## OPUS 2 INTERNATIONAL

Grenfell Tower Inquiry

Day 32

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1 1 Tuesday, 8 September 2020 Metropolitan Police dated 8 August 2017, and that is at 2 2 (10.00 am) {MET00019988}. 3 3 SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to I will just identify, but not have shown up on the screen, the accompanying exhibits: {MET00019987}, just 4 4 today's hearing. Today we're going to hear from the 5 first of the witnesses representing Harley Curtain Wall. 5 so that I have read that number into the record. Those of you watching will see that there is a large 6 6 Can you confirm, Mr Bailey, that this witness 7 7 flip pad next to the witness box. That's because the statement that I'm showing you is yours? 8 8 next witness has asked for an opportunity to make A. Yes. 9 9 drawings or diagrams to illustrate his evidence if he Q. Thank you. 10 10 finds it necessary or helpful to do so. Now, the second witness statement was one that you 11 11 Yes. Mr Millett. made to the Inquiry dated 9 November 2018, and the 12 12 MR MILLETT: Mr Chairman, good morning. I now call reference to that is {HAR00010184}. Can I please have 13 13 that on the screen. Thank you. Mr Ray Bailey, please. 14 SIR MARTIN MOORE-BICK: Thank you. 14 Can you confirm that that's your statement? 15 15 MR RAY BAILEY (affirmed) A. Yes. 16 16 SIR MARTIN MOORE-BICK: Thank you very much, Mr Bailey. Sit Q. Have you read both of these statements recently? 17 down, make yourself comfortable. All right? 17 A. I've read the Rule 9 statement recently, but not the 18 18 THE WITNESS: Yes. Met Police one. 19 19 SIR MARTIN MOORE-BICK: Now, you did ask whether you could Q. So the Inquiry statement? 20 be provided with some means of making diagrams or 20 A. 21 drawings if necessary in the course of your evidence. 21 Q. Can you confirm that the contents of both statements are 22 THE WITNESS: Yes. 22 true? 23 SIR MARTIN MOORE-BICK: There's a large flip pad there, 23 A. Yes. 24 which I hope you will find convenient, so if you need to 2.4 Q. Thank you. 25 make some diagram, there it is. 25 Can you please look at the final page of your 1 1 THE WITNESS: Okay, thank you. Inquiry statement, {HAR00010184/44}. You will see 2 SIR MARTIN MOORE-BICK: Thank you very much. 2 a signature there. Is that yours? 3 Yes, Mr Millett. 3 4 **Questions from COUNSEL TO THE INQUIRY** 4 Q. Have you discussed your statements or the evidence that 5 5 MR MILLETT: Good morning. you propose to give today with anybody before coming 6 6 A. Morning. here today? 7 7 Q. Can I start by thanking you sincerely for coming to A. No. 8 8 Q. Thank you. the Inquiry and helping us with our investigations, we 9 9 are very grateful to you. Now, I'm going to start with some questions about 10 10 If you have any difficulty understanding any of my your background, if I may. 11 questions or you want them put in a different way, I can 11 You graduated with a degree in civil engineering, 12 12 do that, or I can repeat the question. I think in 1981, from Salford University. 13 Can I ask you also, please, to keep your voice up, 13 A. Yes. 14 so that the transcriber, who sits to your right, can get 14 Q. Did you study façade engineering as a speciality? 15 your answer down clearly. Also, I should just say, 15 A. No. 16 16 because this sometimes happens, that a nod or a shake of Did the course that you did include the fire performance 17 17 of materials, building materials? Did it include how the head doesn't go on to the transcript, so you have to say yes or no as the case may be. 18 18 façade materials are tested or classified in relation to 19 19 fire? Okay. 20 Q. You have made two statements, and I would like just to 20 A. No. 2.1 show them to you first. They are contained in a folder 2.1 Q. Since graduating in 1981, I think it's right that you on your desk, but they will also appear on the screen in 22 22 have worked in various construction and cladding 23 front of you, as will the documents to which I will be 23 companies. 24 referring during the course of my examination. 24 Yes. A. 25 The first statement was made to the 25 Q. Yes. And you have worked, I think, for a number of 2 4

1 companies, including Elementa.

- 2 A. Elemeta.
- 3 Q. Elemeta, forgive me. What was your job title there, at
- 4 Elemeta?
- 5 A. I started as a graduate trainee and became a contracts
- 6 manager.
- 7 O. You also worked at, I think, Channel Triline Limited.
- 8 A. Yes.
- 9 Q. What was your job title there?
- 10 A. I was contracts director.
- 11 Q. A contract director?
- 12 A. Yes.
- $13\,$   $\,$  Q.  $\,$  I see. Then you also name, I think, Chiltern Aluminium
- 14 Limited as another company you worked for.
- 15 A. Yes, I was operations director.
- 16 Q. During your time with any of those three organisations,
- did you work on any cladding projects on high-rise
- 18 residential blocks?
- 19 A. No.
- 20 Q. Now, can I ask you to look at your witness statement,
- your Inquiry witness statement, paragraph 4, and I would
- 22 like to show you the top line of the page, page 2
- 23 {HAR00010184/2}, where you say:
- 24 "Over some 15 years I gained significant experience
- in all aspects of building envelopes from design to

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- 1 manufacturing and installation ."
- Now, the 15 years, was that from 1981 to 1996, or
- 3 was it another period?
- 4 A. 1981 to 1996.
- 5 Q. Did that significant experience involve façade design?
- 6 A. No, we had façade designers working for us.
- 7 Q. What about façade installation?
- 8 A. Yes.
- 9 Q. Yes. What about product procurement?
- 10 A. Product procurement but not product selection.
- 11 O. I see.
- Would I be right in thinking that, during those
- 13 15 years in the industry, you, as part of your
- 14 experience, learnt something about fire performance
- 15 principles?
- 16 A. Yes.
- 17 Q. During your whole 35-year career to date, or so, did you
- ever have cause at any time to study the
- 19 Building Regulations?
- $2\,0\,$   $\,$  A.  $\,$  I  $\,$  read through Approved Document B some years ago, but
- found it quite complicated, and as a result I have
- $22 \hspace{1cm} a \hspace{1cm} working \hspace{1cm} knowledge \hspace{1cm} of \hspace{1cm} it \hspace{1cm} \hspace{1cm} but \hspace{1cm} \hspace{1cm} not \hspace{1cm} \hspace{1cm} detailed \hspace{1cm}.$
- 23 Q. Right.
- 24 Can you, even roughly, tell us how long ago you read

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25 through Approved Document B?

