

# OPUS 2

## INTERNATIONAL

Grenfell Tower Inquiry

Day 33

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1 Wednesday, 9 September 2020  
2 (10.00 am)  
3 SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to  
4 today's hearing. We are going to hear further today  
5 from Mr Ray Bailey of Harley. So could you ask  
6 Mr Bailey to come in, please.  
7 MR RAY BAILEY (continued)  
8 SIR MARTIN MOORE-BICK: Good morning, Mr Bailey.  
9 THE WITNESS: Morning.  
10 SIR MARTIN MOORE-BICK: Take your time. All right?  
11 THE WITNESS: Yes, thank you.  
12 SIR MARTIN MOORE-BICK: Ready to continue?  
13 THE WITNESS: Yes.  
14 SIR MARTIN MOORE-BICK: Good, thank you very much.  
15 Yes, Mr Millett.  
16 Questions from COUNSEL TO THE INQUIRY (continued)  
17 MR MILLETT: Good morning, Mr Chairman.  
18 Good morning, Mr Bailey.  
19 A. Morning.  
20 Q. I'm going to ask you some questions next about CWCT  
21 guidance.  
22 Were you aware at the time of your involvement in  
23 the Grenfell Tower project of guidance notes produced by  
24 CWCT?  
25 A. Yes.

1

1 Q. Can you ask you to look at {CWCT0000019}. This is  
2 something called Technical Note 73, produced by the CWCT  
3 in March 2011.  
4 Have you ever seen this document before, do you  
5 think?  
6 A. Yes, I have.  
7 Q. When do you think you had seen it before?  
8 A. It was shown to me, I think, a couple of years ago.  
9 Q. After the Grenfell Tower fire?  
10 A. Yes.  
11 Q. Had you seen it at the time of your involvement in the  
12 project?  
13 A. I don't think I had, no.  
14 Q. You don't think you had; do you think anybody else  
15 within Harley had?  
16 A. Yes, I'm sure they would have done.  
17 Q. Who was that, do you think?  
18 A. I think Mark Stapley. When did this -- what date did  
19 this come out?  
20 Q. March 2011.  
21 A. Well, then Graham Hackley and Mark Stapley would have  
22 seen it.  
23 Q. What about Daniel Anketell-Jones?  
24 A. He may have seen it.  
25 Q. Right. We can ask him about that.

2

1 Was there a system within Harley for disseminating  
2 guidance documents such as these to the professionals  
3 involved in particular projects?  
4 A. Mark Stapley was the operations director and chief  
5 designer, so he would -- if it was important  
6 information, he would disseminate it to his design team.  
7 Q. Right. Did you proceed on the assumption that whoever  
8 was doing detailed design on a cladding package would  
9 have seen documents such as this?  
10 A. Yes.  
11 Q. Yes.  
12 Let's see how we go, given that you, I think, are  
13 telling us that you weren't familiar with its detail.  
14 If you look at the summary in italics to the  
15 guidance note, it says:  
16 "Curtain walls are normally used for areas of the  
17 building envelope that are not required to be fire  
18 resisting but they still require appropriate detailing  
19 to limit the spread of fire. This Technical Note  
20 reviews the aspects relating to fire performance that  
21 generally need to be considered in the design of façades  
22 that are not required to be fire resisting. Where the  
23 façade is required to be fire resisting additional  
24 requirements will apply."  
25 Was that your understanding in general terms as

3

1 a matter of principle?  
2 A. Yes.  
3 Q. What was your understanding of the distinction between  
4 fire resistance of curtain walling compared with  
5 fire resistance of rainscreen cladding?  
6 A. I think they're the same.  
7 Q. What would you understand by the phrase, "Where the  
8 façade is required to be fire resisting additional  
9 requirements will apply"?  
10 A. That would apply if it was protecting a walkway or means  
11 of escape, and it would be fire resistant glazing.  
12 Q. What about buildings over 18 metres?  
13 A. I think there's a ... sorry, there's two sort of sides  
14 to this. Fire resisting -- a fire resisting curtain  
15 wall protects the -- one side of the wall from the  
16 other. So if you have a fire on one side, you can walk  
17 down the other side, and that is a physical fire barrier  
18 between the fire. When we're -- so that's  
19 fire resisting.  
20 What we're talking about here is whether a curtain  
21 wall or a cladding will be destroyed in a fire, and  
22 they're two different things. A curtain wall is glass  
23 which will break in a fire, and they're made of  
24 aluminium, which will melt during the course of a fire.  
25 Q. Right.

4

1 Let's look further down the page, then. On the  
 2 left-hand side, under "Introduction", the third  
 3 paragraph on the left under that heading says:  
 4 "The main requirement ..."  
 5 Do you see that?  
 6 A. Yes.  
 7 Q. "The main requirement for curtain walls that are not  
 8 required to provide fire resistance is provision of fire  
 9 stopping between the external wall and compartment  
 10 floors and walls. In some situations there may also be  
 11 a requirement to provide fire protection to brackets  
 12 supporting the wall and limit the combustibility of  
 13 materials used in the wall."  
 14 Then it goes on:  
 15 "Rainscreen walls are additionally required to limit  
 16 the spread of fire in the rainscreen cavity."  
 17 Did you understand that guidance, even though you  
 18 hadn't read it --  
 19 A. Yes.  
 20 Q. -- to be applicable at the time?  
 21 A. Yes.  
 22 Q. Now, I want to move to questions about class 0, if  
 23 I can, and what you understood about class 0 and the  
 24 concept of limited combustibility. That's the next  
 25 topic.

5

1 A. Mm-hm.  
 2 Q. Now, the technical note here, if you look at the bottom  
 3 of page 1 and over on to page 2 {CWCT0000019/2}, says at  
 4 the very bottom on the right:  
 5 "In England, Wales and Northern Ireland, materials  
 6 may be described as non-combustible, of limited  
 7 combustibility or Class 0 using definitions given in  
 8 AD B. Materials may also be classified as Class 1, 2, 3  
 9 or 4 in accordance with BS 476 Parts 6 and 7.  
 10 Equivalent European classifications are also used."  
 11 Were you familiar with class 0 as a classification  
 12 for building materials at the time?  
 13 A. Yes.  
 14 Q. What did you consider class 0 to mean?  
 15 A. It was a product that's difficult to ignite, and if you  
 16 take the source of flame away from it, it won't continue  
 17 to burn.  
 18 Q. What was the significance of a material having a class 0  
 19 certification, did you think?  
 20 A. That it was safe to use on a building.  
 21 Q. Safe to use on any building?  
 22 A. Over 18 metres.  
 23 Q. Safe to use on any building over 18 metres in any part  
 24 of that building?  
 25 A. Yes.

6

1 Q. Was it a phrase or expression, class 0, used regularly  
 2 in the construction industry at the time?  
 3 A. Yes.  
 4 Q. Had you yourself undertaken any training or CPD in  
 5 relation to the testing of building products and their  
 6 different classifications, fire classifications?  
 7 A. No.  
 8 Q. Do you or did you consider yourself as under a duty to  
 9 educate yourself as to these different fire  
 10 classifications that existed at the time of your  
 11 involvement?  
 12 A. No.  
 13 Q. As a specialist cladding subcontractor, why were you not  
 14 under that duty, did you think?  
 15 A. As a specialist subcontractor, there is a lot of things  
 16 that we're involved with, fire being one of them, but we  
 17 are not fire experts.  
 18 Q. So is the gist of that answer, so I'm clear, that even  
 19 though Harley was a specialist cladding subcontractor,  
 20 it was not concerned with the fire classifications of  
 21 the products and materials it was using in the envelopes  
 22 it was applying to buildings?  
 23 A. No, that's not what I said. We supply the material that  
 24 actually has the correct classification to be used.  
 25 Q. Yes?

7

1 A. And, correct, we haven't -- I haven't investigated all  
 2 the tests that are required to give the material their  
 3 particular classification.  
 4 Q. You see, fire classification is to do with fire safety  
 5 and the saving and protection of life. My question is  
 6 really a simple one, which is why, as a specialist  
 7 cladding subcontractor, at the time of the  
 8 Grenfell Tower project, Harley wasn't concerned to  
 9 educate itself as to the nature of these fire  
 10 classifications.  
 11 (Pause)  
 12 A. Sorry, I'm not ... no, we hadn't educated ourselves on  
 13 the tests that are used to provide materials with their  
 14 classification.  
 15 Q. No, I know, and I'm just keen to know why that is.  
 16 A. Well, because the materials come classified to  
 17 a standard, we didn't necessarily understand exactly  
 18 what the test is.  
 19 Q. Why is that?  
 20 (Pause)  
 21 A. I don't know.  
 22 Q. Were you aware of a distinction between class 0 as  
 23 a concept and limited combustibility as a concept?  
 24 A. Yes.  
 25 Q. What was your understanding of that difference at the

8

1 time of the Grenfell Tower project?  
 2 A. Well, I think class 0 generally in parts 6 and 7 refers  
 3 to the -- is tested for the surface spread of flame and  
 4 propagation, and there is another test that then makes  
 5 the material of limited combustibility.  
 6 Q. So does that answer tell us that you understood that  
 7 they were separate concepts, subject to separate tests?  
 8 A. They're a slightly different concept, with additional  
 9 tests.  
 10 Q. All right.  
 11 What was your understanding of how class 0 and  
 12 limited combustibility related to one another?  
 13 A. There's an additional test, which I can tell you now is  
 14 BS 476, part 11.  
 15 Q. You say you can tell me now --  
 16 A. I knew there was another test.  
 17 Q. Could you have told me that in 2013?  
 18 A. I would have said there's another test, I wouldn't know  
 19 what it is.  
 20 Q. Sorry. You say, with great specificity, BS 476,  
 21 part 11. Was that something that you were aware of in  
 22 2013?  
 23 A. No, I knew there was another test within BS 476,  
 24 I didn't know which one it was. I've subsequently  
 25 looked at it and it's part 11.

9

1 Q. Yes, I see.  
 2 It's clear from this technical note that class 0 and  
 3 limited combustibility were different. Did you  
 4 understand that they were different at the time?  
 5 A. Yes.  
 6 Q. Did you understand at the time that they weren't  
 7 interchangeable concepts?  
 8 A. Actually, they are.  
 9 Q. They're interchangeable, are they?  
 10 A. Well, if you look at table 8 in appendix A, it actually  
 11 says class 0, and then the European equivalent -- which  
 12 is the UK class 0 -- is described as non-combustible,  
 13 limited combustibility or a composite that complies with  
 14 section 13b. So class 0 covers all of those three  
 15 conditions.  
 16 Q. Your explanation just now, which is technical and  
 17 detailed, is that something that you're telling us as  
 18 a result of researches and learning that you have  
 19 undertaken after the fire, or is this something you  
 20 could have told me if I was asking you these questions  
 21 in 2013?  
 22 A. No, this is what I know now.  
 23 Q. Right.  
 24 A. But it also goes to explain, I think, part of the  
 25 confusion that is across the industry with class 0 and

10

1 limited combustibility.  
 2 Q. Let me put it perhaps more simply: as at the time of  
 3 your involvement in the Grenfell Tower project, spanning  
 4 the years of your involvement, did you think that the  
 5 concept of class 0 was interchangeable with the concept  
 6 of limited combustibility?  
 7 A. I actually thought that class 0 throughout meant that it  
 8 had passed the additional test, so that that actually  
 9 meant it was of limited combustibility.  
 10 Q. Let's see how we get on, then.  
 11 Can I ask you to look at Approved Document B, which  
 12 is at {CLG00000224/122}, please.  
 13 I would like you to look at paragraph 13, which  
 14 says -- I'll read it to you, so as to familiarise  
 15 yourself with it:  
 16 "The highest National product performance  
 17 classification for lining materials is Class 0."  
 18 So that's lining materials is class 0:  
 19 "This is achieved if a material or the surface of a  
 20 composite product is either:  
 21 "a. composed throughout of materials of limited  
 22 combustibility; or  
 23 "b. a Class 1 material which has a fire propagation  
 24 index (i) of not more than 12 and sub-index (i1) of not  
 25 more than 6.

11

1 "Note: Class 0 is not a classification identified in  
 2 any British Standard test."  
 3 Was it your understanding that class 0 was  
 4 a classification that was primarily concerned with  
 5 lining materials?  
 6 A. No.  
 7 Q. So you thought that -- is this right? -- it had  
 8 relevance other than in respect of lining materials?  
 9 A. Yes.  
 10 Q. Did you consider that it had any relevance other than in  
 11 respect of the external surface of a product?  
 12 A. No. Sorry, let me just rephrase. If it's class 0 for  
 13 surface spread of flame, it's on the outside; if it's  
 14 throughout, I took that to mean it was of limited  
 15 combustibility.  
 16 Q. Well, we can read the words in paragraph 13, and I'm  
 17 just seeking to get your understanding at the time.  
 18 Maybe it's difficult now to put yourself back in that  
 19 position. I am seeking your contemporaneous  
 20 understanding, and I'm just trying to understand what  
 21 you thought at the time.  
 22 Let me try it differently: did you understand at the  
 23 time that if it was of limited combustibility it would  
 24 be class 0, and if it was class 0 then it would be of  
 25 limited combustibility?

12

1 A. No, there's a difference.  
 2 Q. And what was that difference, in your mind, at the time?  
 3 A. There was an additional test. So if it's -- because  
 4 class 0 covers both, to be limited combustibility,  
 5 there's an additional test, and I told you at the time  
 6 I didn't know exactly what that test was. I know what  
 7 it is now. And that is the difference. So if it's  
 8 class 0 throughout, it means it's limited  
 9 combustibility; if it's class 0, that means surface  
 10 spread of flame.  
 11 Q. I don't understand what you mean by the reference to  
 12 "class 0 throughout".  
 13 A. Sorry, that's a phrase that was used by Celotex.  
 14 Q. Right.  
 15 A. And --  
 16 Q. We will come to that documentation later on. Let me try  
 17 and put it to you: do you accept that on paragraph 13 --  
 18 which is, as we can see, to do with lining materials --  
 19 something, a product, is class 0 if it's composed  
 20 throughout of materials of limited combustibility,  
 21 but -- and ignore (b) for the moment -- not the other  
 22 way round. In other words, just because it is composed  
 23 of materials of limited combustibility, it's not  
 24 necessarily class 0?  
 25 Sorry, I've got that the wrong way round myself.

13

1 Just because it is class 0, then it's not necessarily of  
 2 limited combustibility throughout?  
 3 A. I think, as I said yesterday, at the time of Grenfell,  
 4 I had -- or prior to it, I had read through this, and  
 5 I wasn't ... didn't have the detailed knowledge of this,  
 6 looking at it now.  
 7 But, again, this ... reading this, this is achieved  
 8 if a material or the surface of the material of  
 9 a composite material is composed throughout of materials  
 10 of limited combustibility. Does that read that the  
 11 surface material is composed throughout of limited  
 12 combustibility?  
 13 Q. Well, you're asking a question of me, and is that  
 14 a question you asked yourself at the time?  
 15 A. No, I'm reading this now, and that's -- it doesn't seem  
 16 to me to be crystal clear.  
 17 Q. Well, let's see how we go.  
 18 Can I ask you to look at your statement, please, at  
 19 page 29 {HAR00010184/29}, paragraph 114. You say there,  
 20 halfway down:  
 21 "... Kooltherm K15 is described in its BBA  
 22 certificate ..."  
 23 Do you see that?  
 24 A. Yes.  
 25 Q. "... as being Class 0. Whilst the test in

14

1 Approved Document B paragraph 12.7 is one of 'limited  
 2 combustibility', it was assumed that, as the product was  
 3 described as Class 0 in respect of 'Behaviour in  
 4 relation to fire', it was compliant with paragraph 12.7,  
 5 and suitable for buildings over 18 metres."  
 6 Now, that's your statement.  
 7 A. Mm-hm.  
 8 Q. Are you saying there that you thought at the time that  
 9 a class 0 product met the definition of limited  
 10 combustibility?  
 11 A. Yes.  
 12 Q. How did you come to that conclusion?  
 13 (Pause)  
 14 A. I think -- I think this was also described as class 0  
 15 throughout.  
 16 Q. Where is that?  
 17 A. It doesn't say that there. It should have said,  
 18 described as Class 0 throughout. You need to check  
 19 the ...  
 20 Q. We may come to the certificate later on, but it looks  
 21 from this that, at the time, you were assuming that if  
 22 something was class 0, it was therefore of limited  
 23 combustibility.  
 24 A. I think if it's class 0 throughout, yes.  
 25 Q. I'm really just asking you how you came to that

15

1 conclusion.  
 2 A. Because it wasn't just the surface that was class 0.  
 3 Q. Where do you get the concept of "class 0 throughout"  
 4 from, as opposed to "limited combustibility throughout"?  
 5 A. I think this is a confusion.  
 6 Q. Whose confusion?  
 7 A. Well, I think mine, and I think it's quite widespread  
 8 throughout the industry.  
 9 Q. At the time -- and I think the answer is yes, given what  
 10 you told us a few moments ago this morning -- did you  
 11 know what tests have to be carried out to meet the  
 12 definition of limited combustibility as opposed to  
 13 class 0?  
 14 A. Yes, there were -- the two for class 0 are 6 and 7,  
 15 which are -- and the additional test is part 11.  
 16 Q. Yes. You have given us the numbers this morning.  
 17 A. Yes.  
 18 Q. Did you know the numbers at the time?  
 19 A. 6 and 7, yes.  
 20 Q. You knew 6 and 7, but not 11?  
 21 A. I didn't know which it was.  
 22 Q. But you knew there were different tests?  
 23 A. I knew there was an additional test, yes.  
 24 Q. An additional test, all right.  
 25 We looked at appendix A, paragraph 13 a moment ago

16

1 in Approved Document B, which referred to linings .  
 2 A. Yes.  
 3 Q. We can go back to it if you like , but was that the  
 4 source of your thinking at the time that class 0  
 5 equalled limited combustibility?  
 6 A. Well, given, as I explained, there is a difference ,  
 7 there's an additional test .  
 8 Q. Yes. Just focusing on paragraph -- perhaps we should  
 9 look back at it -- it is {CLG00000224/122} -- because  
 10 I just want to understand precisely the basis of your  
 11 thinking at the time. We have read it and we can see  
 12 what it says there, and I just want to focus on (a). So  
 13 class 0 is achieved:  
 14 "... if a material or the surface of a composite  
 15 product is either:  
 16 "a. composed throughout of materials of limited  
 17 combustibility ..."  
 18 If you read it properly, it says that class 0 will  
 19 be met for lining products if the product is of limited  
 20 combustibility throughout, but it doesn't say that  
 21 vice versa; it doesn't say that it will be of limited  
 22 combustibility if it's class 0 throughout, does it?  
 23 A. No, it doesn't say that.  
 24 Q. In fact, it's quite clear, I would suggest to you, what  
 25 it's saying.

17

1 (Pause)  
 2 A. Yes.  
 3 Q. If we look on, just on tests , at page 132  
 4 {CLG00000224/132} of the same document, this is  
 5 table A7. This is the "Use and definitions of materials  
 6 of limited combustibility ". You can see there, under  
 7 item 8, which is telling you about insulation material  
 8 in external wall construction referred to in  
 9 paragraph 12.7, that it can be, "Any of the materials in  
 10 (a), (b) or (c) above", and you can see what those are:  
 11 non-combustible; then something of a requisite density  
 12 which, tested to 476-11, doesn't exceed certain  
 13 temperatures; and (c) is to do with thickness.  
 14 And then (d):  
 15 "Any material of density less than 300kg/m3, which  
 16 when tested to BS 476-11:1982, does not flame for more  
 17 than 10 seconds ..."  
 18 There is nothing in there about being an additional  
 19 test , and I'm suggesting to you on this that 476-11 was  
 20 a completely separate, standalone test for limited  
 21 combustibility; it wasn't additional to 476-6 or 476-7.  
 22 Now, do you accept that?  
 23 A. Yes, I'd accept -- well --  
 24 Q. And therefore your understanding, as you told us, at the  
 25 time that 476-11 was additional to 476-6 and 476-7 was

18

1 wrong?  
 2 A. It appears that it was.  
 3 Q. Did Harley ever train or educate any of its employees as  
 4 to the distinction between a class 0 product and  
 5 a product of limited combustibility?  
 6 A. We sent our technical manager on the CWCT course, and he  
 7 had a Master's degree at the time. The chap was  
 8 Graham Hackley. His job when he came back was to  
 9 disseminate knowledge to the rest of the team.  
 10 Q. Did Mr Hackley, when he came back, ever sit Harley  
 11 employees down, such as yourself, and explain the  
 12 difference , as he understood it, between class 0 and  
 13 limited combustibility?  
 14 A. He didn't sit down and explain that to me, but with the  
 15 use of Kingspan, when that product was first brought to  
 16 market after -- or started to be used when part L was  
 17 changed, he signed off on using Kingspan as a product in  
 18 exactly the same way that we've subsequently used  
 19 Celotex.  
 20 Q. Signed it off as a product for use on what building?  
 21 A. Wayland House, but a number of buildings. So the  
 22 architect will specify Kingspan, Graham's looked at it ,  
 23 looked at it and said, "Yes, that's the product you can  
 24 use, it's safe to use it ".  
 25 Q. Was any of the buildings on which Graham Hackley

19

1 signed off, as you put it , the use of Kingspan Kooltherm  
 2 K15 -- I think that's the product you're referring to --  
 3 A. It is , yes.  
 4 Q. -- a high-rise building in excess of 18 metres?  
 5 A. Yes.  
 6 Q. Was Wayland House one of those?  
 7 A. Wayland House was one of those.  
 8 Q. When was this sign-off?  
 9 A. 2012.  
 10 Q. 2012. We may revisit that .  
 11 Can I move on. Can I ask you to go to page 20  
 12 {HAR00010184/20} of your statement, paragraph 79. You  
 13 say at paragraph 79 there:  
 14 "In terms of the materials used in the building  
 15 envelope, these were all materials manufactured by  
 16 trusted, well known, multi-billion pound global  
 17 companies. The Reynobond ACM had been used by Harley  
 18 and many other cladding companies for many years. We  
 19 had no reason to doubt its Class 0 rating. The Celotex,  
 20 whilst a relatively new product, was manufactured by  
 21 a well-known, reputable manufacturer. It had been in  
 22 use for some years and had become widely used after the  
 23 introduction of Part L and the drive to improve  
 24 U values. It was clearly sold as being suitable for  
 25 buildings over 18 metres and described as Class 0 in its

20

1 literature . We relied on the information given to us by  
2 these manufacturers.”

3 Would it be fair to say that your assumption, which  
4 we have been discussing this morning and appears to be  
5 wrong, about class 0 was applied to the Celotex  
6 insulation product as well?

7 A. It was.

8 Q. Yes.

9 Now, returning to the technical note, if I may,  
10 which is {CWCT0000019/4}, I would like pages 4 and 5  
11 {CWCT0000019/5} to be put up together, please. Right at  
12 the very bottom of page 4 you can see “Regulations”, and  
13 then over to the top of page 5.

14 “For rainscreen walls, AD B requires that cavity  
15 barriers are provided.”

16 Do you see that?

17 A. Mm-hm.

18 Q. Then it says at the top of page 5:

19 •” To close the edges of cavities including around  
20 window openings.

21 •” At the junction of the wall with a compartment  
22 wall or floor.”

23 Just pausing there, did you know that the guidance  
24 drew specific attention to cavity barriers around window  
25 openings?

21

1 A. Yes.

2 Q. Did your staff?

3 A. Yes.

4 Q. Let’s look at page 6 {CWCT0000019/6}, please, then,  
5 moving on with it, under the heading of “Use of  
6 combustible material”. I would just like to look with  
7 you, please, at the second paragraph there. It says:

8 “To satisfy the recommendations in AD B, insulation  
9 and filler materials in walls of a building with a floor  
10 more than 18m above ground level are required to be of  
11 limited combustibility.”

12 Pausing there, at the time of the Grenfell Tower  
13 project, were you aware of the requirement for  
14 insulation to be of limited combustibility?

15 A. Yes.

16 Q. Now, the guide goes on to say, above the heading  
17 “Alternative approaches”, just at the bottom:

18 “The only commonly used insulation material that  
19 will satisfy the definition of limited combustibility is  
20 mineral wool. It is sometimes argued that thermoset  
21 insulation materials with non combustible facings may be  
22 regarded as satisfying the requirement, noting that  
23 their decomposition in fire will release smoke.”

24 It’s right, I think, that Grenfell Tower did not use  
25 a mineral wool insulation material, did it?

22

1 A. It didn’t.

2 Q. And there is nothing here to say that if the material or  
3 product is class 0, then that will satisfy the  
4 requirement, is there?

5 A. No, that goes on to ... we come back to the term  
6 “class 0 throughout”, which has been used by -- which  
7 has led to the belief that the material was of limited  
8 combustibility.

9 Q. That’s based on your error that class 0 throughout --

10 A. Yes.

11 Q. That there was such a thing as “class 0 throughout”,  
12 which equalled limited combustibility --

13 A. Yes.

14 Q. -- as opposed to “limited combustibility throughout”,  
15 which equalled class 0.

16 A. Could you repeat that?

17 Q. Yes. What you have just told us, which is the term  
18 “class 0 throughout”, is an erroneous term, because  
19 in fact what you are doing is equating “limited  
20 combustibility throughout” with “class 0”, which would  
21 be correct, with “class 0 throughout” with “limited  
22 combustibility”, which would be incorrect, as we’ve just  
23 established earlier.

24 A. Okay.

25 Q. Do you accept that, that the source of your assumption

23

1 is as I have put to you?

2 A. Yes.

3 Q. Looking at the CWCT Technical Note 73, and particularly  
4 this part about insulation, were you aware of the  
5 argument at the time that thermoset insulations might or  
6 may be regarded as satisfying the definition of limited  
7 combustibility?

8 A. Yes, that’s why the Kingspan was signed off.

9 Q. Is it right that, in fact, the only commonly used  
10 insulation that would satisfy -- let me start the  
11 question again.

12 Did you understand at the time that the only  
13 commonly used insulation material that would satisfy the  
14 definition of limited combustibility is mineral wool?

15 A. At the time, Kingspan had become accepted in the  
16 industry as a product that was suitable for use over  
17 18 metres. Prior to 2009, every project we did had  
18 Rockwool on it.

19 Q. I think also Chalcots had Rockwool, didn’t it?

20 A. Yes, that was a 2000 -- we did that in 2006 to 2010.

21 Q. Yes, that’s right. But Ferrier Point?

22 A. That had Rockwool.

23 Q. Rockwool as well, and that was later, wasn’t it?

24 A. That was 2012.

25 Q. Yes. I think Ferrier Point was the most recent

24

1 high-rise overcladding job that you had done -- is this  
2 right? -- prior to the Grenfell Tower job?

3 A. Erm ... probably.

4 Q. Yes.

5 Can I ask you, then, to look at the top of the  
6 right-hand column on this self-same page 6 in this note,  
7 which says:

8 "Where testing is carried out in accordance with  
9 BS 8414, the test applies to the complete cladding  
10 system including insulation, rainscreen, flashings and  
11 cavity barriers. Changing any of these components may  
12 affect the ability of the wall to resist the spread of  
13 fire."

14 At the time, did you appreciate as a matter of  
15 principle, at least, that the compliance of a cladding  
16 system with Approved Document B -- summarised, we would  
17 say, by this guidance note -- required a contractor to  
18 consider all of the components of a particular cladding  
19 system against a test rig which had successfully passed  
20 the BS 8414 test?

21 A. Yes.

22 Q. You did understand that?

23 A. Mm-hm.

24 Q. Would you accept that it would follow that at the time  
25 that you understood that if the insulation used on any

25

1 tower block, but let's take Grenfell, Celotex RS5000 and  
2 Kooltherm K15, were not in fact materials of limited  
3 combustibility -- and we will come back to them  
4 specifically later -- their use on Grenfell Tower as  
5 a building over 18 metres could only have complied with  
6 Approved Document B, summarised here, where it had  
7 either passed a full-scale BS 8414 test as part of the  
8 same cladding system used, or there was a desktop study  
9 or a holistic engineering report to support its use?

10 A. Well, as I explained, we were comfortable with the  
11 Celotex for two reasons. First, the understanding of  
12 "class 0 throughout" meant that it was of limited  
13 combustibility, which we've discussed. Secondly, in  
14 addition to that, it had passed an 8414 test, and we  
15 sent the details of the cladding system that we were  
16 using to Celotex for them to approve.

