7 A. Yeah, that's possible, because --  
 8 SIR MARTIN MOORE-BICK: Well, was it your understanding at  
 9 the time that there was a lot of fire testing going on  
 10 of which you hadn't been informed?  
 11 A. That's also possible. It's quite possible, because the  
 12 technical service department did their own testing, and  
 13 they also had access to tests where the product had been  
 14 tested in -- I don't know, apart from European tests  
 15 there were tests -- Singapore tests, there were Chinese  
 16 tests, there were Australian tests, I think, so there  
 17 was a lot of other information out there. I don't know  
 18 how convincing it would have been, but it's possible  
 19 that there were other tests -- that there was other test  
 20 data.  
 21 SIR MARTIN MOORE-BICK: Thank you.  
 22 Sorry, Ms Grange.  
 23 MS GRANGE: That's okay.  
 24 Isn't it right that, as the person in control of the  
 25 budget, you would have had to sign off on the costs of

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1 any other testing?  
 2 A. Not if it was done in another department I wouldn't.  
 3 Q. Which other department are you talking about?  
 4 A. It could have been done in the production department,  
 5 operations, it could have been done at one of our  
 6 subsidiaries abroad, I don't know.  
 7 Q. Dr Rochefort, are you saying this is actually what you  
 8 thought at the time, "There must be other fire test  
 9 information that I'm not aware of that doesn't appear in  
 10 any of the monthly reports or the other technical  
 11 feedback that I'm getting, so I don't need to worry  
 12 about it because there must be that other body of test  
 13 data"? Is that what you actually thought at the time?  
 14 A. That is what I actually thought at the time, yes.  
 15 Q. Did you ever get a proper response from Mr Heath? This  
 16 response doesn't actually tell you what test data you  
 17 used, it doesn't answer your question. You ask, "which  
 18 fire test result(s) did we use to get this?" Did you  
 19 ever get a proper response to that question?  
 20 A. I don't think I got anything in writing. Whether Phil  
 21 came along at some point -- and I don't know where Phil  
 22 was physically and where I was physically during this  
 23 interchange, so ...  
 24 Q. You're the technical director. You can see that this is  
 25 a great moment in the lifetime of K15. Why didn't you

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1 ask for a proper answer to that question: what fire test  
 2 data did we use to get that? Why didn't you follow up  
 3 on it?  
 4 A. Well, I trusted the department, and I had no reason not  
 5 to trust them. Philip Heath was a very experienced guy,  
 6 Andrew Pack was extremely experienced as well. So that  
 7 was the situation at the time.  
 8 Q. Can we go now to a different email from 11 May, a little  
 9 bit later than this, {KIN00005382}, with the subject  
 10 "Phenolic Fire Focus Group". Do you see this? So this  
 11 is an email a few days later on 11 May 2009, and you're  
 12 cc'd in here; do you see that?  
 13 A. Yes.  
 14 Q. It attaches the LABC system approval certificate, we can  
 15 see that.  
 16 Mr Heath says:  
 17 "Following the success of receiving the attached  
 18 LABC accreditation that now satisfies the requirements  
 19 for K15 being installed above 18mts, we should cease any  
 20 further fire tests for Ventilated Rainscreens."  
 21 Do you see that there?  
 22 A. Yes.  
 23 Q. Now, did that make sense to you, that the LABC  
 24 accreditation now satisfies the requirements for K15  
 25 being installed above 18 metres?

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1 A. No, it didn't surprise me at the time -- sorry,  
 2 didn't -- can you just rephrase the question so I can  
 3 get your wording correct?  
 4 Q. Did that make sense to you, that he's saying that the  
 5 LABC accreditation now satisfies the requirements for  
 6 K15 being installed above 18 metres?  
 7 A. Well, yes, it did, because I believe that the LABC  
 8 certification was correct, so ...  
 9 Q. But how did that make sense? You said that you knew  
 10 about large-scale 8414 testing; yes? And you had been  
 11 aware that there had been failed tests to try and meet  
 12 that test standard.  
 13 A. Failed system tests, yes. I don't know the details --  
 14 how the details of the system compared with the details  
 15 as put down in the LABC certificate. So my assumption  
 16 would have been that, provided that LABC advice is  
 17 followed, then that is acceptable.  
 18 Q. Right.  
 19 Mr Heath is saying, "Now that we've got that  
 20 certificate, we should cease any further fire tests for  
 21 ventilated rainscreens".  
 22 Did you agree with that, that it was right to stop  
 23 testing at this point, given what you had got in the  
 24 LABC certificate?  
 25 A. I can see why he's saying it, because of the cost of the

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1 tests. I thought we should carry on work, and I think  
 2 we did in the focus -- fire focus groups, to understand  
 3 that and other things as well about the product to see  
 4 if we can, at some point in the future, repeat tests if  
 5 it was appropriate.  
 6 Q. So do I get this right: that actually at the time you  
 7 thought you should carry on, what, work on 8414  
 8 large-scale testing?  
 9 A. Well, no, I could see that we had the LABC  
 10 certification, and therefore it wasn't a necessity to do  
 11 the 8414-2 or 1 testing, but clearly we needed to get to  
 12 the bottom of why it was performing differently, and  
 13 that was the work that I was keen to carry on doing.  
 14 Q. Can you explain why the LABC certificate meant it wasn't  
 15 necessary to do the 8414 testing? Can you explain why  
 16 you were of that understanding?  
 17 A. From the explanation given by Philip Heath.  
 18 Q. But on the basis of what test evidence?  
 19 A. Well, that -- as I said, I had assumed that there was  
 20 a lot of test evidence given, a lot of details given to  
 21 the LABC to achieve this certificate.  
 22 Q. I see.  
 23 Then he goes on:  
 24 "At in excess of £15k/test both the sales and  
 25 business development teams should be adept enough to use

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1 their tool kit to the full. The pressure is on other  
 2 component suppliers of this method of construction to  
 3 obtain similar statements or prove their non combustible  
 4 statements."  
 5 Do you see that there?  
 6 A. Yes.  
 7 Q. Then he goes on:  
 8 "This saving will allow other applications and the  
 9 Kooltherm brand to achieve a similar focus to that given  
 10 to K15 over recent years and look at how the sales in  
 11 this have grown.  
 12 "Therefore, the focus on this group should be other  
 13 Kooltherm applications where we do not have the complete  
 14 sales tool kit. We should also be considering fire  
 15 tests, smoke tests etc; that may not be relevant for  
 16 either construction or the end use application, provided  
 17 it has a good marketing story, these should be tabled."  
 18 Now, that last sentence, did you think that was  
 19 appropriate for Mr Heath to be saying in this email,  
 20 that you should consider fire tests/smoke tests that  
 21 "may not be relevant for either construction or end use  
 22 application, provided it's got a good marketing story,  
 23 they should be tabled"?  
 24 A. Well, I can see it looks like he's just doing it for  
 25 marketing reasons. From my point of view, any tests

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1 that showed the phenolic product in a positive light  
 2 were worth pursuing, because you never know whether they  
 3 might -- when they might be useful in the future, and if  
 4 it's -- yes, I mean, marketing were making and selling  
 5 products, so you'd obviously try and -- you'd do things  
 6 and then see if -- you'd try and do things that could  
 7 potentially give you a new market, but you would also  
 8 look at what tests you've got and what other markets you  
 9 can get into. It's a natural commercial activity.  
 10 Q. Did you think it was appropriate to be providing test  
 11 evidence that might not be relevant, provided it's got  
 12 a good marketing story? Did you endorse that approach  
 13 as technical director?  
 14 A. No, I think what he's saying there -- maybe I've misread  
 15 it, but what he's saying there, it may not be relevant  
 16 for either construction or end-use application, what can  
 17 we do to show that phenolic is a better material in  
 18 terms of its fire performance and insulation performance  
 19 compared to other insulant materials? That was  
 20 a natural thing to try and do for the Kooltherm brand.  
 21 Q. I see.  
 22 Just standing back from this email and thinking  
 23 about this email and the "Great news" email, would you  
 24 agree that you knew full well at this time that this was  
 25 a get-out-of-jail card? It bought Kingspan time because

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1 it was not managing to pass the 8414-2? That's the  
 2 reality, isn't it?  
 3 A. No, I didn't think that. I thought this was  
 4 an alternative route they'd gone for accreditation of  
 5 8414-2 or above 18 metres, and therefore was valid in  
 6 its own right. So that was my approach to it.  
 7 Q. And what was that alternative route?  
 8 A. I don't know. I mean, I certainly didn't know at the  
 9 time. I just assumed that the LABC had been convinced  
 10 and, as a reputable body, that the certificate was  
 11 correct.  
 12 Q. Did you think that that other body of test evidence that  
 13 you hadn't seen included tests at 8414 that were shown  
 14 to the LABC? Did you assume that at the time?  
 15 A. I don't know. I don't know what I assumed at the time  
 16 in terms of what those tests were.  
 17 Q. And did you agree with the decision to stop testing?  
 18 A. I can see from a cost point of view it made sense if we  
 19 didn't need to do the tests, because I think that 15k  
 20 was probably an underestimate for what the tests cost.  
 21 It was also taking a lot of resource, so if we actually  
 22 didn't need to do the tests, then it was sensible to  
 23 apply that resource elsewhere.  
 24 Q. If we can look now at some meeting minutes,  
 25 {KIN00020737}. This is the first meeting of the fire

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1 focus group on phenolic, do you see that there?  
 2 A. Yes.  
 3 Q. And you're present. Ivor Meredith takes the minutes.  
 4 A. Yes.  
 5 Q. Do you see that there? If we look on page 1, we can  
 6 see, if we read under "Background", it says:  
 7 "The meeting was called to organise, agree and  
 8 understand the current fire testing requirements and  
 9 mandatory product development of our New technology  
 10 Kooltherm. There are several fire performance  
 11 requirements that are crucial for sales of Phenolic  
 12 however in some areas on development Phenolic products  
 13 we are falling just short of the mark. This group was  
 14 originally pulled together as we believed we must have  
 15 the BS 8414-1 & 2 (the façade test for masonry and  
 16 steel frame) fire propagation test on Kooltherm K15.  
 17 Following the recent release of the K15 BBA and the LABC  
 18 Lantac Approval this urgent requirement has been relaxed  
 19 as the documents are working to cover the regulatory  
 20 desires for specific system approval. Other areas of  
 21 concern relate to the surface spread of fire performance  
 22 of the product that we are concerned may have reduced,  
 23 this can be seen in recent BS 476 Part 7 tests and the  
 24 most recent attempt at UL for [new technology]  
 25 Koolduct."

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1 Do you see that there?  
 2 A. I think that's underwriters' laboratory, the UL.  
 3 Q. Yes. So can you see there, it's clearly being recorded  
 4 in a meeting that you're present at that the urgent  
 5 requirement for that 8414 testing has been relaxed as  
 6 the documents are working to cover the regulatory  
 7 desires for specific system approval; do you see that?  
 8 A. Yes.  
 9 Q. What did you understand that to mean when you read it?  
 10 How could those documents be covering the regulatory  
 11 desires for specific system approval if you hadn't had  
 12 any passes to 8414?  
 13 A. I would have assumed it was correct, that there was  
 14 an alternative route to get to specific system approval.  
 15 Q. I see.  
 16 The sentence "we still need to look at developing  
 17 a product that will be able to pass a BS 8414-2 test"  
 18 confirms that Kingspan did not have any version of K15  
 19 in May 2005 which as part of a system could pass  
 20 a large-scale fire test to BS 8414; that's right, isn't  
 21 it?  
 22 A. Can you just repeat that question?  
 23 Q. Yes. The sentence, "we still need to look at developing  
 24 a product that will be able to pass a BS 8414-2 test" --  
 25 A. Where does it say that, sorry?

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1 Q. Sorry, maybe that's further down. Yes, I'm so sorry.  
 2 I'm sorry. In item 2, I beg your pardon, still on  
 3 page 1.  
 4 A. Ah, right, okay.  
 5 Q. Sorry. It's there, under "Kooltherm K15 façade test",  
 6 it says:  
 7 "Following discussions it was agreed that we still  
 8 need to look at developing a product that will be able  
 9 to pass a BS 8414-2 test as a back up to the LABC  
 10 documentation."  
 11 Do you see that there?  
 12 A. Yes.  
 13 Q. So does that confirm that Kingspan didn't have any  
 14 version of K15 at this time, May 2009, which as part of  
 15 a system could pass the large-scale fire test to part 2  
 16 of 8414?  
 17 A. Well, we knew that we'd done probably by this time four  
 18 8414-2 system tests with other suppliers, so the fact  
 19 that it would be desirable to get a BS 8414-2 test made  
 20 sense to me.  
 21 Q. I see.  
 22 In fact, it's right, isn't it -- and we'll come to  
 23 this later -- that no further 8414 testing actually was  
 24 carried out again until 2014?  
 25 A. That's correct, yes.