- 1 A. Ten years.
- $2\,$   $\,$  Q.  $\,$  Was there a  $\,$  specific  $\,$  reason which prompted you to read
- 3 Approved Document B?
- 4 A. I can't recall.
- 5 Q. Right.

6 Was your reading of Document B a one-off, or have

you had cause to go back to it and refer to it over the

8 years?

9 A. The most recent interaction I had with it is looking at

diagram 40, which determines whether the products need

- 11 to be class 0 if they're over 18 metres.
- 12 Q. When was that?
- 13 A. That would have been, I think, even during Grenfell.
- 14 Q. Right. We will come back to that.
- In general, did you have cause at any time to study
- any of the industry guidance relating to exterior
- envelopes in relation to high-rise buildings, such as
- the 2008 CWCT standard and related technical guidance?
- 19 A. I've read through the CWCT standard, and there's I think
- 20 12 or 13 volumes of that, which deal with all aspects of
- 21 the cladding, from testing, impact loads, weather
- resistance, and fire is one of those elements.
- $23\,$  So, again, I've read through that, I understand the
- $24\,$   $\,$   $\,$  principles of the elements, but again, not in forensic
- 25 detail.

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1 Q. Yes.

Now, as at 2013, did you consider yourself as well placed as anyone in the specialist cladding industry in

placed as anyone in the specialist cladding industry in the UK to advise on whether materials or products to be

5 used in an external wall construction complied with the

6 Building Regulations 2010, and in particular Approved

- 7 Document B?

(Pause)

9 A. Yes.

- 10 Q. And it sounds, from what you're telling us, that you had by that date amassed a reasonable body of expertise.
- by that date amassed a reasonable body of expertise,technical expertise, that would equip you to answer
- technical expertise, that would equip you to answer
- detailed queries if they arose on a particular project?
- 14 A. It depends how detailed the queries were.
- 15 Q. Yes, fair enough.
- 16 Did you understand that there were specific
- requirements in relation to external wall construction
- for buildings which exceeded 18 metres in height?
- 19 A. Yes
- 20 Q. Were you keeping abreast of amendments to and
- developments of the Building Regulations and associated
- 22 good practice?
- 23 A. I wasn't personally, but we had a technical manager,
- prior to Dan Anketell-Jones, who had an MSc in façade
- $25 \qquad \quad \text{engineering and was a member of the Institute } \quad \text{of } \text{Façade} \quad$

- 1 Engineers. So when he left, Daniel took on that role.
- 2 So we actually had someone within the company whose job
- 3 that was
- 4 O. Who was that?
- 5 A. Prior to Dan Anketell-Jones, it was a chap called
- 6 Graham Hackley.
- 7 O. When did he leave?
- 8 A. I think he left in 2013, or the end of 2012.
- $9\,$   $\,$  Q.  $\,$  Did he have any role at  $\,$  all  $\,$  --  $\,$  it sounds from the date
- of his departure that he didn't, but can you just
- $11 \hspace{1cm} \text{confirm for us -- in relation to the Grenfell Tower} \\$
- 12 project?
- 13 A. No, he didn't.
- Q. And you say that Daniel Anketell-Jones took over from
- 15 him?
- 16 A. Yes.
- $17\,$  Q. Did Daniel Anketell-Jones have equivalent or better
- 18 professional qualifications?
- 19 A. Daniel had an MSc in structural engineering, and was on
- the MSc façade engineering course.
- 21 Q. Right.
- Now, you go on to say in paragraph 4 of your
- 23 statement {HAR00010184/2}, which I hope is still on the
- 24 screen in front of you:
- 25 "I was also involved in a number of largescale

- 1 building envelope projects including the North Terminal
- 2 for Gatwick."
- Now, Gatwick North Terminal, from my research, was
- 4 opened, I think, in March 1988, so you would have been
- 5 quite junior at that time.
- 6 A. I was a young contracts manager, yes.
- 7 Q. Yes.
- 8 Did you specifically work on the façade engineering
- 9 of the North Terminal?
- 10 A. Not on the façade engineering.
- $11\,$  Q. What aspects of the façade did you work on?
- $12\,$   $\,$  A. A contracts manager in our context is someone who
- 13 organises the material, suppliers, the delivery, the
- access equipment, the programming on site. So I wasn't
- actually involved in the engineering of the façade.
- 16 Q. Right. What about product selection or product --
- 17 A. Product selection was initially done by the architect,
- who were YRM, and in-house it was the company's,
- 19 Elemeta, the technical and design department.
- Q. Were you involved in considering the fire ratingperformance of the materials for use in the
- North Terminal façade?
- 23 A. No.
- Q. Now, at paragraph 5 of your statement, you say that, to
- date, ie November 2018, which is when you signed this

- 1 statement, two Harley employees have been funded through
- 2 the MSc in façade engineering. Was one of those
- 3 Mr Hackley, who you have referred to?
- 4 A. Yes
- 5 Q. Who was the other one?
- 6 A. Dan Anketell-Jones.
- $7\,$   $\,$  Q. Oh, I see. Did Dan Anketell-Jones complete his MSc in
- 8 façade engineering?
- $9\,$   $\,$  A. He has, but he had left the company by the time he
- 10 completed his MSc.
- 11 Q. Right. Do you know where he was on the course, at what
- stage he had reached on that façade engineering course,
- 13 when he was involved in the Grenfell Tower project?
- 14 A. I think he was three-quarters of the way through.
- 15 Q. I see.
- So would it be right to say that, during the period
- 17 2014 to 2016, mid-2016, Harley didn't actually have
- anybody with a completed qualification in façade
- 19 engineering?
- 20 A. Yes.
- 21 Q. Now, you set Harley Curtain Wall Limited up in 1996, and
- you also say that that company did estimating, designing
- and project managing construction packages of external
- façades, including rainscreen.
- When you set it up, is it right that you were the