17 It says changing any of the components may affect  
18 the ability for the wall to resist the spread of fire,  
19 but we're asking Celotex, "This is what we're using, are  
20 you happy with this?" And they were.

21 Q. Just in terms of the principles -- I'm going to come  
22 back to the facts later, but just in terms of the  
23 general applicable principles, and I'm trying to get  
24 your understanding of those -- I think you're telling  
25 us, but please correct me if I'm wrong about that, that

26

1 you understood at the time that there were a number of  
2 routes to compliance for the purposes of limited  
3 combustibility: either that the material was of limited  
4 combustibility or it had passed a full-scale BS 8414  
5 test --

6 A. Yes.

7 Q. -- or there was a desktop study, or a holistic  
8 engineering report.

9 A. Yes.

10 Q. I've given you four options there. I'm trying to  
11 summarise this because there is a lot of material we  
12 could look at, but is that how you understood it at the  
13 time?

14 A. Yes.

15 Q. Which route to compliance for limited combustibility did  
16 you think was being followed on the Grenfell Tower  
17 project?

18 A. I thought we were covered in two ways, that -- and our  
19 thoughts were the material was of limited  
20 combustibility, and if that's incorrect, we accept that.  
21 In addition, there was a BS 8414 test, so it was  
22 a material that had had a whole series of tests, it was  
23 a fantastic product. On the certificate, we saw that it  
24 said it had been tested with different facing material.  
25 We sent our details to Celotex to get them to sign off

27

1 that it was safe. So I suppose we're saying we believed  
2 that Celotex had carried out a study on it.

3 Q. You say, "We sent our details to Celotex to get them to  
4 sign off that it was safe"?

5 A. Yes.

6 Q. Does that tell us that you were --

7 A. Sorry, that may be a poor -- that was a poor choice of  
8 words. To confirm that it was the -- they were happy  
9 for us to use it in that situation.

10 Q. So whichever choice of words you take, does it come to  
11 this: that you were delegating the sign-off or  
12 confirmation, if you like, of the safety of this product  
13 to the very person who had made it and was selling it to  
14 you?

15 A. Yeah. We wanted Celotex's confirmation that they were  
16 happy for us to use it.

17 Q. Was it not up to Harley to satisfy itself that it was  
18 safe to use by making the appropriate investigations?

19 A. Well, we made the investigations with the manufacturer.

20 Q. Was there any reason why you couldn't ask either  
21 Studio E or Exova, who had been involved in this project  
22 and remained involved in this project, to undertake the  
23 investigations of the fire safety nature of this  
24 product?

25 A. Well, the product was specified by Studio E. Exova were

28



1 their fire consultant. So by the time the design was  
 2 passed down to us, the prescriptive design was passed  
 3 down to us, Celotex was named. We were doing a -- our  
 4 own back-up check to stuff that had already been  
 5 signed off by them. So we did our own checks, as ...  
 6 and took all proper and necessary means, in our view, to  
 7 confirm that what they had specified for us was correct.  
 8 Q. Well, you say that the product was specified by  
 9 Studio E. That may be correct in relation to FR5000,  
 10 but what about when it changed to RS5000?  
 11 A. When it changed to RS5000 we passed that information  
 12 back to Studio E.  
 13 Q. Did you?  
 14 A. Yeah, we told them, "This is the product, Celotex", and  
 15 I think we've confirmed since they actually are the same  
 16 product, just marketed differently.  
 17 Q. Did you ask Studio E to investigate the fire safety  
 18 nature of this new product or newly branded product,  
 19 RS5000?  
 20 A. I'm not sure that we asked them to do that.  
 21 Q. What about Kingspan Kooltherm K15, that wasn't specified  
 22 at all by Studio E, was it?  
 23 A. No.  
 24 Q. In the absence of your own architect knowing, how did  
 25 you undertake any checks to see whether or not that was

1 fire safe?  
 2 A. Because it had been signed off as fire safe previously  
 3 by our technical manager on previous projects.  
 4 Q. Some years before?  
 5 A. Yes.  
 6 Q. Did you undertake any checks to see whether or not the  
 7 product had changed in any way in those years?  
 8 A. No, although it is interesting that the -- there is  
 9 a subsequent BBA certificate for Kingspan that came out  
 10 after we had started Grenfell that actually changed its  
 11 performance criteria. Now, that's -- and this --  
 12 I can't understand how you can have a product with the  
 13 same name, change its composition or not change its  
 14 composition, have it re-tested, and carry on selling it  
 15 when its performance has been completely downgraded.  
 16 Q. That's something you know now but not something you knew  
 17 at the time; is that right?  
 18 A. It's not something that we knew at the time, it's not  
 19 something that was advertised, and if they had called it  
 20 something different, Kingspan K10, instead of -- and K15  
 21 is no longer available, it would have alerted everyone  
 22 there had been a change.  
 23 Q. And had checks and investigations been carried out,  
 24 Harley would have found that out.  
 25 A. At the time that we actually got the K15, it's --

1 I don't think the BBA certificate had changed.  
 2 Q. What about the product?  
 3 A. No, they're still selling Kingspan K15, there was no  
 4 change in name of the product, and why would you be  
 5 alerted if they're selling the same stuff?  
 6 Q. We will come to K15 later on, but just for the present  
 7 purposes, did you think that K15 was a material of  
 8 limited combustibility?  
 9 A. Okay, from what it would be (inaudible) before, yes.  
 10 Q. Or, or perhaps and, did you think that it had passed  
 11 an 8414 test?  
 12 A. Kingspan has passed an 8414 test, yes.  
 13 Q. You say it has --  
 14 A. It has.  
 15 Q. -- as a fact. You know that, do you?  
 16 A. Yes, I know that for sure now.  
 17 Q. How do you know that?  
 18 A. I've seen -- in the past year or so, I've seen a number  
 19 of tests with Kingspan K15.  
 20 Q. Right.  
 21 Let's then turn to a different topic, which is  
 22 Reynobond and the BBA certificate. We talked to some  
 23 extent yesterday about this, Mr Bailey.  
 24 Can I start with some evidence or some proposed  
 25 evidence from Mr Wehrle of Arconic. I would like you to

1 see his statement, please. It's {MET00053190/20}, and  
 2 at paragraph 68 he says:  
 3 "On 7 November 2013, the CSTB [the French testing  
 4 organisation] informed Philippe that the first SBI tests  
 5 had been completed on the samples sent and that the  
 6 rivet sample had indicated behaviour equivalent to a  
 7 C classification (on the one sample) and that the test  
 8 on the cassette sample had been stopped due to  
 9 a flash-over so the best achievable classification for  
 10 that variant would be an E (using an ignitability  
 11 test)."  
 12 Just pausing there, it appears from this excerpt  
 13 from his statement that a cassette system was  
 14 significantly more combustible compared with a riveted  
 15 system. I'm suggesting to you that that's effectually  
 16 what that says.  
 17 My question is: were you aware of that at the time  
 18 of your involvement with the Grenfell Tower project?  
 19 A. Absolutely not.  
 20 Q. Did anybody from Alcoa or Arconic tell you about the  
 21 testing that had been conducted by the CSTB and the  
 22 ratings which had been achieved on flat panels and  
 23 cassettes respectively?  
 24 A. Absolutely not.  
 25 Q. What about Geof Blades of CEP, did he tell you that

1 cassette had achieved an E?  
 2 A. Absolutely not.  
 3 Q. Or that there had been a flashover during the test?  
 4 A. No.  
 5 Q. Did you consider, in general terms -- and we'll look at  
 6 the certificate in a moment -- whether there was  
 7 a distinction between the two methods of fixing of  
 8 Reynobond PE ACM so far as regards fire safety or  
 9 classification ?  
 10 A. No.  
 11 Q. Did you ever make any investigations yourself, or  
 12 anybody else at Harley, into how the fixing method might  
 13 affect fire performance?  
 14 A. No, on the BBA certificate it shows both as being  
 15 conformed to class 0.  
 16 Q. It does. Well, we will come to that in a moment.  
 17 Let's just go on with Mr Wehrle's statement. Can  
 18 I ask you to go to page 21 {MET00053190/21}, please,  
 19 paragraph 70. He says in the first two sentences at the  
 20 top of the page:  
 21 "The next EN 13501 testing that I organised on  
 22 Reynobond 55 PE was later in 2014. It had become clear  
 23 from discussions within AAP SAS and the wider market  
 24 that, there was a desire to again have separate  
 25 classification reports for the PE rivet and cassette

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1 variants to more accurately reflect the classifications  
 2 that each had in practice obtained."  
 3 Now, this is 2014. Were you aware at that time or  
 4 by that time of any desire in the wider market, as he  
 5 calls it, to have different classification reports for  
 6 the PE rivet and the cassette variant respectively?  
 7 A. No.  
 8 Q. Were you aware that Alcoa, as they were then called,  
 9 were sending their cassettes off for re-testing?  
 10 A. No.  
 11 Q. Assuming that Mr Wehrle is right in his evidence, are  
 12 you able to explain how, as a specialist subcontractor  
 13 operating on major multimillion pounds cladding projects  
 14 in London and the south east of England, you weren't  
 15 aware of any noises in the market about the desire to  
 16 have separate classification reports for PE rivet and  
 17 cassette respectively?  
 18 A. As far as I'm aware, there were none.  
 19 Q. Right.  
 20 So when he says there were discussions in the wider  
 21 market, and assuming you were part of that wider market,  
 22 you're telling us that, so far as you know, there were  
 23 no such discussions?  
 24 A. No.  
 25 Q. Right.

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1 Can I then ask you to go to your statement, and  
 2 I want to turn to the question of class 0 and Reynobond  
 3 ACM very specifically. If you look at page 6  
 4 {HAR00010184/6} of your statement, you will see  
 5 paragraph 24, and three lines up from the bottom of that  
 6 paragraph you say:  
 7 "As I will detail further below, it came with  
 8 a Class 0 rating, as indicated in the BBA certificate  
 9 and Reynobond literature. According to Diagram 40 of  
 10 Approved Document B, Class 0 is suitable for use on  
 11 buildings over 18m."  
 12 Now, was what you have written there something you  
 13 knew at the time?  
 14 A. Yes.  
 15 Q. Okay. So did you actually look at the BBA certificate  
 16 for the Reynobond ACM when it was sent by Reynobond to  
 17 Harley on 23 April 2014?  
 18 A. I saw it, but it was a document I had seen previously.  
 19 Q. Yes, and you told us yesterday, I think, that you had  
 20 seen it when it was first published in 2008.  
 21 A. Yes.  
 22 Q. Did you have cause to look at it between 2008 and  
 23 April 2014?  
 24 A. Not to re-read it. I knew what was on there.  
 25 Q. Just to refresh your memory, I'll show you the document.

35

1 It is {CEP00000281}, because this is where I get the  
 2 date of 23 April 2014 from. This is an email from  
 3 Deborah French at Alcoa/Arconic, 23 April 2014, to  
 4 Mark Harris, copied to Mike Albiston at Harley and  
 5 Geof Blades at CEP. She attaches, among other  
 6 documents, the BBA certificate 084510, and she says in  
 7 the first line:  
 8 "Hi Mark  
 9 "As per your couple of emails I have attached copies  
 10 of our Reynobond BBA - Specimen Warranty ..."  
 11 I think you're telling us that, even though that  
 12 came in to Harley on this date, you yourself didn't  
 13 re-read it --  
 14 A. No.  
 15 Q. -- or refresh your memory about it?  
 16 Did you ever, after this date, have any cause to  
 17 look at the BBA certificate --  
 18 A. No.  
 19 Q. -- on the Grenfell Tower project?  
 20 A. No.  
 21 Q. Did Mr Harris or anybody else at Harley ever discuss the  
 22 contents of the BBA certificate with you on this  
 23 project?  
 24 A. No.  
 25 Q. Did you ever discuss the contents of the BBA certificate

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1 with Mr Sounes or anyone else at Studio E on this  
 2 project?  
 3 A. No, Mark's sent them the Reynobond BBA certificate.  
 4 Q. Did you consider that it was Harley's responsibility to  
 5 examine the certificates that you were given by  
 6 manufacturers to make sure that you were satisfied that  
 7 Harley were satisfied that it was complying with its  
 8 duties under the Building Regulations?  
 9 A. Yes, but we also have a duty to pass them on to the main  
 10 contractor, to pass on to the architect and  
 11 Building Control.  
 12 Q. When you first read the BBA certificate, did you  
 13 yourself cross-check it with Approved Document B?  
 14 A. No.  
 15 Q. To your knowledge, did anybody cross-check it with  
 16 Approved Document B?  
 17 A. Sorry, can you ... it is -- it has -- it is class 0.  
 18 How do you mean cross-check it with ...?  
 19 Q. Well, did anybody put the two documents side by side,  
 20 look at the certificate, look at Approved Document B,  
 21 and read across from one to the other to make sure that  
 22 the BBA certificate was saying something that made sense  
 23 in the context of ADB?  
 24 A. I'm not sure people -- anybody put them side by side,  
 25 but if the product has to be class 0, and the BBA

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1 certificate said it's class 0, then we've checked it  
 2 with ADB, surely.  
 3 Q. So, in truth, is it right that in fact the only piece of  
 4 information that you yourself considered in terms of  
 5 fire performance for Reynobond ACM PE was your belief  
 6 that the panels achieved class 0?  
 7 A. Yes.  
 8 Q. And what did that tell you, in relation to use on  
 9 buildings over 18 metres?  
 10 A. They're suitable for cladding on buildings over  
 11 18 metres.  
 12 Q. Now, let's look at the certificate. You have exhibited  
 13 this to your witness statement as RB13, exhibit 13.  
 14 Let's look at it. It's {BBA0000047}, please. It's  
 15 dated 14 January 2008, and here we can see the Agrément  
 16 Certificate number, 08/4510, so we know that it's the  
 17 same document that Debbie French was attaching to her  
 18 23 April email. Let's just look at it.  
 19 It says under section 1, do you see, that it relates  
 20 to:  
 21 "... Reynobond Architecture Wall Cladding Panels,  
 22 aluminium/polyethylene composite panels used to provide  
 23 a decorative/protective facade over the external walls  
 24 of buildings."  
 25 Then it says, under "Key factors assessed", in the

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1 third item down, "Behaviour in relation to fire":  
 2 "In relation to the Building Regulations for  
 3 reaction to fire, the panels may be regarded as having a  
 4 Class 0 surface in England and Wales, and a 'low risk'  
 5 material in Scotland (see section 6)."  
 6 Now, I want to ask you about the expression "class 0  
 7 surface". What did you understand a class 0 surface to  
 8 mean?  
 9 A. That it's class 0, and that relates to the surface, but  
 10 it's not of limited combustibility.  
 11 Q. Did you understand that that description applied to both  
 12 the PE and the FR versions of ACM panels?  
 13 A. Yes.  
 14 Q. Was it your understanding from this that the ACM panels  
 15 would be classed as the external surface for the  
 16 purposes of Approved Document B?  
 17 A. Yes.  
 18 Q. And therefore, being class 0, it was suitable for  
 19 buildings over 18 metres in any circumstances; is that  
 20 right?  
 21 A. Yes.  
 22 Q. Right.  
 23 SIR MARTIN MOORE-BICK: Well, I wonder if you can help me  
 24 a bit further on that, Mr Bailey. This certificate is  
 25 actually only speaking about the panels, isn't it?

39

1 A. It is.  
 2 SIR MARTIN MOORE-BICK: Yes, and the language it uses is,  
 3 speaking of the panel, it has a class 0 surface. Does  
 4 it say anything about the rest of the panel?  
 5 (Pause)  
 6 A. No, it doesn't.  
 7 SIR MARTIN MOORE-BICK: No, it doesn't tell you anything  
 8 about the core of the panel, does it?  
 9 A. No.  
 10 SIR MARTIN MOORE-BICK: All right, thank you.  
 11 MR MILLETT: I'm going to take a slight detour for a moment  
 12 or two from the certificate, and ask you just to look at  
 13 appendix A of ADB. Can you please go to  
 14 {CLG00000224/119}. We will come back to the certificate  
 15 in just a moment, Mr Bailey, so bear with me, but I just  
 16 want to ask you this.  
 17 This is appendix A, "Performance of materials,  
 18 products and structures", and there is a lengthy  
 19 introduction in the first column that you will see  
 20 there, and if you look at the second column, the column  
 21 on the right, there is "Note 2", do you see that?  
 22 A. Mm-hm.  
 23 Q. It says:  
 24 "Any test evidence used to substantiate the fire  
 25 resistance rating of a construction should be carefully

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1 checked to ensure that it demonstrates compliance that  
2 is adequate and applicable to the intended use. Small  
3 differences in detail (such as fixing method, joints,  
4 dimensions and the introduction of insulation materials  
5 etc.) may significantly affect the rating."

6 Were you aware at the time of your involvement in  
7 the Grenfell Tower project of that note?

8 A. No.

9 Q. Were you aware in principle of the idea, the concept,  
10 that that note indicates?

11 (Pause)

12 A. Can you repeat that?

13 Q. Well, even though you weren't aware of the note itself,  
14 my question was a more general one: were you aware of  
15 the principle that any test evidence used to  
16 substantiate the fire resistance rating of  
17 a construction should be carefully checked?

18 A. No.

19 Q. It would follow, I think, therefore, that -- tell me if  
20 this is right -- you and nobody else at Harley requested  
21 the test data relating to the Reynobond panels in order  
22 to interrogate the fire resistance rating?

23 A. Correct.

24 Q. And the same applies in relation to Celotex and K15,  
25 I suppose; is that right?

41

1 A. Yes.

2 Q. Can I go back to the BBA certificate, {BBA00000047/3},  
3 please, and I would like to look at paragraph 1.1. This  
4 is under the "Technical Specification", and it says:

5 "The Reynobond Architecture Wall Cladding Panels  
6 comprise two 0.5 mm thick aluminium alloy sheets ...  
7 bonded to either side of a core of low-density  
8 polyethylene (LDPE). The panels are available either  
9 plain edged (riveted system) or flanged (cassette  
10 system) to suit architectural requirements (see  
11 Figure 1)."

12 Pausing there, you can see figure 1 at the bottom of  
13 that page, figure 1, and there is a pair of diagrams.

14 Then it goes on:

15 "A Duragloss or PVDF coating available in various  
16 colours protects the exposed face. A polyester primer  
17 protects the unexposed face. The products are also  
18 available in a fire-retardant grade (FR)."

19 Then there is something about thicknesses.

20 Did you have any understanding about the differences  
21 between the PE and the FR core described there?

22 A. No.

23 Q. Did you ever ask anybody on the Grenfell Tower project  
24 whether FR should be specified instead of PE, or should  
25 be used instead of PE?

42

1 A. No.

2 Q. Turning to PE, polyethylene, did you have any  
3 understanding at the time of what polyethylene actually  
4 was?

5 A. It was a plastic-type core.

6 Q. Did you have any understanding of its fire performance?

7 A. I think polyethylene actually has quite a high ignition  
8 point.

9 Q. Well, at the time, did you have any understanding of its  
10 fire performance?

11 A. No. No, not particularly.

12 Q. Was it common for Harley to use products on external  
13 wall constructions without understanding how those  
14 products would perform in a fire?

15 A. No, we actually have products which have been tested and  
16 supplied for that specific use. Exactly their chemical  
17 composition and how they're made is perhaps a little bit  
18 beyond us.

19 Q. Did the reference to fire retardant panel in the BBA  
20 certificate not alert you to the fact that the standard  
21 product was not fire retardant?

22 A. The performance of the panels, if you go further in the  
23 certificate, is -- the only difference is one produces  
24 slightly more smoke than the other.

25 Q. Was that your understanding at the time?

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1 A. Yes.

2 Q. Which produced slightly more smoke than the other?

3 A. The PE produces slightly more smoke than the FR.

4 Q. So was it your understanding at the time that, so far as  
5 fire performance is concerned, there was no difference  
6 between FR and PE?

7 A. Yes.

8 Q. Where did you get that understanding from?

9 A. Because of the difference in -- or the only difference  
10 in their fire performance -- there's two -- there is  
11 class 0 and there's a -- the European Standard is  
12 B-s1, d0 for the FR and B-s2, d0 for the PE.

13 Q. I see. So your understanding about smoke production was  
14 based entirely on the differences in those two  
15 standards?

16 A. Yes.

17 Q. Which we will come to in a moment.

18 Did you ever seek any information from  
19 Deborah French about the fire retardant version of the  
20 product? Or did anyone at Harley?

21 A. No, I think the -- when we saw the certificate back in  
22 2008, there was a query, what's the difference between  
23 the two, which is why I knew that the difference was the  
24 smoke. Whether that came from Deborah French or through  
25 some other route, I can't remember.

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1 Q. Can we look at page 5 {BBA00000047/5} of this document,  
 2 section 6, under the heading "Behaviour in relation to  
 3 fire". It says at 6.1:  
 4 "A standard sample of the product, with a grey/green  
 5 Duragloss 5000 coating, when tested for reaction to  
 6 fire, achieved a classification of B-s2, d0 in  
 7 accordance with EN 13501 ..."  
 8 What did you understand that to mean?  
 9 A. That is class 0 or equivalent to class 0.  
 10 Q. Did you consider whether the finish that was on the  
 11 product may have made a difference to its  
 12 classification?  
 13 A. It's strange. It was a question that I asked at the  
 14 time --  
 15 Q. Who did you ask?  
 16 A. -- believe it or not. I can't recall who I asked,  
 17 whether it was Reynobond direct or through CEP, and if  
 18 it was through CEP it would probably have been  
 19 Roy Fewster, and the reason for the question was the  
 20 delamination we were having with the Etalbond, and it  
 21 was suggested that the paint on that may have had  
 22 something to do with the delamination. So when I saw  
 23 grey/green, I thought: does this only apply to this  
 24 certificate? And I was told that, no, it's on the  
 25 certificate because that's the colour that was tested

1 and it has to go on there. And does it apply to  
 2 everything else? Well, yes, otherwise there would be  
 3 200 of these certificates, one for each colour that they  
 4 sell.  
 5 Q. So that was the answer: you were told it would make no  
 6 difference?  
 7 A. Yes.  
 8 Q. Who was it who told you that?  
 9 A. I believe that came back through Roy Fewster, although  
 10 it's a long time, I can't remember who it was, but  
 11 I think that's the route that it came back through.  
 12 Q. Well, if you look at 6.4, it actually says:  
 13 "These performances may not be achieved by other  
 14 colours of the product and the designations of  
 15 a particular colour should be confirmed by:  
 16 "England and Wales - Test or assessment in  
 17 accordance with Approved Document B, Appendix A,  
 18 Clause 1."  
 19 So I'm not quite sure how Mr Fewster or anybody else  
 20 could have given you the assurance you have just told us  
 21 about in the light of paragraph 6.4; can you explain?  
 22 A. No.  
 23 Q. So does it come to this: you relied on what you were  
 24 told about the colours rather than what the certificate  
 25 actually said in black and white at paragraph 6.4?

1 A. Yes.  
 2 Q. Just to be clear, when was that? When was this  
 3 assurance that you were given, you say?  
 4 A. 2008.  
 5 Q. At the time when you first read the certificate?  
 6 A. Yes.  
 7 Q. I see.  
 8 Can I ask you to look at section 6.2, please. It  
 9 says:  
 10 "A fire retardant sample of the product, with  
 11 a metallic grey PVDF finish, when tested in accordance  
 12 with BS 476-6 ... achieved a fire propagation index (I)  
 13 of 0 and, when tested in accordance with BS 476-7 ...  
 14 achieved a Class 1 surface spread of flame."  
 15 Now, on its face, the BBA certificate would appear  
 16 to state that the only fire retardant sample had been  
 17 tested in accordance with class 0, in other words it  
 18 actually passed those tests.  
 19 A. Er ... yes.  
 20 Q. Did you notice at the time that, although the fire  
 21 retardant sample had been tested, the PE, the standard,  
 22 had not been tested in accordance with those tests?  
 23 A. No, it had been tested to the European Standard, which  
 24 is equivalent.  
 25 Q. Did you notice that at the time of your consideration of

1 this certificate?  
 2 A. Yeah, I noticed that they were different, but they were  
 3 both class 0, as it says on the front of the  
 4 certificate.  
 5 Q. Let me ask you this: did you ever investigate with  
 6 Arconic or Alcoa how the panels complied with diagram 40  
 7 of Approved Document B that you have referred to  
 8 earlier?  
 9 A. Well, they complied with diagram B(sic) because it's  
 10 B-s2, d0.  
 11 Q. Did you ever ask her whether a standard sample of the  
 12 product had actually been tested in accordance with  
 13 BS 476-6 and BS 476-7?  
 14 A. No, I didn't.  
 15 Q. Why is that?  
 16 A. Because it actually had a B-s2, d0 rating, which is  
 17 equivalent to class 0.  
 18 Q. Right.  
 19 Did you not consider that it might be safer to use  
 20 the FR product rather than the standard PE version,  
 21 given that only the FR product had passed a UK class 0  
 22 test?  
 23 A. No, it didn't occur to me, and if it was significant  
 24 I would have expected Reynobond to suggest that that's  
 25 what we did.