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1 Q. Yes.  
 2 A. Sorry, can I just take one step back? As far as I know,  
 3 that's correct. There might have been some indicatives  
 4 that I didn't know about. For example, when in one of  
 5 the chains of emails Gwyn asked the question about,  
 6 "Didn't old process fail the test?" and Ivor says, "Yes,  
 7 it did", indicated to me there must have been a test  
 8 that I wasn't aware of. So there could have been other  
 9 tests out there.  
 10 Q. Right.  
 11 Now, you were asked by the Inquiry if you had at any  
 12 stage been made aware of any complaints about Kingspan  
 13 in relation to K15. If we go to your response in your  
 14 witness statement -- this is at paragraph 4.15 on  
 15 page 17 {KIN00008838/17} -- you say there that you're  
 16 aware that:  
 17 "... during the period July 2013 to November 2013 an  
 18 issue did arise in respect of concerns about the fire  
 19 performance of K15 raised by Wintech, who describe  
 20 themselves as façade engineering consultants."  
 21 Do you see that there?  
 22 A. Yes.  
 23 Q. I want to move on to some questions about those issues  
 24 with Wintech.  
 25 If we can go to {KIN00005683/2}, about two-thirds of

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1 the way down the page, there is an email there from  
 2 Gareth Mills and it's cc'd to you, 24 July 2013; do you  
 3 see that there? The title of the email is "Downing  
 4 Development K15 jobs - 18m/Wintech issues". Do you see  
 5 that?  
 6 A. Yeah.  
 7 Q. Then he says there:  
 8 "We may need to relook at the issues we are having  
 9 with regards to some of the K15 jobs I've highlighted in  
 10 recent weeks.  
 11 " Specifically for the two Downing Development jobs,  
 12 I have been in contact with Andy Russell of the BRE to  
 13 aid with the assessment that they were doing, as per our  
 14 discussions last week, but he has advised Keyclad today  
 15 that due to the limited test data we have they are not  
 16 able to complete the assessment, and said we either need  
 17 a BS 8414-2 result (apparently would not have to exactly  
 18 match the proposed construction provided it was a  
 19 BS 8414 part 2 rainscreen result), or a limited  
 20 combustibility or better test result (which would, if  
 21 available, negate the need for the assessment).  
 22 Following getting this information via Anthony Marston  
 23 of Keyclad, John Lazell ... the Keyclad MD has also  
 24 phoned up not very happy and has asked if either Tony or  
 25 Malcolm can ring him in the morning to discuss the

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1 resolutions."  
 2 Do you see that there?  
 3 A. Yes.  
 4 Q. Now, did you know what discussions he's referring to?  
 5 Do you see in that second paragraph, in the second line,  
 6 he says, "as per our discussions last week"?:  
 7 " Specifically for the two Downing Development jobs,  
 8 I have been in contact with Andy Russell of the BRE to  
 9 aid with the assessment that they were doing, as per our  
 10 discussions last week ..."  
 11 Had you been involved in any discussions?  
 12 A. I don't think so, I think this is to Tony and Ivor,  
 13 so ...  
 14 Q. Yes.  
 15 A. I know I'm copied in, but I don't think I was involved  
 16 in --  
 17 Q. You don't recall those.  
 18 A. I think this is -- I think he's copied me because the  
 19 Keyclad MD wants to talk to someone senior about it.  
 20 I would assume that's what it was.  
 21 Q. Yes, that appears right.  
 22 Then going down to page 3 {KIN00005683/3}, and  
 23 looking at the rest of his email, he sets out what the  
 24 system was on that wall construction, plasterboard,  
 25 steel stud led with Rockwool, Versapanel, et cetera.

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1 Then he gives some examples of horizontal and vertical  
 2 cavity barriers.  
 3 Then he says this in the penultimate paragraph:  
 4 "If anyone has any [advice] on how to progress,  
 5 Keyclad want us to do a further BS 8414 test, although  
 6 this may not be practical, so any advice would be  
 7 appreciated."  
 8 Do you see that there?  
 9 A. Yes.  
 10 Q. We've seen he's asked that either Tony Millichap or you  
 11 call the managing director of Keyclad.  
 12 Now, moving up the chain, in the middle of page 2  
 13 {KIN00005683/2}, we can see that you respond the  
 14 following morning on 25 July, and you say:  
 15 "Gareth,  
 16 "I'm in meetings all morning, but should be able to  
 17 call him about 1 pm. Please let him know. Ivor: please  
 18 forward or link me to our BS8414 pass result."  
 19 Do you see that there?  
 20 A. Mm.  
 21 Q. Why did you step in at this point and not leave it to  
 22 Tony Millichap to deal with?  
 23 A. I assumed Tony was busy. The guy is after talking to  
 24 someone senior. Whether I'd had a conversation with  
 25 Tony or not, I don't know, but that would be the only

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1 reason. Incidentally, I can't remember if I did talk to  
 2 him or if --  
 3 Q. I'll come to that.  
 4 If your involvement in fire testing was only at  
 5 a high level, what did you hope to contribute to this  
 6 particular discussion with them?  
 7 A. I was only involved because, as far as I understand it,  
 8 the Keyclad MD had asked to talk to one of us, so that  
 9 would be the only reason.  
 10 Q. When you say "Please forward or link me to our BS8414  
 11 pass result", that could only be the test from May 2005;  
 12 yes?  
 13 A. I assume so, yes.  
 14 Q. On the masonry system?  
 15 A. Yes.  
 16 Q. Which you knew pre-dated the change to new technology  
 17 K15; yes?  
 18 A. Yes. Well, I think I would have known by then, yeah.  
 19 MS GRANGE: Yes.  
 20 I'm sorry, apparently the transcript has stopped.  
 21 Sorry, I think there has been a problem with the system.  
 22 Do we need to take a break? Okay.  
 23 SIR MARTIN MOORE-BICK: How long do you think it might take?  
 24 Five minutes. Shall we have a break now, then? We  
 25 might as well take the afternoon break early, mightn't

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1 we?  
 2 MS GRANGE: Yes, that's sensible.  
 3 SIR MARTIN MOORE-BICK: We always have a break in the  
 4 afternoon, Dr Rochefort, not normally as early as this,  
 5 but in the circumstances we will take it now and come  
 6 back at 3.10, please; and no discussing your evidence.  
 7 Thank you very much.  
 8 (Pause)  
 9 Right, 3.10, please.  
 10 (2.55 pm)  
 11 (A short break)  
 12 (3.10 pm)  
 13 SIR MARTIN MOORE-BICK: As far as we know, is everything  
 14 working? Good, thank you very much.  
 15 Well, we have now had our break, so we're ready to  
 16 keep cracking on.  
 17 Would you ask Dr Rochefort to come in, please.  
 18 Thank you.  
 19 (Pause)  
 20 Right, Dr Rochefort. Well, ready to carry on,  
 21 I hope?  
 22 THE WITNESS: Yes.  
 23 SIR MARTIN MOORE-BICK: Thank you very much.  
 24 Yes, Ms Grange.  
 25 MS GRANGE: Yes, thank you.

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1 We were looking at an email chain which was relevant  
 2 to concerns that had been raised by Wintech in 2013. If  
 3 we could go back to that chain, {KIN00005683/2}, and if  
 4 I can pick it up at the top of page 2.  
 5 So we can see that Joel Clarke has sent you:  
 6 "The following will link you to our BS 8414 test  
 7 report."  
 8 Do you see that there?  
 9 A. Yes.  
 10 Q. He has sent you a link.  
 11 Then the next email up in the chain is from you. It  
 12 starts at the bottom of page 1 and on to page 2. If we  
 13 look at the start of it, we can see you have sent it to  
 14 Joel Clarke, cc'ing Gareth Mills, Tony Millichap,  
 15 Ivor Meredith, and then if we look at what you have said  
 16 at the top of page 2, you say:  
 17 "Thanks. I'm checking - but what does the part 2  
 18 test involve?  
 19 "[Regards],  
 20 "Malcolm."  
 21 Do you see that there?  
 22 A. Yes.  
 23 Q. Did you not know in 2013 what the BS 8414-2 test  
 24 involved?  
 25 A. I think in terms of detail I didn't, no.

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1 Q. Did you know it was a test on a steel-framed structure?  
 2 A. I think I probably would have known that.  
 3 Q. Right.  
 4 A. But ... sorry, what I was going to say was certainly  
 5 after the meeting with Wintech, I definitely knew it.  
 6 But I think I probably would have known it at this  
 7 point.  
 8 Q. Yes.  
 9 We have looked at a lot of notes from 2007/2008 when  
 10 the 8414-2 test had taken place on the steel-framed  
 11 systems, so do you agree that by this time you would  
 12 have understood that it would have involved the  
 13 steel-frame system, even if you didn't know a bit more  
 14 about the detail of it?  
 15 A. Yes, I think that that's a better clarification,  
 16 thank you.  
 17 Q. Yes.  
 18 Then in his email back to you, about halfway down  
 19 page 1 {KIN00005683/1}, sent at 13.35, if we go to that  
 20 now, Joel Clarke says:  
 21 "Hi Malcolm,  
 22 "Attached. The primary difference is substrate  
 23 (part 2 specifically for steel-framed structures).  
 24 I don't think there is major difference in the test  
 25 configuration and method, just that this deals

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1 specifically with steel-framed buildings.  
 2 "Part 2 is, I believe, now explicitly referenced in  
 3 Part B of the building regulations.  
 4 "Our 8414-1 test was undertaken on steel frame (with  
 5 non-combustible substrate), prior to Part 2 being issued  
 6 (as I understand it)."  
 7 Do you see that there?  
 8 A. Yes.  
 9 Q. Now, did you pick up at the time that Mr Clarke,  
 10 a senior technical adviser, was telling you that it was  
 11 a test on a steel frame, the 8414-1 test? Did that make  
 12 any sense to you?  
 13 A. It probably shouldn't have made any sense, but I'm in  
 14 the middle of presumably trying to prep for a telephone  
 15 conversation, and Joel was sending me some information,  
 16 so I would have assumed that there was a steel frame  
 17 involved with that 8414-1 test. But I agree, in  
 18 retrospect, it doesn't seem to make any sense, but --  
 19 Q. Would you agree if you had read the test report sent to  
 20 you by Mr Clarke you would have understood that that  
 21 2005 test was carried out on a masonry substrate?  
 22 A. Presumably I would have done.  
 23 Q. You have been telling us up to today that your  
 24 understanding was that K15 could only be used on  
 25 buildings provided it was with a masonry substrate;

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1 that's right, isn't it?

2 A. With a non-combustible substrate, that was my

3 understanding.

4 Q. With a masonry substrate, I think is what you said

5 earlier on today.

6 A. I said masonry or cementitious, non-combustible

7 substrate.

8 Q. Right.

9 If we go to the very top of the email chain, we can

10 see another email from you, and you say this:

11 "Just checked - no, our test (BRE220876) was on a

12 block work substrate. However, it does appear that

13 BS8414 Part 2 only came out in 2005 and our test was

14 completed in 2005, so it's possible that it was the only

15 test available at the time. BS8414 part 1 came out in

16 2002.

17 "In Ivor's absence, could you or Gareth please check

18 when we could re-schedule a BS8414 part 2 and the

19 limited combustibility test (what standard is this?) so

20 we have this information to hand. Presumably the latter

21 will be quicker."

22 Do you see that there?

23 A. Yes.

24 Q. So is it right that at this time you wanted to schedule

25 a limited combustibility test for K15?

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1 A. Yes, and I clearly didn't know what it was, so that's

2 why I'm asking. I think I must have read the report.

3 Q. And were you unaware at the time that K15 could not ever

4 pass such a test or tests to get limited combustibility?

5 It could never achieve A1 or A2 or the right test under

6 476-11, could it?