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- 1 only employee?
- 2 A. Yes.
- 3 Q. So you did all the work?
- 4 A. Yes
- 5 Q. At paragraph 8 of your statement, if we can just go to
- 6 that, please, on page 3 {HAR00010184/3}, you say there
- 7 that you subcontracted relevant work. Do you see you
- 8 say that?
- 9 A. Yes.
- 10 Q. What kind of work did you subcontract?
- 11 A. The physical installation of the work, the drafting of
- the design, and the manufacturing of the products.
- 13 Q. So when you say the drafting of the design, is that you
- $14\,$  actually sketched out the designs for the façade, did
- 15 you?
- 16 A. It depends what form the contract takes. Usually the
- architect designs what they want and we effectively
- productionise it.
- 19 Q. I see. So you would work with the architect in relation
- 20 to design?
- 21 A. Yes
- $22\,$   $\,$  Q.  $\,$  Did you have anybody yourself who you would engage as
- an independent contractor to do design work?
- $24\,$  A. There were a couple of draughtsmen that we knew and used
- at that stage.

Q. Who were they, do you remember? 1 polyethylene core, PE core, within an ACM panel? 2 2 A. No. A. I can't remember their names. 3 3 O. Right. Q. Did you have any understanding about the availability 4 4 What about fitting, did you subcontract fitting? and relative merits in terms of fire performance of fire 5 A. We did. 5 retardant ACM panels? 6 6 Q. Is that how you got to know Grahame Berry and A. Fire retardant ACM panels, that's -- were not a product 7 7 Mark Osborne? that was widely advertised. The only reason I knew of 8 8 A. No, I knew Grahame Berry and Mark Osborne from Channel. its existence is because I read the BBA certificate. 9 9 When I joined Channel, Mark Osborne was the installation The BBA certificate for Reynobond says that both the PE 10 manager for the company, and Grahame Berry was the shop 10 core and the FR core achieve a class 0 rating. 11 foreman, who was then prompted to the technical office . 11 Q. You read the BBA certificate at the time of the 12 So I'd known those two directors of Osborne Berry for --12 Grenfell Tower project? 13 13 A. I read it in 2008. Q. I see. 14 O. In 2008? A. -- 30-odd years now. 15 15 Q. Yes. And you used them as cladding fitters I think A. Yes. 16 regularly --16 Did you read it after 2008? 0. 17 A. Yes. 17 A. I didn't read it thoroughly after 2008. I read it 18 Q. -- for about 20 years after 1996. 18 thoroughly in 2008 when we were working on the 19 19 A. Correct. Chalcots Estate project, and the -- when I've seen it 20 20 since, it is the same certificate. Q. Yes. We will come back to them later in your evidence. 21 21 Can I just show you paragraph 10 of your Inquiry Did you have any understanding at the time of the 22 22 Grenfell Tower project -- which I appreciate is a period statement. You identify there four previous projects on 23 23 residential tower blocks which involved ACM rainscreen of years, as far as you're concerned -- about the 24 24 cladding, namely Premier House, Castlemaine Tower, combustibility and attendant fire risks relating to PIR 25 25 Clements Court and Ferrier Point. insulation? 13 15 1 A. Yes. 1 A. No. The ... there's a bit of a history to rigid 2 2 insulation boards. They came into existence on Q. Were there any others? 3 3 A. Yes, there was Chalcots Estate and Little Venice. high-rise buildings after 2009, when part L was revised 4 Little Venice was when? 4 and the need for better insulation on buildings became 5 Little Venice would have been 2009. Around then, I may 5 the driver. 6 6 be a year or so out. The first product that was used in high-rise that 7 7 Q. Was Little Venice a private block or a social housing was approved, as far as we were concerned, was 8 8 block? Kingspan K15, and that's a product, when it was first 9 9 A. Social housing. suggested, we looked into, or our technical manager at 10 Q. It was. And they were all projects involving buildings 10 the time looked into and checked it out and said, "Yeah, 11 11 in excess of 18 metres in height, were they? that's -- you know, we can use that on high-rise 12 12 A. Yes 13 Q. Now, prior to the Grenfell Tower project, can you 13 14 describe the state of your understanding of the 14 15 15

combustibility of ACM panels? A. They are class 0. Q. Well, we'll come back to what that means in detail later, but in brief summary, can you tell us what that meant to you? A. That it's a product that won't burn unless it's being -unless there's a flame on it, so it won't sustain

Did you have any understanding in particular of the

combustibility and the fire risks attendant on

buildings". And that product is widely used -- has been widely used, almost as standard in the industry, since 2008, because Rockwool, which is the stuff we had used previously, has a far less -- far less thermal performance. When we were asked to use Celotex on Grenfell Tower, we were of the mindset that these new special super-duper insulation products were acceptable, providing they met certain criteria. Celotex made a big, big deal about their products being suitable for buildings over -- specifically designed for buildings over 18 metres, they complied

with BS 8414, and then they use the term which is very

misleading now, looking back at  $\mbox{--}$  the term "class 0

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a fire.

Q. Right.

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1 throughout", not surface, but actually throughout. 2 So we not only read the literature, we had their 3 technical sales manager in to go through the project, we 4 sent drawings showing the application with the ACM on 5 the building to them, and I think we carried out all 6 possible reasonable tests. And it's also on the basis 7 that Celotex produced (inaudible) a huge, multinational 8 company, and we didn't believe for one second that they

- 9 would attempt to mislead us on this.
- say that the first product that was used in high-rise

Q. Following up on one or two things in that answer, you

- $12 \hspace{1cm} \text{that was approved, as far as you were concerned, was} \\$
- 13 K15.