1 Q. So you would have relied on Reynobond, in other words  
 2 Alcoa or Arconic, to make that suggestion rather than  
 3 investigating it for yourself?  
 4 A. If it -- if they felt it was a significant thing, they  
 5 would have -- I would have expected them to have told  
 6 us, and ... but the PE product is class 0 and complies  
 7 with diagram 40.  
 8 Q. Looking at paragraph 6.3, it says:  
 9 "As a consequence of sections 6.1 and 6.2, the  
 10 products may be regarded as having a Class 0 surface in  
 11 relation to the Approved Document B of The Building  
 12 Regulations ..."  
 13 I don't think I need the rest.  
 14 It goes on to say at the end of that paragraph:  
 15 "The unexposed side of the products may also be  
 16 regarded as having a class 0 surface."  
 17 What did you understand that statement to mean, the  
 18 unexposed side?  
 19 A. Both sides.  
 20 Q. In other words, the back as opposed to the front?  
 21 A. The back as well as the front.  
 22 Q. What about the edge?  
 23 (Pause)  
 24 A. Well, as a -- that's an interesting -- as a composite,  
 25 the whole product, if it has a -- both surfaces are

1 class 0 -- sorry, both surfaces are of limited  
 2 combustibility, it will be class 0, so the whole product  
 3 is regarded as class 0.  
 4 Sorry, yeah, I'm ...  
 5 (Pause)  
 6 That's an interesting question. I can't answer  
 7 that.  
 8 Q. Is it one that you asked at the time?  
 9 A. No, the product -- as far as we were concerned, the  
 10 product is class 0 by dint of it having a European  
 11 classification, and the certificate says class 0 on it,  
 12 and we didn't actually, I think, consider whether the  
 13 edge would have a different classification to the rest  
 14 of the product.  
 15 Q. Let's look at clause 6.3, it says:  
 16 "As a consequence of sections 6.1 and 6.2, the  
 17 products may be regarded as having a Class 0 surface in  
 18 relation to the Approved Document B..."  
 19 I've just read you that, I just remind you of it.  
 20 What did you understand by the phrase "the products"  
 21 in that line, "the products [plural] may be regarded as  
 22 having a Class 0 surface"?  
 23 A. Reynobond with a PE or Reynobond with an FR core.  
 24 Q. Given the diagram on page 3 {BBA0000047/3} of the  
 25 certificate -- let's just go back to that, if we can,

1 figure 1. We looked at it briefly before. I just want  
 2 to show it to you. This is the diagram on page 3,  
 3 figure 1, which shows the two systems.  
 4 Did you study that diagram at the time?  
 5 A. Not in great detail. I mean, they're both standard type  
 6 ACM fixing methods.  
 7 Q. Did you draw any distinction in your mind between the  
 8 rivet or face-fixed system and the cassette system when  
 9 it came to the application of the class 0 classification  
 10 to the products?  
 11 A. No.  
 12 Q. Why is that, given that the product or products are  
 13 capable of being used in two different fixing systems?  
 14 A. Well, the certificate covers both of those systems.  
 15 Q. That's how you read it, is it?  
 16 A. Yes.  
 17 Q. Going back to paragraph 6.4 on page 5 {BBA0000047/5},  
 18 please, we looked at this a moment ago, it says:  
 19 "These performances may not be achieved by other  
 20 colours of the product and the designations of  
 21 a particular colour should be confirmed by ..."  
 22 I showed you this, a test in accordance with  
 23 Approved Document B.  
 24 We know that the finish of the product that was  
 25 tested in the standard sample, the grey/green

1 Duragloss 5000, wasn't the one that was chosen for  
 2 Grenfell, was it?  
 3 A. No.  
 4 Q. No. That was smoke silver, in the end.  
 5 A. Correct.  
 6 Q. Were any investigations made as to what differences in  
 7 fire performance the different finish made?  
 8 A. No, other than the -- sorry, let me just go back. On  
 9 all the Reynobond sales literature, there is no -- it  
 10 says clearly that the PE panels and the FR panels  
 11 achieve class 0. There is no distinction on any of  
 12 their literature that it only applies to one colour of  
 13 panel. The explanation I was given back in 2008 made  
 14 sense to me, that if you're selling 104 colours in three  
 15 different shades of finishing, you would therefore have  
 16 to have 300 certificates. Therefore, the certificate  
 17 covered whatever colour was selected.  
 18 Q. So what did you make, then, of paragraph 6.4?  
 19 A. 6.4 was it may not be achieved, not that it won't, that  
 20 it may not.  
 21 Q. And doesn't that tell you that when you're selecting  
 22 a colour or finish different from the grey/green  
 23 Duragloss, you would have to check out whether or not it  
 24 would be achieved?  
 25 A. I ... it didn't -- it didn't mean that to me, and again,

1 if we are ordering panels from Reynobond and the colour  
 2 affects the fire performance, we would expect them --  
 3 well, first of all, I wouldn't expect them to sell the  
 4 panels, and if there was a problem, they would tell us.  
 5 So I can't see how Reynobond ... the only colour they  
 6 can sell into the market is grey/green.  
 7 Q. When it says, "the designations of a particular colour  
 8 should be confirmed by ... [a] test ... in accordance  
 9 with Approved Document B", when you read the  
 10 certificate, who was it who would ask for that test to  
 11 be carried out on the colour that was to be chosen if it  
 12 wasn't grey/green?  
 13 A. It's never a point I considered. If you're asking me  
 14 now, I would presume that we would wait for the  
 15 architect to pick the colour he wants and then Reynobond  
 16 would have to do a test on it.  
 17 Q. Did you ever go back to Arconic or Alcoa and seek any  
 18 assurances as to the fire performance of the smoke  
 19 silver that was eventually selected?  
 20 A. No, because of the conversation back in 2008, that it  
 21 actually made no difference.  
 22 Q. Notwithstanding the presence of 6.4?  
 23 A. No, accepted.  
 24 MR MILLETT: Right.  
 25 Mr Chairman, I'm still on the certificate. I've got

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1 a little bit of a way to go.  
 2 SIR MARTIN MOORE-BICK: Might it make sense to break now, or  
 3 is it going to destroy your line of questioning?  
 4 MR MILLETT: Well, it makes sense in one sense, and makes no  
 5 sense in another. It's an appropriate time, given that  
 6 we have been going for an hour and 25 minutes, but I'm  
 7 in the middle of the certificate and it's a critical  
 8 document on any view.  
 9 SIR MARTIN MOORE-BICK: Yes, I'm not trying to hurry you  
 10 through the certificate at all.  
 11 MR MILLETT: Well, if we take a few minutes now.  
 12 SIR MARTIN MOORE-BICK: We will take a break now.  
 13 Mr Bailey, we will have a short break now.  
 14 THE WITNESS: Okay.  
 15 SIR MARTIN MOORE-BICK: We will come back at 11.40, please.  
 16 THE WITNESS: Okay.  
 17 SIR MARTIN MOORE-BICK: Again, I have to ask you not to talk  
 18 to anyone about your evidence or anything to do with it  
 19 while you're out of the room.  
 20 THE WITNESS: Okay.  
 21 SIR MARTIN MOORE-BICK: Good, thank you very much. Would  
 22 you like to go with the usher.  
 23 (Pause)  
 24 Right, 11.40, please. Thank you.  
 25 (11.24 am)

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1 (A short break)  
 2 (11.40 am)  
 3 SIR MARTIN MOORE-BICK: All right, Mr Bailey, ready to carry  
 4 on?  
 5 THE WITNESS: Yes.  
 6 MR MILLETT: Thank you, Mr Chairman.  
 7 Mr Bailey, just a question arising out of  
 8 an exchange we had earlier on about the differences  
 9 between FR and PE.  
 10 The question is: did you ever ask Alcoa, Reynobond,  
 11 what the difference was between FR and PE?  
 12 A. Only, I think, in 2008. It would probably have been  
 13 through Roy, but not directly, no.  
 14 Q. Right. Were you not interested to know what the  
 15 difference was?  
 16 A. Yes.  
 17 Q. What were you told?  
 18 A. That the difference between them was the amount of smoke  
 19 that they generated in a fire.  
 20 Q. Did you ever ask them which was better?  
 21 A. The FR produced slightly less smoke.  
 22 Q. Right. Why would you have a PE if an FR produced less  
 23 smoke?  
 24 A. That is a fair question, and looking at it now, I don't  
 25 know why the PE product needed to exist.

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1 Q. No, and is that a question that occurred to you at the  
 2 time?  
 3 A. It didn't, no.  
 4 SIR MARTIN MOORE-BICK: Just help me a little further on  
 5 that, Mr Bailey. Why would you prefer to use a non-fire  
 6 retardant version in preference to a fire retardant  
 7 version?  
 8 A. I don't think it was a question that we preferred to use  
 9 it; that was the Reynobond product.  
 10 SIR MARTIN MOORE-BICK: Reynobond, as I understand it, were  
 11 offering two products. One was billed as being fire  
 12 retardant, and so, on the face of it, it would give you  
 13 something that the ordinary PE version didn't give you,  
 14 and something that would be, on the face of it, to be  
 15 preferred.  
 16 A. I wouldn't disagree with you on that. But it was a --  
 17 when we were doing the high-rise block at Camden, and we  
 18 were -- Reynobond were involved with that, and they said  
 19 Reynobond PE is fine, and at that point we didn't  
 20 interrogate whether FR would have been a better product  
 21 like, you know, how much more money it is. Looking back  
 22 now, it would seem that there was no point in producing  
 23 PE for Reynobond.  
 24 SIR MARTIN MOORE-BICK: Well, that might depend on different  
 25 applications, perhaps.

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1 A. From what I had looked at, I can't see anything that PE  
 2 can do that FR can't. And, as it turned -- you know, as  
 3 we found out now, the price differential between them is  
 4 minimal.  
 5 SIR MARTIN MOORE-BICK: Thank you very much.  
 6 MR MILLET: Just in that last answer you told the Chairman  
 7 that Reynobond were involved with Camden -- that's  
 8 Chalcots, I think --  
 9 A. Yes.  
 10 Q. -- and they said Reynobond PE is fine. Are you telling  
 11 us that Reynobond confirmed to you that their own  
 12 product at Chalcots was acceptable?  
 13 A. Yes, and they issued a warranty for all of those  
 14 buildings.  
 15 Q. Right. And you relied on Reynobond's say-so, did you?  
 16 A. On their say-so and their warranty.  
 17 Q. Can we go back to the BBA certificate {BBA00000047/5},  
 18 which should still be on the screen somewhere,  
 19 paragraph 6.5. That says:  
 20 "For resistance to fire, the performance of a wall  
 21 incorporating the product, can only be determined by  
 22 tests from a suitably accredited laboratory, and is not  
 23 covered by this Certificate."  
 24 What did you understand that statement to mean?  
 25 (Pause)

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1 A. The ability of the products to resist the fire from  
 2 going one side of a wall to another.  
 3 Q. Did the wording in there alert you to the fact that the  
 4 fire performance of a wall incorporating the cladding in  
 5 a different system could not be ascertained by reference  
 6 to this certificate alone?  
 7 A. No.  
 8 Q. Why is that?  
 9 A. I read that as resistance to fire, stopping the passage  
 10 of fire from one side of a wall to another.  
 11 Q. Can I ask you to look at paragraph 6.6, then, please.  
 12 This is cavity barriers, and it says:  
 13 "Cavity barriers should be incorporated behind the  
 14 cladding, as required by the national Building  
 15 Regulations, but should not block essential ventilation  
 16 pathways. Particular attention should be paid to  
 17 preventing the spread of fire from within a building  
 18 breaching the cladding system through window and door  
 19 openings."  
 20 When you read this, what did you consider that  
 21 statement to mean?  
 22 A. That they'd need to put cavity barriers in the cladding  
 23 system.  
 24 Q. And specifically round window openings?  
 25 A. Depending on the layout of the windows, yes.

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1 Q. Depending on the layout of the windows? What do you  
 2 mean by that?  
 3 A. I think we're going back to the interpretation or the  
 4 industry practice, if there is a single window contained  
 5 within an opening, the compartmentalisation around the  
 6 opening -- around the compartment means that the cavity  
 7 barriers directly round the window may not be necessary.  
 8 But I think we've accepted previously that that's  
 9 an error.  
 10 Q. Yes.  
 11 Do you agree that the BBA certificate for Reynobond,  
 12 as we see here, itself recommends the inclusion of  
 13 cavity barriers around the windows in order to prevent  
 14 internal fire spreading --  
 15 A. We've accepted that.  
 16 Q. Yes.  
 17 Can I ask you to look at section 10, then, please,  
 18 on page 6 {BBA00000047/6}. Let's just look at paragraph  
 19 or section 10.2. This is under "General":  
 20 "Installers must be trained and approved by the  
 21 Certificate holder who can provide technical assistance  
 22 at the design stage and at the start of the  
 23 installation."  
 24 Would you accept that Harley, in the case of the  
 25 Grenfell Tower project, was the certificate holder for

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1 this purpose?  
 2 A. Yes.  
 3 Q. What steps did you take, or did you take any steps, to  
 4 ensure that Osborne Berry, as the installers, were  
 5 appropriately trained?  
 6 A. They, Osborne Berry, have installed ACMs on a number of  
 7 projects for us, so we've done training with them over  
 8 the years.  
 9 Q. On these panels, the installation of these panels?  
 10 A. Installation of these panels.  
 11 Q. Right. I see.  
 12 I may have misled you by suggesting that the  
 13 certificate holder was Harley. If, as a matter of  
 14 correct reading, the certificate holder was the person  
 15 to whom the certificate was issued, that would mean that  
 16 the installers would have to be trained and approved by  
 17 Arconic. To your knowledge, were Osborne Berry ever  
 18 trained and approved by Arconic?  
 19 A. No.  
 20 Q. In your experience generally in the industry, were  
 21 cladding installers ever trained and approved by the  
 22 person who had received a BBA certificate in respect of  
 23 its product?  
 24 A. No.  
 25 Q. I'm going to turn to a different topic.

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1 Can I ask you to look at {RYD00023468}, please.  
 2 Now, this is an email which people in this Inquiry have  
 3 called the "'Lacknall' moment" email. It's from  
 4 Claire Williams of the TMO to Simon Lawrence on  
 5 12 November 2014, copied to Phil Booth at Artelia, and  
 6 she says:  
 7 "Simon  
 8 "I am just writing to get clarification on the fire  
 9 retardance of the new cladding - I just had a 'Lacknall'  
 10 moment."  
 11 She then goes on to set out some excerpts, which we  
 12 believe are from the NBS specification, and there's a  
 13 reference to the CWCT standard and a section from the  
 14 GRC cladding.  
 15 Now, you weren't copied in on this email, so we  
 16 don't expect you to have seen it at the time, but do you  
 17 recognise it?  
 18 A. Maybe it had been in a bundle of documents that I have  
 19 looked through.  
 20 Q. I see.  
 21 Now, Simon Lawrence, when he gave evidence, said  
 22 that he would have forwarded Ms Williams' query to  
 23 Harley. To your knowledge, Mr Bailey, did he ever do  
 24 so?  
 25 A. I can't recall.

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1 Q. Right.  
 2 Now, Mr Lawrence went on to say in his evidence --  
 3 perhaps I should just show it to you. It's  
 4 {Day24/163:16}, please, first of all, we can see there  
 5 is a passage there where he says:  
 6 "... there was a conversation at the time, because  
 7 we were looking -- there was a design conversation going  
 8 on in the background about whether GRC products could be  
 9 substituted for Reynobond or AN Other, and there was  
 10 a long conversation about whether stainless steel was  
 11 acceptable, whether Reynobond was acceptable, whether  
 12 they had to stick with GRC products."  
 13 Do you recall any such discussion about whether or  
 14 not the GRC products proposed for the lower four floors  
 15 of the building were suitable in terms of their fire  
 16 performance?  
 17 A. No, I don't. GRC is glass reinforced concrete, and GRC  
 18 columns were provided at the lower floors.  
 19 Q. Right.  
 20 Do you recall any discussions with Rydon about  
 21 whether GRC products could be substituted for Reynobond?  
 22 A. No. If anything, it would have been the other way  
 23 round.  
 24 Q. Can you just explain why that is?  
 25 A. Well, the GRC columns at ground-floor level are big and

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1 heavy to get in, whereas the Reynobond panels are light.  
 2 So if there was going to be a change, it would have made  
 3 sense to put ACM at the bottom rather than GRC, for that  
 4 reason. But typically we would put a heavier duty  
 5 product at the base for impact resistance, so if people  
 6 run into it they don't damage it. So I'm not sure what  
 7 that conversation was about.  
 8 Q. But I think your evidence is you don't recall any such  
 9 conversations yourself?  
 10 A. No.  
 11 Q. Can you -- and I don't want you to speculate, but are  
 12 you able to help me with who at Harley would be the  
 13 person to have had such conversations with Mr Lawrence,  
 14 if they had taken place?  
 15 A. So what was the date of this email?  
 16 Q. 12 November 2014.  
 17 A. So the ... maybe -- I'm only speculating -- maybe Mark.  
 18 I'm speculating. Mark possibly.  
 19 Q. Mark Harris?  
 20 A. Harris, yeah.  
 21 Q. I see, all right.  
 22 I would like then to turn to ask you some questions  
 23 about the insulation. Let's start with Celotex.  
 24 Can we first look, please, at your statement at  
 25 page 28 {HAR00010184/28}, paragraph 113. Here you say:

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1 "The Celotex RS5000 PIR insulation was a relatively  
 2 new product at the time of the project, and this was the  
 3 first time that Harley had used it. As with the  
 4 Reynobond ACM, it had been specified by the architects  
 5 in the NBS specification document. Prior to this,  
 6 Max Fordham had also specified the use of Celotex ..."  
 7 And then you go on to say over the page at  
 8 {HAR00010184/29}, about six lines down:  
 9 "The LABC certificate in relation to the Celotex  
 10 RS5000 confirmed that it had been assessed by the  
 11 BRE ..."  
 12 I'm so sorry, I should have read on at the top of  
 13 the page, first of all:  
 14 "The Celotex marketing material stated clearly that  
 15 it was suitable for buildings above 18 metres in height.  
 16 One of its selling points was that it was the first PIR  
 17 insulation board to successfully test to BS 8414-2:2005,  
 18 and meet the criteria set out in BR 135, and was  
 19 therefore acceptable for use in buildings above  
 20 18 metres in height."  
 21 Then you, I think, exhibit the LABC certificate in  
 22 relation to that product, and I've just read that bit.  
 23 Now, you say in numerous points in your statement,  
 24 as well as this, that the architects specified RS5000.  
 25 In fact, the NBS specification actually specified

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1 FR5000, didn't it?  
 2 A. It did.  
 3 Q. As far as you were aware, was RS5000 a new product or  
 4 did you think that it was an old material or product,  
 5 FR5000 simply re-branded and launched as a new product?  
 6 A. No, we thought it was a new product.  
 7 Q. You thought it was a new product?  
 8 A. Yes.  
 9 Q. Why did you think that?  
 10 A. Because of the marketing, that it was RS5000.  
 11 Q. Right.  
 12 Now, let's look at your statement at page 8  
 13 {HAR00010184/8}, then, if we can, and go to  
 14 paragraph 31. You say there that, in the last sentence:  
 15 "Celotex informed us that the relevant product was  
 16 in fact the 'RS' (Rainscreen) product rather than the  
 17 'FR' (Flat Roof) product which had been specified."  
 18 Do you know when Celotex told you or Harley that the  
 19 relevant product was in fact the RS rainscreen rather  
 20 than the FR which had been specified?  
 21 A. I'm guessing, but I would imagine it would have been  
 22 towards the end of 2014.  
 23 Q. At that stage, did you raise any queries as to whether  
 24 the change was significant?  
 25 A. Sorry, in what respect?

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1 Q. Well, did you ask Celotex whether this was actually  
 2 a change of product or just a change of name?  
 3 A. I didn't actually deal with this personally, so I'm  
 4 speculating a little bit. They told us this was the  
 5 product for rainscreen, as opposed to the FR for flat  
 6 roof.  
 7 Q. Given your answer earlier that you thought it was a new  
 8 product, did you raise any queries as to whether the --  
 9 well, did you ask them whether there were any  
 10 differences?  
 11 A. I didn't speak to them.  
 12 Q. No, but did anybody at Harley ask them whether there  
 13 were any differences?  
 14 A. Daniel was dealing with them, so he may well have asked  
 15 them. I don't know.  
 16 Q. Do you know whether he asked them whether the change  
 17 from FR to RS was significant in any way?  
 18 A. I don't know.  
 19 Q. Right.  
 20 As a new product, at least as you thought it was, do  
 21 you agree that Harley should have satisfied itself that  
 22 it had been appropriately selected for use at  
 23 Grenfell Tower?  
 24 A. Yes, but we also put it back up the chain to the  
 25 architect and the specifiers.

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1 Q. I think the answer is you say, "Yes, and we put it back  
 2 up the chain [you say] to the architect and the  
 3 specifiers". Who were the specifiers?  
 4 A. Sorry, wrong word. The architect who would then pass it  
 5 through to the rest of the professional team.  
 6 Q. Who was that?  
 7 A. That would -- I am suggesting that would be Exova and  
 8 Max Fordham.  
 9 Q. To your knowledge, are you recalling that there was  
 10 a discussion between Studio E and Exova about RS5000?  
 11 A. Not specifically. Exova were the fire specialist, so if  
 12 we were changing a product, or we're suggesting a change  
 13 of product, that would be who the architect would talk  
 14 to.  
 15 Q. Well, is that an assumption you're making now, or are  
 16 you recalling actual conversations that you knew about  
 17 at the time?  
 18 A. It's an assumption I'm making now. That would be the  
 19 normal course of events.  
 20 Q. Right.  
 21 Now, do you accept, just to press the point a bit  
 22 more, that Harley should have satisfied itself that,  
 23 given that it thought it was a new product, it was safe  
 24 to use at Grenfell Tower?  
 25 A. Yes, and as far as Harley are concerned, we carried out

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1 the -- all possible reasonable investigations on it,  
 2 primarily talking to the manufacturers who produced the  
 3 product. We've sent them a series of drawings showing  
 4 its application and the products it's being used with,  
 5 for them to confirm that they're happy with it.  
 6 Q. Well, let's just examine that in a little bit more  
 7 detail, if we can. Can you go back to paragraph 113 of  
 8 your statement, please, on page 29 {HAR00010184/29}.  
 9 I just want to follow that through. About seven lines  
 10 up from the bottom of that paragraph, you say there:  
 11 "In addition, a representative of Celotex,  
 12 Jonathon(sic) Roome, also attended Harley's offices to  
 13 talk with Harley staff about the benefits of the RS5000  
 14 product specifically for the Grenfell Project."  
 15 Do you recall why such a meeting took place?  
 16 A. I think that Jonathan was called in specifically to talk  
 17 about the use of Celotex at Grenfell, and it may have  
 18 been at that meeting that Daniel gave him drawings to  
 19 take away, but I must admit I can't ...  
 20 Q. Do you know who called Jonathan Roome in?  
 21 A. I don't. I suspect it was Daniel, but I might be wrong.  
 22 Q. Why did he call him in, do you know?  
 23 A. Because this was a new product, we wanted to assure  
 24 ourselves that it was safe, and I did see an email from  
 25 Daniel to Celotex saying, "You need to convince us that

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1 this stuff is as good as Rockwool or we won't be using  
 2 it".  
 3 Q. Do you know why it was Jonathan Roome who attended  
 4 Harley's offices, as you say, rather than Studio E or  
 5 Rydon in order to discuss the proposed use of RS5000?  
 6 A. Because we were trying to satisfy ourselves that the  
 7 product, as far as we were -- that the use of Celotex  
 8 was suitable for the project.  
 9 Q. Can we look at {CEL00009973}, please. Now, this is  
 10 a Celotex Salesforce entry, and if we look at page 2  
 11 {CEL00009973/2}, we can see that next to a meeting on  
 12 24 November 2014, your name is mentioned.  
 13 A. Where is that?  
 14 Q. Well, it's about two-thirds of the way down the page.  
 15 It may need to be expanded a little bit more. Looking  
 16 at what's on the screen at the moment, we can see, about  
 17 two-thirds of the way down the screen --  
 18 A. Yes.  
 19 Q. -- if you look at the meeting identity, rainscreen  
 20 contractor, Ray Bailey, and then reading across to the  
 21 very far right-hand column, 24 November 2014. Do you  
 22 see that?  
 23 A. I do.  
 24 Q. Yes.  
 25 Were you present at a meeting, as identified here,

1 with Jonathan Roome on 24 November 2014?  
 2 A. I don't think ... I don't think I was. I may have met  
 3 Jonathan when he was in the office, but I don't recall  
 4 sitting down to a meeting with him.  
 5 Q. Now, I know this is not your document, and we will  
 6 investigate it with others, but I just want to try and  
 7 get your recollection.  
 8 Looking at this document, it may be that the meeting  
 9 was about Premier House, because we can see that the  
 10 entry above it, Mike Albiston, is next to something to  
 11 do with Premier House, and that's also --  
 12 A. All those are the same date, are they?  
 13 Q. They were the same date, as is entered. This seems to  
 14 have been a meeting with Mark Harris, "Premier Inn  
 15 (T4) - Heathrow"; Mark Albiston, Premier House; and  
 16 Ray Bailey, no entry, all on 24 November.  
 17 A. It may be just -- we know Jonathan, he's worked for  
 18 a number of companies, and it may be, you know,  
 19 I stopped and said hello to him. So I don't know quite  
 20 what that meeting was about.  
 21 Q. Do you remember having a meeting with Jonathan Roome  
 22 about this time yourself?  
 23 A. No, I don't remember having a meeting with Jonathan.  
 24 I have had -- I met a chap -- I don't recall actually  
 25 having a meeting with him, but I'm not saying I wasn't

1 there on that day.  
 2 Q. Do you remember having a meeting with anybody else with  
 3 Celotex on or about 24 November 2014?  
 4 A. No. The only person that we had contact with from  
 5 Celotex as far as I'm aware is Jonathan.  
 6 Q. I see.  
 7 Can I then ask you to look at {CEL00000018}. This  
 8 is an email from Jonathan Roome at Celotex to  
 9 Daniel Anketell-Jones at Harley dated the same day,  
 10 24 November 2014, as you can see:  
 11 "Hi Dan  
 12 "I spoke with Mark and the team regarding a few  
 13 projects."  
 14 You can see the Premier projects are set out there,  
 15 as well as another one, Chartwell House, Southend. The  
 16 first one is Grenfell Tower, as you can see, and he says  
 17 under the heading "Grenfell Tower":  
 18 "When we last looked at this we came to a conclusion  
 19 of using 3,000m2 of 150mm RS5000. Is this still so?  
 20 "Mark's drawings were showing a mix of 100mm &  
 21 160mm."  
 22 Does this prompt a recollection about a discussion  
 23 between Harley and Celotex at that time?  
 24 A. No, it doesn't, but they clearly -- Mark, I suspect  
 25 that's Mark Stapley, because it's talking about

1 drawings, but they were, yeah, chatting about various  
 2 projects that may or may not happen.  
 3 Q. Did Mr Roome, to your recollection, give any assurances  
 4 to you or to anybody else at Harley about the  
 5 suitability of Celotex RS5000 on high-rise buildings?  
 6 A. Yes.  
 7 Q. What were those assurances?  
 8 A. That -- well, that it was a perfectly safe product for  
 9 the job.  
 10 Q. Did he say that to you in a conversation?  
 11 A. No, not to me.  
 12 Q. Did he say that to anybody else in a conversation --  
 13 A. Er --  
 14 Q. -- to your knowledge?  
 15 A. The conversations with regard to the suitability of this  
 16 I think would be had with Daniel, and I knew they'd  
 17 certainly had assured him, otherwise he wouldn't have  
 18 put it on the job.  
 19 Q. Right. What I'm seeking really to establish is whether  
 20 or not, apart from what was on the certificate, Harley  
 21 had any conversations with Celotex in which Celotex gave  
 22 assurances as to the suitability of this material --  
 23 A. Yes.  
 24 Q. -- on high-rise buildings.  
 25 A. Yes, but I wasn't present.

1 Q. I see.  
 2 Did, to your knowledge -- and if you weren't  
 3 present, you weren't present -- anybody at Harley  
 4 discuss the fire performance of RS5000 with Mr Roome,  
 5 either on this occasion or any other?  
 6 A. I think that that was the intention of Daniel's first  
 7 email when he was talking about, he needs to be  
 8 convinced otherwise we would be staying -- or going with  
 9 Rockwool.  
 10 Q. So you think that Daniel Anketell-Jones wanted to be  
 11 convinced that it was safe; is that what you're saying?  
 12 A. Yes.  
 13 Q. From a fire safety perspective?  
 14 A. Yes.  
 15 Q. Otherwise you wouldn't use it?  
 16 A. Yes.  
 17 Q. And would go with Rockwool?  
 18 A. (Witness nods).  
 19 Q. You say you think that; what leads you to think that?  
 20 A. I've seen an email.  
 21 Q. Okay. Can you help us any further with that or is this  
 22 something we should be asking Mr Anketell-Jones?  
 23 A. I would ask Daniel, that's -- yeah.  
 24 Q. All right.  
 25 Now, Mr Roome goes on, as we can see in this email,

1 to give the measurements in respect of the product for  
 2 the tower and asks "Is this still so?"  
 3 Is it fair to say that the decision to use RS5000  
 4 had been made by this point, 24 November 2014?  
 5 A. Yes, I would ... sorry. I would imagine so, but I'm not  
 6 100% certain of the timeline on this.  
 7 Q. Who would have made the decision to use RS5000?  
 8 A. The decision to use the Celotex was part of the  
 9 specification that we came -- that was handed down to  
 10 us. So unless there was a good reason to change it, the  
 11 decision was made by the architect back in ... I'm  
 12 losing track of the years.  
 13 Q. Let me help you. The original decision, of course, was  
 14 made in 2012, but that was FR5000.  
 15 A. Yes.  
 16 Q. Let me be a bit more precise with my question.  
 17 Who made the decision to use RS5000 as opposed to  
 18 FR5000?  
 19 A. The architect.  
 20 Q. You know that, do you?  
 21 A. Well, yeah, this is -- we pointed out that there's  
 22 a difference, and this is one we use, so it had to be  
 23 signed off for us to use it.  
 24 Q. I see.  
 25 Did anybody at Harley make the decision that RS5000

1 should be used?  
 2 A. Celotex said, "This is the product you need to use",  
 3 we've passed it up the line to the architect, they've  
 4 signed it off so we've used it.  
 5 Q. Who was it who passed it up to the architect to  
 6 sign off?  
 7 A. It would have been Daniel or maybe Ben.  
 8 Q. Are you aware of any discussions between Daniel or Ben  
 9 on the one hand and the architect on the other about  
 10 whether or not RS5000 should be used?  
 11 A. No, I can't recall.  
 12 Q. When you say the architect, obviously Studio E.  
 13 A. Yes.  
 14 Q. Who at Studio E would have, as you say, signed off on  
 15 the use of RS5000?  
 16 A. Since I wasn't part of the conversation, I can't tell,  
 17 but I suspect it would have been Neil Crawford.  
 18 Q. I just want to show you something in Neil Crawford's  
 19 evidence on that point. Can you please go to  
 20 {Day10/46:13}:  
 21 "Do I recall the period when it was specified?"  
 22 This is in the context of earlier questions about  
 23 RS5000, in place of FR5000. He says at line 15:  
 24 "Answer: Yes, it was forwarded to me by, I think,  
 25 Ray, Harley, 17/18 September, thereabouts, I think,

1 2014.  
 2 "Question: What makes you recall that so  
 3 specifically?  
 4 "Answer: Because we were having a conversation --  
 5 I think they had raised their RFI1 in relation to the  
 6 cavity barrier strategy."  
 7 Now, do you recall a conversation with Mr Crawford  
 8 on 17 or 18 September 2014 or thereabouts about changing  
 9 from FR5000 to RS5000?  
 10 A. No.  
 11 Q. At the time of the change, did anybody at Harley, to  
 12 your knowledge, consider how RS5000 met the requirements  
 13 of Approved Document B?  
 14 A. I think we've discussed this earlier.  
 15 Q. Well, remind me, in summary.  
 16 A. In summary, we sent the details and the information to  
 17 Celotex to make sure that they were satisfied that it  
 18 complied with their -- effectively their 8414  
 19 certificate, and, because we had changed the panel on  
 20 the front, that it was safe to use it. So effectively  
 21 they would have been doing a desktop study on it.  
 22 Q. Right. Did you ask them or make any assessment of  
 23 whether or not RS5000 was a material of limited  
 24 combustibility?  
 25 A. I didn't, no.