7 A. I certainly would have known it couldn't be an A1 or A2.

8 I don't think I was familiar with the 476-11 test.

9 Q. Right.

10 Now, looking at the correspondence with Joel Clarke

11 and Gareth Mills, do you consider that you were in fact

12 in a position to assist with the queries that had been

13 raised by Wintech?

14 A. Probably not, because I don't think I was very well

15 briefed on it, but I assumed this was a question of

16 talking to a customer and finding out what exactly the

17 problem was.

18 Q. What was the outcome of your discussions with Keyclad,

19 can you remember?

20 A. I do recall that I spoke to someone when I was in Seoul

21 in South Korea, and whether this was that occasion, it

22 might have been -- I can't even remember his name.

23 Q. What did you tell them? Did you tell them it was okay

24 to use K15?

25 A. No, I would have -- I think, from my vague recollection

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1 of the South Korea phone call, it was -- he was asking

2 about tests, and I was trying to clarify that and would

3 have got back to whoever it was who was dealing with it.

4 Q. Right.

5 Now, if we look at your witness statement at this

6 point, paragraph 4.16 on page 17 {KIN00008838/17}, you

7 say this:

8 "Wintech were concerned that Kingspan did not have

9 a BS 8414-2 test on K15. That is to say, a BS 8414 test

10 with a steel frame substrate as opposed to a masonry

11 substrate. This matter had been escalated to me, and to

12 resolve it I liaised internally with the Technical

13 Projects team to confirm the basis on which to respond.

14 I met Wintech personnel and was involved in some

15 correspondence with those involved at Wintech in order

16 to try to resolve those concerns, by referring them to

17 the BBA certificate and LABC documentation that we had

18 at that time. Following this exchange with Wintech and

19 others in the industry, I recall that we conducted

20 a programme of further BS 8414-2 testing."

21 Do you see that there?

22 A. Yes, I do, yeah.

23 Q. Can you help us, how did you try and resolve their

24 concerns by reference to the BBA certificate and the

25 LABC documentation?

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1 A. I think that would have been what was available to me at

2 the time. I'm not sure why I was talking to Wintech

3 without advice from Tony or Phil. It would have been

4 Tony at this time. Whether Tony was not available or

5 not, I don't know, but ...

6 Q. But would you agree that there was nothing referred to

7 in the BBA certificate or the LABC documentation which

8 referred to a successful pass to 8414-2 on

9 a steel-framed substrate?

10 A. I believe that that was the case, and following the

11 meeting with Wintech, I think that was made clear to me.

12 Q. Is it right that in October 2013, you met with

13 Paul Savidge and Stuart Taylor of Wintech, along with

14 the UK managing director of Kingspan, Peter Wilson?

15 A. Yes.

16 Q. Why did Kingspan's managing director, Peter Wilson,

17 attend the meeting with you?

18 A. I think because it was a major customer and a major

19 specifier. Wintech were façade engineering consultants,

20 and ...

21 Q. By the time you attended that meeting, had you learnt

22 that K15 was not a product of limited combustibility?

23 A. Again, you're using a term that I wasn't very familiar

24 with, and I honestly can't remember what my

25 understanding of that would have been at the time.

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1 Q. What are your recollections of that meeting in terms of  
2 what was said about K15's suitability for use above  
3 18 metres?  
4 A. I can't remember details, but I did take some notes in  
5 my diary, I think, from that meeting. I don't know if  
6 you have had a copy of that, have you?  
7 Q. We'll check. I'm not aware that we've had a copy of  
8 that.  
9 A. Oh, okay.  
10 Q. Okay, we'll check.  
11 What do those notes say? You have obviously looked  
12 at them.  
13 A. They're notes to myself, so they don't make a lot of  
14 sense, but it just says ... no, I honestly can't  
15 remember the details, you need to look at the details.  
16 They're not extensive notes, they're just -- and I was  
17 told that you have been sent the diary extract, so  
18 I assume ...  
19 SIR MARTIN MOORE-BICK: Can I ask you where the diary is  
20 now?  
21 A. The diary has been completely photocopied, the whole  
22 lot, and I understood -- and then it's been looked at in  
23 detail and certain relevant sections have been copied,  
24 as I understood, to counsel.  
25 SIR MARTIN MOORE-BICK: Right. We'll make our own

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1 enquiries. But just in case we needed any further help,  
2 do you have the diary?  
3 A. I have the diary, yeah. I'm a bit of a hoarder, I keep  
4 all this stuff. It has been -- it took a long time to  
5 go through everything, so ...  
6 SIR MARTIN MOORE-BICK: Do you have any other notebooks or  
7 diaries or records?  
8 A. No, that was the only thing, and it's something I just  
9 do out of habit, I take notes.  
10 SIR MARTIN MOORE-BICK: Perhaps you would ensure that you  
11 don't part with it.  
12 A. Absolutely, no, no, I definitely didn't, but I was under  
13 the impression that you had got all these relevant --  
14 SIR MARTIN MOORE-BICK: It may be we have them, but I just  
15 wanted to be clear where we are, thank you.  
16 MS GRANGE: We have had a lot of very late disclosure from  
17 Kingspan that we have been trying to look through as  
18 a matter of urgency, so we will follow up on that.  
19 You refer in your witness statement to an exchange  
20 of correspondence following that meeting with Wintech.  
21 Can we go to those emails. It's at {KIN00003823/2}, and  
22 I want to look on page 2 at your email to Wintech sent  
23 on 31 October 2013 at 13.25. Do you see that there?  
24 A. Yes.  
25 Q. You say:

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1 "Thank you for seeing us this morning ..."  
2 So it's to Paul Savidge and Stuart Taylor, and it's  
3 cc'ing Peter Wilson and Mark Harris, and you say:  
4 "Thank you for seeing us this morning to discuss  
5 façade insulation systems. We were pleased to hear you  
6 would like to do more work involving Kingspan's  
7 insulation systems.  
8 "As mentioned, we are confident that our K15  
9 Rainscreen Board is suitable for façade use above  
10 18 metres (given the correct design and installation),  
11 and I enclose our BBA and LABC certification to this  
12 effect. As you are aware, we have been successfully  
13 assessed by the BBA and LABC on the basis of our  
14 BS 8414-1:2002 test conducted at the BRE, and have not  
15 seen the necessity of an extensive test programme to  
16 BS 8414-2, considering the apparent contradictory advice  
17 in the scope of BS 8414-2:2005 (see scopes of parts 1  
18 & 2 attached ..."  
19 Then you go on:  
20 "However, I note your concern that the BRE are  
21 reluctant to assess for certain constructions to BR 135  
22 on the basis of our existing test result and will  
23 discuss this matter with them (Tony Baker, as you  
24 suggest). As discussed, we will target resolving this  
25 issue within 6 months, if further testing is required by

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1 them, or sooner, if not, I hope."  
2 Do you see that there?  
3 A. Yes, yes.  
4 Q. Now, going back to the start of that paragraph, you say:  
5 "As mentioned, we are confident that our K15  
6 Rainscreen Board is suitable for façade use above  
7 18 metres (given the correct design and installation),  
8 and I enclose [those certificates] ..."  
9 You don't say there, do you, it's only suitable on  
10 a masonry substrate?  
11 A. No, I was using the advice from the BBA and LABC  
12 certificates.  
13 Q. You go on and you talk about your 8414-1 test, you have  
14 been successfully assessed by the BBA and LABC on the  
15 basis of that 8414-1 test conducted at the BRE and have  
16 not seen the necessity of an extensive test programme;  
17 you don't explain to them that you have changed the  
18 composition of K15 to new technology K15 since that  
19 time, do you?  
20 A. I don't, no.  
21 Q. And you don't explain, do you, that there had been  
22 a test programme to 8414-2 in 2007 and 2008 which  
23 resulted in a number of very significant failures, do  
24 you?  
25 A. They were systems -- they were commercial systems from

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1 other companies and it wouldn't be appropriate to  
 2 divulge information about them, so that would be the  
 3 reason for that.  
 4 Q. In what design or installation circumstances did you, in  
 5 October 2013, consider K15 to be suitable for façade use  
 6 over 18 metres?  
 7 A. I would have used the BBA and LABC certification, so  
 8 that's why I was emailing it to them.  
 9 Q. Yes, but as you stated there, that's on the basis of the  
 10 8414-1 test done in 2005.  
 11 A. Yes.  
 12 Q. So how were you relying on that in a steel frame  
 13 situation, part 2 situation, and given you have now  
 14 changed the K15 that you're actually producing and  
 15 selling?  
 16 A. Well, as far as the certification was concerned, that  
 17 was my understanding, that that gave us the ability to  
 18 do it.  
 19 With the old technology/new technology change, as  
 20 we've discussed, yes, there was a change. My view was  
 21 that the product itself was not vastly different in  
 22 terms of its construction anyway. But at this time, I'm  
 23 not sure what my understanding of that -- what was  
 24 tested in 2005 was, actually. By then -- I mean,  
 25 I hadn't been looking at it for quite a few years, and

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1 by then I don't think I was as clear about what that  
 2 was. It was done --  
 3 Q. So why -- sorry.  
 4 A. The test was carried out at a time when we were changing  
 5 the technologies.  
 6 Q. Why are you giving this advice if you're not that clear  
 7 in your own mind? You know that serious concerns have  
 8 been raised about the use of K15 above 18 metres. It's  
 9 been escalated up to you and Peter Wilson is now  
 10 involved. How can you be giving this advice if you're  
 11 not completely sure the basis on which you're giving it?  
 12 A. I'm not giving advice, I'm just giving them information.  
 13 They're the experts in this, I'm just giving them  
 14 information, and to be honest this wasn't a normal  
 15 activity I would undertake. I'd been involved in this  
 16 because the issue was escalated. So following that  
 17 meeting that we had on 31 October, then I would have  
 18 been aware that they needed an 8414-2 test.  
 19 Q. Well, with respect, you're not just giving information  
 20 here. You're saying in that first line of that second  
 21 paragraph, "we are confident that our K15 Rainscreen  
 22 Board is suitable for façade use over 18 metres".  
 23 A. "... (given the correct design and installation) ..."  
 24 Q. Yes, and you enclose the BBA and LABC certificate to  
 25 this effect.

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1 A. Yes.  
 2 Q. And you say you have been successfully assessed by those  
 3 organisations on the basis of the 8414-1 test.  
 4 A. Yes.  
 5 Q. So on the basis of that one test, you're giving this  
 6 advice?  
 7 A. Well, that was my understanding at the time. I mean,  
 8 with hindsight, it ...  
 9 SIR MARTIN MOORE-BICK: Can I ask you just to help me with  
 10 this: you refer to the correct design and installation;  
 11 what systems did you understand K15 could be used as  
 12 part of?  
 13 A. My understanding was that it could be used against  
 14 a non-combustible substrate.  
 15 SIR MARTIN MOORE-BICK: Yes?  
 16 A. With a non-combustible cladding material, that was my  
 17 understanding.  
 18 SIR MARTIN MOORE-BICK: And that was the limit of its scope  
 19 of use, as far as you understood it?  
 20 A. As far as I understood, yes.  
 21 SIR MARTIN MOORE-BICK: All right, thank you.  
 22 MS GRANGE: When you say non-combustible substrate, do you  
 23 mean non-combustible substrate on a steel frame?  
 24 A. I don't think I would have been considering that,  
 25 actually, either way. If someone told me that that was

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1 acceptable, I would have taken that as being acceptable.  
 2 Q. But that's what's said in the LABC certificate. We  
 3 looked at that earlier. It says you can use it in  
 4 a steel-framed system with a non-combustible substrate.  
 5 Do you recall?  
 6 A. Yeah. Well, that's why I would have assumed  
 7 non-combustible.  
 8 Q. But what test evidence was there that K15 could be used  
 9 on a non-combustible substrate like a calcium silicate  
 10 board, which is what's said in the LABC certificate,  
 11 with a steel-framed system? Where was the test evidence  
 12 to support that?  
 13 A. I had assumed that the test evidence -- that this 8414-1  
 14 test that was done gave the ability to be able to use  
 15 that against any non-combustible substrate. That would  
 16 have been my understanding of it at the time.  
 17 Q. I see. And even though you have changed the technology  
 18 of K15 since, and all you have had since on 8414 is  
 19 a series of failures?  
 20 A. On systems with other people, we did four tests and  
 21 I think there were four failures, that's correct.  
 22 Q. Now, you go on to say, from the end of that sixth line:  
 23 "However, I note your concern that the BRE are  
 24 reluctant to assess for certain constructions to BR 135  
 25 on the basis of our existing test result ..."