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- 14 A. Yes.
- $15\,$   $\,$  Q.  $\,$  And you say your technical  $\,$  manager at the time looked  $\,$
- $16 \hspace{1cm} \text{into it and checked it out and said yes, you can use it} \\$
- $17 \hspace{1cm} \text{on a high-rise building} \, .$
- Who was that technical manager, was that Mr Hackley?
- 19 A. It was.
- 20 O. I see.
- 21 In Harley, was it the job of the technical manager
- 22 to assess technical compliance of products?
- 23 A. Yes.
- $24\,$   $\,$  Q.  $\,$  I see. And at the time of Grenfell Tower, that was
- Dan Anketell-Jones, was it?

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- 1 A. It was.
- 2 O. Yes, I see.
- When Mr Hackley first looked at Kingspan K15, do you remember, even roughly, when that was?
- 5 A. I'm guessing -- I would imagine it was about 2010/2011.
- 6 Q. You also say in that answer that, in relation to
- 7 Celotex, "I think we carried out all possible reasonable
- 8 tests ". What tests did you think --
- 9 A. I should have said checks.
- $10\,$   $\,$  Q.  $\,$  Checks, I see. So did you actually have any knowledge
- $11 \hspace{1.5cm} \text{at all about what tests } \text{Celotex had carried out on} \\$
- 12 RS5000, or FR5000 for that matter?
- $13\,$  A. No, on -- from their sales literature that I saw, it
- 14 said it had been tested to BS 8414, and that it had been
- tested to BS 476, and it was class 0 throughout.
- 16 Q. Yes. Well, we will come back to the product literature
- 17 later on.
- 18 A. Yes.
- $19\,$   $\,$  Q.  $\,$  Just in general terms, can I ask you another question:
- 20 did you at the time of the Grenfell Tower project have
- $21 \hspace{1cm} \text{knowledge of the \ risks \ of \ specifying \ ACM \ polyethylene}$
- 22 panels as part of a rainscreen cladding system together
- with PIR insulation?
- 24 A. Absolutely not.
- 25 Q. No.

- Were you or anybody else at Harley a member of the
- 2 Centre for Window and Cladding Technology, CWCT?
- 3 A. The company was, yes.
- 4 Q. When did Harley join as a member?
- 5 A. I can't remember, but I would imagine probably 1999.
- 6 Q. Right.
- 7 A. Again, that's -- if I'm wrong, that will not ... it's
- 8 because I can't remember.
- 9 Q. Did membership of the CWCT mean that you had access to
- 10 regular updates, technical guidance and industry
- 11 knowledge?
- 12 A. Yes
- 13 Q. How often did that come through to Harley as a member?
- 14 A. I can't remember.
- 15 Q. Right.
- Was there anybody in the organisation who was
- responsible for curating the information as it came
- 18 through from that industry body?
- 19 A. It would have been either our operations director,
- 20 Mark Stapley, but when Graham Hackley became the
- technical manager, it would go through him.
- Q. Were you or Harley as a company a member of the Metal
- 23 Cladding and Roofing Manufacturers Association?
- 24 A. No.
- 25 Q. What about the Timber Decking and Cladding Association?

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- 1 A. No.
- 2 Q. The Architectural Cladding Association?
- 3 A. No
- 4 Q. Or the Engineered Panels in Construction trade
- 5 association, or EPIC, as it's known?
- 6 A. No.
- 7 Q. Is there any reason why any of those organisations
- 8 didn't attract your interest?
- 9 A. Well, we're not panel manufacturers, and we don't deal
- with timber and we don't do roofs.
- 11 Q. Do you agree in general with this proposition: that it's
- 12 necessary for a specialist cladding contractor to engage
- with trade associations in order to keep up with
- industry information and knowledge?
- 15 A. Yes
- $16\,$   $\,$  Q. As a  $\,$  specialist ,  $\,$  can we assume that Harley was keeping
- itself up to date with the cladding industry at large,
- in general terms?
- 19 A. In general terms, yes.
- 20 Q. Yes.
- Now, at the time of working on the Grenfell Tower
- project, from 2013, were you aware that there had been
- a long history of external cladding façades on high-rise
- 24 residential buildings?
- 25 A. Sorry, can you repeat that?

1 Q. Yes.

- 2 As at and from 2013, which was the time you were
- 3 working on the Grenfell Tower project, were you aware
- 4 that there had been a long history of fires on cladding
- 5 façades on high-rise residential buildings?
- 6 A. No.
- 7 Q. So were you aware of the fire at Knowsley Heights in
- 8 1991?
- $9\,$  A. I was aware of that fire , yes. That was the point after
- 10 which cavity barriers were introduced.
- 11 Q. Were you aware of the fire at Garnock Court which had
- 12 occurred in 1999 --
- 13 A. No.
- 14 Q. -- resulting in one fatality? No.
- Were you aware of the fire at Lakanal House in south
- 16 London in 1999?
- 17 A. Yes.
- 18 Q. Were you aware of the fire in Mermoz Tower in Roubaix in
- 19 France in 2012?
- 20 A. No.
- 21 Q. What about the spate of fires in high-rise buildings in
- 22 the UAE in the period 2012 to 2013?
- 23 A. No.
- 24 Q. No?
- What about the fires at the Address Downtown Hotel

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- and also at the Torch Residential Building, both in
- 2 Dubai, in 2015, did you know about those?
- 3 A. No, I don't think they were widely reported --
- 4 Q. Right.
- 5 A. -- at the time.
- 6 Q. So of the list I have read out to you, I think you have
- 7 said yes in relation to Knowsley Heights and
- 8 Lakanal House.
- 9 A. Yes.
- Q. Are there any others that come to mind which you were
- aware of as at and from 2013?
- $12\,$   $\,$  A. No. Subsequent press had talked about a fire in
- $13\,$   $\,$  Melbourne, but that  $\,$  was something that we had no
- 14 knowledge of at all.
- 15 Q. So can we take it from what you have just told us that
- you don't have or you didn't have any knowledge of the
- coverage of cladding fires in those Dubai high-rise
- 18 buildings in 2015 --
- 19 A. No.
- 20 Q. -- and 2016 and the industry publications?
- 21 A. No.
- 22 Q. Right.
- 23 It would follow from that, I think, that you didn't
- know that the external cladding had ignited and caused

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25 flame to spread up the external cladding.