1 Q. Did anybody at Harley?  
 2 A. I don't know.  
 3 Q. Did anybody at Harley check what system RS5000 had been  
 4 tested in, as part of its 8414 test and certification ?  
 5 A. I think that was the reason for sending them our  
 6 details , to get them to -- to get Celotex to compare  
 7 them and confirm that, with their study, it complied.  
 8 Q. Did you think there was a -- you mentioned the word  
 9 "desktop" a moment ago -- desktop study in relation to  
 10 RS5000?  
 11 A. I thought there was a -- perhaps "desktop study" is not  
 12 the right -- there was an assessment carried out by  
 13 Celotex on our system compared to their 8414 test.  
 14 Q. Did you ask for the BBA certificate in relation to  
 15 RS5000?  
 16 A. I'm sure we've -- I didn't, but I'm sure we had one from  
 17 them.  
 18 Q. All right .  
 19 Did you consider how Reynobond PE would interact  
 20 with RS5000 in terms of fire safety?  
 21 A. That's the reason we sent the details to Celotex to  
 22 assess that.  
 23 Q. I see. Does that tell us that you were alive to the  
 24 risks of using RS5000 with Reynobond PE ACM?  
 25 A. No, it ... we need to ensure that the product we put

1 with it, whether it be -- because it's something  
 2 different to what they used in the test, we need them to  
 3 assess that it is still relevant.  
 4 Q. You say there was an assessment carried out by Celotex.  
 5 What was that assessment?  
 6 A. I don't know.  
 7 Q. Did you ever ask for it?  
 8 A. I didn't. Again, Dan was dealing with this .  
 9 Q. Did Dan ever ask for it?  
 10 A. I don't know.  
 11 Q. We will have to ask him, I suppose. Right.  
 12 Let's look at the brochures in respect of RS5000.  
 13 You, I think, exhibit at RB52 the Celotex rainscreen  
 14 cladding specification guide. That's {CEL00000013},  
 15 let's just start with that.  
 16 Is this document familiar to you? It should be,  
 17 because you have exhibited it .  
 18 A. It is, yeah.  
 19 Q. Did you read that document at the time?  
 20 A. No, the one I read at the time was the sales brochure.  
 21 Q. Right. If you didn't read it at the time, why did you  
 22 exhibit it?  
 23 A. I think there may be -- yes, there may have been the  
 24 wrong one that was put in there.  
 25 Q. Let's look at it and see how we go.

1 Can you look at page 5 {CEL00000013/5}, please,  
 2 "Fire performance", left -hand side, and there is a big  
 3 set of words between two purple lines:  
 4 "Celotex RS5000 has been successfully tested to BS  
 5 8414-2:2005 (Fire performance of external cladding  
 6 systems)."  
 7 Then it says, under "Rainscreen Insulation":  
 8 "Celotex RS5000 is Class O fire rated as described  
 9 by the national Building Regulations having achieved  
 10 both:  
 11 "A pass to BS 476 Part 6 ...  
 12 " Classification as Class 1 in accordance BS 476  
 13 Part 7 ..."  
 14 Do you see that?  
 15 A. Yes.  
 16 Q. Does this ring a bell with you?  
 17 A. Yes, the document I was actually -- should have been  
 18 included, it's the wrong one, it was the sales brochure.  
 19 But yes, carry on with this, I have read this since .  
 20 Q. So you have read this?  
 21 A. Yes.  
 22 Q. At the time, did this confirm to you that the RS5000  
 23 product was class 0?  
 24 A. Yes. Well, as I said, I've read this subsequent to ...  
 25 Q. Subsequent to ...?

1 A. Sorry, this is the -- wasn't the document that should  
 2 have been included, it was a different one, but carry on  
 3 with this .  
 4 Q. All right . Well, I don't want to ask you questions on  
 5 a false basis. Assuming you had read it at the time --  
 6 A. Yes.  
 7 Q. -- do we take it from your answers earlier on that you  
 8 understood from the reference to class 0 that that meant  
 9 that it was a material of limited combustibility?  
 10 A. It's more clear in here that this relates to part 6 and  
 11 part 7.  
 12 Q. You say more clear ...  
 13 A. Well, on the sales brochure, it referred to it being  
 14 "class 0 throughout", and this is -- relates to class 0,  
 15 parts 6 and 7.  
 16 Q. Now, I just read you the part on the left -hand side  
 17 where it says RS5000 has been successfully tested to  
 18 BS 8414.  
 19 A. Yeah.  
 20 Q. It then says the same thing underneath "Building above  
 21 18 metres".  
 22 A. Yes.  
 23 Q. And it then goes on to say, at the end of that first  
 24 paragraph:  
 25 "... meets the criteria set out in BR 135 and is

1 therefore acceptable for use in buildings above  
 2 18 metres in height.”  
 3 Assuming -- I'm not sure about this -- that you read  
 4 this at the time, what did you or would you have taken  
 5 from that?  
 6 A. That it was suitable for buildings above 18 metres in  
 7 height.  
 8 Q. Including Grenfell?  
 9 A. Including Grenfell.  
 10 Q. Did you notice that the sheet also set out the system  
 11 within which the insulation had passed the 8414 test?  
 12 It's set out just below that.  
 13 A. Yes. Yes.  
 14 Q. Let's look at it together:  
 15 "The system tested to BS 8414-2:2005 was as follows:  
 16 •" 12mm fibre cement panels  
 17 •" Supporting aluminium brackets and vertical rails  
 18 •" 100mm Celotex RS5000  
 19 •" 12mm non-combustible sheathing board  
 20 •" 100mm SFS system  
 21 •" 2 x 12.5mm plasterboard."  
 22 Was it clear to you at the time that the system was  
 23 different from the system proposed for use at  
 24 Grenfell Tower?  
 25 A. With regard to the face panel, yes, it was. The backing

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1 wall here is this -- because this is a BS 8414 part 2  
 2 test -- is an SFS backing wall, which is the 12-mil  
 3 non-combustible sheathing, 10-mil SFS and the two skins  
 4 of plasterboard. At Grenfell we actually had  
 5 a 100-millimetre thick concrete wall, which would have  
 6 been an 8414 part 1 test.  
 7 So in terms of the cladding elements, the difference  
 8 was the fibre panels are metal on the front.  
 9 Q. Yes.  
 10 A. Which is why we -- if you read on, it says if the -- if  
 11 it's a change to it, it needs to be considered, which is  
 12 why the details were sent to Celotex.  
 13 Q. Indeed. Did you notice that at the time? Just to be  
 14 clear, so that other people listening to this will  
 15 understand what you're talking about, let's look  
 16 together at the right-hand column, third paragraph down:  
 17 "The fire performance and classification report for  
 18 Celotex RS5000 only relates to the components detailed  
 19 above. Any changes to the components listed will need  
 20 to be considered by the building designer."  
 21 I think what you're telling us in the last composite  
 22 answer was that you had noticed that at the time?  
 23 A. I ... I think Daniel picked that up.  
 24 Q. I see. To your knowledge, were the changes to the  
 25 components listed considered by the building designer?

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1 A. I am assuming that they were, the building designer  
 2 being the architect, but we sent the details to Celotex  
 3 to have them assess it as well.  
 4 Q. You say the building designer was the architect; did you  
 5 send the details and requests to Studio E to ask them to  
 6 assess whether or not the differences between the system  
 7 tested by Celotex and that to be applied at Grenfell  
 8 were satisfactory from a fire safety point of view?  
 9 A. We sent them the RS5000 details and they have our -- and  
 10 they had in fact their cladding details.  
 11 Q. I'm sorry, I'm not sure that's an answer to my question.  
 12 Did you send the details and the request to Studio E to  
 13 ask them to make an assessment about whether or not the  
 14 differences between the cladding system to be used at  
 15 Grenfell and the cladding system used in the 8414 test  
 16 by Celotex made a difference from a fire safety point of  
 17 view?  
 18 A. I don't think we specifically did, no.  
 19 Q. Did Daniel Anketell-Jones or anybody else at Harley,  
 20 assuming for the moment them to be the building  
 21 designer, make any such assessment?  
 22 A. Our assessment on this would have been through Celotex.  
 23 Q. So, again, you were content to rely on what the  
 24 manufacturer was telling you rather than making  
 25 an independent assessment of those differences, either

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1 yourself or with other professionals engaged on the  
 2 project?  
 3 A. We're not fire experts and that's why we asked Celotex,  
 4 who were the manufacturers, for their input on it.  
 5 Q. Well, you say, "We're not fire experts"; you are  
 6 cladding experts, and although there may be a debate  
 7 about whether you are the building designer, Celotex are  
 8 clearly saying here, are they not, that any changes to  
 9 the components should be considered by the building  
 10 designer? They're not inviting questions to them.  
 11 That's right, isn't it? It was the building designer's  
 12 job to get to the bottom of what differences the changes  
 13 made; no?  
 14 (Pause)  
 15 A. It does -- that seems to be what they're saying but not  
 16 how they acted.  
 17 Q. Can we look at a slightly different document. This is  
 18 the rainscreen cladding compliance guide, which is  
 19 {CEL00000012}, and I would like first of all just to ask  
 20 you whether this is a document you're familiar with.  
 21 A. I've seen this.  
 22 Q. Yes. Had you seen it at the time?  
 23 A. No.  
 24 Q. Right, let's see how we go with that.  
 25 Can I ask you to look at page 3 {CEL00000012/3}.

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1 It's a similar point, but look at page 3, right-hand  
 2 column. It sets out the performance criteria in some  
 3 detail, BR 135 and then the performance criteria of that  
 4 with some diagrams beneath that. Then it says in the  
 5 right-hand column at the top of the page:  
 6 "The performance of the system under investigation  
 7 is evaluated against three criteria :  
 8 "> External fire spread.  
 9 "> Internal fire spread.  
 10 "> Mechanical performance.  
 11 "The classification applies only to the system as  
 12 tested and detailed in the classification report. The  
 13 classification report can only cover the details of the  
 14 system as tested. It cannot state what is not covered.  
 15 When specifying or checking a system it is important to  
 16 check that the classification documents cover the  
 17 end-use application."  
 18 Did you know that at the time of the selection of  
 19 RS5000?  
 20 (Pause)  
 21 A. Yes.  
 22 Q. Can you look at page 4 {CELO0000012/4}, please. This is  
 23 a depiction in a drawing -- it's figure 4 -- of the  
 24 system as tested for the purposes of the 8414 test that  
 25 Celotex are saying they carried out for this product.

1 You can see there what the composite elements of the  
 2 test were. You've got a helping hand bracket, and then  
 3 on the outside you've got a 12-millimetre Marley Eternit  
 4 Natura panel. That's different, isn't it, from  
 5 Reynobond PE 55 ACM?  
 6 A. It is.  
 7 Q. Then you have got, below that, a 12-millimetre magnesium  
 8 oxide board. That's different from the substrate that  
 9 you had at Grenfell, isn't it?  
 10 A. We had a 100-mil of concrete as opposed to 12-mil of  
 11 magnesium oxide board.  
 12 Q. Then you had also on the test 100 millimetres of LSF  
 13 system. What's that, do you know?  
 14 A. LSF?  
 15 Q. Do you know what that is?  
 16 A. Might be lightweight steel frame.  
 17 Q. Right. Again, different from Grenfell; yes?  
 18 A. Can you roll the diagram up a little?  
 19 Q. I'm so sorry, you're quite right.  
 20 (Pause)  
 21 Can you see it there?  
 22 A. Yes. So the lightweight steel frame and the magnesium  
 23 oxide board are the backing wall in this system.  
 24 Q. Yes.  
 25 A. Compared to the 100-mil thick concrete at Grenfell.

1 Q. Yes. So different?  
 2 A. Different, but --  
 3 Q. Yes.  
 4 A. -- Grenfell is far better than that in terms of --  
 5 Q. I understand that, I understand what you're saying, but  
 6 different. And then underneath that, aluminium 60x40x2  
 7 continuous rail, and then underneath that the Celotex.  
 8 Now, you refer, at paragraph 113 of your statement  
 9 {HAR00010184/29}, if we could just go back to that, to  
 10 the LABC certificate and the BRE assessment. Could we  
 11 just look at that very briefly. I touched on this  
 12 earlier when I read this part of the paragraph to you.  
 13 You can see that it says, seven lines down:  
 14 "The LABC certificate in relation to the Celotex  
 15 RS5000 confirmed that it had been assessed by the BRE  
 16 (Building Research Establishment) and complied with  
 17 BR135 for use in rainscreen walls above 18 metres."  
 18 Do you see that?  
 19 A. Yes.  
 20 Q. Did you look at the LABC certificate at the time?  
 21 A. No.  
 22 Q. Did you look at any documents demonstrating the  
 23 assessment by BRE at the time?  
 24 A. Not personally, no.  
 25 Q. You see, you referred to it in your statement, and

1 I confess that I had thought that that was something  
 2 that you were speaking to at the time. So do we read  
 3 your statement here as something that you came to know  
 4 afterwards?  
 5 A. No, the LABC, all the statements there were on the front  
 6 page of their sales literature, which was the document  
 7 I was referring to.  
 8 Q. Let's look at the certificate.  
 9 Before I go to that with you, does that tell us  
 10 that, although you noticed it in the sales literature,  
 11 you didn't actually look at the certificate itself?  
 12 A. Correct.  
 13 Q. Right. Did anybody at Harley actually look at the LABC  
 14 certificate and the BRE assessment itself?  
 15 A. I can't say for sure, but if ... it would have been  
 16 Daniel, if we did indeed look at it.  
 17 Q. Okay.  
 18 Let's look at the BRE classification report, first  
 19 of all. This is for RS5000. This is at {CELO0000011}.  
 20 Is this document familiar to you?  
 21 A. I can't recall. As you go through it, I may recognise  
 22 it.  
 23 Q. This is dated 11 August 2014, and it's issue 2, it  
 24 appears, produced by the BRE. If we go to page 4  
 25 {CELO0000011/4}, section 5.3, I want to focus on that

1 with you.  
 2 It says under 5.3, "Field of application" --  
 3 I should just perhaps show you 5.2, first of all,  
 4 although it's only a sentence:  
 5 "The system described in this classification report  
 6 has been tested and met the performance criteria set in  
 7 Annex B of BR 135 ..."  
 8 Then the field of application under 5.3 says:  
 9 "This classification is valid only for the system as  
 10 installed and detailed in Section 2 of this  
 11 classification report and the associated details found  
 12 in the related test reports, referenced in Section 4."  
 13 Did you know that the BRE classification report for  
 14 RS5000 was valid only for the system as installed and  
 15 detailed in section 2 of the report itself, and not  
 16 otherwise?  
 17 A. That seems to be a repeat of the clause that was in the  
 18 installation manual later.  
 19 Q. Yes. So taking the product literature and the  
 20 certificate, do you accept that they don't say that any  
 21 cladding system configuration incorporating RS5000 would  
 22 be covered by the BS 8414 fire performance and  
 23 classification report?  
 24 A. Which is why we asked Celotex to confirm that we could  
 25 use the -- their product, effectively getting them to do

1 an assessment of it.  
 2 Q. I'll take that as a yes, unless you tell me I shouldn't.  
 3 Is that a yes?  
 4 A. Sorry, can you repeat the --  
 5 Q. Well, yes. Do you accept that neither the sales  
 6 literature which we've looked at or the certificate say  
 7 that any cladding system configuration which  
 8 incorporated RS5000 would be covered by the BS 8414 test  
 9 as having met the relevant criteria in BR 135?  
 10 (Pause)  
 11 A. If it's a yes or no answer, yes.  
 12 Q. Now, would it follow from that that, had Harley, perhaps  
 13 you, taken the trouble to familiarise yourself  
 14 thoroughly with the sales literature and the  
 15 certificates, you or others at Harley would have  
 16 realised that RS5000 could only be used in a cladding  
 17 system which was exactly the same as the system tested,  
 18 which gave rise to the certification under 8414?  
 19 A. That's why we investigated the product with Celotex to  
 20 go through this, to ensure that it was compliant.  
 21 Q. But even though the system was different, as we've  
 22 accepted, and even though the sales literature and the  
 23 certificates say that the 8414 test wouldn't cover  
 24 a different system, what is it that Celotex said to  
 25 Harley that led Harley to believe that it was covered?

1 A. Well, it -- they said it was safe and acceptable to use  
 2 it with -- in the configuration that we had. If they  
 3 had told us it wasn't safe to use, it would not be on  
 4 the building.  
 5 Q. They said it was safe and acceptable to use, you say.  
 6 Did anybody undertake any independent verification of  
 7 that assurance, or did you just take it on trust from  
 8 Celotex?  
 9 A. Celotex are a major insulation manufacturer. They're  
 10 a huge corporation. We do not expect to be misled by  
 11 them. So, yeah, we trusted what they told us.  
 12 Q. Even though they had a vested interest in making sure  
 13 you bought the product because they were making it and  
 14 selling it?  
 15 A. Yeah. Why -- how -- why would they lie to us?  
 16 Q. Well, that is a question to which there may be a number  
 17 of answers, but I'm afraid I'm not equipped to answer  
 18 them.  
 19 A. No.  
 20 SIR MARTIN MOORE-BICK: Mr Bailey, just help me with this:  
 21 you referred to the exercise that you asked Celotex to  
 22 carry out, I think at an earlier stage, as a desktop  
 23 study, which is shorthand for --  
 24 A. An assessment.  
 25 SIR MARTIN MOORE-BICK: An assessment, all right.

1 A. Yes.  
 2 SIR MARTIN MOORE-BICK: Did they provide you with any  
 3 detailed analysis to explain why they came to the  
 4 conclusion that it was an acceptable use?  
 5 A. I hadn't seen it, so I don't know what they gave to  
 6 Daniel.  
 7 SIR MARTIN MOORE-BICK: You would normally, I suppose,  
 8 expect a desktop assessment to be based on some form of  
 9 analysis of the products actually used and comparing  
 10 them with the materials used in the test, wouldn't you?  
 11 A. Correct, yes.  
 12 SIR MARTIN MOORE-BICK: But you don't know whether any such  
 13 analysis was supplied?  
 14 A. I don't know what analysis was supplied.  
 15 SIR MARTIN MOORE-BICK: Thank you.  
 16 MR MILLETT: Now, in paragraph 113, you also refer to the  
 17 LABC certificate, as we've seen. We don't need to go  
 18 back to it.  
 19 Can we look at the certificate, {CELO0000539}.  
 20 Again, just to be clear with you, is that a document you  
 21 ever saw at the time, do you think?  
 22 A. I'm not sure I saw it at the time.  
 23 Q. Right. We can see from the bottom of the page that it  
 24 was issued first on 21 August 2014, and had a three year  
 25 validity life.



1 A. Okay.  
 2 Q. This particular version was issued on 19 August 2016.  
 3 It covers RS5000 insulation board, and there is  
 4 a description of the product there on the first page.  
 5 It says:  
 6 "This is an assessment of a PIR insulation board by  
 7 Celotex designed for use within rainscreen  
 8 construction."  
 9 Then it goes on to say, towards the bottom of that  
 10 paragraph:  
 11 "It has been assessed by the BRE and complies with  
 12 BR135 for use in rainscreen applications above 18 metres  
 13 in height subject to the board being fixed to a  
 14 non-combustible substrate \*see conditions of certificate  
 15 for more information."  
 16 Can we then look at the second page {CEL00000539/2}  
 17 of the certificate . That says, under the "Scope of  
 18 Registration", six lines down:  
 19 "Celotex RS5000 has been successfully tested to  
 20 BS 8414 ... meets the criteria set out in BR135 ... and  
 21 therefore is acceptable for use in buildings with  
 22 storeys above 18m in height (subject to matching the  
 23 specification criteria of the BRE Classification Report  
 24 ... carried out) as alternative compliance to AD B."  
 25 Do you see that?

1 A. Yes.  
 2 Q. Then under "Conditions of Certificate ", it says, reading  
 3 from the eighth line down:  
 4 "For use on buildings with a floor more than 18m  
 5 above ground level, Celotex RS5000 has been successfully  
 6 tested to BS 8414 part 2 ... and meets the criteria set  
 7 out in Annexe B of BR 135 ... This classification is  
 8 only valid for the system specification and detailing  
 9 outlined in section 2 of the BRE Classification report  
 10 ... including the associated details found in section 4  
 11 test reports as an alternative compliance to AD B.  
 12 A full copy of the report should be made available by  
 13 Celotex."  
 14 It goes on to particularise the details of the  
 15 build-up of the test .  
 16 Again, would you agree that the LABC certificate --  
 17 although you didn't, I think, see it at the time -- sets  
 18 out quite clearly the exact system which the RS5000 was  
 19 said to have passed?  
 20 A. Yes.  
 21 Q. And that was different from Grenfell, I think we've  
 22 established. Again, this certificate makes clear in  
 23 a number of places that the classification related only  
 24 to the system that was tested.  
 25 A. Yes.

1 Q. Therefore, just reading the certificate , do you accept  
 2 that it couldn't or can't or shouldn't have been read as  
 3 permitting the use of RS5000 in buildings over 18 metres  
 4 in all circumstances, whatever the build-up of the  
 5 cladding system?  
 6 A. Reading that, I accept that it shouldn't have been.  
 7 Q. Can you look at page 3 {CEL00000539/3}, please, of this  
 8 document. It's got a section, as we can see, headed  
 9 "The Building Regulations 2010 (as amended) England &  
 10 Wales", and under "AD B, Fire Safety, Note", you see the  
 11 second note down, it says:  
 12 "Thermosetting insulants ( rigid polyurethane foam  
 13 boards) do not meet the limited combustibility  
 14 requirements of AD 82 Table A7 and so should not be  
 15 accepted as meeting AD 82 paragraph 12.7."  
 16 Did you know that at the time? Did you know that  
 17 this certificate was making it crystal clear that RS5000  
 18 was not a material of limited combustibility?  
 19 A. No.  
 20 Q. Had you read this certificate , you would have done,  
 21 wouldn't you?  
 22 A. Yes, it would have been at complete odds with the  
 23 "class 0 throughout" statement that was put on their  
 24 advertising .  
 25 Q. Well, you say at complete odds in accordance with your

1 understanding at the time of what class 0 meant.  
 2 A. Well, "class 0 throughout", yes.  
 3 Q. That's your understanding. We have been through that  
 4 this morning.  
 5 A. Yes, we have.  
 6 Q. I see that.  
 7 It's clear, I would suggest to you, from this that  
 8 the only reason it could be used above 18 metres is if  
 9 it was included as part of a system tested to BR 135 and  
 10 BS 8414 using exactly the same elements in the system.  
 11 A. Yes, it would mean that there's only one configuration  
 12 or panel that Celotex can be used for anywhere in  
 13 the ... so there's no other products that could be used  
 14 with it is really what it's saying. And as a -- and as  
 15 an insulation product being sold all over the UK for use  
 16 on high-rise blocks, that ... it makes no -- it makes no  
 17 logical sense.  
 18 Q. Just summarising it, leaving aside what you say Celotex  
 19 told Harley --  
 20 A. Yes.  
 21 Q. -- if RS5000 was not -- let me try it again.  
 22 If you had read this certificate and read the BRE  
 23 report on which it was based, you would have realised,  
 24 first of all , that RS5000 was not a material of limited  
 25 combustibility; correct?

1 A. Yes.  
 2 Q. And you would have realised that, because the system to  
 3 be applied at Grenfell was different from the components  
 4 of the system the subject of the BS 8414 test, that the  
 5 fact that the BS 8414 test had been passed did not mean  
 6 that you could use it at Grenfell.  
 7 A. Unless there was an assessment on it, yes.  
 8 Q. And you can't put your finger on a separate individual  
 9 assessment, can you?  
 10 A. I can't.  
 11 Q. Thank you.  
 12 I'm now going to turn to Kingspan K15. Can I ask  
 13 you to go, please, to paragraph 114 of your witness  
 14 statement, which is at page 29 {HAR00010184/29}. You  
 15 say there:  
 16 "A small amount of Kingspan Kooltherm K15 was used  
 17 in place of the Celotex. The reason for this was that  
 18 SIG Plc, the suppliers, had sold the allocation intended  
 19 for Grenfell Tower to another customer. SIG Plc offered  
 20 to supply Harley with the Kingspan Kooltherm K15 as  
 21 a substitute to help keep the project progressing.  
 22 Kingspan Kooltherm K15 is described in its BBA  
 23 certificate as being Class 0. Whilst the test in  
 24 Approved Document B paragraph 12.7 is one of 'limited  
 25 combustibility', it was assumed that, as the product was

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1 described as Class 0 in respect of 'Behaviour in  
 2 relation to fire', it was compliant with paragraph 12.7,  
 3 and suitable for buildings over 18 metres."  
 4 First of all -- I'll come back to class 0 in  
 5 a moment -- do you know where on the building K15 was  
 6 used, even roughly?  
 7 A. No, I don't. But there are long-range photographs of  
 8 the building in construction with the Kingspan logo on  
 9 it, so it is -- it would be possible to locate it.  
 10 Q. Well, we may come back to that. But you say here that  
 11 the Kingspan Kooltherm K15 is described in its BBA  
 12 certificate as having a class 0 rating. Did you  
 13 actually read the Kingspan K15 BBA certificate at the  
 14 time?  
 15 A. No, as I explained earlier, the Kooltherm K15 had been  
 16 signed off some while -- some years ago, and therefore  
 17 we were use -- we used it on other projects. So when  
 18 there was some K15 to go on here, it was signed off by  
 19 our technical guys.  
 20 Q. What, signed off for all projects?  
 21 A. K15, going back to the initial use of it in 2010/2011,  
 22 yeah, it's become an industry standard insulation  
 23 product for tall buildings. It was regarded, other than  
 24 Rockwool, as the only other product you could use on  
 25 high-rise buildings, and then subsequently Celotex have

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1 moved into the market, and -- with the problems that  
 2 we're currently sat here looking at.  
 3 Q. Now, Kingspan Kooltherm K15 wasn't specified in any of  
 4 the specification documents for this project.  
 5 A. No, it wasn't.  
 6 Q. Can you think of any reason why it was that, when it was  
 7 substituted on one or two occasions, in fact, I think,  
 8 for Celotex RS5000, nobody at Harley thought to  
 9 double-check the certification?  
 10 A. I think it's because it had been checked previously on  
 11 previous projects.  
 12 Q. But you would have realised that, in order to ensure its  
 13 safety for use above 18 metres, it would either have to  
 14 be a material of limited combustibility or have passed  
 15 an 8414 test or there be a desktop study in relation to  
 16 it.  
 17 Did anybody at Harley to your knowledge actually  
 18 address their mind to what route to compliance the  
 19 Kooltherm would take?  
 20 A. They addressed their mind to it, as I say, some years  
 21 ago, so on this particular -- I don't know quite what  
 22 was done when this small amount of Kingspan was  
 23 substituted.  
 24 Q. When it was signed off by your technical guys, as you  
 25 say earlier in your answers just now, it wasn't

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1 signed off, as I think you've said, for all projects, or  
 2 was it?  
 3 A. Back in -- well, yes, initially it was signed off for  
 4 use pretty much on all projects.  
 5 Q. Regardless of whether the clad was above 18 metres or  
 6 not?  
 7 A. Yes.  
 8 Q. Without any reference or qualification about limited  
 9 combustibility or 8414 or any other route to compliance?  
 10 A. It was signed off by then technical manager and since  
 11 then we've used it.  
 12 Q. Is there a document under which we can see this  
 13 sign-off?  
 14 A. No, but we've got a number of tenders with this  
 15 project -- product referenced in.  
 16 Q. Well, that may be. Is there an internal document at  
 17 Harley to which anybody engaged on any project could  
 18 look at when confronted with K15 just to double check  
 19 that it was safe to use on a high-rise building, in  
 20 other words a building above 18 metres?  
 21 A. I don't think there is a document -- specific document  
 22 for that, no.  
 23 Q. So how would, for example, Daniel Anketell-Jones, who  
 24 I think wasn't there in 2009, or anybody else who wanted  
 25 to know whether K15 was safe, know?