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1 What was the concern that the BRE were reluctant to  
 2 assess for certain constructions? What were those  
 3 certain constructions?  
 4 A. I can't recall, but presumably that was steel frame.  
 5 I don't know.  
 6 Q. Then you say:  
 7 "As discussed, we will target resolving this issue  
 8 within 6 months, if further testing is required by  
 9 them ..."  
 10 Did you accept at the time that Wintech's concerns  
 11 were valid ones to be raising?  
 12 A. I think that they'd obviously convinced me and  
 13 presumably Peter Wilson in the meeting, and I see  
 14 Mark Harris I think was also involved in the meeting,  
 15 that they were serious concerns. So I think possibly  
 16 prior to this they might have been seen as causing  
 17 trouble, a bit of an irritant rather than anything else.  
 18 I think following this meeting, we could see that  
 19 they're serious, see that they've got a valid point, and  
 20 therefore we need to be working on it.  
 21 Q. When you say, "prior to this they might have been seen  
 22 as causing trouble", by who? Who had thought --  
 23 A. I just think probably from the sales team, they ...  
 24 Q. Now, if we move to Wintech's response now, which is the  
 25 next email up in the chain {KIN00003823/1}, sent by

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1 Paul Savidge the same day at 22.11. If we go up to the  
 2 top, there we see his response.  
 3 In essence -- I'll read it out to you --  
 4 Paul Savidge urges Kingspan to either have K15  
 5 reclassified or conduct further fire testing.  
 6 A. He does say:  
 7 "... although I do appreciate that the scope of this  
 8 specific standard is stated to exclude rain screens and  
 9 external render systems ..."  
 10 Which is what I'd pointed out to him in my email.  
 11 Q. Right. So he says:  
 12 "With regard to your comment in respect to not  
 13 undertaking a BS8414-2 test, although I do appreciate  
 14 that the scope of this specific standard is stated to  
 15 exclude rain screens and external render systems I would  
 16 ask how you intend to validate the use of K15 in  
 17 conjunction with an [steel-frame system] cement board  
 18 build up as there would appear to be no test standard to  
 19 cover this?"  
 20 Do you see that there?  
 21 So what was the point you were making about the  
 22 scope of 8414-2? Had you tried to say that that was  
 23 limited in some way?  
 24 A. Yeah, I think I'd read -- probably for the first time  
 25 for a number of years, anyway, I'd read the 8414-1 and

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1 2, I think either just after the meeting or prior to the  
 2 meeting, and it clearly stated in the scope that it  
 3 was -- it excluded rainscreens and external render  
 4 systems. So it was odd that the standard said that, and  
 5 I was pointing that out to Paul Savidge and  
 6 Stuart Taylor.  
 7 Q. Right. I see.  
 8 He is going on, isn't he, and he's saying although  
 9 he appreciates that, he is asking how you intend to  
 10 validate the use of K15 in conjunction with  
 11 a steel-frame system cement board build-up as there  
 12 appears to be no test standard to cover this. So he is  
 13 saying: even if you're right about that, how are you  
 14 going to validate that because there would be no test  
 15 standard?  
 16 A. Yeah, I think he makes a good point, but --  
 17 Q. Yes. Then he says:  
 18 "Part B of the building regulations still requires  
 19 that either a material of limited combustibility is used  
 20 or a test to BS8414 or BR135 assessment is undertaken  
 21 when used in instances over 18m high."  
 22 Do you see that there?  
 23 A. Yes, "or an equivalent assessment body, a sufficient  
 24 bank of test data to provide BR135 desktop assessments".  
 25 Q. When he's talking about a material being either of

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1 limited combustibility or used in the 8414 test, by this  
 2 time did you understand what a material of limited  
 3 combustibility meant?  
 4 A. I don't think I did. In fact, I think in my diary  
 5 notes, which I'm sure you will find, it would be for  
 6 this date, 31 October.  
 7 Q. I'm being told they're not disclosed to us. That's what  
 8 we're being told.  
 9 A. Oh, that was my understanding, that they were.  
 10 SIR MARTIN MOORE-BICK: No doubt they could be if we asked  
 11 for them, could they?  
 12 A. Yes, I'm sure they could be.  
 13 MS GRANGE: Sorry, if they are disclosed, they've not been  
 14 disclosed to core participants -- sorry, they have been  
 15 disclosed to us, but they haven't yet been disclosed to  
 16 others.  
 17 A. Right, okay, okay, I thought so.  
 18 Q. Let's press on with this for a moment.  
 19 A. But there's actually a note to myself about, "Check  
 20 limited combustibility", so obviously I wasn't clear  
 21 about the --  
 22 Q. And what date is that note made?  
 23 A. It's made on this day, 31 October 2013. It's  
 24 handwritten notes of the meeting.  
 25 Q. And that's the first time you thought to check what

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1 limited combustibility meant, is it?

2 A. Well, it's being raised with me and I'm obviously

3 reading his response, I presume -- well, no, they must

4 have said this in the meeting, because I think the notes

5 were from the meeting.

6 Q. He goes on:

7 "Generally Wintech is contractually obliged to

8 ensure that our clients building facades comply with

9 Building Regulations. Without documented proof we

10 cannot do this for your K15 board ..."

11 Then he says:

12 "I do hope that you are planning to proceed with

13 testing following your discussions with BRE. As we

14 stated BRE have relayed to Wintech that their view is

15 that the test Kingspan have already undertaken simply

16 justifies that the construction tested complies with the

17 requirements of BS 8414-1 only and that this single test

18 cannot be used to infer that all other forms of

19 construction including K15 boards are also accepted."

20 Do you see that?

21 A. Yes.

22 Q. Then if you go down to the next paragraph, he says:

23 "Until such a reclassification is confirmed, or the

24 provision of satisfactory test data is made available,

25 Wintech cannot alter our position on the use of this

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1 material for facades over 18m high and will have no

2 alternative but to recommend to our clients that your

3 K15 board is not considered for such applications unless

4 supported with appropriate project specific testing or

5 a BR135 assessment. During our meeting I understood

6 that there is now a commitment from Kingspan to

7 undertake such tests and to provide the test data within

8 a 6 month period. Following completion of this period

9 if the situation remains unresolved Wintech will have no

10 alternative but to make public our concerns to the

11 industry at large. This stance may not always be

12 appreciated by our clients, nevertheless, we do take

13 fire safety very seriously and of course have a duty of

14 care to public safety. With regard to the

15 inconsistencies within BS8414, other documents noted and

16 poorly drafted clauses in [ADB] I trust that the

17 underlying requirement of preventing the spread of fire

18 up building facades is clear and that Kingspan will

19 behave in a responsible manner to properly resolve the

20 doubt over the use of K15 and not be distracted by such

21 inconsistencies."

22 Do you see that there?

23 A. Yes, absolutely, yeah.

24 Q. Now, is this the reason Kingspan then began a further

25 programme of testing in January 2014 to BS 8414-2?

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1 A. That's my understanding, that this was the reason, yes.

2 Q. So it's the threat of exposure to the wider industry

3 that prompted that restarting of 8414-2 tests; do you

4 agree?

5 A. No, I think it's more a realisation, if you like, at

6 senior level that there was an issue here around the

7 certification.

8 Q. Well, Dr Rochefort, what I'm going to put to you is that

9 you always knew there was an issue around the

10 certification, but the LABC certificate had bought you

11 time, but when that expired and when consultants like

12 Wintech started raising their concerns, Kingspan were

13 forced into the position of having to start that

14 programme of testing again; do you agree?

15 A. No.

16 Q. So why hadn't Kingspan been testing to BS 8414-2 prior

17 to this point?

18 A. Well, we had, a few years earlier, obviously, along with

19 other customers. As far as I was concerned at this

20 time, you can see from my email, I believed that the

21 LABC and BBA certification was enough.

22 Q. But we've just discussed that the only thing that had to

23 underpin it was a 2005 test that was on old technology

24 K15.

25 A. I know with hindsight, but at the time that was my --

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1 that was actually what I believed.

2 Q. But can you accept that, with hindsight, that was wholly

3 inappropriate to take that position?

4 A. To take what position, sorry?

5 Q. That it was appropriate to rely on that one single

6 8414 test from 2005 on old technology K15 in a masonry

7 situation.

8 A. I think it was -- with hindsight, it was inappropriate

9 to rely on -- yes, I do agree with that. But at the

10 time, my belief was that the certification from LABC and

11 the BBA gave us enough that satisfied the requirement.

12 Q. Yes.

13 You respond to Paul Savidge the following day, the

14 top email at page 1, and you say:

15 "Dear Paul,

16 "I think you may have misinterpreted my response -

17 sorry if I didn't make it clear. I will be discussing

18 with the BRE what is required and go with their

19 recommendations.

20 "I understand from Ivor that Tony Baker no longer

21 works in that area, he recommended I discuss the matter

22 with his successor.

23 "Kingspan always acts in a responsible manner."

24 Do you see that there?

25 A. Yes.

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1 Q. Do you stand by that comment? Is that your evidence?  
 2 A. Yes.  
 3 Q. That Kingspan did always act in a responsible manner?  
 4 A. That was my belief.  
 5 Q. Why not tell Wintech about the new technology K15 and  
 6 that you had had no relevant fire test results since  
 7 developing that new product?  
 8 A. Because that was my belief, I believed that the LABC and  
 9 BBA certification was enough. But now he has drawn it  
 10 to my attention, we wanted to do the further 8414-2  
 11 testing.  
 12 Q. What consideration did you give to the issues of public  
 13 safety that Wintech had raised?  
 14 A. Well, obviously you take it seriously, yes.  
 15 Q. How did you satisfy yourself at that stage, in 2013,  
 16 that safe advice, clear and accurate advice, was being  
 17 given about the use of K15 on buildings over 18 metres?  
 18 A. Again, as far as I was concerned, the advice being given  
 19 was to skilled people and giving them the information  
 20 that we had available. So as far as I was concerned,  
 21 they -- each system that was designed and put into use  
 22 was appropriately designed.  
 23 Q. You said that you now were aware that you needed to do  
 24 more tests after this exchange with Wintech. Did you do  
 25 anything about the fact that no one had thought to draw

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1 this position to your attention before October 2013?  
 2 A. No, I don't think I did. I think the conversation with  
 3 Wintech probably started in July 2013, didn't it, in  
 4 terms of the Keyclad.  
 5 Q. Did you do anything about the fact that no one had  
 6 thought to draw this position to your attention before  
 7 Wintech did? I mean, it doesn't matter when they did,  
 8 but did you do anything about it?  
 9 A. No, because -- sorry, I didn't mean to interrupt. No,  
 10 because my understanding was that the LABC and BBA  
 11 certification was sufficient, and clearly Wintech had  
 12 a problem with that, they weren't going to recommend our  
 13 product, so it made sense to do the 8414-2 testing.  
 14 Q. So is it fair to say that the position was this: you  
 15 didn't fully understand on what basis the LABC  
 16 certificate was based, but you were nevertheless happy  
 17 to rely upon it when it came to exchanges like this?  
 18 A. For this particular exchange, I was, because I wasn't --  
 19 I definitely wasn't talking to someone who was unaware  
 20 of the situation. These were experts in the area. So  
 21 I knew that anything I said would be analysed extremely  
 22 carefully by Wintech.  
 23 I would not normally get involved in these kind of  
 24 discussions with customers or specifiers. It wasn't my  
 25 area of expertise.

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1 Q. Sorry, I'm going to put that to you again.  
 2 Was the position this: that you didn't fully  
 3 understand on what basis the LABC certificate was based,  
 4 but you were nevertheless happy to rely on it when it  
 5 came to exchanges like this with Wintech?  
 6 A. Because I believed the LABC certificate was correct.  
 7 Q. Even though you didn't fully understand on what evidence  
 8 it was based?  
 9 A. As I said before, I trusted the technical team to advise  
 10 me correctly on it.  
 11 Q. Okay.  
 12 Let's move on now to the tests to 8414-2 which were  
 13 carried out by Kingspan in 2014.  
 14 Would you accept that this exchange with Wintech had  
 15 placed Kingspan under some pressure to provide evidence  
 16 from testing to 8414-2 on systems incorporating K15?  
 17 A. I think it had certainly focused our attention on --  
 18 Q. Were you also aware in late 2013 of some pressure on  
 19 exactly the same topic from the NHBC?  
 20 A. I know that there were some discussions with NHBC.  
 21 I don't know how aware I was of the detail of those  
 22 discussions.  
 23 Q. But did you know that there was some pressure being  
 24 exerted by the NHBC on exactly the same lines as that  
 25 being imposed by Wintech?