- 1 A. Not at the time, no.
- $2\,$   $\,$  Q. Or, I suppose, that the cladding on those buildings
- 3 contained a polyethylene core; no?
- 4 Is it fair to say that, as Harley was holding itself
- 5 out as a specialist cladding contractor, you and your
  - team should have been aware of the dangers associated
- 7 with ACM panels that those fires illustrated?
- 8 A. No, I don't.
- 9 O. Why is that?
- 10 A. The fires that happened abroad were not reported, so we
- weren't aware of those. The other two fires , one in
- 12 1991, the recommendation was about the cavity barriers
- should be installed. The Lakanal fire was -- as it was reported, the problem there was that the firestopping or
- reported, the problem there was that the firestopping on the inside of the cladding system had been removed, so
- the panels themselves didn't appear to be the issue.
- the panels themselves didn't appear to be the issue.
- $17\,$   $\,$  Q. You see, the spate of fires in the UAE in 2012 and 2013
- were well publicised. I know they were overseas, but
- 19 they were well publicised and carried by the BBC, but
- 20 I think you're telling us you didn't have any knowledge
- 21 of those.
- 22 A. No.
- 23 Q. Is that right?
- 24 A. Correct.
- 25 Q. Did you take any lessons away from your knowledge either

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- of the Knowsley Heights fire or of the Lakanal House
- 2 fire about the fire performance of ACM cladding panels?
- 3 A. No.
- 4 Q. Let's go to Harley as at 2013 to 2014 as a topic.
- 5 Can I take you to paragraph 9 of your Inquiry
- $\mbox{6}$  statement {HAR00010184/3}, please. You say there that:
- 7 "By 2013-2014 Harley had approximately 16
- 8 employees."
- 9 Now, you have a son called Ben Bailey.
- 10 A. Yes
- 11 Q. How old is Ben Bailey now?
- 12 A. He is 31.
- 13 Q. 31?
- 14 A. Yes.
- 15 Q. When was he first employed by Harley?
- 16 A. Erm ... he actually worked for Harley during his summer
- holidays from university, but he became a full-time
- employee when he left university. I'm just trying to
- think what date that would have been. 2012/2013.
- 20 O. So he would have been 23 or 24 when he first started

- 21 working --
- 22 A. Yeah, full-time.
- 23 Q. -- full-time at Harley?
- 24 A. Yes.
- 25 Q. 23 or 24?

- 1 A. Yes.
- 2 Q. How many of your employees as at 2013 to 2014 would have
- 3 been involved in façade engineering?
- 4 A. 2013/14 -- in façade engineering?
- 5 Q. Yes?
- 6 A. Probably one.
- 7 Q. Who is that?
- 8 A. 2013/14, Graham Hackley would have left by then, it
- 9 would be Daniel.
- 10 Q. I see.
- 11 How many of those employees would have been
- 12 required, as part of their job, to consider the fire
- 13 performance of specified materials in relation to any
- 14 particular project?
- 15 A. I -- in terms of ... what the design office generally do
- 16 is if the products have a certificate that says they're
- 17 class 0, they rely on that, so it's -- anybody working
- 18 at the design office will look at -- once the
- 19 certificate 's been looked at, and the product is
- 20 accepted, they will use it. We don't look at every
- 21 product every time. Once it's been used and been
- 22 signed off, we will use it on another project without --
- 23 Q. Right.
- 24 You refer to a design office. Who was the design
- 25 office, or who comprised the design office, as at 2013

- 1 to 2014?
- 2 A. 2013/14, it was -- Dan was in the design office,
- 3 Mark Stapley was in the design office, and there were
- Δ another four designers in our in-house design office at
- 5 that stage.
- 6 Q. Right. And after 2014?
- 7 A. It was similar, until Harley Curtain Wall went into
- 8 liquidation .
- 9 Q. Okay.
- 10 You refer also in that last answer to, "Once it says 11
- it's class 0, they rely on that". We'll come back to 12
- class 0 later on in your evidence, but I just want to
- 13 note that there.
- 14 Did Harley provide any formal training or continuing
- 15 professional development for its employees in respect of
- 16 their roles during that period?
- 17 A. In addition to the MScs, there were product knowledge
- 18 courses that various employees went on. So that may
- 19 involve training with the systems companies, people like
- 20 Kawneer or Schueco, and also Pilkingtons with regard to
- 21 glass, that sort of thing.
- 22 Q. Did any of your staff go on product knowledge courses
- 23 relating to ACM panels?
- 24
- 25 What about insulation to be used in a rainscreen system? 26

- 1 A. No.
- 2 Q. No.
- 3 Did Harley provide staff with training to allow them
- 4 to keep up with industry accepted codes of practice for
- 5 the design and installation of cladding and windows?
- 6 That would have been the MSc course that --Α.
- 7 O. Right.
- 8 A. -- both Daniel and Graham went on.
- 9 Q. But apart from that, I think the answer is no; is that
- 10
- 11 A. Yes.
- 12 0. Okav.
- 13 Was Harley ISO 9001 accredited?
- 14 A. No.
- 15 Q. Were the protocols of ISO 9001 applied by Harley, even
- 16 though Harley wasn't a member?
- 17 A. No.
- 18 Q. Now, you go on to say in paragraph 9 of your statement
- 19 that your role as a director was to oversee the projects
- 20 being worked on.
- 21 A. Yes.
- 22 Q. That is right, is it?
- 23 Would you actually yourself study quotations which
- 24 were being given to employing contractors, main
- 25 contractors?