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1 A. I think Daniel was there in 2009 but not in that role.  
 2 Q. All right.  
 3 How would anybody at Harley, or any independent  
 4 contractor of Harley brought in to assist with the  
 5 design, know whether K15 was safe unless there was  
 6 something they could go to to tell them?  
 7 A. That would have been just historic data.  
 8 Q. Historical detail held by whom?  
 9 A. On -- details on previous projects.  
 10 Q. In people's heads?  
 11 A. No, there's -- on projects which we completed, we have  
 12 O&M manuals and product data from those projects.  
 13 Q. Okay.  
 14 Does that explain why nobody at Harley requested  
 15 a copy of the BBA certificate for Kingspan when it was  
 16 suggested by SIG as a substitute product?  
 17 A. Yes, we had a copy of the BBA certificate, which was  
 18 a 2008 copy.  
 19 Q. Can we go to the BBA certificate. It's at  
 20 {KIN00000454}. This is a second issue of the  
 21 certificate dated 2013.  
 22 Do you accept -- I mean, it's common sense -- that  
 23 if anybody did want to see the BBA certificate for  
 24 Kingspan Kooltherm K15, this is what they would have  
 25 got?

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1 A. After 2013, yes.  
 2 Q. Indeed. 17 December 2013. You can see that it says  
 3 under "Key factors assessed":  
 4 "Behaviour in relation to fire - the product will  
 5 not contribute to the development stages of a fire or  
 6 present a smoke or toxic hazard (see section 8)."  
 7 Now, section 8 is on page 5 {KIN00000454/5}, let's  
 8 just look at that. Let's look at section 8.1 at the  
 9 bottom of page 5:  
 10 "Behaviour in relation to fire  
 11 "The product is classified as Class 0 or 'low risk',  
 12 as defined in the documents supporting the national  
 13 Building Regulations."  
 14 It doesn't say "class 0 throughout", does it?  
 15 A. No, the "class 0 throughout" moniker was a Celotex  
 16 advertising phrase.  
 17 Q. Do you accept that, on this product, the fact that it  
 18 was class 0 did not mean that it was a product of  
 19 limited combustibility?  
 20 A. I accept that.  
 21 Q. Right.  
 22 Did anybody at Harley ever investigate whether there  
 23 was any test evidence which showed that Kooltherm K15  
 24 met the definition of limited combustibility?  
 25 A. Not in 2014, no. So I don't know exactly what was done

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1 in 2009.  
 2 Q. We can look at this document in total, but take it from  
 3 me that there is no reference in it to limited  
 4 combustibility at all. Can you comment on --  
 5 A. I accept that.  
 6 Q. Right.  
 7 Now, we looked yesterday at the Curtins structural  
 8 performance specification, which formed part of your  
 9 contract with Rydon, and in particular clause 7.1.14,  
 10 which related to fire hazards if the insulant was  
 11 exposed. Given the contractual obligations we looked at  
 12 yesterday in some detail, Mr Bailey, do you accept that  
 13 in order to comply with them, Harley should have made  
 14 further investigations in respect of the combustibility  
 15 of K15 before ordering it and applying it to the  
 16 building?  
 17 (Pause)  
 18 A. Yes, I think there should have been a check on it, yes.  
 19 Q. If we turn the page on this certificate {KIN00000454/6},  
 20 just before we finish off, before the lunch break, it  
 21 refers to the BS 8414 test under paragraph 8.2 at the  
 22 top there, and it shows what the specific cladding  
 23 construction was which met the criteria in BR 135.  
 24 Again, just casting your eye down those elements,  
 25 it's clear that they were different again from the

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1 elements making up the cladding system at Grenfell?  
 2 A. Yes.  
 3 Q. So, again, that means that K15 was neither a material of  
 4 limited combustibility, nor reliable as a route to  
 5 compliance on the basis of a successful pass of an 8414  
 6 test?  
 7 A. Correct.  
 8 MR MILLETT: Yes.  
 9 Mr Chairman, is that a convenient moment?  
 10 SIR MARTIN MOORE-BICK: I think it is, yes, thank you very  
 11 much.  
 12 We will have a break now, Mr Bailey. We will resume  
 13 at 2 o'clock. Again, please don't talk to anyone about  
 14 your evidence or anything related to it while you're  
 15 out, all right?  
 16 THE WITNESS: Okay.  
 17 SIR MARTIN MOORE-BICK: Thanks very much. You go with the  
 18 usher, then, please.  
 19 (Pause)  
 20 Thank you. 2 o'clock, then, please. Thank you.  
 21 (1.00 pm)  
 22 (The short adjournment)  
 23 (2.00 pm)  
 24 SIR MARTIN MOORE-BICK: Right, Mr Bailey, ready to go on?  
 25 THE WITNESS: Yes.

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1 SIR MARTIN MOORE-BICK: Yes, please.  
 2 Thank you, Mr Millett .  
 3 MR MILLETT: Mr Chairman.  
 4 Mr Bailey, I just want to revisit one or two answers  
 5 you gave us this morning on the subject of assurances  
 6 given by Mr Roome to Harley.  
 7 You, I think, referred earlier this morning -- and  
 8 it's {Day33/68:23} and again at {Day33/73:6} -- to  
 9 an email to Celotex saying along the lines of, "You need  
 10 to convince us this stuff is as good as Rockwool or we  
 11 won't be using it".  
 12 A. Yes.  
 13 Q. I just want to explore that a little bit more.  
 14 Can you please be shown {CEL00000019}. Now, this is  
 15 an email from Jonathan Roome to Daniel Anketell-Jones on  
 16 21 January 2015, and Mr Roome says:  
 17 "I have attached the 12 Page BS8414:2 report showing  
 18 the build-up and components used. In addition I am  
 19 sending you the thermocouple graphs showing the  
 20 temperatures at each level of the test.  
 21 "I am not able to send you the BS476 test document  
 22 as this is confidential."  
 23 Now, you are not copied in on this email, but just  
 24 looking at it, is this the email, do you think, that you  
 25 were referring to in your evidence this morning?

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1 A. I don't know, I've not seen this.  
 2 Q. No, but you referred to an email or --  
 3 A. I referred to an email that Daniel sent to --  
 4 Q. Yes.  
 5 A. -- Celotex asking for clarification .  
 6 Q. All right, fair enough.  
 7 If you scroll down, then, to the question  
 8 Mr Anketell-Jones asked Mr Roome on 20 January. Let's  
 9 have a look at that email in full . Perhaps if we can go  
 10 to the bottom of that email chain, actually, just to  
 11 follow it up {CEL00000019/2}. I think that's it,  
 12 16 January. Daniel Anketell-Jones, 16 January, to  
 13 Jonathan Roome:  
 14 "Good Morning Jon,  
 15 "Sorry - but got a headache for you!  
 16 "We are being asked by one of our clients to see the  
 17 test results and certificates for the RS5000 insulation.  
 18 "They want to know exactly how it was installed when  
 19 tested to BS 8414-2:2005, who carried out the testing,  
 20 how it was fixed, what it was covered with, what  
 21 cladding was used, what support structure, etc and most  
 22 importantly the results . Drawings and or photos of the  
 23 test set up would help show how it was installed , but  
 24 I imagine these form part of the test results anyway.  
 25 "They also want to see the certificate and results

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1 for the test to BS476 Pt7 (fire class rating ), showing  
 2 the index rating achieved during the test .  
 3 "Could you sort this out for us please? We are  
 4 hoping to put this forward on most of the cladding jobs,  
 5 so having this information to hand would be most  
 6 useful."  
 7 Now, obviously there will be questions for  
 8 Mr Anketell-Jones about this evidence, or email, but to  
 9 your knowledge, was the client asking this series of  
 10 detailed questions of any of those working on the  
 11 Grenfell Tower project?  
 12 A. I don't know.  
 13 Q. Do you remember which client it was that had asked these  
 14 detailed questions about RS5000?  
 15 A. I don't know.  
 16 Q. Do you remember having a discussion with  
 17 Mr Anketell-Jones to the effect that a client , whoever  
 18 it was, was asking headache-giving questions about  
 19 RS5000?  
 20 A. No.  
 21 Q. Okay.  
 22 Can we just scroll up the page. We see there is  
 23 an email from Daniel Anketell-Jones on 20 January 2015.  
 24 If we can scroll down, you can see that the message is,  
 25 "Morning" -- well, there is a message before that on the

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1 19th.  
 2 "Morning Dan,  
 3 "Hope you had a good weekend.  
 4 "I will check regarding test reports and what we are  
 5 allowed to send out.  
 6 Then Daniel Anketell-Jones back to Jonathan Roome,  
 7 and you can't quite see, I am afraid, the top of that  
 8 email, but if you scroll up to the bottom of page 1, top  
 9 of page 2, we can see here is Daniel Anketell-Jones  
 10 going back to Jonathan Roome on 20 January:  
 11 "Fingers crossed you can get this for us. I am  
 12 worried that if this can't be cleared up, then we will  
 13 have to change to Rockwool duo slab as this has the  
 14 necessary backup to appease the 'specialists'!"  
 15 Pausing there, is that the message or email that you  
 16 were referring to this morning when you say, "You need  
 17 to convince us this stuff is as good as Rockwool or we  
 18 won't be using it"?  
 19 A. I think it must be, yes.  
 20 Q. Do you remember having a conversation with  
 21 Daniel Anketell-Jones about this message?  
 22 A. No.  
 23 Q. How did you know, then, when you were giving evidence  
 24 this morning, that there was an email to Celotex saying  
 25 words along the lines of, and your words this morning,

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1 "You need to convince us this stuff is as good as  
 2 Rockwool or we won't be using it?"  
 3 A. I think I've seen it in an email bundle.  
 4 Q. I see.  
 5 If we then look at the email I started with at the  
 6 top of page 1 {CELO0000019/1}. This is the final  
 7 message in this email string from Jonathan Roome, and  
 8 I've read you the first paragraph. Just go back to the  
 9 second:  
 10 "I am not able to send you the 85476 test document  
 11 as this is confidential. I would be surprised if you  
 12 were able to get this or any other report from the  
 13 manufacturer to be honest. In lieu of this I have  
 14 attached the data sheet showing confirmation of the  
 15 products having BS476 part 6 & 7 which gives it its  
 16 Class 0 performance in addition to the BS8414 test.  
 17 "I would ask that these documents are not shared  
 18 outside of the network of you and your specialist  
 19 advisor for this project.  
 20 "Please give me a call when you have a moment to  
 21 discuss."  
 22 Did you know that this was the response or the tenor  
 23 of the response that Celotex had given to  
 24 Mr Anketell-Jones in response to his request?  
 25 A. No.

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1 Q. We don't see anything in here about any assurance from  
 2 Celotex that RS5000 was safe to use on buildings in  
 3 excess of 18 metres in height, do we?  
 4 A. No.  
 5 Q. Did you have a conversation with Mr Anketell-Jones about  
 6 this email and what he was sent by Celotex, do you  
 7 think?  
 8 A. I don't recall, no.  
 9 Q. If the email that we looked at before about, "If we  
 10 can't clear it up, we will have to change to Rockwool  
 11 Duoslab" is not the email you were referring to earlier,  
 12 would you agree with me that the reply from Mr Roome  
 13 cannot be read as any kind of assurance that RS5000 was  
 14 safe to use at Grenfell?  
 15 A. Looking at this email now, I would agree with you.  
 16 Q. Yes.  
 17 Can I then turn to the statement of Jonathan Roome.  
 18 This is {CELO0010031/22}, paragraph 73.  
 19 He says there, and I'll read it all to you:  
 20 "On 11 February 2015 I had an email exchange with  
 21 Ben Bailey of HCW [Harley Curtain Wall] which I exhibit  
 22 as JWRR/34:C00024 in relation to Grenfell Tower.  
 23 I asked for the construction section drawings so that  
 24 Celotex Technical Team could replicate the thermal  
 25 calculations (U-value) previously modelled by Daniel

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1 [at] HCW. Ben sent the drawings via a dropbox link.  
 2 Celotex prohibited the use of dropbox facilities  
 3 therefore I had to forward to my personal email account  
 4 to download and view the drawings. I identified two  
 5 relevant drawings which I exhibit as JWRR/35:C\_00456 and  
 6 JWRR/36:C\_00457 and sent them back to my work email  
 7 address. These drawings were then emailed to the  
 8 Technical Team and asked if they could see if a U-value  
 9 of 0.15 with 150mm for RS500 could be achieved.  
 10 I explained that there was an 150mm existing concrete  
 11 wall and 150mm/160mm RS5000. This email I exhibit as  
 12 JWRR/37:C\_08724."  
 13 Just looking at that, do you agree, from what  
 14 Mr Roome says there, that Celotex were only asked to  
 15 check U-values and not the fire performance of RS5000?  
 16 A. On that date, yes, I would.  
 17 Q. And it appears that the drawings weren't sent by  
 18 Ben Bailey with a comment, "Please check or confirm that  
 19 your product is suitable for use in this build-up as set  
 20 out in attached drawings?"  
 21 A. No, I think this one was to do with insulation.  
 22 Q. Yes. To do with insulation, to do with U-values?  
 23 A. Yes.  
 24 Q. Yes, thank you.  
 25 Now, can I turn to a different topic, which is

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1 specification of insulation products in the Harley spec.  
 2 Can we go, please, to {RYD00046822}. Now, this is  
 3 a document entitled "Specification notes". This  
 4 particular version, as you can see, is revision D dated  
 5 15 July 2015, and you can see that in fact it was  
 6 originally created on 15 January 2015, as you can see  
 7 from the date at the very bottom.  
 8 A. Yes.  
 9 Q. Correct?  
 10 A. Mm-hm.  
 11 Q. So there are earlier versions of this. This is as late  
 12 as July. If you look at the document on the left-hand  
 13 side, you can see the specification for the things going  
 14 on to the building. We don't see anywhere there any  
 15 reference to any insulation.  
 16 Looking at it, do you agree with that?  
 17 A. I agree with that, yeah.  
 18 Q. We've never seen a version of this specification that  
 19 does contain any specification of the insulation product  
 20 to be used at Grenfell. Is that right?  
 21 A. It appears so, yes.  
 22 Q. Why is that?  
 23 A. I can't answer that.  
 24 Q. Do you know why the insulation product was omitted  
 25 from -- well, do you know who might be able to tell us

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1 why the insulation product was omitted from the Harley  
 2 system specification?  
 3 A. I would -- you would need to ask Kevin.  
 4 Q. If we look at {RYD00046822/4} and {RYD00046822/5},  
 5 please, we can see there that, despite showing  
 6 insulation, because you can see the wiggly lines which  
 7 are a legend or mark for insulation, we don't see any  
 8 reference to an insulation type or insulation product.  
 9 That's correct, isn't it?  
 10 A. It is.  
 11 Q. Again, do you know why these drawings omitted any  
 12 identification of the insulation product to be used in  
 13 that location?  
 14 A. The specification drawing you referred to is basically  
 15 a key, so that the notes are not put on all of the  
 16 drawings.  
 17 Q. Right.  
 18 A. So that's why there is a specification drawing, it is  
 19 just a reference for materials being used, but I can't  
 20 understand why the insulation wasn't shown on that  
 21 drawing.  
 22 Q. Would that be normal, not to have the insulation shown  
 23 on either the drawing or in the specification?  
 24 A. No, I don't think it would be.  
 25 Q. Can you explain why there was a departure from normal

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1 practice in the case of this specification for  
 2 Grenfell Tower, then?  
 3 A. No, I can't, except it wasn't that nobody knew what the  
 4 insulation was.  
 5 Q. It wasn't that nobody knew what the insulation was,  
 6 which means they did know and therefore you can't  
 7 explain why it wasn't --  
 8 A. Everybody knew what the insulation was. I can't explain  
 9 why it wasn't written on the drawing.  
 10 Q. We can see from this document -- if we go back to page 1  
 11 {RYD00046822/1} again, perhaps it's even clearer -- that  
 12 Studio E had stamped this document as "A: conforms to  
 13 design intent", and I think Harley had stamped it  
 14 "Issued for approval".  
 15 Did Harley, to your knowledge, flag up the omission  
 16 of the identification of the insulation product to  
 17 Studio E or anybody else?  
 18 A. Sorry, can you repeat?  
 19 Q. Yes, did they flag it up?  
 20 A. That it wasn't on the drawing?  
 21 Q. Yes.  
 22 A. No. I think if we had realised it, we should have put  
 23 it on.  
 24 Q. And not in the spec? Did anybody flag up the fact that  
 25 it wasn't in the spec?

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1 A. No.  
 2 Q. No.  
 3 Can I just ask you one or two questions about  
 4 Rockwool.  
 5 A. Yes.  
 6 Q. Is it right that you would usually use Rockwool as your  
 7 insulation product in a rainscreen cladding for  
 8 a high-rise building?  
 9 A. Yes.  
 10 Q. It was used at Chalcots, I think we know that. I think  
 11 it was also used at Ferrier Point.  
 12 A. Correct.  
 13 Q. Was it used at Little Venice?  
 14 A. Yes.  
 15 Q. Did you ever consider on the Grenfell Tower project  
 16 whether Rockwool would be a more appropriate insulation  
 17 product for use at Grenfell than either FR or RS5000?  
 18 A. Given the thermal requirements and the cladding zone  
 19 that we had, it was the only product which would achieve  
 20 the U-value.  
 21 Q. Did you yourself get into the calculations to see  
 22 whether or not the U-value was appropriate or the  
 23 measurements for the cladding system which the product  
 24 was to fill were appropriate, and compare those with  
 25 Rockwool, and what would happen if Rockwool were used?

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1 A. No, I didn't. The cladding zone was set out by the  
 2 architect, so the area that we had to put insulation in  
 3 was determined long before we were involved, and given  
 4 the desire of the client to produce a warm building for  
 5 the residents, that was the product we -- and, as I say,  
 6 the designers handed down to us, and we had at that  
 7 point no concerns with it because we expected, by the  
 8 time we received it, it to be fully compliant.  
 9 Q. Did you know that Rockwool could have been used and  
 10 achieved similar U-values and similar dimensions and  
 11 thicknesses?  
 12 A. No.  
 13 Q. Do you accept that that was possible?  
 14 A. Sat here, I don't.  
 15 Q. All right.  
 16 Now, can I ask you to look at paragraph 44 of your  
 17 statement at page 11 {HAR00010184/11}. You say there:  
 18 "As regards the use of Rockwool as an alternative to  
 19 Celotex, I am now aware that Rockwool had contacted the  
 20 Project Client, with a view to consideration being given  
 21 to the use of their products. The Project Client appear  
 22 then to have passed this enquiry straight on to Rydon.  
 23 Rydon, at least initially, appear to have been  
 24 interested in the use of Rockwool because it may have  
 25 opened up some eco funding for the project. Contact was

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1 made - it may have been by Mark Harris - with Rockwool,  
 2 who explained that funding may only become available if  
 3 Rockwool had provided the complete system, that is  
 4 cladding panels, rails and insulation. By this  
 5 relatively late stage all the bids had been based on the  
 6 request for Celotex with Reynobond panels, and  
 7 furthermore, Celotex offered a higher insulation rating.  
 8 It is for this reason, as I understand the position,  
 9 that Rockwool was not used at Grenfell. Both Celotex  
 10 and Rockwool had the same British class 0 rating.”  
 11 Is this paragraph -- I've read it to you in full --  
 12 telling us what you knew at the time or is it  
 13 a commentary on the documents you have been shown when  
 14 preparing your statement?  
 15 A. I think it's stuff that I knew at the time.  
 16 Q. You knew this at the time, did you?  
 17 Did you yourself have any role in deciding not to  
 18 use Rockwool at Grenfell Tower?  
 19 A. No.  
 20 Q. Who was the person who ultimately made that decision?  
 21 A. I think I -- because the ECO funding fell away, the  
 22 Celotex was used as per the specification.  
 23 Q. Did you or anyone else at Harley to your knowledge  
 24 consider whether Rockwool would be a preferable insulant  
 25 from the fire safety perspective?

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1 A. No.  
 2 Q. Did you or anyone else at Harley seek any information  
 3 about the fire performance of Rockwool insulation in  
 4 comparison with RS5000?  
 5 A. We carried out the analysis of Celotex, as we spoke  
 6 about earlier, and as far as we were concerned that was  
 7 compliant and performed. We knew from past experience  
 8 that Rockwool was -- performed as well.  
 9 Q. When you say, "We carried out the analysis of Celotex as  
 10 we spoke about earlier", is that a shorthand for the  
 11 evidence that you were giving us this morning --  
 12 A. It was, yes.  
 13 Q. -- about the discussions with Celotex?  
 14 A. Yes.  
 15 Q. Right.  
 16 Is it fair to say that Rockwool was only considered  
 17 from an ECO funding perspective as opposed to  
 18 a fire safety perspective?  
 19 A. As far as I'm aware, yes.  
 20 Q. Yes.  
 21 I then want to turn to a different topic, which is  
 22 the resourcing of the Harley team on this project.  
 23 Can I start with {HAR00006092}, please. This is  
 24 an email from Mark Harris to Rob Maxwell and you on  
 25 19 June 2014, and he says:

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1 "Rob  
 2 "To keep you in the loop, contract stuff is starting  
 3 to hit us now on the Grenfell Tower front. Some of the  
 4 items below and attached are for estimating, however,  
 5 there are many items which need looking at by our  
 6 proposed Grenfell House construction team, and therein  
 7 lies the problem, we don't f\*cking have one!! To say  
 8 I'm concerned about this is an under statement."  
 9 Can you explain why Mr Harris's concerns were only  
 10 being raised at this stage in mid-June 2014 which was  
 11 long after Harley had already been involved in  
 12 significant discussions with Studio E and Rydon about  
 13 the design of the cladding system?  
 14 A. I can't understand why it was raised at that stage, no.  
 15 Q. I mean, you received this email; did you have any  
 16 discussion with Mr Maxwell or Mr Harris about it?  
 17 A. Yes, afterwards.  
 18 Q. After what?  
 19 A. After receiving the email.  
 20 Q. And what did you discuss?  
 21 A. How we were resourcing the project.  
 22 Q. Okay. Let's see how we proceed. But in a nutshell, can  
 23 you just tell us, what did you decide to do as a result  
 24 of Mark Harris's concerns as expressed to you?  
 25 A. The initial -- Rob is the contracts manager and he needs

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1 to start controlling it as we are picking up the order.  
 2 The date here is 19/6; I think we got the order for the  
 3 job in July. So the first elements that we deal with  
 4 are the design, and Daniel then took over as project  
 5 lead, because he was designing the project.  
 6 Q. Yes. What was the immediate decision that you made in  
 7 the hours, minutes, days after receiving Mark Harris's  
 8 email on 19 June?  
 9 A. That we need to put Daniel in charge of the design.  
 10 Q. I see.  
 11 Can I ask you to look at the next email down in the  
 12 chain, which was the precursor to Mark Harris's email to  
 13 you. This is from Zak Maynard at Rydon to Mark Harris,  
 14 not copied to you, but you saw it the next day, of  
 15 18 June. He says:  
 16 "Mark,  
 17 "Apologies for the delay! I have been writing the  
 18 below for the last 2 days and keep getting dragged off  
 19 to do other things. However, I have copy and pasted in  
 20 to this email."  
 21 He then sets out a list, if you go over to page 2  
 22 {HAR00006092/2}, of 26 items which he wanted to see in  
 23 the costs build-up.  
 24 Can you help me, what items in that costs build-up  
 25 list could Harley not quote for without a construction

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1 team in place?  
 2 A. What could we not quote for?  
 3 Q. Yes. It's a long list, but just casting your eye down  
 4 it, are there any items in that 26-item list which  
 5 Harley couldn't quote for without having a construction  
 6 team in place?  
 7 A. No, no, the estimators would have picked this -- all of  
 8 this up.  
 9 Q. Right. Then why did it come as a surprise to Mr Harris,  
 10 then, that he was being asked all this now and there was  
 11 a problem which needed a resolution?  
 12 A. No, I think what he was saying in the email is they're  
 13 about to place an order with us, and as soon as the  
 14 order is placed, they're going to want someone to jump  
 15 on it. So I think he was forewarning that in a couple  
 16 of weeks' time it's going to start running. Is that  
 17 what he says?  
 18 Q. Well, no, to be frank, it isn't. If you go back to  
 19 page 1 {HAR00006092/1}, can you please look at the  
 20 paragraph I read to you:  
 21 "Some of the items below and attached are for  
 22 estimating, however, there are many items which need  
 23 looking at by our proposed Grenfell House construction  
 24 team, and therein lies the problem, we don't f\*cking  
 25 have one!!"

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1 So my question is: given that 26-item list, what in  
 2 that list were the many items which needed looking at by  
 3 the non-existent Grenfell House construction team?  
 4 A. Can you roll that back up?  
 5 Q. Yes. I'm sorry, could you go to {CEL00006092/2},  
 6 please. Thank you.  
 7 (Pause)  
 8 A. Only item 16, but the estimators are capable of filling  
 9 that in anyway.  
 10 Q. Right. So are you saying that, in fact, apart possibly  
 11 from item 16, all of those, or the remaining 25 items,  
 12 were items which could be managed by the existing  
 13 Grenfell House team, and that Mark Harris is wrong when  
 14 he says, "there are many items which will need looking  
 15 at by our proposed Grenfell House construction team"?  
 16 A. Yes.  
 17 Q. I see.  
 18 If you go to the third paragraph down in his email  
 19 on page 1 {HAR00006092/1}, he says:  
 20 "There is no doubt that this job is starting to  
 21 gather pace. Rydon are fully on board with the client,  
 22 and will start setting up on site in the next few days.  
 23 They will issue a contract to us shortly, which will  
 24 underwrite initial design. Once we have that in our  
 25 possession, I guarantee that the architect will expect

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1 our design to commence. In addition, we need to install  
 2 the mock up on site in the next 2 weeks."  
 3 Would it be usual for Harley's design work not to  
 4 have commenced at all by this stage?  
 5 A. Yes, we didn't -- we had no contract, no letter of  
 6 intent, so we wouldn't have started any design.  
 7 Q. So when Mark Harris says to you "contract stuff is  
 8 starting to hit us now on the Grenfell Tower front",  
 9 what did you understand he meant?  
 10 A. Again, if you go to the previous -- the next page down  
 11 {CEL00006092/2}.  
 12 Q. Certainly, yes, of course.  
 13 A. It's all this stuff is starting to come through, and  
 14 this is a precursor to design being started.  
 15 Q. Right.  
 16 I mean, to be fair to you, Mr Bailey, you are right  
 17 that the letter of intent discussions did not take place  
 18 until the July and into August and September of this  
 19 year, but it looks very much from this, although  
 20 Mark Harris has called it "contract stuff", there was  
 21 a need for urgency in terms of getting on top of the  
 22 design.  
 23 My question is: how did it all happen so quickly and  
 24 would that be usual?  
 25 A. Not unusual. We're waiting for an order, then we'll

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1 start the design.  
 2 Q. Did it take you by surprise that suddenly you had to  
 3 start doing all these things?  
 4 A. No.  
 5 Q. Right.  
 6 Mr Harris then goes on to say in the final main  
 7 paragraph {CEL00006092/1}:  
 8 "The last thing I want to do is walk away from the  
 9 job (believe me, I've invested many month's of time into  
 10 this), not least because it would severely damage our  
 11 relationship with Rydon, and worst still, would  
 12 potentially leave the door open for Tim Lovell & Co.  
 13 However, unless we can gear up and service it, will be  
 14 doomed to fail.  
 15 "We need to have an honest and frank team chat about  
 16 this job on Friday!"  
 17 What did you understand by the reference to  
 18 Tim Lovell there?  
 19 A. They're one of our competitors.  
 20 Q. Right. He was an employee at Harley, wasn't he, in  
 21 2012?  
 22 A. He was.  
 23 Q. And he has left and set up on his own in competition  
 24 with Harley, is that it?  
 25 A. Correct.