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1 A. I don't know that it was on exactly the same lines, but  
 2 I was aware that there was discussion with the NHBC,  
 3 yes.  
 4 Q. And were you aware that the NHBC had raised concerns  
 5 about the use of K15 on buildings over 18 metres?  
 6 A. Well, I was aware of that from the exchange with  
 7 Wintech, they'd pointed it out.  
 8 Q. Now, you have explained in your witness statement that  
 9 following the meeting and the exchanges with Wintech in  
 10 late 2013, Kingspan decided to embark on a programme of  
 11 testing to 8414-2 on systems incorporating K15.  
 12 A. Sorry, where is this?  
 13 Q. Actually I haven't got a reference for that, but you  
 14 explain in your statement that there was this programme  
 15 of testing in 2014.  
 16 Can we look at a spreadsheet which has been produced  
 17 for the Inquiry by Kingspan. If we go to {KIN00022357}.  
 18 So what happened is the Inquiry began asking  
 19 questions of Kingspan about exactly what K15 product had  
 20 been tested during each test to BS 8414, and this is the  
 21 schedule dated 31 January 2020 that Kingspan then  
 22 provided.  
 23 Have you seen this spreadsheet previously?  
 24 A. I've seen it previous to this hearing. I hadn't seen  
 25 it -- I don't think I'd seen this during my time at

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1 Kingspan.  
 2 Q. We can see that the columns along the top give us the  
 3 test date, the sponsor, the details of the system  
 4 tested, et cetera, then in the sixth column the  
 5 properties of the tested insulation product. Do you see  
 6 that there?  
 7 A. Yes.  
 8 Q. In the seventh column, it also gives details of whether  
 9 the tested insulation product was the same as K15 being  
 10 offered for sale by Kingspan at the time.  
 11 A. Yes.  
 12 Q. Do you agree that was an important question, whether  
 13 what was being tested was the same as what was being  
 14 sold?  
 15 A. Yes.  
 16 Q. In your witness statement -- for the transcript, this is  
 17 paragraph 11.23 on page 51 {KIN00008838/51} -- you say  
 18 that you would have expected any reliance on  
 19 an 8414 report to make clear if the product was  
 20 materially different from that which was being sold. Is  
 21 that right?  
 22 A. It sounds right. Where was the --  
 23 Q. Sorry, it's paragraph 11.23 in your witness statement,  
 24 page 51, in the last two lines.  
 25 A. Yes, yes.

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1 Q. "... I would have expected any reliance on a BS 8414-2  
 2 report to make clear if the product was materially  
 3 different."  
 4 A. Yes.  
 5 Q. You mean materially different to that which was being  
 6 sold; yes?  
 7 A. Yes.  
 8 Q. Would it be right that if a trial product was being  
 9 tested to 8414 and therefore was being specifically  
 10 manufactured for the purpose of testing, all those  
 11 within Kingspan who were involved in the production of  
 12 that sample and the testing itself would be aware that  
 13 that was the case; yes?  
 14 A. I would think so, yeah.  
 15 Q. Yes. And you as technical director, in terms of at the  
 16 very least budget planning, would have been aware of the  
 17 costs associated with such testing; is that right?  
 18 A. I would broadly, but the budgets were planned at the  
 19 beginning of the year or before the beginning of the  
 20 year and a sum allocated for testing, which would cover  
 21 a number of tests.  
 22 Q. And were you aware in 2014 that there was some budget  
 23 allocated to producing trial samples of K15 for the  
 24 purposes of testing?  
 25 A. Yes.

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1 Q. Now, in this spreadsheet, if we go back to that  
 2 spreadsheet, {KIN00022357/3}, we see the first of the  
 3 2014 tests, 7 January 2014. Do you see that there?  
 4 A. Yes.  
 5 Q. We can see that the system tested in the third column is  
 6 "8mm Trespa FR [high pressure laminate]", do you see  
 7 that there, "HPL"?  
 8 A. Yes.  
 9 Q. The properties of the insulation tested are said to be  
 10 unknown. Do you see that there?  
 11 A. Yes.  
 12 Q. Can you recall what the insulation product tested in  
 13 that January 2014 test was?  
 14 A. No, I think it might have been ... I'm just trying to  
 15 think. I think this might have been ... well, it would  
 16 be speculation. It could have been a blowing agent.  
 17 I know we were looking at solstice product at the time.  
 18 Q. Yes, the solstice comes in, I think, in the next two  
 19 tests.  
 20 A. But I can't recall what it was.  
 21 Q. Let's go to an internal presentation now, {KIN00021945},  
 22 which appears to be an internal presentation prepared by  
 23 Mr Meredith in May 2015 called "The Façade Insulation  
 24 Solution", do you see that there?  
 25 If we can go to page 17 {KIN00021945/17} there is

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1 a timeline of testing to date. Do you see that there?  
 2 A. Yes.  
 3 Q. The January 2014 test is the third one up from the  
 4 bottom.  
 5 A. Yeah.  
 6 Q. Can you see it says there Kingspan, the thickness is  
 7 80 millimetres, and it says K15, 25-micron unperforated  
 8 on the formula/facer? Do you see that there?  
 9 A. Yes.  
 10 Q. Does that help with your recollection that that was  
 11 carried out on standard K15 foam as sold but with  
 12 a non-standard unperforated foil facer?  
 13 A. If that was what it was, then obviously it's correct.  
 14 I can't recall from the time what was tested. I know  
 15 a number of things were tested.  
 16 Q. Yes.  
 17 If we could just look at some email correspondence  
 18 from the time between you, Tony Millichap, Mr Davies and  
 19 Ivor Meredith. This is at {KIN00021095}. If we go to  
 20 the end of the document at the end of the email chain at  
 21 the bottom of page 2 {KIN00021095/2}, it's from  
 22 Mr Meredith there on 9 January 2014, 17.35. Do you see  
 23 that there?  
 24 A. Where he says "If you look to the back page", is that  
 25 the one you mean?

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1 Q. Yes:  
 2 "If you look to the back page you will see where the  
 3 15minute reference comes from."  
 4 Do you see that there?  
 5 A. Yes.  
 6 Q. There is a note at the bottom of this page that says the  
 7 entire message is not included, do you see that there?  
 8 But there seems to be some discussion going on about  
 9 that January 2014 test. It's just two days after that  
 10 test.  
 11 A. Right.  
 12 Q. Just above Mr Meredith's email -- and all we have of it  
 13 is that -- you send an email saying:  
 14 "That implies we only just failed?  
 15 "Regards  
 16 "Malcolm."  
 17 Do you see that?  
 18 A. Yes.  
 19 Q. Why did you say that?  
 20 A. Well, if I see the subject of Ivor's email below, he's  
 21 got the subject "15mins", so I assume he's drawing  
 22 something to my attention -- well, mine, Tony's, Gwyn's  
 23 and Linzi's -- about the performance of the system at  
 24 15 minutes.  
 25 Q. Yes.

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1 A. And my comment there suggests that, having a look at  
 2 the -- whatever he sent, it would have been in less than  
 3 an hour, my conclusion was that it looks like we only  
 4 just failed.  
 5 So I assume I was looking at the 600-degree limit at  
 6 whatever the -- I have forgotten the height now, but  
 7 whatever height that's set at.  
 8 Q. Mr Meredith then responds to you on 13 January, if we  
 9 look at the bottom of page 1 {KIN00021095/1}, and you  
 10 can see in the first line, he says:  
 11 "From the external temps it does look very close,  
 12 the temperatures in the cavity where a little higher but  
 13 still close to the 15minute window. Ideally we need to  
 14 pass with a 10% window for assessment. Anything [too]  
 15 close will [impede] the BRE's ability to provide  
 16 practical tests assessments."  
 17 Do you see that there?  
 18 And then what he does, he says at the bottom of that  
 19 page:  
 20 "It's with the above in mind and after an extensive  
 21 review of the test video and data we are looking to  
 22 propose/consider the following."  
 23 What he does is give a detailed list of  
 24 modifications which could be made to try and achieve  
 25 a pass. Do you see that there? There are six listed.

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1 A. Yes.  
 2 Q. One of the things he says there at 5 {KIN00021095/2} is:  
 3 "Adopt modified K15 (solstice) [refer] discussions  
 4 in meeting."  
 5 Do you see that?  
 6 A. Yes.  
 7 Q. He says:  
 8 "As soon as this is made if I can get samples for O2  
 9 index and calorimetry ... of any variants of the  
 10 solstice board we should try and get them to Exova  
 11 quickly to see if there is any difference in initial  
 12 flammability/ calorific output."  
 13 Do you see that there?  
 14 A. Yes, yes.  
 15 Q. Can you help us as to what previous discussions he is  
 16 referring to there about K15 solstice?  
 17 A. No, it must have been one of the options looked at for  
 18 improved performance in this test, I assume.  
 19 Q. What is K15 solstice?  
 20 A. I think we were looking at a blowing agent in those  
 21 days, and the hope was that that would become the  
 22 blowing agent, I think, for K15 in the future.  
 23 Q. Yes.  
 24 A. And that was called solstice. It was a new generation  
 25 blowing agent. It was -- oh, I can't remember exactly,

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1 but a hydrofluoroolefin, I think, which meant it was  
 2 unstable in the atmosphere and would break down quite  
 3 quickly. But the advantage was it gave an improved  
 4 lambda value, improved insulation value, and also  
 5 I believe it was slightly less flammable as well.  
 6 Q. So it had better environmental credentials in terms of  
 7 its ozone depletion --  
 8 A. No, they were no better. The HFCs and HCFCs were phased  
 9 out because they had ozone depletion potential. So  
 10 anything introduced after that, including IPC, IP and  
 11 pentanes didn't have any ozone depletion potential.  
 12 Q. It was a liquid blowing agent; is that right?  
 13 A. Yes, these were fluorinated hydrocarbons that were  
 14 engineered so they didn't have an ozone depletion  
 15 potential.  
 16 Q. Yes.  
 17 So it's right, isn't it, that Mr Meredith was  
 18 proposing that Kingspan use solstice blown K15 in the  
 19 next test to 8414, but first he wanted to test samples  
 20 of that at Exova; is that right?  
 21 A. That seems to be what he's discussing, yes.  
 22 Q. If we move up the chain on page 1 {KIN00021095/1}, you  
 23 respond as follows in the middle of that page. So that  
 24 evening, 21.29 you say:  
 25 "Ivor,

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1 "Agree with all , except move to Solstice , as rest  
2 are merely tweaks to the test .  
3 "Suggest any recipient calls me back to discuss  
4 rather than email correspondence, which will get too  
5 complicated.  
6 "Regards,  
7 "Malcolm."  
8 Do you see that there?  
9 A. Yes.  
10 Q. Is it right that you didn't agree with the move to  
11 solstice blown K15?  
12 A. I think for this test I was keen to try and get  
13 something that was the same as the product that was on  
14 the market, which would have been presumably the one  
15 that was tested, and the move to solstice -- well, there  
16 were a number of implications: one, it wouldn't have  
17 been the product on the market, which meant that we'd  
18 have to introduce a completely new product then --  
19 Q. Yes.  
20 A. -- solstice blown, and it was very early days, if  
21 I remember correctly, with our investigations into  
22 solstice . So I don't think I was certain that it would  
23 be viable . You might test something that actually  
24 doesn't -- you can't commercially supply.  
25 Q. Yes.