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- 1 A. The estimates were produced by our estimator and we
- 2 would have a review before they were sent out.
- 3 Who was your estimator? Was that Mike Albiston?
- 4 A. Mike Albiston.
- 5 Q. Right.
- 6 You say they would have a review; were you
- 7 personally involved in that review?
- 8 A. I was involved in the review with Mark Harris and
- 9 Mike Albiston.
- 10 Q. For Grenfell?
- 11 A. For Grenfell, yes.
- 12 0. Yes
- 13 At paragraph 9 you also say that you would work with
- 14 Mark Harris, I think he was the commercial manager, on
- 15 the sales side of the business.
- 16 A. Yes.
- 17 Q. That's right, is it?
- 18 How was your time divided, if you can give us some
- 19 impression of it, between overseeing projects and the
- 20 sales side of the business?
- 21 A. I would say -- and I'm guessing -- 70% on projects and
- 22 30% on sales.
- 23 Q. Right.
- 24 Now, you say also that overseeing projects would
- 25 involve -- and these are your words -- "reviewing key

concept drawings for buildability and discussing projects internally "; do you see that --A. Yes. Q. -- in the third and fourth line there? So is it right that you would actually discuss the design, specifically the design, of cladding projects with your staff? A. Yes. Q. Yes. When you say, as you do at paragraph 9, that you reviewed key concept drawings, what does that mean, and specifically how would you distinguish between what you call a key concept drawing from any other drawing? A. Well, the key concept drawings are basically how we're going to build it. How best to describe this? In the -- well, if we're talking about Grenfell 

In the -- well, if we're talking about Grenfell specifically, we looked at -- the architect sent us his design of how he wants the building or the cladding to work, and from that we're looking at ways to productionise. An example is the support rails for the windows. Now, this is an angle that bolts to the face of the structure above and below the opening, into which the window unit is loaded. And we spent quite a lot of time on that. Rather than taking a standard,

off-the-shelf angle extrusion, we designed it, reviewing a number of factors. One is thickening up various walls of it so that we didn't get any bending, where the -- so that ... shall I?

SIR MARTIN MOORE-BICK: Is it going to help you to explain
 what you are trying to tell us?

7 A. It is.

8 SIR MARTIN MOORE-BICK: Well, yes, do, then.

9 A. So that's the structure, the concrete structure, and
10 here, on the architect's drawing, is a set of angles
11 which are bolted, into which the window unit's loaded,
12 and we have its -- made down there. On to the front of
13 that is the cladding rail, which ultimately the panels
14 are hooked over.

Now, this rail, or this angle, what we did with that is actually determine the thickness that we want of this to give it its strength, and over here we slope this down so that any water that came on here would run off the front. And we introduced some key slots here so that when we bolted this to it, we didn't have to drill it on site, so the bolt would sit in here and stick up. A cleat would then bolt through to that, with adjustment in and out.

On here, this is a serrated plate with a hole in it, and then there is a serrated plate here which the bolt

goes through into the concrete. So we can adjust this up and down and in and out. This is sloped to let the water off.

At the bottom we put a downstand leg on it. So this is far more intricate and complex than the standard angle. The standard angle doesn't have these bits. At the base, the bottom one, it wasn't the reverse of this, because -- actually, I should have drawn that there. That's a ... that concrete cill was sloped back, so there was quite a long lever arm on this one. So the wall thickness here was increased because it was longer.

At the bottom, we had a smaller upstand. This is serrated again, with a serrated base so we can adjust this up and down, and again, with a race in here to take the cleat to give us the adjustment in and out.

When we had the window here -- bearing in mind these are big units and we're lifting them up and we are 20 storeys up in the air, we don't want to drop anything. So the purpose of these is when we put the window in, the windows have a sort of -- have a channel at the -- and a channel ... So when we put it in, we push it up to the top, lift it over, and then when it sits in, in this position, position 2, it can't fall out. So you can put it up, let go, it can't come out.

So when I'm talking about the productionisation or

taking the architect's concept, this is the bit of design that we're doing. So the whole concept of what the architect wants, how he's designed it, is his design, the products are his, but this bit is ours, and that's what I was involved with, the key concept of how this works. So we're looking at adjustment.

Because the floors on here, the heights are different, so from this side of the building to the other side of the building, there can be 25-mil difference on the floor levels. So we have to have adjustment in this to take care of it all.

So when I'm talking about our design, that's what we do.

MR MILLETT: Sorry to cut you off, because it's getting a bit long.

16 A. Yes.

Q. My question was: what distinguishes key concept designs
 or key concept drawings from other drawings. Is what
 you have just done to show us an example of a key
 concept drawing?

21 A. Correct.

22 Q. And that would be done by the Harley designers?

23 A. That would be done by the Harley designers.

24 Q. And you would review those?

25 A. Yes.

- $1\,$  Q. Would they then be reviewed again by Studio E on this
- 2 project?
- 3 A. Yes.
- 4 Q. They would. Before going off for construction?
- 5 A. Yes.
- 6 Q. Routinely?
- 7 A. I've seen that there are some drawings that slipped
- 8 through that, but routinely.
- 9 Q. Right.
- 10 A. Absolutely every time they should be reviewed by --
- 11 Q. I see
- So can we take it that you saw all drawings produced
- 13 by Kevin Lamb and Daniel Anketell-Jones?
- 14 A. No.
- 15 Q. Why not? Were they not key concept drawings?
- 16 A. There were half a dozen key concept drawings at the
- start that I saw, and thereafter, as they -- and then
- there are variations on those key concept drawings.
- 19 Q. I understand.
- 20 A. Variations on those drawings, I don't see, and there are
- revisions that go backwards and forwards with the
- architects . I don't see all those revisions .
- 23 Q. How would you decide which ones you saw and which ones
- 24 you didn't see?
- 25 A. Generally it's the early, the first half dozen drawings