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1 Q. Was there a team meeting on Friday, do you remember?  
 2 A. I can't recall, but there could well have been.  
 3 Q. What plans did Harley put in place after this to ensure  
 4 that there was sufficient resource on the project in  
 5 order to be able to meet these matters and make  
 6 estimates for them?  
 7 A. Well, the estimates would be taken care of by the  
 8 estimating department, which were in -- which was  
 9 Mike Albiston, basically, in place, and on the design  
 10 side, Daniel took over that, and we looked at recruiting  
 11 some additional design resource to assist him.  
 12 Q. Was that done more quickly than would be normal due to  
 13 the pressures of this job that, according at least to  
 14 Mark Harris's email, you suddenly found yourself under?  
 15 A. I wouldn't have said it was particularly unusual.  
 16 Q. Can I ask you to look at {HAR00006153}. This is  
 17 Rob Maxwell's reply to Mark Harris's email we've just  
 18 been studying, and this is the same day. He says:  
 19 "Mark,  
 20 "We need to get an external design team on this now.  
 21 I can pull in a project/site manager within a couple of  
 22 weeks, we could use Neal or Ben to attend a meeting in  
 23 the next couple of weeks.  
 24 "From our discussion on Monday in the office about  
 25 this job it would be a shame to let this go (if Im

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1 honest it would be better to let Karma go) as we know  
 2 the client and our risk is less as a consequence.  
 3 "Let's talk on Friday to try and find a way to  
 4 cope."  
 5 I don't need the last line there.  
 6 First, what's the reference to letting Karma go?  
 7 A. At the time there were two projects that we were looking  
 8 at, Karma and Grenfell Tower, and we had a choice of  
 9 which one to -- we couldn't take both, we didn't have  
 10 the capacity to take both.  
 11 Q. Right.  
 12 A. So we decided that we'd let Karma go.  
 13 Q. And what was Karma?  
 14 A. A high-rise overcladding in Wembley.  
 15 Q. Right, in Wembley. Why was it better to let Karma go  
 16 and do Grenfell?  
 17 A. I think Karma was actually -- whilst it's overcladding,  
 18 it's a new-build, and refurbishment is actually a better  
 19 project to be involved in for us.  
 20 Q. Why is that?  
 21 A. Because if it's an existing building, it's there and  
 22 there's usually less delays on site.  
 23 Q. Right.  
 24 A. If it's a new-build, we're waiting for concrete to be  
 25 poured and there's lots of things that can go wrong.

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1 Q. Is it also fair to say that because you knew the client,  
 2 it was better to go with Grenfell?  
 3 A. We knew the client for Karma as well.  
 4 Q. Well, he says, does Rob Maxwell, "as we know the  
 5 client":  
 6 "... it would be a shame to let this go (if Im  
 7 honest it would be better to let Karma go) as we know  
 8 the client and our risk is less as a consequence."  
 9 So did the fact that you knew the client play in the  
 10 decision to opt to do the Grenfell project?  
 11 A. Both the fact that we knew the client and it was a -- it  
 12 wasn't a new-build.  
 13 Q. Right. The client being Rydon?  
 14 A. Yes.  
 15 Q. Yes.  
 16 Does this also tell us that in fact, within Harley,  
 17 although an awful lot of involvement and work had been  
 18 done in the months and indeed years prior to the June of  
 19 2014, Harley had not actually decided to commit to being  
 20 the cladding subcontractor on the Grenfell Tower project  
 21 until June 2014?  
 22 A. We wanted to do it, but until Rydon appoint us, they  
 23 could always go with somebody else.  
 24 Q. Right.  
 25 When you say you wanted to do it, did you also want

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1 to do Karma? Did you have capacity to do both?  
 2 A. We didn't have capacity to do both.  
 3 Q. Right. But you were running both?  
 4 A. Yes, because we don't know which one's going to drop.  
 5 Q. I see. At what point would one drop and one stand up?  
 6 A. Whichever one -- I think whichever one they gave us the  
 7 order for first.  
 8 Q. Right.  
 9 Now, Mr Harris refers to the need for a construction  
 10 team in his email to look at Zak Maynard's proposal, and  
 11 Rob Maxwell, as we can see here, says in response "We  
 12 need to get an external design team on this now".  
 13 Do you agree that the terms of Mr Harris and  
 14 Mr Maxwell's emails here we've seen suggest a single  
 15 additional recruit was insufficient to deal with what  
 16 was appearing to emerge as a problem?  
 17 A. No.  
 18 Q. Why is that?  
 19 A. The initial design details need to be dealt with first,  
 20 and that's -- one person can deal with that, and then we  
 21 start moving into the productionisation of the design  
 22 once it's been signed off by the architect.  
 23 On Grenfell, on a high-rise building, the lower  
 24 floors are usually different, the top is different, but  
 25 the middle 20 or so floors are the same. So in terms of

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1 design, once we designed one floor, it repeats up, so we  
 2 don't need a whole design team on this. The two guys  
 3 working on it is sufficient, particularly at the initial  
 4 stages. If we need additional design throughout the  
 5 project, we can bring them in later or transfer people  
 6 across. In fact, Mark Stapley assisted on occasion with  
 7 the design.  
 8 Q. Why was it necessary to bring in an external design team  
 9 as opposed to using your existing in-house design  
 10 capabilities?  
 11 A. Because we -- it gives us flexibility in our capacity.  
 12 Q. Was bringing in Kevin Lamb as a designer your solution?  
 13 A. Yes.  
 14 Q. Was he brought in because Harley lacked the design  
 15 expertise itself or because --  
 16 A. No, not the design expertise, the actual -- we needed to  
 17 increase our design resource at that stage.  
 18 Q. I see. So this was about numbers of designers?  
 19 A. Yes.  
 20 Q. Just on Kevin Lamb, it's right, I think, that he had  
 21 only worked for Harley once before.  
 22 A. Yes.  
 23 Q. And that was on a job doing design details for a project  
 24 proposal, wasn't it?  
 25 A. Yes.

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1 Q. What was that project?  
 2 A. I can't recall.  
 3 Q. How familiar with his work were you?  
 4 A. He had worked -- personally, I wasn't. He worked with  
 5 Daniel for, I think, two or three years prior to Daniel  
 6 joining us.  
 7 Q. I see. So he was a contact of Daniel Anketell-Jones',  
 8 is that how he came to be contacted?  
 9 A. Yes. I think he was Daniel's boss, actually.  
 10 Q. Right, I see.  
 11 Did Harley look at any other external designers for  
 12 the Grenfell Tower project other than Kevin Lamb?  
 13 A. Yes, I had a meeting with a designer that I knew, and we  
 14 also -- although we didn't talk to them about it --  
 15 considered using Wintech. Wintech had done other design  
 16 work for us on a previous project.  
 17 Q. Yes, you mentioned Wintech yesterday.  
 18 Who was the designer that you did meet?  
 19 A. A chap called Gerry Clutterbuck.  
 20 Q. Which was his firm, or did he have a firm?  
 21 A. I can't remember the name of his firm, but it was  
 22 basically him.  
 23 Q. What was your experience of him?  
 24 A. I had worked with him a number of years ago and he has  
 25 been a freelance designer on high-rise buildings for 20,

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1 30 years.  
 2 Q. Which projects?  
 3 A. That I worked with him on?  
 4 Q. I'm so sorry, you're right. Which of the Harley  
 5 projects did you use Gerry Clutterbuck as your designer?  
 6 A. Not with Harley.  
 7 Q. I see.  
 8 A. Previous ones I --  
 9 Q. Prior to Harley?  
 10 A. Yes.  
 11 Q. Right.  
 12 Looking at Chalcots and Ferrier Point, who were the  
 13 designers on that? Was that a Harley design team or did  
 14 you have externals on those projects?  
 15 A. On those two, I think Daniel did Ferrier Point.  
 16 Q. Right.  
 17 A. And Mark Stapley did Chalcots.  
 18 Q. Right, so you didn't have externals?  
 19 A. At Chalcots we actually had a chap called ... sorry, my  
 20 brain's gone.  
 21 Q. Not to worry.  
 22 Did you have an external designer on Chalcots?  
 23 A. We did, to assist. Mark Heywood.  
 24 Q. Mark Heywood?  
 25 A. Yes.

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1 Q. Right. Is Mark Heywood connected with CEP?  
 2 A. He is.  
 3 Q. Yes, the name is familiar. Is that how you got the  
 4 cladding design or cladding designer, through CEP, for  
 5 that project?  
 6 A. He wasn't through CEP, he was -- whilst he works with  
 7 CEP, he is independent of them, so he did some design  
 8 work on that for us.  
 9 Q. I see.  
 10 Is it fair to say that between June and August 2014,  
 11 Harley was pretty desperate for some immediately  
 12 available design expertise, extra expertise, and you  
 13 took Kevin Lamb on for the want of anyone better?  
 14 A. No, I wouldn't say that.  
 15 Q. All right.  
 16 Can I just ask you one or two questions about  
 17 Ben Bailey, your son.  
 18 You told us yesterday that he is 31. Does that mean  
 19 that in 2013 he would have been about 25?  
 20 A. Yes.  
 21 Q. 24 or 25?  
 22 A. Yes.  
 23 Q. At that point, how much -- well, let me try it this way  
 24 round.  
 25 He was formally appointed to the role of project

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1 manager, the Harley project manager for the Grenfell  
 2 Tower project, in February 2015, wasn't he?  
 3 A. Yes.  
 4 Q. Who preceded him?  
 5 A. The role of project manager at that point was being  
 6 carried out by Rob Maxwell, the contracts manager.  
 7 Q. I see.  
 8 At the point of Ben Bailey's appointment as project  
 9 manager for Harley in February 2015, aged 25, how much  
 10 site experience had he had?  
 11 A. He had just finished being a project manager on  
 12 a high-rise curtain wall project, the value of which was  
 13 probably double that of Grenfell.  
 14 Q. Which was that project?  
 15 A. That's a project called Merit House.  
 16 Q. When did he start as project manager on Merit House?  
 17 A. It would have been two years before that.  
 18 Q. Aged 23?  
 19 A. Yes.  
 20 Q. And before Merit House, did he have any experience of  
 21 project management?  
 22 A. He has worked for the company during his school --  
 23 university holidays since 2009, so he was very familiar  
 24 with project management.  
 25 Q. Merit House in 2013, that was his first project manager

1 role, was it?  
 2 A. It was. Was it 2013? No, it was before that.  
 3 Q. Before that?  
 4 A. Sorry, I'm --  
 5 Q. When did --  
 6 A. I'm losing track of the dates.  
 7 Q. Let me try and clear it up. When did Ben Bailey become  
 8 project manager on the Merit House project?  
 9 A. I'm sorry, you're right, it's 2013.  
 10 Q. 2013. He would have been 23 years old at that stage,  
 11 and that was his first project manager job.  
 12 A. Yes.  
 13 Q. So he had never been a project manager before being  
 14 appointed project manager to Merit House?  
 15 A. No, he was a project co-ordinator.  
 16 Q. Yes.  
 17 A. So he stepped up from being project co-ordinator to  
 18 being project manager.  
 19 Q. Yes.  
 20 Did you or anyone else at Harley conduct  
 21 a recruitment exercise to look for a project manager  
 22 within Harley for Grenfell Tower?  
 23 A. No.  
 24 Q. How did Ben Bailey get the job, then?  
 25 A. He -- when he completed Merit House, we moved him on to

1 Grenfell Tower.  
 2 Q. I see. Did he get the job because he was your son?  
 3 A. No.  
 4 Q. How can you account for appointing a 25-year-old, whose  
 5 experience of project management had started when he was  
 6 23 on a prior project, for the position of project  
 7 manager on the Grenfell Tower project?  
 8 A. His experience working on Merit House.  
 9 Q. Right.  
 10 I'm going to ask you some questions now about cavity  
 11 barriers. Could you please go to your statement at  
 12 page 16 {HAR00010184/16}. I would like to look at  
 13 paragraph 62. You describe there email discussions  
 14 relating to cavity barriers in March 2015, and I'll just  
 15 show you that. I'm not going to read it out to you.  
 16 Is it right that this paragraph is a summary of what  
 17 you read in the documents, or do you actually have  
 18 a recollection of these emails?  
 19 A. It's difficult to remember now what I knew then and what  
 20 I read in between, but -- so I can't remember what  
 21 I knew when.  
 22 Q. No, that's fair enough.  
 23 Can I then go to {RYD00037117}. Now, this is  
 24 an email from you on 27 March 2015 to Simon Lawrence,  
 25 Neil Crawford and Ben Bailey, copied to Simon O'Connor,

1 Kevin Lamb and Daniel Anketell-Jones. There is  
 2 a context to this, quite a lengthy context to this.  
 3 I just want, if I can, to scroll to the bottom of this  
 4 email and scan up to this email.  
 5 Can we go, please, to the bottom email in this chain  
 6 {RYD00037117/3}, I just want to show it to you, first of  
 7 all. It starts at the bottom with an email from  
 8 Ricky Kay on 26 March, he is Siderise, to Ben Bailey,  
 9 copied to Lamb and Stapley. You didn't see this. He  
 10 includes an extract from Approved Document B on the  
 11 subject of -- trying to summarise it -- fire integrity  
 12 and insulation in relation to cavity barriers.  
 13 Then if we look at the next email up on page 2  
 14 {RYD00037117/2}, please, there is an email from  
 15 Ben Bailey to Simon Lawrence. Again, you don't see --  
 16 sorry, you are copied in on this one actually:  
 17 "Simon,  
 18 "As discussed, please see the email below from the  
 19 firebreak supplier. There is quite a large cost  
 20 difference between what Siderise and the spec recommend,  
 21 and upgrading to the 120min barriers we discussed on  
 22 Tuesday.  
 23 "Could you forward this to the client's  
 24 representative for approval please."  
 25 Then Simon Lawrence sends this to Studio E, copied

1 to Simon O'Connor, on 27 March, and then at the very top  
 2 of that page, Neil Crawford of Studio E comes back to  
 3 Simon Lawrence saying he had spoken with John, that's  
 4 John Hoban:  
 5 "... and he wasn't happy with Harley's email as we  
 6 are talking about fire stopping as opposed to cavity  
 7 barriers. I have explained again the specifics of our  
 8 scenario and he will have a conversation with Paul  
 9 Hanson to see if there is a reduced spec they can agree  
 10 to and will then speak with Harley's directly."  
 11 Then if we can look at the next page up  
 12 {RYD00037117/1}, Simon Lawrence to Neil Crawford, and  
 13 you're copied in:  
 14 "Thanks for checking Neil.  
 15 "Ben - See Neil's response. It doesn't look  
 16 promising."  
 17 Then you come in with your email at the top of that  
 18 to Simon Lawrence, Neil Crawford and Ben Bailey,  
 19 et cetera:  
 20 "Hi Simon,  
 21 "Reading the email from the specialist suppliers  
 22 Façade Manager [that's Ricky Kay, as we saw at the  
 23 bottom] it should be fairly straight-forward.  
 24 "A firestop is required to stop fire spreading  
 25 between floors or party walls if it is inside the

1 building. Inside of the window or curtainwall.  
 2 "A cavity barrier is required to stop fire spreading  
 3 inside the cavity. For the fire to enter the cavity it  
 4 has had to have gone through the window or curtainwall.  
 5 "In our situation the cladding is outside of the  
 6 windows and therefore it should have a cavity barrier as  
 7 opposed to a firestop."  
 8 Does that email reflect your understanding at the  
 9 time of the distinction between cavity barriers and  
 10 firestopping?  
 11 A. Correct.  
 12 Q. Where had you got that understanding from? I'm not  
 13 saying it's wrong, I just want to know where it's from.  
 14 A. Experience, I suppose.  
 15 Q. Was it your conclusion that the façade was required to  
 16 contain cavity barriers rather than firestopping to  
 17 prevent the fire from entering the cavity?  
 18 A. The cavity barrier -- cavity barriers don't stop it from  
 19 entering the cavity, they stop it travelling round the  
 20 cavity.  
 21 Q. Were you alive to the importance of effective cavity  
 22 barriers around windows, particularly around these  
 23 windows, to prevent fire from progressing into a cavity  
 24 between the external wall and the rainscreen?  
 25 A. This comes back to the industry practice that if you've

1 got a single window in a compartment, it's not always  
 2 regarded as necessary, except according to Approved  
 3 Document B that is an incorrect assumption.  
 4 Q. Just so I understand: first of all, where does this  
 5 industry practice that you're referring to come from?  
 6 Where does your understanding of that come from?  
 7 A. On a number of projects that we've done where we have  
 8 this situation, the Building Control will decide whether  
 9 or not the cavity barriers are necessary around the  
 10 windows, and ... so, again, with this, this is why we  
 11 always ask with cavity barriers, we ask the architect,  
 12 Building Control, where they want them, what do they  
 13 want. So we've gone along with that.  
 14 Q. In your answer before last you also said, "it's not  
 15 always regarded as necessary, except according to  
 16 Approved Document B that is an incorrect assumption".  
 17 A. Yes, I accept that.  
 18 Q. Right, okay. That may shorten things. I just want to  
 19 be clear about it.  
 20 By way of a little build-up to that, just looking at  
 21 the email I showed you at the top of page 2 about  
 22 John Hoban not being happy about Harley's email, what  
 23 was your impression of the professionals' understanding  
 24 of the differences between firestopping and cavity  
 25 barriers?

1 A. I thought he had made a mistake.  
 2 Q. Did it surprise or concern you that there appeared to be  
 3 a significant level of confusion or mistake, as you put  
 4 it, among the professionals in this chain even at this  
 5 late stage of the project?  
 6 A. Yeah, I suppose it did.  
 7 Q. It did concern you?  
 8 A. It surprised me.  
 9 Q. It surprised you, all right.  
 10 Given that surprise, did you -- well, what did you  
 11 do, I suppose is the best question I can ask you, given  
 12 the fact that you had felt surprise about the degree of  
 13 confusion?  
 14 A. I think the email that I sent was -- tried to clarify  
 15 the position as we understood it.  
 16 Q. Did you check the guidance in Approved Document B before  
 17 reaching the view that only cavity barriers were  
 18 required, or were you already familiar with the  
 19 provisions of Approved Document B in relation to cavity  
 20 barriers?  
 21 A. I was familiar with the provision of cavity barriers and  
 22 what they need to do and their fire -- on their fire  
 23 performance that's necessary.  
 24 Q. Now, I think you say now that you have accepted that it  
 25 was an erroneous understanding and that you do need

1 cavity barriers around windows because they're  
 2 an opening; you accept that, I think?  
 3 A. I accept that.  
 4 Q. I see. So we don't need to look at it.  
 5 Can I then take a step out from the topic for  
 6 a moment and ask you about the Chalcots fire.  
 7 A. Yes.  
 8 Q. I think we can take this quite shortly, but you remember  
 9 that there was a fire in 2012 at Chalcots?  
 10 A. I do.  
 11 Q. Yes?  
 12 A. Yes.  
 13 Q. Just to clear up one or two things about Chalcots, the  
 14 cladding system in Chalcots was a Rydon/Harley job,  
 15 wasn't it?  
 16 A. It was.  
 17 Q. It had mineral wool insulation; yes?  
 18 A. Correct.  
 19 Q. It had Reynobond PE 55 face-fixed, not cassette?  
 20 A. Correct.  
 21 Q. And there was a fire there in 2012.  
 22 Was one of the lessons that you learnt from that  
 23 fire that it was immensely important, to stop the fire  
 24 exiting the compartment of origin and into the cladding  
 25 system, that there should be extensive firebreaks around

1 the head and cill of each window?  
 2 A. At Camden, the window system was different. They  
 3 weren't individual windows; they were strip windows  
 4 running from the bottom of the building to the top. As  
 5 such, they effectively were a curtain wall, and  
 6 therefore the barriers at the head and the cill of the  
 7 window were not cavity barriers, they were firestopping.  
 8 Q. Well, let's just have a look, then. Can we look at the  
 9 Harley incident report form for the Chalcots fire. This  
 10 is {HAR00010169}. This relates to the fire that broke  
 11 out on 16/17 January 2012, and this is a report dated  
 12 17 January.  
 13 We can see that you were on the distribution list of  
 14 the report, even though you weren't, I think, at the  
 15 investigation.  
 16 A. Correct.  
 17 Q. The purpose of the report is to record the initial  
 18 findings.  
 19 I can take it that you saw this report at the time?  
 20 A. Yes.  
 21 Q. If you go to the bottom of {HAR00010169/2}, please, you  
 22 can see that there are some photographs. Just pick this  
 23 up: that was what the fire looked like on the outside of  
 24 the building.  
 25 Just on that, while we're there, did you learn from

1 this experience that when ACM catches fire and burns on  
 2 the exterior of the building, the ACM would burn and  
 3 drip downwards?  
 4 A. No, we saw that it would burn, and I presume there would  
 5 be some dripping if it's aluminium.  
 6 Q. If we go to {HAR00010169/4}, there are two photographs.  
 7 Above the first one it says:  
 8 "The fire had caused extensive damaged(sic) to the  
 9 living room, the windows and building structure as all  
 10 had been subject to extensively high temperatures."  
 11 Then we see the photograph of who turned out in the  
 12 end to be Steve Blake pointing at the windows. It says  
 13 underneath that:  
 14 "It was evident that despite the fire and the amount  
 15 of flammable items in the flat such as paper etc the  
 16 fire breaks were still intact and prevented the fire  
 17 spreading between flats. The Harley designed fire break  
 18 system is visible, now the surrounding fabric has melted  
 19 under the extensive heat."  
 20 Did you understand or do you understand what was  
 21 meant there by "firebreaks" in the context of this  
 22 photograph?  
 23 A. It was firestopping.  
 24 Q. So not cavity barriers?  
 25 A. No.

1 Q. Were these breaks behind the cladding or was there  
 2 firestopping elsewhere?  
 3 A. This firestopping was from the concrete slab to the back  
 4 of the -- I'll call it -- it's not a -- a curtain wall.  
 5 Q. Right. Do you know why Harley constantly used the  
 6 expression "firebreaks" --  
 7 A. I think that's --  
 8 Q. -- as opposed to "firestops" or --  
 9 A. I think it's just a generic term that's used within the  
 10 industry, and it covers cavity barriers and firestops.  
 11 A cavity barrier is not interchangeable with a firestop,  
 12 but the overall term is "firebreaks".  
 13 Q. It has the potential, therefore, would you accept, to  
 14 cause confusion as to whether anybody using the term  
 15 "firebreaks" is referring to cavity barriers or  
 16 firestops?  
 17 A. Yeah, possibly, but not if you're doing what we do.  
 18 Q. Who designed the Harley-designed firebreak system?  
 19 A. On there, it may have been Mark Stapley.  
 20 Q. Right. Do you know whether it was used at  
 21 Grenfell Tower?  
 22 A. No, we had no firestopping.  
 23 Q. Or firebreaks?  
 24 A. No, we had cavity barriers.  
 25 Q. Not around the windows.

1 A. We had cavity barriers on the slab and on the party  
2 walls, yes.  
3 Q. Right.  
4 My question is: why wasn't the Harley-designed  
5 firebreak system used around the windows at  
6 Grenfell Tower in the way that it had been used at  
7 Chalcots?  
8 A. As I explained earlier, because there was one window  
9 within the compartment, for the fire to spread between  
10 flats, it had to go past a cavity barrier. And this --  
11 sorry, just to go back to this, this was the design  
12 handed down by the architect. We accept we have  
13 a responsibility. It was signed off by Exova before we  
14 started. During the many discussions we had about the  
15 cavity barriers and increasing it to two-hour  
16 firestopping, which wouldn't work, Siderise, the cavity  
17 barrier manufacturers, did not show the cavity barriers  
18 around the windows, down the jambs or tied to the head.  
19 So we have a raft of people looking at this and not  
20 picking up that there is a problem, that it doesn't  
21 comply.  
22 So we put our hands up for our part in it, but there  
23 is -- there are five or six levels of supervision to  
24 pick these things up.  
25 Q. Well, Mr Bailey, never mind about others, I'm asking

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1 you, and you were involved in the Taplow experience, as  
2 was Rydon for that matter, but did the Taplow House  
3 experience not teach you that the failure to place  
4 cavity barriers or firestops, a firebreak in your  
5 parlance, around the windows creates a serious risk of  
6 the spread of fire from the compartment of origin to the  
7 cladding?  
8 A. Because they are different, they serve different  
9 functions. So what happened at Camden is a different  
10 situation from what we were faced at Grenfell.  
11 Q. Yes, and my question, again, is: given the lessons that  
12 you, Harley, had learnt at Taplow House, why didn't  
13 those lessons cause you to bring them to bear when  
14 examining precisely what was going to go around the  
15 windows at Grenfell?  
16 A. We accept that's an error.  
17 Q. Can we look at Approved Document B, which I think will  
18 crystallise the error. {CLG00000224/82}, please,  
19 paragraph 9.1, 9.2 and 9.3.  
20 9.1, let's start with that. I want, as I say, 9.1,  
21 9.2 and 9.3. But 9.1:  
22 "Concealed spaces or cavities in the construction of  
23 a building provide a ready route for smoke and flame  
24 spread. This is particularly so in the case of voids  
25 in, above and below the construction of a building, e.g.

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1 walls, floors, ceilings and roofs. As any spread is  
2 concealed, it presents a greater danger than would a  
3 more obvious weakness in the fabric of the building."  
4 That's 9.1.  
5 Just pausing there, would you agree with me that  
6 here ADB is drawing specific attention to fires within  
7 a cavity where flame spread is less obvious?  
8 A. I agree with that.  
9 Q. And that would include behind a façade or behind  
10 a rainscreen?  
11 A. Correct.  
12 Q. Looking at diagram 33 on page 82 just below it, you can  
13 see "Provisions for cavity barriers". Are you familiar  
14 with this diagram or were you at the time?  
15 A. Yes.  
16 Q. If we look at it closely, we can see that it shows  
17 a window and specifically instructs designers to close  
18 around openings. Do you see that?  
19 A. I do.  
20 Q. So it would have been possible, wouldn't it, at Grenfell  
21 to comply with the requirements of diagram 33 by putting  
22 cavity barriers in all the locations required by  
23 diagram 33?  
24 A. I think we've accepted that.  
25 Q. Yes.