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1 Why did you want a call back rather than  
2 a discussion over email correspondence?  
3 A. Well, it's -- obviously Ivor's put a number of  
4 possibilities , including solstice , so it was: well,  
5 let's talk about what is possible and what isn't  
6 possible, and the trouble is these email chains go on  
7 and on forever and ...  
8 Q. Yes.  
9 If we move up the chain towards the top of page 1  
10 there are two emails between Mr Millichap and  
11 Mr Meredith into which you're not copied, just to be  
12 clear .  
13 A. Yeah.  
14 Q. The first is from Mr Millichap to Ivor Meredith and he  
15 says:  
16 "Malcolm's response was cryptic? Let me know his  
17 thoughts over the solstice element."  
18 Then at the top of the email chain, Mr Meredith  
19 responds:  
20 "Will do (he is in meetings today )... Also I edited  
21 your comments as I thought he would be concerned over us  
22 putting too much in black and white."  
23 Do you see that there?  
24 A. Yes.  
25 Q. Now, were you concerned about putting too much in black

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1 and white on this issue?  
2 A. I don't know what he was referring to in terms of the  
3 comments. I've no idea what those comments were, and we  
4 can't see them, so I don't know.  
5 Q. Can I just show you a passage in Mr Meredith's oral  
6 evidence now, at {Day76/122:4}. So at line 4 I say:  
7 "Question: Okay, and did you ever get a clearer  
8 picture as to why he didn't want to discuss this in  
9 email correspondence? He says it will get too  
10 complicated there, but did you ever become aware that  
11 there was another reason for --  
12 "Answer: Malcolm was always very reserved about  
13 what we put in writing. I think I was told off a few  
14 times for maybe being too illustrative in emails,  
15 really .  
16 "Question: Why was he more reserved about what you  
17 put in writing?  
18 "Answer: He'd been through -- he'd been through  
19 a large legal case with Rockwool, I think.  
20 "Question: Yes.  
21 "Answer: And, you know, he knew how these things  
22 could potentially be taken out of context and come back  
23 to bite you, basically .  
24 "Question: Was that when there was an action by  
25 Kingspan against Rockwool in relation to how it

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1 represented its products?  
2 "Answer: Yeah, yeah, yeah, that was the case, yeah.  
3 "Question: He had been through that?  
4 "Answer: Yeah.  
5 "Question: And he was, what, worried about  
6 committing things to email?  
7 "Answer: I think that might be what he's referring  
8 to here, yeah."  
9 Do you see that there?  
10 A. Yes.  
11 Q. Then if we just go over the page to the next page, if we  
12 go above this, I ask him about the Tony Millichap, and  
13 then I say:  
14 "Question: So does that go back to --  
15 "Answer: That verifies what I was saying before,  
16 yeah.  
17 "Question: Yes, that you were aware that  
18 Malcolm Rochefort didn't like you putting too much in  
19 writing about this?  
20 "Answer: (Witness nods).  
21 "Question: Because he was nervous about if this  
22 ever came out; yes?  
23 "Answer: Potentially , yes.  
24 "Question: Yes.  
25 "Answer: I agree."

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1 Do you see that there?

2 A. Yes.

3 Q. Is that right, that you had been through the experience  
4 of being involved in a civil case, Kingspan against  
5 Rockwool?

6 A. I had been in that and I'd been in a case in the States  
7 as well.

8 Q. And had that made you nervous about committing matters  
9 in writing and emails?

10 A. I think what he says there is correct, I was a bit  
11 nervous about what you put down in emails, but it was --  
12 on this particular occasion I wasn't sure what they  
13 could have said that would have been -- would have given  
14 me problems, it was more a question of: let's get to the  
15 bottom of this particular issue that we're talking  
16 about, which was the next -- the testing regime.

17 Q. Was one of the reasons you were nervous because that  
18 email chain was illustrating that K15 had not yet passed  
19 an 8414-2 test and you were looking at research and  
20 development products to try and pass?

21 A. I was looking at research and development products to  
22 try and pass, that's correct. That's one of the things  
23 we were doing, was definitely that. But that wasn't --  
24 wouldn't have been why I was nervous about it on that  
25 particular occasion, no.

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1 Q. If we can go back to Kingspan's spreadsheet now at  
2 {KIN00022357/3}, and I want to look at the next test to  
3 8414-2. This is in the middle of page 3. This was on  
4 19 March 2014, and it would appear that this test was  
5 not classified to BR 135. Do you remember that?

6 A. Vaguely, yes.

7 Q. In this instance, Kingspan have confirmed, in that sixth  
8 column along, "Properties of the tested insulation  
9 product", that this test was not carried out on the K15  
10 which was being sold but on a trial product. Do you see  
11 that?

12 A. Yes.

13 Q. The properties of that tested insulation are listed as  
14 thickness: 80 millimetres, foil: unperforated 50-micron  
15 or 100-micron foil. Do you see that there?

16 A. Yes.

17 Q. Whereas the standard K15 had a 25-micron foil facer,  
18 didn't it?

19 A. That's correct, yes.

20 Q. And it also says:

21 "Core: R330UF-1. Calcium Carbonate & polyol blend  
22 added. Alternative blowing agent."

23 Do you see that there?

24 A. Yes.

25 Q. Was that the solstice alternative blowing agent?

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1 A. I assume it was. That's what was being looked at at the  
2 time, so I assume it was a blend of solstice of some  
3 sort.

4 Q. Yes.

5 Presumably the fact that the K15 foam used in that  
6 test was made using a different blowing agent was not  
7 a surprise to you, given the correspondence you'd had  
8 with Mr Meredith about that very matter?

9 A. Correct, the fact that they were looking at that.

10 I mean, it was a logical thing to do, to look at  
11 different formulations that might give you a different  
12 result in a system test.

13 Q. This test is not mentioned in your witness statement.  
14 Can you help us as to why that is?

15 A. Was I even ... I don't know why it isn't mentioned, but  
16 I don't know that I was particularly aware of this.  
17 I knew that there had been some tests -- did I mention  
18 the January one as well? I can't remember.

19 Q. We'll check that.

20 A. Yeah. I mean, I'm writing this witness statement  
21 five years after I'd left the company, so I'm relying on  
22 looking through a load of old documents.

23 Q. Let's look at some correspondence after the test.  
24 {KIN00021907/3}, the second email, at the bottom of the  
25 chain. We can see that on 25 March Stephen Howard of

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1 the BRE is informing Mr Meredith in respect of the test,  
2 and he says in the first line:

3 "I discussed the test with Phil and the current  
4 status is that you do not have a clear pass."

5 Do you see that there?

6 A. Yes.

7 Q. Then on the same day, Mr Meredith forwards that message  
8 to you, Tony Millichap and a number of others, that's at  
9 the bottom of page 2, top of page 3. Right at the  
10 bottom there.

11 A. Yeah.

12 Q. Going up then to Mr Meredith's email at the top of  
13 page 2 {KIN00021907/2} on 31 March 2014 at 13.23, he  
14 says this:

15 "Initial feedback from the BRE is that this test did  
16 not meet the requirements of BR 135 3rd edition. This  
17 is by no means the end of this as we will be challenging  
18 this opinion and doing everything possible to get  
19 something [usable] out of the testing. Whether this be  
20 an assessment for a different cladding or a shorter  
21 build ..."

22 Do you see that there?

23 A. Yes.

24 Q. He says in the next paragraph:

25 "The test is being dismantled this week so hopefully

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1 we can demonstrate very little flame spread on the K15  
 2 and this will support the counter arguments that we are  
 3 preparing.”  
 4 A. Yes.  
 5 Q. Then he says:  
 6 “As mentioned we have a meeting with TENOS, ARUP,  
 7 IFC and Trespa planned to analyse what we have learnt so  
 8 far ...”  
 9 In the next paragraph, and then he says this:  
 10 “I spoke to Malcolm on Friday about this and he  
 11 advised we should proceed with the  
 12 ‘non combustible/terracotta cladding’. Following this  
 13 news from the BRE are we all still in agreement in  
 14 respect of this?”  
 15 Do you see that there?  
 16 A. Yes.  
 17 Q. Do you remember speaking to him about saying, “Well,  
 18 let’s do the terracotta cladding next?”  
 19 A. I don’t remember speaking to him, but on the other hand,  
 20 this is quite a credible -- you know, it’s a credible  
 21 statement.  
 22 Q. Yes.  
 23 A. It would have been the way I was thinking. In other  
 24 words, if the Trespa was a narrow failure --  
 25 Q. Yes.

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1 A. -- then the logical thing was to look at the --  
 2 Q. The terracotta?  
 3 A. -- terracotta cladding, yes.  
 4 Q. Which is what we see you end up doing, and then in July,  
 5 in the third test in 2014, which we’ll come to, that’s  
 6 the terracotta test.  
 7 Then he says:  
 8 “I shall know by the end of the week when I will  
 9 need the insulation for the next test by. However the  
 10 question remains about the insulation we choose to use.  
 11 Is it possible to share the calorimeter results of the  
 12 solstice vs standard vs phosphoric that we performed at  
 13 FTT last week?  
 14 Do you see that there?  
 15 A. Yeah.  
 16 Q. “Does this support our views on the  
 17 flammability/calorific content of the different  
 18 [phenolic foams]? This would be good to look at  
 19 alongside the video.”  
 20 Do you see that there?  
 21 A. Yes.  
 22 Q. At this point, do you agree that you are one of the  
 23 people who are directing the testing strategy, you’re  
 24 discussing with Mr Meredith what you should test next,  
 25 having had this fail?

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1 A. Yeah, I think at this stage we’re all looking at what we  
 2 should be testing.  
 3 Q. Did you understand the basis on which the result of this  
 4 test was going to be challenged?  
 5 A. I assume -- I don’t understand -- I cannot now recall  
 6 what the detail was, but I assume from the earlier  
 7 comments that Ivor had made, this was the one that  
 8 narrowly failed, so I don’t know exactly why it was  
 9 going to be challenged.  
 10 Q. Did you know what he meant by “doing everything possible  
 11 to get something [usable] out of the testing”? That’s  
 12 the second line, first paragraph.  
 13 A. Yes, I don’t know what exactly he meant from that, no.  
 14 Q. Are you aware that the test data from this test was  
 15 used, despite the fact that the tested system wasn’t  
 16 classified to BR 135, in a number of desktop assessments  
 17 for systems incorporating K15? Were you aware of that?  
 18 A. I don’t think I was aware of that, no. Presumably it  
 19 wasn’t claimed that it passed the BR 135, was it?  
 20 Q. Well, there was a dispute between Kingspan and the BRE  
 21 about whether it had passed, and a complaint was lodged  
 22 about it.  
 23 If we go up the chain, a little further up on page 1  
 24 {KIN00021907/1} at the bottom half of the page, there is  
 25 an email from Gwyn Davies sent on 21 March 2014 at

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1 13.46. He starts off saying:  
 2 “Surely we risk making fools of ourselves trying to  
 3 quarrel with them based on an earlier edition of the  
 4 BR135. I feel we need to understand why they are  
 5 terming this a fail and how they have come to this  
 6 decision and then discuss internally the counter to this  
 7 and meet with Phil and Stephen.”  
 8 Do you remember that what Kingspan were trying to  
 9 say is because the old BR 135 standard didn’t make it  
 10 clear that the full 60-minute test duration was relevant  
 11 to the pass/fail, somehow you could go back to that old  
 12 standard and --  
 13 A. I think, now you mention it, that does sound familiar,  
 14 yes.  
 15 Q. Yes.  
 16 Then at the top of this chain, Tony Millichap says  
 17 this, the same day, 14.01. He says:  
 18 “All,  
 19 “Let’s not forget we are carefully pushing BRE for  
 20 the result, typically this is not issued without the  
 21 full report after 4-5 weeks. In the short term we are  
 22 just trying to understand our options whilst waiting for  
 23 the full data and trying to sow some seeds to influence  
 24 that result.”  
 25 What did you understand him to mean by that, “sow

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1 some seeds to influence that result?"

2 A. Sorry, I've just missed that.

3 Q. Sorry, it's the end of that second line --

4 A. Oh, yes, in the first paragraph.

5 Q. Yes, first paragraph, and into the third line.

6 Do you remember being aware of him saying that?

7 A. I assume he -- it's one of the bits of information he

8 wants to use to the BRE in trying to convince them that

9 it would be appropriate to issue a BR 135 on it.

10 Q. Yes.

11 He then goes on in that same paragraph in the last

12 sentence to say this:

13 "In the event we do not get what we aimed for

14 stronger tactics will be employed."

15 Do you see that there?

16 A. Yes.

17 Q. What did you understand him to mean by that, "stronger

18 tactics will be employed"?

19 A. Well, I think he goes on to say:

20 "I will concurrently employ our solicitor to ensure

21 they are fully briefed to support a challenge or defend

22 against any ongoing contracts."

23 Q. So those were the stronger tactics?

24 A. I assume that's what he means, yeah.

25 Q. To get lawyers involved and defend --

209

1 A. Yes.

2 Q. I see.

3 Did you consider that to be an acceptable response

4 to the BRE at the time?