- 1 that I would see.
- 2 O. I see.
- $3\,$   $\,$  A. Other drawings may pass across my desk, but I'm not
- 4 necessarily reviewing all of those.
- 5 Q. Very well. We may come back to some examples of those
- 6 later on in your evidence.
- 7 You say you reviewed the key concept drawings which
- 8 you have very helpfully now illustrated . Does that also
- 9 tell us that you would have considered the fire
- 10 performance of the materials being used?
- 11 A. I think with the ACMs which we had used before, we knew
- they were class 0, so we didn't review them, but we knew
- $13\,$  what they were. So we didn't review it; it was taken as
- read that they were compliant.
- The insulation, as I've explained earlier, was a new
- product to us. Daniel spoke to Celotex, had the
- technical sales manager in, we sent them key drawings
- $18\,$  and they've signed off on it . So as far as we were
- concerned, the products were safe.
- 20 Q. Would you also consider the fire safety of the design
- 21 itself and its compliance with Approved Document B when
- 22 considering the key concept drawings you have described?
- $23\,$   $\,$  A. I think the products -- at this stage there are
- 24 things -- these are early stage drawings, so there are
- additions that go on to that. So the firebreak strategy

- 1 is introduced a little bit further down the line.
- Q. Well, we're going to come back to that, but my question,
- 3 I'll just repeat it: did you yourself consider, when
- 4 considering the key concept drawings, whether or not
- 5 those drawings complied with Approved Document B,
- 6 Mr Bailey?
- 7 A. Yeah, I think we just took it as read that they were.
- 8 Q. Well, you took it as read that they were --
- 9 A. Well --
- 10 Q. -- but would you consider --
- 11 A. Yes. We wouldn't -- we would not knowingly provide
- materials that weren't compliant.
- 13 Q. No.
- 14 A. Or designs that weren't compliant.
- 15 Q. I'm going to try and pin you down a bit more.
- When you reviewed the key concept drawings that you
- 17 have described to us by the illustration, did you
- cross-check those designs as part of your review with
- the Building Regulations and with Approved Document B?
- 20 A. Not specifically, no.
- 21 Q. No.
- Now, going back to paragraph 9 {HAR00010184/3}, you
- 23 say that you would usually visit the site once every two
- to three weeks to see how work was progressing. That is
- 25 right, is it?

35

- 1 A. Yes.
- $2\,$   $\,$  Q.  $\,$  How many projects would Harley be working on at any one
- 3 given time, in general terms, as at 2013/14?
- 4 A. Four, five.
- 5 Q. Right. And during the period 2013 to 2016, when
- 6 Harley -- and by that I mean the two companies -- were
- 7 involved in the Grenfell Tower refurbishment, do you
- 8 recall how many other projects those two companies were
- 9 actually involved in? Was it the same number?
- 10 A. Yes.
- 11 Q. Now, in order to assess the progress of those works, is
- it right that you would have known what materials were
- being used or proposed on those projects?
- 14 A. Yes.

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- 15 Q. And during the site visits, would you be looking at
- those specifically?
- 17 A. Not specifically .
- 18 Q. To what extent would you personally be appraised of the
  - specific materials being used or proposed for
- a particular job at any given time?
- 21 A. I would know what products were on the job, yes.
- 22 Q. Would you discuss those with the client or client
- representative at those site meetings?
- 24 A. No
- Q. Now, you go on to say, and this is paragraph 9 again:

"On occasions, I would visit projects more freelance consultant was Harley Curtain Wall. 2 2 frequently." I estimate that for the first fifteen years of my work 3 3 Do you see that? as a freelance consultant I divided my time between 4 4 A. Yes. these various subcontractors, and thereafter, for a 5 Q. How would you normally determine the frequency of your 5 period of about five years I worked exclusively for 6 6 Harley Curtain Wall and Harley Facades Limited ... visits to site on these projects? 7 7 A. How smoothly they were running. During the time that I was involved in the Grenfell 8 8 Q. Right, I see. So the less smooth, the more frequent? Tower project I was working exclusively for Harley. 9 9 A. Yes. I worked full time and was generally based at Harley's 10 10 Q. Now, we know you set up Harley Façades in 2000, and that offices ." 11 that company remained dormant until, I think, 11 From what date do you remember Mark Harris worked 12 September 2015, when Harley Curtain Wall went into 12 exclusively for Harley? 13 13 administration. Have I got that right? A. I can't recall. I would have to guess at from 2011. 14 A. No, actually it was running in parallel with Harley 14 About 2011, you think? 15 15 Curtain Wall for about nine months. A. Yeah. But that is a guess, I can't recall. 16 Q. Okay. For nine months up to September 2015; is that 16 What prompted him to come and work exclusively for 17 right? 17 Harley, do you remember? 18 18 Because we were his biggest client by some way, and he A. Yes. 19 19 Q. In September 2015 -- 10 September 2015, I think -- the decided that he would be better off working for us 20 20 Grenfell Tower project -- I'll call it that -- was full -time. 21 21 transferred or novated, if you like, from Harley Curtain O. Right. 22 22 Wall to Harley Façades under a formal novation Now, looking at that last sentence in paragraph 8, 23 23 agreement. where he says, "I worked full time and was generally 24 24 A. Correct. based at Harley's offices ", does that tell us that he 25 25 Q. I don't want to take you to it, I will just read the was still an independent consultant, even though he was 37 39 1 reference into the record so we can see it if we need 1 working for Harley full -time? 2 2 it: {TMO100000004}. A. He was, yeah. 3 3 Now, in general terms, in your view, to the best of Q. He wasn't an employee on your payroll? 4 4 your recollection, did the financial difficulties of A. 5 Harley Curtain Wall have an impact on the progress of 5 Were there any formal contractual arrangements between 6 6 the Grenfell Tower refurbishment? Mr Harris as an independent contractor and Harley? 7 A. I think, to my recollection, no, although it may have 7 A. He sent us his invoice every month and we paid it. 8 8 delayed the project by a couple of weeks. Q. I see. But beyond that, there were no terms and 9 9 Q. Okay. conditions, governing contractual relationships? 10 Just going back to an answer you gave earlier on, 10 11 11 you say that you would visit normally every two to 0. Was he paid on a commission basis or a bonus basis? 12 three weeks. Did you visit the Grenfell Tower site 12 A. 13 every two to three weeks? 13 Q. Can you --A. Yes, maybe a little more than that. 14 A. He had a retainer and was paid on commission for the 15 15 Q. Was that because it was a little less smooth than other work that we got. 16 16 projects? Q. I see. Can you just give us a little bit of detail 17 A. No. I think, certainly after the novation, there was 17 about how that commission arrangement worked? 18 a lot of stuff to sort out, so ... 18 It was a percentage of the sales value for a project. 19 Q. Right. We may come back to that with you or others. 19 Okay. The sale of what in particular? 20 20 A. The contract value. Can I turn to some questions about Mark Harris. 21 I would like you to look at his witness statement, 21 Q. Right. So the value of the contract between Harley and 22 please. It's {HAR00010159/2}, please, and I would like 22 the main contractor? 23 23 you and I to look together, please, at paragraph 8. He A. Yes. 24 says there: 24 Q. I see.