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1 Now, 9.2 gives you provision of cavity barriers for  
2 specific locations, and that refers to diagram 33 which  
3 we've looked at and also extensive cavities.  
4 Then it goes on to say:  
5 "Consideration should also be given to the  
6 construction and fixing of cavity barriers provided for  
7 these purposes and the extent to which openings in them  
8 should be protected ... see ... 9.13 to 9.16 ..."  
9 Then 9.3 at page 83 {CLG00000224/83}, it says:  
10 "Cavity barriers should be provided to close the  
11 edges of cavities, including around openings."  
12 Then it goes on to add to that, but I think you  
13 accept that, as a result of 9.1, 9.2, diagram 33 and  
14 9.3, cavity barriers should have been around the windows  
15 at Grenfell, in accordance with the guidance.  
16 A. Yes.  
17 Q. Going back, then, to the email chain if I can, please,  
18 {HAR00006585}, this is an email to Daniel Anketell-Jones  
19 which you forward to him, seeking his input. You say:  
20 "Dan,  
21 "Do you have any comments?"  
22 Do you see that, halfway down?  
23 A. Yes.  
24 Q. Then he comes back to you at the top of that page, same  
25 day, 27 March 2015:

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1 "Just that it's ridiculous .  
 2 "There is no point in ' fire stopping', as we all  
 3 know; the ACM will be gone rather quickly in a fire !  
 4 "The whole point is to stop 'unseen' fire spreading  
 5 in the cavity and moving to other parts of the building .  
 6 "Who is John? And who is Paul?  
 7 "Are we working to the NBS spec by Studio E?"  
 8 Now, did you understand that the ACM cladding panels  
 9 would melt and fall off the building rather quickly in  
 10 a fire?  
 11 A. In the CWCT guidance there is no fire performance for  
 12 a cladding system or a -- it has no ability to resist  
 13 fire , and it is recognised that the cladding, whatever  
 14 it is , would not be expected to last more than 10 to  
 15 20 minutes. Dan's point there, I think, is you can't  
 16 firestop for two hours against a panel that will be gone  
 17 in 10 or 20 minutes.  
 18 Q. Does that tell us that you were aware, and certainly he  
 19 was aware, that the ACM proposed was combustible?  
 20 A. No.  
 21 Q. Well, how would you explain what he is saying, then:  
 22 "... as we all know; the ACM will be gone rather  
 23 quickly in a fire !"  
 24 Why would it be gone if it wasn't combustible?  
 25 A. Because it may melt. Glass is not combustible, and that

1 wouldn't last two hours with firestopping against the  
 2 back of it . Aluminium is non-combustible, that wouldn't  
 3 last two hours with firestopping against it . So it's no  
 4 different than those products. The fact that it may be  
 5 gone quite quickly, I think Dan's talking quarter of  
 6 an hour, does not mean that it is combustible.  
 7 Q. Did you share his understanding that ACM would be gone  
 8 rather quickly in a fire ?  
 9 A. With who?  
 10 Q. I'm sorry. Well, did you agree in your own mind with  
 11 Daniel Anketell-Jones that ACM would be gone rather  
 12 quickly in a fire ?  
 13 A. I agree with Daniel that any cladding product in  
 14 rainscreen will be gone rather quickly -- "rather  
 15 quickly" is not a good phrase, but it will not last  
 16 two hours. Typically a cladding panel will last 10,  
 17 20 minutes.  
 18 Q. Well, there is nothing about two hours. Rather quickly  
 19 is rather quickly .  
 20 A. No, this is in response to: shall we put a two-hour  
 21 firestop against the back of it .  
 22 Q. I see.  
 23 Did you understand Mr Anketell-Jones to be  
 24 indicating that there was no point installing  
 25 fire resistant products, or specifically cavity

1 barriers, within the cavity of the rainscreen because  
 2 they wouldn't have anything to expand against to resist  
 3 the spread of fire because the rainscreen would have  
 4 fallen off very quickly?  
 5 A. The -- if we go back to firestopping, in two hours' time  
 6 there would be no panels there, in 20 minutes' time  
 7 there would be no panels there. The cavity barriers are  
 8 supposed to stop the chimney effect and the spread of  
 9 smoke around the building .  
 10 If the panels aren't there, we no longer have  
 11 a chimney, and therefore the draw of the fire up the  
 12 inside of the cavity will stop .  
 13 Q. So there was no point effectively having any effective  
 14 cavity barriers within the rainscreen system?  
 15 A. No, the half hour cavity barriers will do -- will stop  
 16 the spread within the cavity until such time as the  
 17 cavity disappears .  
 18 Q. How do you reconcile his and your understanding that ACM  
 19 would be gone rather quickly in a fire with what you  
 20 understood to be its fire performance qualities as  
 21 communicated to you by the BBA certificate that we were  
 22 discussing this morning?  
 23 A. The fire performance certificate was that it wouldn't  
 24 actually ignite , as far as I ...  
 25 Q. So it was your understanding that the ACM would either

1 melt or would somehow remove itself from the building  
 2 but wouldn't ignite ?  
 3 A. Yes .  
 4 Q. What would be the mechanism for that?  
 5 A. What, that it would melt?  
 6 Q. What would be the mechanism for melting but not  
 7 igniting ?  
 8 A. Well, if it's -- if there's a fire , with the heat, it  
 9 will melt. It may -- and as at Chalcots, it burnt away .  
 10 Q. Was it your understanding that the tests which the BBA  
 11 certificate had said that the panels had passed  
 12 nonetheless allowed it to melt and fall off the  
 13 building?  
 14 A. Yes .  
 15 Q. Really? Okay .  
 16 Given what you told us about class 0 this morning,  
 17 which was that class 0 meant that the material was of  
 18 limited combustibility throughout, as you told us, how  
 19 does that reconcile with the idea that ACM would be gone  
 20 rather quickly in a fire ?  
 21 A. I said that class 0 throughout indicated to me that it  
 22 was of limited combustibility , and that ordinary class 0  
 23 was just class 0, so that would -- do you want to look  
 24 that up?  
 25 Q. I'm not sure I understand, to be honest. Can we try it

1 a different way. Given your understanding --  
 2 SIR MARTIN MOORE-BICK: I think Mr Bailey was going to  
 3 explain.  
 4 MR MILLETT: Oh, I'm sorry.  
 5 SIR MARTIN MOORE-BICK: Did you want to explain, Mr Bailey?  
 6 A. Yes, I think the confusion with regard to class 0 is if  
 7 it's class 0, it's not of limited combustibility, but if  
 8 it's class 0 throughout, it is what I took to be of  
 9 limited combustibility. So the Reynobond panels are  
 10 just class 0. The assertion was made in the Celotex  
 11 literature that their product was class 0 throughout,  
 12 and that was the distinction that I was making.  
 13 SIR MARTIN MOORE-BICK: Right, thank you.  
 14 MR MILLETT: Did you think that the point about ACM being  
 15 gone rather quickly in a fire was something that needed  
 16 to be escalated to the attention of Building Control or  
 17 Exova or Rydon or Studio E for that matter?  
 18 A. No, I thought it was a well understood result of a fire.  
 19 Be it ACM or aluminium or glass, if there's fire on it,  
 20 it will break.  
 21 Q. So you assumed that each of Studio E, Rydon, Exova and  
 22 Building Control would have known what you knew, namely  
 23 that ACM would be gone rather quickly in a fire, and you  
 24 didn't need to take that up with them or tell them about  
 25 your knowledge or concerns about that?

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1 A. No, it's not just ACM.  
 2 Q. No, I understand what you're saying, but I think the  
 3 answer to my question is: no, you didn't, because you  
 4 assumed that they would know the same as you did?  
 5 A. Yes, and I think certainly at that time, and looking at  
 6 I think it was Neil Crawford's evidence, he was well  
 7 aware that aluminium panels would melt.  
 8 Q. Can we look at {HAR00006596}, please. This is an email  
 9 chain on 1 April 2015 from Simon Lawrence to Ben Bailey  
 10 and to you, which is I think the end result of this  
 11 exchange:  
 12 "The Building Control officer is now in agreement  
 13 with the fire protection in the cladding being a 'cavity  
 14 barrier' rather a fire stop as first thought.  
 15 "Good news."  
 16 When you got this, did you read the email chain  
 17 below it, including John Hoban's 1 April email to  
 18 Neil Crawford at Studio E, copied to Simon Lawrence, as  
 19 we can see there?  
 20 A. I can't recall. Can you bring it up?  
 21 Q. It should be on -- oh, yes, you're quite right, it's not  
 22 on the screen. It is just below it, page 1 over to  
 23 page 2.  
 24 You can see there that he refers to some drawings,  
 25 does John Hoban, in the second paragraph.

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1 A. Yes.  
 2 Q. He says:  
 3 "I have no adverse comments to make on the cladding  
 4 proposals shown on your drawings 1279 (06) 120 rev. 00,  
 5 121 rev. 00 and Harleys drawing C1059-325 rev. C ..."  
 6 And then he refers to another drawing in the next  
 7 paragraph, "1279 (06) 121 rev.00 to that standard".  
 8 Did you yourself review the drawings referred to in  
 9 John Hoban's email at the time?  
 10 A. I don't think so, no.  
 11 Q. Did Simon Lawrence tell you that John Hoban had not  
 12 commented on a set of Harley drawings that Studio E had  
 13 provided to RBKC Building Control on 6 March 2015?  
 14 A. No, he hadn't.  
 15 Q. And those drawings which had been sent by Kevin Lamb of  
 16 Harley to Simon Lawrence on 3 March?  
 17 A. I can't recall.  
 18 Q. For our reference purposes, they're at {SEA00000252},  
 19 just for the transcript.  
 20 Did you seek to clarify with Rydon or Studio E  
 21 whether RBKC's Building Control had any comments to make  
 22 on Harley's drawings that Studio E had sent to is on  
 23 6 March?  
 24 A. No, the procedure is that we pass the drawings to --  
 25 technically to Rydon, but practically to the architects,

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1 and they deal with Building Control. In my experience,  
 2 subcontractors almost never talk direct to  
 3 Building Control.  
 4 Q. Just on that, then, can I just come to a point I was  
 5 going to come to later.  
 6 A. Sorry, yeah.  
 7 Q. Did you ever have a discussion with John Hoban  
 8 yourself --  
 9 A. No.  
 10 Q. -- whether on site or off site?  
 11 A. No.  
 12 Q. Did you ever have a discussion with anybody at RBKC  
 13 Building Control?  
 14 A. No.  
 15 Q. Right.  
 16 Just going back to this, did you or anybody else at  
 17 Harley to your knowledge assume, on receipt of  
 18 Simon Lawrence's email of 1 April that we can see there,  
 19 that Building Control had no adverse comments to make on  
 20 the drawings that Studio E had sent to RBKC  
 21 Building Control?  
 22 A. Correct.  
 23 Q. Right.  
 24 Were you aware, having seen those four drawings, if  
 25 you had looked at them, that there were no cavity

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1 barriers around the windows?  
 2 A. There wouldn't have been.  
 3 Q. Well, you say there wouldn't have been; I think we  
 4 established earlier that there should have been.  
 5 A. No, you said was I aware that those drawings didn't show  
 6 that.  
 7 Q. Correct.  
 8 A. And the answer was yes.  
 9 Q. Thank you.  
 10 Now, can I ask you to look at {HAR00003947}. This  
 11 is Ben Bailey's email to you, 30 March 2015, as well as  
 12 Kevin Lamb and Mark Stapley, and he is forwarding to you  
 13 an email he had got the same day from Chris Mort at  
 14 Siderise which attached some drawings.  
 15 Can I just look at the first paragraph of that  
 16 email, just below it, halfway down the screen, he says:  
 17 "Hi Ben,  
 18 "I have reviewed the drawings sent over and sketch a  
 19 proposal to alleviate the issues raised by the BCO  
 20 [Building Control Officer], also on the second page of  
 21 the attachment I have highlighted the weak link so to  
 22 speak in terms of fire and I think the BCO would have  
 23 also noticed this."  
 24 Now, let's look at the drawing where he identifies  
 25 the weak link. This is {HAR00003948}, please. If you

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1 look, please, at the second drawing down there  
 2 {HAR00003948/2}, you can see where he has put a pink or  
 3 orange squiggly cloud around the bracket and said, "Weak  
 4 link for fire".  
 5 Did you look at that drawing when it was forwarded  
 6 to you by Ben Bailey on 30 March?  
 7 A. I'm not sure if I saw it on 30 March but I've seen it  
 8 subsequently.  
 9 Q. Did you see it subsequently before the end of the  
 10 project?  
 11 A. Yes.  
 12 Q. And did you note what Chris Mort had said in his email,  
 13 which was being forwarded to you, namely that he has  
 14 highlighted the weak link?  
 15 A. Yes.  
 16 Q. Now, you do say in your statement -- and it's  
 17 paragraph 69 {HAR00010184/17}, I don't think I need to  
 18 show it to you -- that you believed you would have read  
 19 this email but had already seen the email chain of  
 20 1 April by the time you read Chris Mort's email.  
 21 Does that mean that you did notice or didn't notice  
 22 the drawing which, at that stage, identified a weak link  
 23 for fire at the head of the window?  
 24 A. I'm not sure I saw it at the time, but maybe a little  
 25 bit later.

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1 Q. Right.  
 2 If you did notice the weak link for fire, even  
 3 a little bit later, on the drawing, what did you do in  
 4 response to being told that there was a weak link for  
 5 fire in that location, the bracket at the head of the  
 6 window?  
 7 A. Well, when I read that, it was in the context that we  
 8 were trying to -- or that there was going to be  
 9 a two-hour firestopping required, and if we only had  
 10 a cavity barrier then everything to do with the two-hour  
 11 firestopping actually would cease to be an issue.  
 12 Actually looking at this drawing here, what's not  
 13 clear on the drawing to Chris Mort is whether that is  
 14 a continuous shelf angle at the head or individual  
 15 brackets, one of which would be a weak link and the  
 16 other wouldn't.  
 17 Q. Did you seek to bring this email and the drawing to the  
 18 attention of Studio E?  
 19 A. No, we didn't.  
 20 Q. Why is that?  
 21 A. Because, as I've explained, it was read in the context  
 22 of achieving a 120-minute firestopping as opposed to  
 23 a 30/15 cavity barrier.  
 24 Q. So did you just ignore what Mr Mort was saying?  
 25 A. No, I don't think -- I thought he had the wrong end of

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1 the stick.  
 2 Q. Did you go back to Chris Mort or ask anybody else at  
 3 Harley, such as Ben, to go back to Chris Mort and tell  
 4 him that he had got the wrong end of the stick?  
 5 A. No, I didn't.  
 6 Q. Why is that?  
 7 A. I don't know.  
 8 Q. Did you bring this to the attention of RBKC  
 9 Building Control, that the manufacturer's representative  
 10 was of the view that there was a weak link in this  
 11 location for fire?  
 12 A. This isn't -- well, no, we didn't.  
 13 Q. You see, Mr Mort, as I've shown you from his email, was  
 14 of the view that the Building Control officer would also  
 15 have noticed this. So if Mr Mort was telling you that,  
 16 why not just verify it with Mr Hoban and say, "Look, the  
 17 manufacturer has picked this up, he thinks you might  
 18 have picked this up, what's the position?"  
 19 A. That would have been a better thing to do, yes.  
 20 Q. Well, it would have been a better thing to do if you  
 21 were reliant on Mr Hoban, I suppose, but given that this  
 22 was something which had been flagged by the  
 23 manufacturer, wasn't it the only sensible thing to do?  
 24 (Pause)  
 25 A. Yes.

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1 Q. Would it be normal on a construction project for  
2 a specialist external façade contractor like Harley to  
3 be made aware by a manufacturer of a weak link for fire  
4 in the external façade and not then bring that to the  
5 attention of the Building Control body?  
6 (Pause)  
7 A. I don't think we've ever had the situation before, no.  
8 Q. If Harley were reliant, as I think you have said to some  
9 extent yesterday, on Building Control, how could  
10 John Hoban ever have given an informed final decision in  
11 relation to what was installed at least here so far as  
12 fire safety was concerned if he wasn't fully apprised of  
13 the potential risks as identified by the manufacturer?  
14 A. Building Control have the drawings. I'm not sure that  
15 this is actually a weak link if there is a continuous  
16 aluminium angle along the head of the window.  
17 MR MILLETT: Mr Chairman, is that a convenient moment?  
18 SIR MARTIN MOORE-BICK: Yes, I think it probably is,  
19 thank you.  
20 We will have another break now, Mr Bailey.  
21 THE WITNESS: Okay.  
22 SIR MARTIN MOORE-BICK: We will come back at 3.40, please.  
23 THE WITNESS: Okay.  
24 SIR MARTIN MOORE-BICK: And no talking again, please, about  
25 your evidence. All right?

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1 Thank you very much, you go with the usher.  
2 (Pause)  
3 Thank you. 3.40, please.  
4 (3.24 pm)  
5 (A short break)  
6 (3.40 pm)  
7 SIR MARTIN MOORE-BICK: Right, all ready, Mr Bailey?  
8 THE WITNESS: I am.  
9 SIR MARTIN MOORE-BICK: Thank you.  
10 Yes, Mr Millett.  
11 MR MILLETT: Mr Chairman.  
12 Mr Bailey, I would like to ask you now some  
13 questions about infill panels on this project. Can  
14 I ask you to go to your statement at page 29  
15 {HAR00010184/29}, paragraph 115. You say there:  
16 "As explained previously, the windows were formed  
17 from aluminium profiles and were double glazed with  
18 units of toughened glass. Between the glazed units were  
19 insulated infill panels. As far as I am aware these  
20 were suitable for use in Grenfell Tower and are used on  
21 buildings across the UK."  
22 Can I go, please, to {HAR00008886}. This is  
23 an elevation drawing produced by Kevin Lamb, as we can  
24 see, dated 22 September 2014. This is revision D of  
25 3 March 2015. Do you see that?

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1 A. Yes.  
2 Q. It was stamped "Approved for construction".  
3 Just out of interest, who would normally stamp  
4 "Approved for construction" on a Harley drawing?  
5 A. The "Approved for construction" stamp is an internal  
6 stamp so that when it arrives on site, the guys are only  
7 working to the latest revision.  
8 Q. I see. Who would apply it normally?  
9 A. Kevin.  
10 Q. Kevin, I see. So would he do the drawing and then stamp  
11 it "Approved for construction"?  
12 A. Once it's been through the approval process he would  
13 actually put that on.  
14 Q. That was the norm, was it?  
15 A. That's the norm.  
16 Q. He shows here two areas of infill panel identified as P1  
17 and P2. Can you see those?  
18 A. I'll take your word -- I can't quite read it, but I'll  
19 take your word for it.  
20 Q. I will see if I can help. P1 -- we may be able to blow  
21 this up a bit more. If we can, that'd be great.  
22 Can you see there are hatched areas there, big ones  
23 and a small one?  
24 A. Yes.  
25 Q. Looking at the left-hand side, you can see the big

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1 square hatched area is P1, top left-hand corner there,  
2 and P2 is the smaller hatched area.  
3 A. Yes.  
4 Q. Yes. Now, the big one, P1, is the big panel that sits  
5 between the windows of the kitchen and the bedroom,  
6 isn't it?  
7 A. It is.  
8 Q. And P2 is the little panel within the window itself  
9 which housed the kitchen extract fans; is that right?  
10 A. Correct.  
11 Q. Those panels are also marked on the window schedule for  
12 the upper floors, which you forwarded to CEP, the  
13 fabricators.  
14 Can we just see a document, {CEP00000493}, please.  
15 This is an email from you to Geof Blades of CEP,  
16 4 December 2014, you attach a drawing and say:  
17 "Window schedule for upper floors."  
18 Do you know why you were sending Mr Blades that  
19 drawing and not Daniel Anketell-Jones or Kevin Lamb?  
20 A. I can't recall.  
21 Q. Let's see if we can look at the drawing to see if it  
22 helps. {CEP00000494}. This comes from CEP's documents.  
23 We can see there that there are a number of different  
24 types of drawings, each identifying P1 and P2 panels.  
25 Do we see that?

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1 Do you remember looking at this drawing and similar  
2 drawings?  
3 A. Yes.  
4 Q. Did you ever make any investigations into what materials  
5 made up P1 and P2?  
6 A. No. From the specification on the key drawing, there  
7 was a make-up shown on that, yes.  
8 Q. The specification on the key drawing?  
9 A. There is --  
10 Q. Let's see how we go, we may come to it.  
11 Can you please go to {HAR00003882}. This is  
12 an email -- well, it isn't an email. This is a meeting  
13 note, actually, of January 2015. I'm not sure we can  
14 see the date on the first page, but it's progress  
15 meeting number 1 of 2015. In attendance were  
16 Mr Maxwell, you, Mr Stapley and Kevin Lamb. Do you see  
17 that?  
18 A. Yes.  
19 Q. Do you remember the meeting?  
20 A. Not offhand, no.  
21 Q. No. Let's look down to page 3 {HAR00003882/3} and look  
22 at item 8. Item 8:  
23 "Sanwich(sic) panels RAL 9010 sorce(sic) from new  
24 supplier?"  
25 Who was the original supplier, do you know?

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1 A. I don't.  
2 Q. Do you know why you had to find a new supplier?  
3 A. I don't.  
4 Q. Just on there, while we're on it, there is also  
5 a reference to "Alucobond panels to be ordered" at  
6 item 13. Can you explain that?  
7 A. I think I said yesterday that Alucobond is to ACM what  
8 Hoover is to vacuum cleaners.  
9 Q. I see what you mean, right, so that meant ACM?  
10 A. Yes.  
11 Q. In fact, they were Reynobond?  
12 A. Yes.  
13 Q. Just to clear that up.  
14 Can you please go to {HAR00003866}. This is the  
15 January version, the first version of a document we  
16 looked at earlier on, the Harley specification notes.  
17 Do you remember earlier today Mr Bailey we looked at the  
18 July version of this --  
19 A. We did.  
20 Q. -- revision? This is the very first one, as you can  
21 see, 15 January 2015. If you look, please, with me, you  
22 can see on the left-hand side that Mr Lamb, if you  
23 ignore the red annotations, specified under "Glazing -  
24 P1":  
25 "Outer - 2mm aluminium skin RAL 9010 matt ...

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1 "Core - 24mm Kingspan TP10 rigid insulation.  
2 "Inner ..."  
3 Again, the aluminium RAL 9010.  
4 Then P2 also had a core of 24-millimetre Kingspan  
5 TP10 rigid insulation .  
6 First of all, did you see this document when it was  
7 first produced in January 2015?  
8 A. No.  
9 Q. Looking at the red annotations, they amended the  
10 dimensions of the aluminium skins on both P1 and P2, as  
11 you can see, but they also amended the core from  
12 Kingspan TP10 rigid insulation to 25 millimetres of  
13 styrofoam.  
14 Can you explain when that decision was made?  
15 A. What's the date of the drawing?  
16 Q. The date of the document is 15 January 2015. You can  
17 see that from the bottom right-hand corner.  
18 A. Do we know what date the revision A was?  
19 Q. Offhand, we can go to another document. Well, I'll try  
20 and answer your question by showing you {RYD00046822}.  
21 I don't want to go round in circles, but you can  
22 certainly see that from this document -- this is  
23 revision D of 15 July 2015, and that tells us from the  
24 box that the first revision, revision A, is  
25 3 March 2015.

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1 So answering your question --  
2 A. It would have been between those two dates.  
3 Q. Right, fine .  
4 Going back, if we can, then, to the red annotations  
5 on {HAR00003866}, do you know whose red annotations  
6 those were?  
7 A. I don't know whose they are, but they look like they  
8 might be Mark Stapley's writing.  
9 Q. Right.  
10 Now, do you know why styrofoam was to be substituted  
11 for Kingspan TP10 as the core of these infill panels?  
12 A. I don't.  
13 Q. Now, if we just move on a little bit, can we go to  
14 {HAR00003869}. You can see that this is the version  
15 dated 15 January 2015, but now marked by  
16 Studio E Architects with a B. You can see that?  
17 A. Mm-hm.  
18 Q. But if you look at the rev box, there are no revisions .  
19 So we can narrow our timeframe down to the changes,  
20 I think, to between 15 January and 26 January 2015,  
21 can't we?  
22 A. Yes.  
23 Q. Yes, because we can then see, if we pan out again, that  
24 the core for glazing for P1 had by then been changed in  
25 the printed form of this document from Kingspan TP10 to

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1 styrofoam; do you see that?  
 2 A. Yes.  
 3 Q. Can you explain how that came about or why that decision  
 4 was made --  
 5 A. I can't.  
 6 Q. -- during that timeframe, between 15 January and  
 7 26 January? You can't, all right.  
 8 Do you know why Mr Lamb, as it appears, adopted that  
 9 change for P1 but not for P2, as you can see the core  
 10 there for P2 remained Kingspan TP10 rigid insulation?  
 11 A. I don't know.  
 12 Q. This version, as you can see, went to Studio E, who  
 13 approved it as conforming to design intent, but subject  
 14 to a comment that I don't think we need to get into, but  
 15 you can't explain why for P1 but not P2.  
 16 Did you or Kevin Lamb to your knowledge tell the  
 17 author of the red annotations, who may have been  
 18 Mark Stapley, that his prescription of styrofoam was  
 19 being followed for P1 but not for P2?  
 20 A. No.  
 21 Q. Now, can we look at your witness statement, page 23  
 22 {HAR00010184/23}, please. You say at paragraph 92:  
 23 "All the materials used in the building envelope  
 24 were specified within Studio E's NBS specification."  
 25 That's not correct, is it, because the P1 and P2

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1 materials were specified by Harley, not by Studio E in  
 2 the NBS spec?  
 3 A. That may be correct.  
 4 Q. Well, we can't find anywhere in the NBS spec where we  
 5 find either styrofoam or TP10 as the material to be used  
 6 in the core of the sandwich panels.  
 7 A. And there is no annotation on their design drawings?  
 8 Q. So -- well, can you help us?  
 9 A. If it's not actually in the NBS spec, it may be in the  
 10 original pack of drawings.  
 11 Q. We haven't been able to find it.  
 12 A. You can't find it?  
 13 Q. We haven't been able to find anything at all specifying  
 14 the material for the core for P1 or P2 infill panels  
 15 anywhere in the --  
 16 A. Right.  
 17 Q. -- NBS spec or the drawings. So we are proceeding on  
 18 the assumption that that came from Harley, and I'm  
 19 interested to know whether you agree, and, if so, why  
 20 that is.  
 21 A. Without the -- looking back at all the documents,  
 22 I can't disagree with you.  
 23 Q. And you can't, I think, help us why it is --  
 24 A. No, I can't.  
 25 Q. -- that the infill panel at P1 became styrofoam but P2

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1 remained TP10.  
 2 A. No, I can't.  
 3 Q. Styrofoam is the trading name for extruded polystyrene  
 4 insulation material, or XPS, isn't it?  
 5 A. It is.  
 6 Q. Do you know why a named product was not(sic) specified  
 7 at this point in the design process?  
 8 A. Sorry?  
 9 Q. Yes. Do you know why a named product was being  
 10 specified at this point?  
 11 A. No, I think, again, styrofoam is a commonly used trade  
 12 name for that type of product.  
 13 Q. Right. So given that styrofoam is a trade name -- a bit  
 14 like Hoover, I think was your example before.  
 15 A. Yes.  
 16 Q. Given that Styrofoam was the Hoover of extruded  
 17 polystyrene, do you know then why a named product wasn't  
 18 specified in the way that TP10 was for that material?  
 19 A. I don't.  
 20 Q. Now, do you accept that styrofoam is an insulation  
 21 product?  
 22 A. It is.  
 23 Q. And do you accept that it was not a material of limited  
 24 combustibility?  
 25 A. I do.