5 A. I assume that Ivor and Tony felt aggrieved that they had

6 performed a test which, on the older version of the

7 BR 135, would have passed, and that because the BR 135

8 had been re-issued, it now failed. So they felt

9 aggrieved at that and they were looking at ways in which

10 that could be challenged. It's understandable why they

11 would be doing it.

12 Q. Yes. Did you ever object to that at the time?

13 A. I didn't, no.

14 Q. Was there any discussion in early 2014 and following

15 these tests in January and March about the risk to

16 public safety in promoting K15 for use over 18 metres?

17 Were you ever involved in such discussions?

18 A. No, not with public safety. Again, at this point my

19 assumption is still that the LABC and BBA certification

20 is ...

21 Q. Can we go now to {KIN00003862}. This is an email from

22 you to Peter Wilson, Mr Meredith, Mr Millichap, do you

23 see that there, on 28 April?

24 A. Yes. Yes, I think I'm framing a letter to send to

25 Wintech because we'd said we'd be doing something in

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1 six months, and it was to say, "Look, basically we have

2 done something". I don't think it's claiming that --

3 Q. Yes, well, let's look at what you say. So you say,

4 "Dear Paul" -- so this appears to be a draft email back

5 to Wintech, as you have said.

6 "It's been a while since we communicated and I

7 thought I should give you a quick update. Further to

8 our meeting last October, we have been conducting some

9 further testing with the BRE on BS 8414-2 using

10 Kooltherm K15. As you are probably aware, tests take

11 quite a long time to set up and complete with the BRE,

12 partly because they appear to be quite busy with

13 large scale fire testing at the moment."

14 Then you say this:

15 "The test we recently conducted incorporating a

16 Trespa 18mm cladding system met the criteria for

17 approval under BR135 Annex B, particularly with respect

18 to the B2.2 requirement where the level 2 thermocouples

19 did not exceed 600°C within 15 minutes of the start

20 time, and the test was run to completion.

21 "We are currently in discussion with the BRE and

22 have further testing planned ..."

23 Now, that must be a reference to the test carried

24 out on 19 March 2014; is that right?

25 A. I think it must be, yes.

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1 Q. It can't be the January 2014 test because that was

2 an 8-millimetre Trespa panel.

3 A. I don't think it is.

4 Q. Now, you knew by 28 April 2014, didn't you, that the BRE

5 had confirmed there was no clear pass? That's right,

6 isn't it?

7 A. I don't know that I -- no, I don't know that I did know

8 that, actually.

9 Q. Well, you knew that from the email chain we've just

10 looked at from 31 March 2014, where Stephen Howard told

11 Kingspan they do not have a clear pass. Do you remember

12 that was forwarded to you?

13 A. Yes, I understand that, but I also understood that Tony

14 was challenging that, so that was the situation as far

15 as I was concerned. And, okay, we could argue with the

16 reasons he is challenging it, he is using an old BR 135,

17 but it seemed to me he did have some justification for

18 challenging it, and I think what I was doing here was

19 updating Wintech, really saying, "Look, we're not doing

20 nothing, we're still working on it, and this is the

21 situation". And I do say, "We are currently in

22 discussion with BRE and have further testing planned and

23 in active construction", that's also correct.

24 Q. You said you knew that it was being challenged; in those

25 circumstances, how did you come to write the words at

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1 the beginning of that second paragraph, "[the] cladding  
 2 system met the criteria for approval under BR 135"? You  
 3 knew that that wasn't the position the BRE had taken,  
 4 didn't you?  
 5 A. Obviously that wording comes from -- someone suggested  
 6 that wording to me, but it would have been based on the  
 7 earlier BR 135 standard, I assume.  
 8 Incidentally, this is just a draft email, and  
 9 I don't even know it was ever sent, was it?  
 10 Q. Well, that may be the case, but I just want to ask you,  
 11 when you drafted this, why did you put in the words "met  
 12 the criteria for approval under BR 135" when you knew  
 13 that there was a dispute going on and that the BRE's  
 14 position was that it was a fail?  
 15 A. Well, I think that was our position, that it had met the  
 16 criteria. As you can see, Tony was even considering  
 17 a legal challenge on it. So that was our position, that  
 18 it had met the criteria.  
 19 Q. So why didn't you say that to Wintech? Why didn't you  
 20 say, "We've just done a test, it was close, we're  
 21 challenging the results, the BRE don't think it's a pass  
 22 but we're challenging that"? Why not say that? That  
 23 was the accurate position, wasn't it?  
 24 A. I think that could have done, it wasn't -- I was running  
 25 this past a number of people and asking for advice on

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1 how it would be worded.  
 2 Q. I see. And you can't help us as to whether this email  
 3 was actually sent?  
 4 A. I don't know if that was ever sent.  
 5 Q. Moving on then to the July 2014 test, if we can go back  
 6 to that spreadsheet, {KIN00022357/3}, in the last row on  
 7 page 3, we can see it tells us, 7 July 2014,  
 8 Kingspan Insulation Limited, and then we can see it was  
 9 a terracotta tile, do you see, under "System tested"?  
 10 A. Yes.  
 11 Q. The third column. And we can see it was a pass this  
 12 time.  
 13 A. Yes, yes.  
 14 Q. Do you see that there?  
 15 Then we can see in the sixth column, "Properties of  
 16 the tested insulation product", it says:  
 17 "Trial Product.  
 18 "Thickness: 80mm.  
 19 "Foil: Perforated and unperforated 50micron."  
 20 A. Yes.  
 21 Q. And then if we go over the page {KIN00022357/4}, "Foil",  
 22 and then core, we've got the same description of the  
 23 core as with the March test, including "Alternative  
 24 blowing agent", do you see that there?  
 25 A. Yes.

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1 Q. Would that have been again the solstice blown blowing  
 2 agent?  
 3 A. I believe it was the solstice blown, yes.  
 4 Q. Yes.  
 5 A. I know there was some dispute over whether it was  
 6 a 50-micron or a 25-micron, because I think Gwyn thought  
 7 it was a 25-micron, and he was the one supplying the  
 8 sample, but ... that -- I don't know that --  
 9 Q. Did you ever get to the bottom of that?  
 10 A. No, I don't think they got to the bottom of it, but  
 11 presumably by the time this table was produced Kingspan  
 12 was convinced that it was a 50-micron, I assume, because  
 13 they put that in.  
 14 Q. Yes. If we go back to the bottom of the table that we  
 15 were just reading from -- and it says "Perforated and  
 16 unperforated".  
 17 A. Yes.  
 18 Q. What was your understanding about whether or not it was  
 19 perforated or unperforated, or indeed whether on one  
 20 side it was perforated and on the other it was not? Do  
 21 you recall?  
 22 A. I don't know, I never saw the samples, but at some stage  
 23 we were producing a K15 product that was perforated on  
 24 one side and unperforated on the other side. So I do  
 25 know that had been done in the past.

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1 Q. Yes. But, again, this was a trial product, and I think  
 2 you tell us that in your witness statement, if we look  
 3 at paragraph 11.23 of your statement on page 50  
 4 {KIN00008838/50}.  
 5 A. Yes.  
 6 Q. 11.23, you say you became aware of some discussion, and  
 7 you say in the third line down on the right-hand side:  
 8 "I had been under the impression that the successful  
 9 BS 8414-2 test had been conducted on a development K15  
 10 product using a 50 micron facer ..."  
 11 Yes?  
 12 A. That's correct.  
 13 Q. So it was a development trial product; yes?  
 14 A. Yes.  
 15 Q. And it wasn't the product that was being sold,  
 16 therefore?  
 17 A. No.  
 18 Q. If we then go to some emails in November 2014, if we  
 19 could go to {KIN00021904} and look at the top of page 1,  
 20 I think that's where we're seeing where you had got that  
 21 in your statement. Do you see that there?  
 22 "Ivor,  
 23 "I was also strongly under the impression that the  
 24 latest successful BS8414 part 2 used 50 micron facer."  
 25 Do you see that there?

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1 A. Yes.  
 2 Q. "Suggest you discuss this face to face with Gwyn in the  
 3 office and we also discuss at next Fire Focus Group  
 4 meeting, but limit email conversation."  
 5 Do you see that there?  
 6 A. Yes.  
 7 Q. Why did you say that to Mr Meredith in this email, "but  
 8 limit email conversation"?  
 9 A. Well, if you look at the previous couple of pages,  
 10 I think it is, you've got Ivor saying it was 50-mil, me  
 11 chipping in, I thought it was 50-mil, Adrian saying he  
 12 thought it was 50-mil, and Gwyn thought that it was  
 13 25-mil, and it seemed to me that that was not resolvable  
 14 on an email ping pong system. So it was better that  
 15 Ivor spoke directly to Gwyn, and that's why I'm saying  
 16 face-to-face and, you know, we don't want any more of  
 17 this --  
 18 Q. I see, yes.  
 19 A. -- carrying on.  
 20 I just want to move now to my final topic, which is  
 21 about Kingspan's dealing with the NHBC, which is a short  
 22 topic.  
 23 You deal with the subject of the NHBC in response to  
 24 the Inquiry's questions in section 10 of your witness  
 25 statement, which starts on page 42 {KIN00008838/42}. If

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1 we could go to paragraph 10.2, on page 42, you say at  
 2 the top there:  
 3 "As far as I can recall, Kingspan regarded the NHBC  
 4 as playing a critical role in the sale of certain  
 5 insulation products to construction areas. It was seen  
 6 as critical to ensure that the NHBC was content with  
 7 Kingspan's products in order to maximise the sale of  
 8 those products in to construction areas in which the  
 9 NHBC played a role."  
 10 Do you see that there?  
 11 A. Yes.  
 12 Q. Did that include K15?  
 13 A. I assume it would include K15, yes.  
 14 Q. And you go on to say later in your statement that your  
 15 recollection is that you weren't involved in any  
 16 meetings with the NHBC; is that right?  
 17 A. That's my recollection, yeah.  
 18 Q. You have also said, over on page 43 of your statement  
 19 {KIN00008838/43}, paragraph 10.4, that you were not  
 20 involved in any internal meetings about the NHBC and the  
 21 use of K15; is that right?  
 22 A. "As far as I can recall, I was not involved in any ...  
 23 meetings relating to K15 and the NHBC, though I did  
 24 receive email correspondence from Ivor Meredith  
 25 regarding a meeting he held with the NHBC in

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1 August 2014."  
 2 Q. Yes.  
 3 If we can just look at an email from August 2014,  
 4 which I think is what you're referring to there,  
 5 {KIN00020736}. This is an email from Mr Meredith,  
 6 21 August 2014. We can see the subject is, "Comment  
 7 required by Monday 5pm pls:- K15 Update". Do you see  
 8 that there?  
 9 A. Oh, yes, it's the heading.  
 10 Q. And you're one of the recipients of this email.  
 11 A. Yes.  
 12 Q. He says in the first paragraph:  
 13 "As the key stakeholders for the current Kooltherm  
 14 K15 Fire Certification Issues I have taken five to  
 15 update you all on the current situation since our last  
 16 meeting ..."  
 17 Do you see that there?  
 18 A. Yes.  
 19 Q. So is that right, did you regard yourself at the time as  
 20 one of the key stakeholders for the current  
 21 Kooltherm K15 fire certification issues?  
 22 A. Yes, I would have been, and I'm just looking at the  
 23 list. That's probably everyone. There might have been  
 24 a few others as well, but ...  
 25 Q. Under that first heading, "NHBC/BCA" -- do you see that

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1 there at point 1 of his email?  
 2 A. Yes.  
 3 Q. He says this:  
 4 "A meeting has been held with the NHBC whom are  
 5 still pushing for someone to provide job specific test  
 6 data."  
 7 A. Yes.  
 8 Q. "They are still sanctioning the use of K15 as long as  
 9 they get a bespoke letter off [Kingspan] which Technical  
 10 Projects are turning around in 48 hours on receipt of the  
 11 drawings and confirmation of the fire barrier  
 12 dimensions. They have also given us an extra 3 months  
 13 to get some further assessments on the test data to meet  
 14 their needs. We have also requested 2 weeks  
 15 notification if they decide to change their stance."  
 16 Do you see that there?  
 17 A. Yes.  
 18 Q. Did you authorise those bespoke letters which were being  
 19 turned around in 48 hours at that time?  
 20 A. No, I wouldn't have seen them, and I wouldn't be aware  
 21 of the detail in those at all.  
 22 Q. Who was signing off on those as far as you understood  
 23 it?  
 24 A. Erm ... oh, let's have a look.  
 25 (Pause)