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1 Q. Do you accept that it should not therefore have been  
 2 specified for the P1 panel?  
 3 A. I think there's a -- there is a debate on that, because  
 4 it is bonded to two skins of aluminium, so it can be  
 5 classed as a class 0 product, and because it's in the  
 6 window rather than a rainscreen cladding, I don't  
 7 believe that that's covered by ADB2.  
 8 Q. Did you believe that at the time?  
 9 A. Yeah, windows are always a bit of an oddity with regard  
 10 to this.  
 11 Q. Was it your view at the time that the P1 panel was not  
 12 part of the external wall construction for the purposes  
 13 of Approved Document B?  
 14 A. Yes.  
 15 Q. Was that a view that you discussed with anyone at  
 16 Studio E at the time?  
 17 A. No.  
 18 Q. Was it a view you discussed with anybody at the time?  
 19 A. No, it's -- it is just one of those oddities that  
 20 windows seem to fall outside of the cladding.  
 21 Q. You say it can be classed as a class 0 product; did you  
 22 know of any tests or any certificates in relation to  
 23 these panels which could have shown you that it was  
 24 class 0?  
 25 A. No, I'm just looking at ADB2, which has two skins of

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1 aluminium with a bonded core that's integral to it, it  
 2 can be a class 0 product.  
 3 Q. Did you know of any tests or certificates which showed  
 4 you that it was either of material of limited  
 5 combustibility or had passed a BS 8414 test?  
 6 A. No, because it's ... sorry, yes, it's not a product that  
 7 we believed was of limited combustibility.  
 8 Q. Now, can I turn to the P2 panel. We saw earlier that  
 9 that was specified as being Kingspan TP10 and remained  
 10 Kingspan TP10 throughout the Harley spec from January to  
 11 July 2015.  
 12 Did you know that Kingspan TP10 rigid insulation was  
 13 in fact a PIR insulation product sold for use as  
 14 a roofing insulation?  
 15 A. I didn't.  
 16 Q. Can we look at the BBA certificate for it, which is at  
 17 {KIN00000276}. This is the BBA certificate for TP10,  
 18 Kingspan Thermapitch TP10, and it's dated, or date of  
 19 first issue, 30 January 2009. On page 1 we can see that  
 20 the product is described under the heading "Product  
 21 scope and summary of certificate", do you see? It says:  
 22 "This Certificate relates to Kingspan Thermapitch  
 23 TP10 board, a warm roof insulation system, using rigid  
 24 polyisocyanurate (PIR) board, faced on both sides with  
 25 aluminium foil for use in pitched roofs in new and

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1 existing domestic and non-domestic buildings."  
 2 Can I assume that you didn't read this BBA  
 3 certificate at the time of the Grenfell Tower project?  
 4 A. I've not seen this.  
 5 Q. Do you know whether anybody at Harley did?  
 6 A. I would suspect that Kevin has read it.  
 7 Q. You suspect that he has read it. Do you know that?  
 8 A. I don't, you need to ask Kevin.  
 9 Q. Okay. And Kevin because he was the one who pulled  
 10 together the Harley spec, is that why?  
 11 A. Yes.  
 12 Q. Are you saying that you wouldn't have expected  
 13 Kevin Lamb to have specified Kingspan Thermapitch TP10  
 14 in that document unless he had read the certificate; is  
 15 that what you would have expected of him?  
 16 A. I would have expected -- I know he has used this on  
 17 other projects, not for us but for other people he works  
 18 for, so it's a product that he's familiar with.  
 19 Q. You know that. On those other projects which you say he  
 20 has used it on, where did you think or know that he had  
 21 used it?  
 22 A. I don't know which projects they were.  
 23 Q. Where in the building?  
 24 A. Sorry?  
 25 Q. Where in the building do you think Kevin Lamb had

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1 previously used or specified Thermapitch TP10?  
 2 A. On other window infill panels.  
 3 Q. I see. And how did you know that?  
 4 A. Because he had told me he was familiar with them.  
 5 Q. In what context did he tell you that?  
 6 A. When we were -- I said, "Why have we got, you know --  
 7 what is this?", and this is after the fire, so not at  
 8 the time, "What's the difference?", and he said,  
 9 "I specified TP10 because I used it all the time" --  
 10 Q. I see, so this is a conversation after the fire?  
 11 A. It was, yeah.  
 12 Q. Not during the project?  
 13 A. No.  
 14 Q. I follow.  
 15 Looking at the description, it's quite clear that it  
 16 was a PIR insulation product for use as a roofing  
 17 insulation. Do you know why Kevin Lamb specified this  
 18 product for use in the external wall construction or, if  
 19 not in the external wall construction, nonetheless as  
 20 a window infill panel when it was a product intended for  
 21 use in pitched roof constructions?  
 22 A. No.  
 23 Q. Looking at the certificate now, are you surprised that  
 24 Kevin Lamb thought it appropriate to use Thermapitch  
 25 TP10 as a window panel or infill panel material?

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1 A. No.  
 2 Q. Later down page 1 on the certificate, the certificate  
 3 gives the summary of the product's fire performance, and  
 4 it says:  
 5 "The product will not contribute to the development  
 6 stages of a fire or present a smoke or toxic hazard.  
 7 When tested to BS 476-7:1987, the product achieved a  
 8 Class 1 rating (see section 7)."  
 9 Is it fair to say that there was no evidence that  
 10 this product met the definition for limited  
 11 combustibility?  
 12 A. I would agree with that.  
 13 Q. And hadn't been tested to achieve any combustibility  
 14 rating under either the Euro classes or the UK  
 15 combustibility classification system?  
 16 A. No, but it was -- the use -- it was bonded to two sheets  
 17 of aluminium, so I believe that actually -- given that  
 18 both the sheets of aluminium are of limited  
 19 combustibility in that configuration, it counts as  
 20 class 0.  
 21 Q. But it didn't achieve class 0, did it?  
 22 A. By dint of the fact it was bonded to two sheets of  
 23 limited combustibility material, the product itself, as  
 24 I understand it, conforms to class 0.  
 25 Q. Well, it tells you, if you look at the certificate, that

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1 it was tested under 476-7 and the product achieved  
 2 a class 1 rating, it doesn't say class 0.  
 3 A. No, that is just the insulation itself .  
 4 Q. Well, it 's the product.  
 5 SIR MARTIN MOORE-BICK: I think you may be at  
 6 cross-purposes. If I have understood you correctly,  
 7 Mr Bailey, what you are saying is you take this TP10 --  
 8 A. Yes.  
 9 SIR MARTIN MOORE-BICK: -- which doesn't test to class 0,  
 10 but then you encase it in aluminium --  
 11 A. Yes.  
 12 SIR MARTIN MOORE-BICK: -- and then, viewed overall, the  
 13 resulting product can be regarded as class 0.  
 14 A. That's my understanding, yes.  
 15 SIR MARTIN MOORE-BICK: Is that what you're saying?  
 16 MR MILLETT: Who produced the panels which included the  
 17 Thermapitch TP10 as the insulation material, or the  
 18 middle, if you like, of the panel?  
 19 A. I may be wrong but I think it was Panel Systems.  
 20 Q. Did you ever see any certificate in relation to the  
 21 product that Panel Systems provided?  
 22 A. No, I didn't .  
 23 Q. Now, I want now to turn to some questions about the  
 24 selection of Harley's subcontractors, and I want to look  
 25 at Osborne Berry in particular .

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1 Can I please go to your statement at page 19  
 2 {HAR00010184/19}, please, paragraph 75. You say there:  
 3 "From Harley's perspective, work began on site in  
 4 around October 2014, and was completed in around  
 5 May/June of 2016. The stages of work were as follows:  
 6 (1) erection of mast climbers; (2) commencement of  
 7 installation of brackets/ rails and insulation; (3)  
 8 window installation; and (4) the final stage, which  
 9 would have been the cladding installation . The  
 10 installation work was carried out by Osborne Berry  
 11 Installation Limited, supervised by Mark Osborne and  
 12 Graham Berry, with whom Harley had worked on a number of  
 13 previous projects ."  
 14 So is it right to say that the installation of the  
 15 brackets and rails and insulation, windows and cladding  
 16 were not carried out by Harley employees but by  
 17 a subcontractor called Osborne Berry?  
 18 A. Correct.  
 19 Q. Do you know why Harley didn't undertake the installation  
 20 works itself?  
 21 A. We don't employ installers .  
 22 Q. It 's right, I think, that there was no written contract  
 23 with Osborne Berry in relation to the Grenfell Tower  
 24 works that they were to carry out, was there?  
 25 A. There wasn't.

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1 Q. No. Why is that?  
 2 A. It is not uncommon practice for us to employ  
 3 subcontractors on an agreed price but not actually have  
 4 a written contract.  
 5 Q. Right.  
 6 If you look at paragraph 97 of your statement on  
 7 page 24 {HAR00010184/24}, you say:  
 8 "The installation of the external facade was  
 9 subcontracted to Osborne Berry, with whom Harley had  
 10 worked for many years on a number of large projects .  
 11 The directors of Osborne Berry are Mark 'Taff' Osborne  
 12 and Graham 'Bez' Berry, both of whom are highly  
 13 experienced in installing external facades ."  
 14 Did you or anyone else at Harley look for any  
 15 installation subcontractors other than Osborne Berry?  
 16 A. We have a list of four or five subcontract glazing  
 17 companies that we use and that we've used over the  
 18 years. On this particular project, we decided that  
 19 Osborne Berry were probably the right team to use. So  
 20 it was a negotiated contract with them.  
 21 Q. How did you decide that Osborne Berry were, as you put  
 22 it, probably the right team to use?  
 23 A. They were finishing another project, becoming available  
 24 at the time that the project was due to start .  
 25 Q. What processes did Harley have in place to ensure that

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1 its subcontractors were competent to undertake the works  
 2 for which they were to be subcontracted?  
 3 A. That's the reason that we have a list of four or five  
 4 subcontract companies that we work with, and only those  
 5 guys. We've worked with them for -- with Osborne Berry  
 6 for -- I've known them for 30 years and they've worked  
 7 on some other large projects for Harley of a similar  
 8 nature.  
 9 Q. What did subcontractors have to do to become approved by  
 10 Harley, to be able to get on to Harley's list?  
 11 A. Normally, if a new -- a new subcontractor we would take  
 12 on if we had a new contracts manager came to work for  
 13 us, for example, who had had a good relationship with  
 14 a subcontract fixing company, and we would start them  
 15 off on one project, and if they were successful we would  
 16 move them to other projects .  
 17 Q. Did price play a role in your selection of Osborne Berry  
 18 for this project?  
 19 A. No. Price is obviously important, but the fixers  
 20 actually have a pretty standard installation rate per  
 21 square metre for putting -- and they're all very much  
 22 the same.  
 23 Q. Had you used Osborne Berry on Chalcots?  
 24 A. No.  
 25 Q. Who had you used on Chalcots?

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1 A. W Kenny.  
 2 Q. What about on Ferrier Point?  
 3 A. W Kenny had done that.  
 4 Q. What other high-rise projects had you used Osborne Berry  
 5 on prior to Grenfell Tower?  
 6 A. Six blocks at Little Venice.  
 7 Q. Right.  
 8 A. Clements Court in Heathrow, and -- not City Road,  
 9 another project in east London.  
 10 Q. Can I just ask you then to look at a slightly different  
 11 topic, an email at {RYD00029683}. This is an email of  
 12 2 February 2015 be, sent by Simon Lawrence to  
 13 Rob Maxwell, into which you were copied.  
 14 He says:  
 15 "Rob,  
 16 "I've asked Simon to arrange meetings on site this  
 17 week with yourselves to go through programme, deliveries  
 18 etc. Unfortunately you seem to be a hard man to get in  
 19 contact with. This means that we are getting  
 20 information from your sub contractors on site. This is  
 21 not ideal. As far as I'm concerned we need Harley  
 22 supervision permanently on site, as promised, from now  
 23 on to ensure the programme is achieved and that we have  
 24 clear contactable lines of communication. Also we have  
 25 major concerns about you current labour levels. All

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1 mastclimbers should be running full tilt from now on but  
 2 they aren't.  
 3 "Please call Simon urgently to remedy this situation  
 4 before it gets out of hand."  
 5 How frequently were Harley employees attending the  
 6 site at this time, February 2015?  
 7 A. I would say twice a week.  
 8 Q. So Mr Lawrence was right, wasn't he, then, that there  
 9 was no Harley person permanently on site at this time?  
 10 A. No, we had no -- we wanted a site cabin. We had no site  
 11 facilities on site, so it was difficult for us. We  
 12 asked for site facilities but they weren't available.  
 13 Q. Who did you ask for site facilities?  
 14 A. Simon Lawrence.  
 15 Q. And what did he tell you?  
 16 A. There's no room.  
 17 Q. When did he tell you that?  
 18 A. At -- when we started on site, probably October time.  
 19 Q. Did you press him after that?  
 20 A. We did, but they would only allow -- there's a small  
 21 play area to the west of the building, and that was full  
 22 of cabins, and we weren't allowed, so I'm told, to stack  
 23 the cabins.  
 24 Q. Could you share one with another subcontractor or with  
 25 Rydon?

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1 A. There just wasn't room. The best we ever got was  
 2 sitting at the end of a Rydon desk if nobody -- if one  
 3 of their guys was out on site. They had quite a lot of  
 4 people on site at the time.  
 5 Q. After this email, did Harley implement full-time site  
 6 supervision?  
 7 A. We never had full-time site supervision.  
 8 Q. It looks from this email that Mr Lawrence is telling  
 9 Harley, and you as a copy on this email, that he was  
 10 concerned that he needed Harley supervision permanently  
 11 on site as promised.  
 12 Who had promised that there would be Harley  
 13 supervision permanently on site as he records here?  
 14 A. That would have been Rob.  
 15 Q. How could Rob -- Rob Maxwell, that is -- promise  
 16 permanent supervision on site if, as you say,  
 17 Mr Lawrence had kept telling him there was no room?  
 18 A. It's a good question.  
 19 Q. Well, what's the answer to that?  
 20 A. I've no idea why he said that.  
 21 Q. After this email, given what he was after, did  
 22 Mr Lawrence get the satisfaction of having Harley  
 23 supervision permanently on site?  
 24 A. Not permanently, but more frequently.  
 25 Q. More frequently.

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1 How was Harley supervising the works, both before  
 2 and after this email, to ensure appropriate workmanship  
 3 by its subcontractors if it didn't have operatives  
 4 constantly on site?  
 5 A. Well, when we have mast climbers, we can't have people  
 6 permanently going up and down in the mast climbers, so  
 7 when work reaches a certain stage, there is a series of  
 8 handover sheets produced to check the quality of the  
 9 work, but it's not -- in the first stage, Osborne Berry  
 10 will check their own work, that they're happy with it,  
 11 and offer it to us. We'll carry out a check. It's not  
 12 100%, every nut, bolt and screw checked. Once we're  
 13 happy with the quality of work coming to us, we'll check  
 14 it and then hand it over to Rydon's to inspect, and when  
 15 they're happy with it they pass it over to the clerk of  
 16 works to inspect. So there is a four-stage checking on  
 17 the works.  
 18 Q. After this email, how frequently did Harley attend  
 19 on site?  
 20 A. I think I said we would be on site three/four times  
 21 a week.  
 22 Q. Three or four times a week after this email, but before  
 23 this email?  
 24 A. Twice a week.  
 25 Q. I see.

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1 Who was, after this email, the Harley operative most  
2 frequently on site?  
3 A. Most frequently would be Ben Bailey.  
4 Q. Right. In fact, I think we know that Ben Bailey was  
5 appointed Harley's project manager in about  
6 February 2015. Was that in response to this message?  
7 A. It was happening anyway.  
8 Q. Right. And therefore, after that, Ben Bailey would  
9 attend site three or four times a week?  
10 A. Yes.  
11 Q. I see, okay.  
12 Can I then go to another topic, which is standard of  
13 work and residents' complaints.  
14 Can I just ask you to look at {RYD00044349}. This  
15 is an email from Simon Lawrence to Steve Blake dated  
16 22 June 2015. Now, you're not copied in, and you would  
17 not have seen this email before, I don't think.  
18 If you look at the second paragraph, it says:  
19 "At the moment we have a poorly performing site  
20 which is mainly (but not totally) caused by poor  
21 surveying and cheap incompetent sub contractors."  
22 Were you ever given the impression by Mr Lawrence  
23 that he thought that there were cheap and incompetent  
24 subcontractors on site?  
25 A. No.

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1 Q. Did he ever accuse you of being cheap and incompetent?  
2 A. No.  
3 Q. Or at least incompetent, if not cheap?  
4 A. No.  
5 Q. Did Harley have a process in place for ensuring that its  
6 work and those of its subcontractors, such  
7 Osborne Berry, was carried out appropriately and to  
8 proper standards?  
9 A. We had check sheets and carried out handover  
10 inspections.  
11 Q. Did you have a system in place that if concerns were  
12 expressed about the quality of the workmanship by  
13 Osborne Berry, those would be escalated to you and you  
14 would handle them?  
15 A. Yes.  
16 Q. What was that system?  
17 A. If there is an issue with the quality, it's put -- it's  
18 returned back from Rydons and we put it right. If it's  
19 not put right, then Rydons will call me and tell me.  
20 Q. So Rydon was the route, was it?  
21 A. Yeah, if -- well, it will come back through us, through  
22 Harley, and if we don't deal with it, Rydon will get  
23 involved and call me.  
24 Q. Can I then ask you to look at {RYD00085661}. This is  
25 an email into which you were copied, late on in the

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1 project. It's dated 12 January 2017, from Emma Kelly at  
2 Rydon to Ben Bailey and you, copied to David Hughes:  
3 "Urgent update - Grenfell Tower windows."  
4 Emma Kelly sets out a "large number of defects  
5 relating to windows open on our system" and she sets  
6 them all out.  
7 Looking at this email, do you recall it?  
8 A. I'm not sure that I recall that, but I've obviously seen  
9 it.  
10 Q. All right. She says, as I've said:  
11 "... there are a large number of defects relating to  
12 windows open on our system, some of which have been open  
13 as long as August. This is not acceptable and we are  
14 not receiving any response from our chaser emails/calls.  
15 We must ensure that defect[s] are closed out within the  
16 target rectification time provided.  
17 "Please ensure that we are provided with a thorough  
18 update by close of play today.  
19 "Failure to do this will result in the issue being  
20 escalated."  
21 Then you can see that there are a number of open  
22 items or open defects relating to windows set out there.  
23 Some of them, as you can see, go back to August and  
24 September 2016, if you look at the dates in the second  
25 column. Do you see that?

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1 A. Yes.  
2 Q. Had you been notified, prior to this, by Rydon of these  
3 defects or was this all news to you at the time?  
4 A. There are "defects" notices that come through, and we  
5 will deal with them as swiftly as practically possible.  
6 What I mean by that is that a lot of these tilt -and-turn  
7 windows which don't work are where they have gone out of  
8 operation. So when you open a tilt -and-turn window, you  
9 turn the handle through 90 degrees to tilt it and then  
10 turn it through another 90 degrees to open it. If  
11 during the process you try to pull the window when the  
12 handle is half open, it will disengage. That is a very,  
13 very simple thing to put right by pressing the reset  
14 button and closing it. So a lot of these, when they're  
15 saying there is a defect with the window, it's simply  
16 that, and --  
17 Q. Well, you say that. In fact, the first one is  
18 a tilt -and-turn window sticking, but the rest of them  
19 don't appear to be anything to do with the tilt -and-turn  
20 mechanism. Let's look at them.  
21 A. Well, I think you will find that the vast majority --  
22 and we've also been called back for a leaking -- sorry,  
23 a window, to find actually when we turned up to the  
24 chap's flat, he had a leaking tap in his kitchen. So  
25 these are not -- you know, these are not all necessarily

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1 what they seem.  
 2 We have also attended a number of these flats to  
 3 find that no one is in when we get there. So this isn't  
 4 quite as black and white as it appears.  
 5 Q. How can you account, taking the first item, which is  
 6 a tilt -and-turn complaint, for a delay of some  
 7 five months between 23 August and 12 January to deal  
 8 with that?  
 9 A. Without the specific details of it, we could have been  
 10 back three or four times to get in there and not been  
 11 able to get in.  
 12 Q. It looks from this email that the defects were being  
 13 notified to Rydon by residents in the tower, not as  
 14 a result of inspections by you or anybody else.  
 15 A. Well, this is 2017, when we'd left site.  
 16 Q. Yes. I see. So would it be normal, then, to have this  
 17 number of complaints open and un-dealt-with, often as  
 18 long as five months afterwards, some months after  
 19 practical completion?  
 20 A. I think we got 3,000 opening windows on the job, so this  
 21 isn't a big ... but what we want to do, when we go back,  
 22 is batch them. So if we have five windows to do, we  
 23 want to do five windows in one visit rather than one  
 24 visit five times.  
 25 Q. Were you caused by this email to be concerned about some

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1 of the quality of the work on site or some of the  
 2 quality of the material?  
 3 A. No, I think the bulk of these is to do -- and the report  
 4 of what they are, kitchen window not closing, window  
 5 doesn't close, these are to do with the mechanism that  
 6 probably nine times out of ten are to do with the window  
 7 being operated incorrectly.  
 8 Q. What did you do to remedy these defects, do you  
 9 remember?  
 10 A. Well, we went there, we remedied them. There's probably  
 11 half a dozen windows on the job where the top arm  
 12 connect had broken, which is probably because they had  
 13 been dropped when the window's been out of mode, so we  
 14 needed new parts to change those. The rest of them are  
 15 pretty much resetting the handle mechanism.  
 16 MR MILLETT: Yes, thank you.  
 17 Mr Chairman, Mr Bailey, I've come to the end of my  
 18 questions. It's now customary for us to take a short  
 19 break just to see whether there are any sweep-up  
 20 questions I have missed, or whether there are questions  
 21 from elsewhere that I should be putting as a result of  
 22 follow-up.  
 23 SIR MARTIN MOORE-BICK: Do you think ten minutes would be  
 24 enough?  
 25 MR MILLETT: I think so, for the time being, and if I need

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1 a little bit more, may I apply through the usual  
 2 channels.  
 3 SIR MARTIN MOORE-BICK: You can come --  
 4 MR MILLETT: Thank you.  
 5 SIR MARTIN MOORE-BICK: Mr Bailey, as Mr Millett has  
 6 explained, he has got to the end of the questions he has  
 7 prepared, but he needs to take a moment or two to check  
 8 there aren't any more things he needs to cover. So  
 9 we're going to break for ten minutes.  
 10 THE WITNESS: Okay.  
 11 SIR MARTIN MOORE-BICK: Then we will see if he has some more  
 12 questions.  
 13 So if you would like to go with the usher, remember  
 14 the no talking rule, and we will come back at 4.35.  
 15 THE WITNESS: Okay.  
 16 (Pause)  
 17 SIR MARTIN MOORE-BICK: Right, 4.35, then, please.  
 18 Thank you.  
 19 (4.26 pm)  
 20 (A short break)  
 21 (4.35 pm)  
 22 SIR MARTIN MOORE-BICK: Have you found some more questions,  
 23 Mr Millett?  
 24 MR MILLETT: Just one or two.  
 25 SIR MARTIN MOORE-BICK: Right.

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1 Could you ask Mr Bailey to come back, please.  
 2 (Pause)  
 3 Right, Mr Bailey, I think Mr Millett has one or two  
 4 questions, but we will see.  
 5 THE WITNESS: Okay.  
 6 MR MILLETT: Mr Bailey, I took you earlier to Chris Mort --  
 7 he's the Siderise chap -- and his warning about the weak  
 8 link for fire. Do you recall that --  
 9 A. I do.  
 10 Q. -- evidence from this afternoon?  
 11 You told us you thought he had the wrong end of the  
 12 stick. You also said that you didn't think it was  
 13 actually a weak link if a continuous aluminium angle  
 14 along the head of the window was used. Do you remember  
 15 that evidence?  
 16 A. I do.  
 17 Q. Just for our purposes, that's at {Day33/159:25} and  
 18 {Day33/161:14}, just so we have it in the transcript.  
 19 Can I ask you to look, please, at ADB at  
 20 {CLG00000224/86}. You will see here paragraph 9.13, and  
 21 you can see under the note there:  
 22 "Cavity barriers provided around openings may be  
 23 formed by the window or door frame if the frame is  
 24 constructed of steel or timber of the minimum thickness  
 25 in a) or b) above as appropriate."

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1 There you can see a), steel would have to be at  
 2 least 0.5 millimetres thick and timber at least  
 3 38 millimetres thick.  
 4 There is nothing in there which permits a cavity  
 5 barrier to be formed by a continuous aluminium angle or  
 6 any other aluminium material, is there?  
 7 A. No, and again, I think that there is a slight  
 8 misconception here. Can you bring the drawing back up?  
 9 Q. Can I do what?  
 10 A. Bring that drawing back up?  
 11 Q. The drawing by Mr Mort?  
 12 A. Yes.  
 13 Q. Yes, I can, and I will show it to you. It is at  
 14 {HAR00003948/2}, the second drawing down, "Weak link for  
 15 fire".  
 16 A. Yes. We're not suggesting at that point that the  
 17 aluminium angle is a cavity barrier. What we have here  
 18 on the inside -- on the inside is the internal finishes  
 19 by others, which should provide a fireproof seal to the  
 20 back of that angle. So -- and the reason that I think  
 21 that he thought perhaps it was weak is if it's  
 22 individual brackets, there's gaps in the aluminium, and  
 23 if it got past the barrier on the inside, which should  
 24 have been two skins of plasterboard, then it would enter  
 25 the cavity, but we didn't consider it as an issue

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1 because the angle was continuous, it wasn't acting as  
 2 a cavity barrier.  
 3 Q. So you say it wasn't a problem because of the presence  
 4 of an aluminium object in the way, to put it in very lay  
 5 terms?  
 6 A. It's not -- that angle is not the cavity barrier, it's  
 7 not its function to be a cavity barrier, but because  
 8 it's continuous, it actually has a beneficial effect  
 9 compared to having individual brackets, which would  
 10 leave a gap there.  
 11 Q. But if you weren't permitted to use anything other than  
 12 wood or steel to the relevant thicknesses as a cavity  
 13 barrier --  
 14 A. I'm not saying it is a cavity barrier.  
 15 Q. No, let me finish the question. If, as 9.13, as I've  
 16 shown you, says, you can only use as a cavity barrier in  
 17 those locations steel or wood to the relevant  
 18 thicknesses, how could you rely on aluminium as  
 19 a functional equivalent?  
 20 A. It wasn't. The thing which prevents the fire entering  
 21 that zone is provided by the internal lining.  
 22 Q. So in what way had Chris Mort got the wrong end of the  
 23 stick, then?  
 24 A. I don't think he's taken into account the lining, and  
 25 that's why I think he's got the wrong end of the stick.

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1 Q. Your explanation, as I understand it, was that it wasn't  
 2 a weak link if there was a continuous aluminium angle  
 3 along the head of the window?  
 4 A. Yeah, if -- it's far, far better to have a continuous  
 5 angle along the head.  
 6 Q. That's not something that is recommended or even  
 7 suggested by ADB, is it?  
 8 A. No, and we're not suggesting that it's a cavity barrier.  
 9 Q. Now, I have a final question for you, Mr Bailey. We  
 10 have been through a great deal of evidence over the last  
 11 two days and we are very grateful for your assistance.  
 12 Looking back on all of that evidence and looking back on  
 13 your involvement in general in the Grenfell Tower  
 14 project as a whole, is there anything that you would  
 15 have done differently?  
 16 A. I have been asking myself that for the past three years.  
 17 Looking back to what we knew then, certification that we  
 18 had, the industry practices that were used throughout  
 19 the UK, if we were faced with the same job now,  
 20 I suspect, I'm pretty certain, that we would have done  
 21 it exactly as we did back then.

22 There's no one, I can't think for a second that  
 23 anybody in the construction team working on Grenfell or  
 24 on the hundreds of other buildings that we similarly  
 25 constructed across the UK, nobody would have thought for

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1 one minute that anything we were doing was unsafe. But  
 2 if I could go back in time, armed with what I know now,  
 3 the certification, the testing regimes, the caveats, the  
 4 misinterpretation of the Building Regulations, that are  
 5 not just restricted to us but the whole industry, this  
 6 stuff, Reynobond, Celotex, Kingspan, none of it would be  
 7 on the wall.

8 The legislation is complicated to use, it's not very  
 9 clear, and I think any form of combustible insulation or  
 10 cladding should be banned immediately. I know that's  
 11 not my place to say, but if the building regs banned it,  
 12 it wouldn't be on the building.

13 Class 0, as I sort of understand how that came into  
 14 being, was some industry self-interest body created this  
 15 false class and it's clouded everybody's judgement and  
 16 belief over the past 40 years.

17 So, yes, we would do -- sorry, I'm ranting.

18 SIR MARTIN MOORE-BICK: No, you say what you want to say,  
 19 please.

20 A. No, it's ... no. You know, things need to change.

21 SIR MARTIN MOORE-BICK: All right.

22 MR MILLETT: Mr Bailey, thank you very much. I have no  
 23 further questions.

24 SIR MARTIN MOORE-BICK: Mr Bailey, it's been quite a long  
 25 period for you to give evidence, and it may not have

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1       been a very easy task for you to undertake, but we are  
 2       very grateful to you for coming to tell us what you  
 3       know, and it has been very helpful to hear from you, so  
 4       thank you very much indeed.

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5             It's all over now, those are all the questions we  
 6       have for you, so you are now free to go.

7 THE WITNESS: Thank you.

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

9             (The witness withdrew)

10 SIR MARTIN MOORE-BICK: Right, thank you very much,

11       Mr Millett .

12 MR MILLETT: Thank you, Mr Chairman.

13 SIR MARTIN MOORE-BICK: That's it for the day, I take it?

14 MR MILLETT: That's it for the day.

15 SIR MARTIN MOORE-BICK: Tomorrow we have another witness.

16 MR MILLETT: We have another witness, Mr Mark Harris, who  
 17       will be giving evidence from a remote location.

18 SIR MARTIN MOORE-BICK: Yes. Good.

19             Thank you very much. 10 o'clock tomorrow, please.

20 (4.45 pm)

21             (The hearing adjourned until 10 am  
 22             on Thursday, 10 September 2020)

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