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1 "... as long as they get a bespoke letter off KIL  
2 which Technical Projects are turning around ..."  
3 If it says bespoke letter, it must be someone in the  
4 technical -- in our technical department is providing it  
5 with them.  
6 Q. Right.  
7 A. So it presumably would have been Tony Millichap or Ivor.  
8 Q. Did you ever check any of those letters yourself?  
9 A. I don't think so, no.  
10 Q. Right.  
11 A. No.  
12 Q. Then if we can look at point 6 at the bottom of page 2  
13 of this email {KIN00020736/2} -- it's a long email -- he  
14 writes this. He says:  
15 "We have issued a couple of standard letters to the  
16 larger contractors (Praters, Lakesmere etc) and  
17 confirming our good news confirming pending reports and  
18 a more general letter confirming test success. These  
19 are being used by Technical and Sales for job specific  
20 queries which we are targeting handling within 48hours  
21 of receipt. Tony/Malcolm I have not written to Stuart  
22 Taylor at Wintech has this been done?"  
23 Do you see that there?  
24 A. I do, yeah.  
25 Q. Do you know why this was being done, issuing standard

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1 letters to the larger contractors confirming good news  
2 and a more general letter about test success? Do you  
3 know why that was being done?  
4 A. I don't know, but I know there was quite a lot of  
5 discussion at the time about introducing the solstice  
6 blowing agent as a new product, so I'm assuming this is  
7 about the new version of the product which would have  
8 solstice blowing agent involved.  
9 Q. Yes. You and Mr Meredith knew at the time that the  
10 July 2014 test had been carried out on a trial product,  
11 but that was not on the K15 which was being sold by  
12 Kingspan and actually used on projects, was it?  
13 A. Not at this point, no.  
14 Q. No.  
15 A. But I think that was tested in April 2015, wasn't it?  
16 Q. But you were the technical director at this time, and  
17 you can see that reliance is being placed on that test  
18 success, which was on a trial product. Can you explain  
19 how you were comfortable with that?  
20 A. I think that I assumed, maybe wrongly, that they're  
21 talking about a new product would be produced based on  
22 this blowing agent configuration.  
23 Q. Yes, but you can see that they're sending letters,  
24 including technical and sales job-specific query  
25 letters, which they're handling within 48 hours of

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1 receipt, so they're turning around these letters  
2 recommending K15 within 48 hours. How were you  
3 comfortable with that when you knew that the only  
4 success you had had at that time was on a trial product  
5 and not the K15 you were selling?  
6 A. Well, again, I think I would have been relying on the  
7 fact that the LABC certification was covering us. I --  
8 Q. By this time -- sorry. By this time, the LABC --  
9 SIR MARTIN MOORE-BICK: Sorry, had you finished what you  
10 wanted to say?  
11 A. But in this particular case, it doesn't say what these  
12 letters are going to contain in them, so I'm not quite  
13 sure what they were. I was speculating when I said it  
14 might be about the solstice product. I don't know what  
15 these letters were about.  
16 MS GRANGE: Sorry, I shouldn't have interrupted you. But by  
17 this time, the LABC certificate saying that K15 was  
18 a limited combustibility product was long expired, so  
19 you couldn't be relying on that, could you?  
20 A. Not if it was expired I couldn't be, no.  
21 Q. So are you saying that you simply weren't aware that K15  
22 was being recommended on projects at that time, and that  
23 somehow what was being said here is that you might be  
24 recommending a future solstice blown product?  
25 A. That could be what was implied by that paragraph, but

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1 I don't know.  
2 Q. Did you ever check?  
3 A. I don't think I did, no.  
4 Q. Why not? You're the technical director; why do you not  
5 check that you're not selling K15 on the basis of test  
6 data that's irrelevant because it's based on a trial  
7 product?  
8 A. I didn't, and maybe that was a mistake, but I would have  
9 looked at the whole -- I think I would have been looking  
10 at this email, rather long email from Ivor, and I would  
11 have been highlighting to myself things that were of  
12 interest. So I would have seen the comment at the  
13 bottom, "Tony/Malcolm I have not written to Stuart  
14 Taylor at Wintech has this been done?", and I probably  
15 would have concentrated on that as an action,  
16 a potential action for me.  
17 Q. Would you accept that this was deliberate and planned  
18 reliance by Kingspan on a test of a trial product to  
19 support the use of a completely different product?  
20 A. I don't think that was the intention, no, because the  
21 standard product was tested the following April and it  
22 passed on a terracotta cladding system.  
23 Q. Right.  
24 Are you prepared to accept that during the whole of  
25 your time as technical director of the company, Kingspan

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1 had no test evidence which related to the K15 product  
 2 actually being sold to market which could support the  
 3 use of that product on buildings over 18 metres in  
 4 height?  
 5 A. I'm not prepared to accept it that that was done  
 6 knowingly. I think if you look back and you say the old  
 7 technology was completely different to the new  
 8 technology and that was the original test that it was  
 9 based on, you could make an argument for that. But that  
 10 wasn't -- it wasn't done knowingly. And the  
 11 certification I took in good faith. I assumed that was  
 12 correct.

13 MS GRANGE: I see.

14 Mr Chairman, I've come to the end of my questions.  
 15 I'm sorry, I'm slightly over 4.30. If we could have the  
 16 customary break.

17 SIR MARTIN MOORE-BICK: Yes.

18 MS GRANGE: We may have to at that point just reserve our  
 19 position on recalling this witness while we check the  
 20 notes that he referred to, but I think we have to see  
 21 where we get to with that. I don't think that should  
 22 stop us releasing this witness today.

23 SIR MARTIN MOORE-BICK: We are getting a bit ahead of  
 24 ourselves. Let's deal with any questions first.

25 Now, Dr Rochefort, when we get to this point,

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1 counsel thinks she has finished asking all the  
 2 questions, but we always have a short break, both to  
 3 allow her to check and to allow those who are not  
 4 present in the room, but are following these hearings,  
 5 to suggest other questions that perhaps should be put to  
 6 you.

7 THE WITNESS: Yes.

8 SIR MARTIN MOORE-BICK: So we will break now until 4.45 and  
 9 then we'll see whether there are any more questions that  
 10 we need to ask you. Is that all right?

11 THE WITNESS: Yes.

12 SIR MARTIN MOORE-BICK: And please don't talk to anyone  
 13 about your evidence while you're out. Thank you.

14 THE WITNESS: Thank you.

15 (Pause)

16 SIR MARTIN MOORE-BICK: Right, 4.45, please.

17 (4.35 pm)

18 (A short break)

19 (4.45 pm)

20 SIR MARTIN MOORE-BICK: Right, Dr Rochefort, we will see if  
 21 there are any more questions for you.

22 Ms Grange, do you have questions?

23 MS GRANGE: Yes, just a couple.

24 The Metsec tests that were done back in 2008 that we  
 25 were discussing with K15, the failures --

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1 A. Right.

2 Q. -- when we were discussing what conclusions you formed  
 3 about the performance of K15, was it a factor in your  
 4 thinking at the time that there had also been a Metsec  
 5 test with Rockwool which had failed to BS 8414?

6 A. I think it was a factor, but it would have been one of  
 7 several things.

8 Q. Can you explain how that was relevant, how you thought  
 9 that was a factor?

10 A. I think what it would have shown was that the system  
 11 even with a non-combustible insulant also failed.

12 Q. Were you ever aware that there was also a pass with  
 13 a Metsec/Rockwool system in 2008?

14 A. No, I wasn't, but I wouldn't necessarily have been aware  
 15 of that.

16 Q. Were you aware that Mr Meredith was present at the  
 17 Metsec/Rockwool fail in 2008, one of those tests?

18 A. I didn't know that he was necessarily present, but  
 19 I know that Ivor spent quite a lot of time down at  
 20 Garson, so it's possible.

21 Q. We've gone through quite a lot today, Dr Rochefort. If  
 22 you had your time again, what would you do differently?

23 A. I would probably ask more questions. That would be my  
 24 biggest regret about it, I think.

25 MS GRANGE: Yes.

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1 SIR MARTIN MOORE-BICK: All right?

2 MS GRANGE: Thank you.

3 Mr Chairman, there is just the remaining matter of  
 4 the recent disclosure. Just to be clear, we have  
 5 checked, and it would appear that, together with a lot  
 6 of other information we have had from Kingspan very  
 7 late -- we have been inundated with late disclosure from  
 8 Kingspan -- on 17 November, those notes were provided,  
 9 although it was not clearly marked that these were  
 10 Dr Rochefort's notes.

11 We are obviously in your hands as to what you do.  
 12 I think some teams would like him not to be released --  
 13 that's Team 2's position of the BSRs -- until they've  
 14 had a chance to consider that.

15 SIR MARTIN MOORE-BICK: Have you or those who sit behind you  
 16 had a chance to look at those notes?

17 MS GRANGE: We've had a brief look and we can't see anything  
 18 terribly significant at the moment in terms of changing  
 19 the evidence or in terms of questions we would want to  
 20 put, but what we could do is let Dr Rochefort go today,  
 21 and then if there are further questions to put to him  
 22 once everybody has seen those documents, we can then, if  
 23 necessary, recall him or put those further questions to  
 24 him in another way.

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

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1 Well, Dr Rochefort, those are all the questions we  
 2 have for you. I think the first thing for me to say is  
 3 to thank you very much for coming to give your evidence.  
 4 It's been a long day for you, I'm sorry it's taken  
 5 longer than thought, but we are very grateful and it's  
 6 been very helpful to hear from you.  
 7 Now, about your diary, you have it somewhere safe at  
 8 home, I take it?  
 9 THE WITNESS: Yes, I have, although it has been scanned, all  
 10 the relevant sections.  
 11 SIR MARTIN MOORE-BICK: Well, yes, but it's nice to know  
 12 where the original is. I'm going to ask you to look  
 13 after it carefully.  
 14 Now, what we're going to do about that -- as you've  
 15 heard, it has been disclosed to us. Counsel have had  
 16 a look at it. They are satisfied that it does not  
 17 contain anything that will assist us or will give rise  
 18 to any further questions. But, as you know, there are  
 19 other people who are interested in this Inquiry --  
 20 THE WITNESS: Yes.  
 21 SIR MARTIN MOORE-BICK: -- and they have not yet had  
 22 a chance to look at it.  
 23 So what I'm going to say is that although I will  
 24 release you now, which means you're obviously not just  
 25 free to go home, but you are free to talk about

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1 the Inquiry if you want to, I would ask you, please, not  
 2 to talk to people about the contents of your diary.  
 3 THE WITNESS: Right.  
 4 SIR MARTIN MOORE-BICK: If it transpires that there are  
 5 further questions arising out of the diary when we have  
 6 had a better chance to look at it, or if other people  
 7 have questions, it might be necessary to ask you to come  
 8 back and deal with those questions.  
 9 THE WITNESS: I understand that, yes.  
 10 SIR MARTIN MOORE-BICK: And we will let you know in good  
 11 time if that turns out to be the case.  
 12 THE WITNESS: I should say there is quite a bit of personal  
 13 information in those diaries.  
 14 SIR MARTIN MOORE-BICK: We shan't be troubling you with  
 15 that.  
 16 THE WITNESS: Hopefully not.  
 17 SIR MARTIN MOORE-BICK: But for the time being, thank you  
 18 very much for coming, and you are free to go. Thank you  
 19 very much.  
 20 THE WITNESS: Thank you.  
 21 (The witness withdrew)  
 22 SIR MARTIN MOORE-BICK: Good. Well, that must be the end  
 23 for today.  
 24 MS GRANGE: It is, Mr Chairman.  
 25 SIR MARTIN MOORE-BICK: We will have another witness

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1 tomorrow.  
 2 MS GRANGE: We have another Kingspan witness tomorrow,  
 3 Mr Tony Millichap.  
 4 SIR MARTIN MOORE-BICK: Right, thank you.  
 5 So we will rise now and we will resume at 10 o'clock  
 6 tomorrow morning.  
 7 Thank you very much.  
 8 MS GRANGE: Thank you.  
 9 (4.55 pm)  
 10 (The hearing adjourned until 10 am  
 11 on Wednesday, 2 December 2020)  
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