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"One of the subcontractors I worked for as a

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Did his commission or bonus or any remuneration

- 1 arrangements depend in any way on the prices that he 2 managed to secure from suppliers?
- 3 A. No.
- 4 Q. Can I ask you, then, about Grenfell Tower specifically .
- 5 Now, we've seen your statement at paragraph 9
- 6  $\{HAR00010184/3\}$  that your role included -- and we've
- 7 seen this already -- going through estimating work,
- 8 reviewing key concept drawings for buildability and
- 9 keeping up to date through site meetings and progress
- 10 meetings. You have given us a general picture in
- 11 paragraph 9.
- 12 Can we take it that the general picture in
- 13 paragraph 9 applied to the Grenfell Tower project?
- 14 A. Yes.
- 15 Q. Yes.
- 16 How many times in total do you think you attended
- 17 site on the Grenfell Tower project?
- 18 A. It would be -- it would be a guess.
- 19 Well, I don't want you to guess.
- 20 Who would you generally meet on those occasions?
- 21 A. I would meet Ben, the project manager, I would meet the
- 22 fixers, and the Rydon project manager, which would be
- 23 Simon Lawrence or Dave Hughes or Steve Blake.
- 24 Q. Right. You said project manager. Do you mean project
- 25 manager or did you mean contracts manager?

- 1 A. Well, both.
- 2 Q. What about Simon O'Connor?
- 3 A. Simon O'Connor, yes.
- 4 Q. What about Building Control?
- 5 A. No.
- 6 Q. I'm so sorry, there is a question I should have asked
- 7 you a moment ago about Mark Harris' remuneration.
- 8 You say it was a percentage of the contract value.
- 9 What was that percentage?
- 10 A. It was on a sliding scale between 1% to 0.5%.
- Q. Right. 11
- 12 Now, we know that the value of the contract between
- 13 Harley and Rydon was roughly £3 million, just a little
- 14 bit under £3 million.
- 15 A. Yeah.
- 16 Q. Do you know what Mark Harris' total remuneration was in
- 17 relation to that project?
- 18 A. I would have to guess.
- 19 Q. Do you remember where it was on the scale between 0.5%
- 20
- 21 A. No, I would be guessing. I can't remember, I'm afraid.
- 22 Q. Okay. Is there a document that shows how he was
- 23 remunerated?
- 24 A. There may well be one somewhere. Mark may have a copy

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25 of it.

- O. Right. Is there a formal document which set out how he
- 2 was to be remunerated, which would then generate the
- 3 invoices that you have discussed?
- 4 A. I've known Mark for a long time and we agreed on
- 5 a handshake.
- 6 Q. Right. How did the sliding scale work?
- 7 A. I can't remember.
- 8 Q. Right.

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- 9 A. But Mark will have a copy of it, I'm sure.
- 10 We will ask him about it. You don't remember where on
  - the sliding scale the Grenfell Tower project ended up?
- 12 Again, going from memory, I think up -- there was so
- 13 much up to a particular value, then over the value it
- 14 was a reduced percentage, because the sales work is
- 15 pretty much the same if you're doing a £1 million
- project or if you're doing a £5 million project. So 17 that's why there was a sliding scale.
- 18 Now, can I take you back to your statement, paragraph 9,
- 19 and also paragraph 76 {HAR00010184/19}, just for the
- 20 purposes of reference.
- 21 You say in your statement that you would have ad hoc
- 22 meetings about key concept drawings for Harley's
- 23 projects; is that right?
- 24 A. Yes.
- 25 We know, and we will come to it in detail later, you had

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- 1 a meeting with Studio E on the Grenfell Tower project --
- 2 they were the Grenfell Tower project architects -- on
  - 27 September 2013 at Hays Galleria --
- 4 A. Yes.

3

- 5 -- in London, where I think you discussed, among other 6
  - things, the materials for the façade.
- 7 A. We discussed a range of things and potential materials
- 8 which might be used, yes.
- 9 Q. Yes.
- 10 Was it normal for Harley, as a specialist
- 11 subcontractor, to have meetings with architects on
- 12 a project directly before the project had been put out
- 13 for tender and before a main contractor had been
- 14 appointed?
- 15 Α. It's not unusual for either Harley or any other
- 16 subcontractor to do that.
- 17 Q. Can I show you paragraph 77 of your statement, page 20
- 18  $\{HAR00010184/20\}$ . Let's have that up on the screen, if
- 19 we could. You say there that you believe you
- 20 reviewed -- this is the second line:
- 21 "... initial key concept design drawings for
- 22 Grenfell Tower, including the elevation drawings ...
- 23 I would have discussed these with Kevin Lamb and/or 24 Daniel Anketell-Jones."
  - Did you discuss those at the Hays Galleria meeting

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- with Studio E?
- 2 A. No, because those drawings weren't -- didn't exist .
- 3 Q. They didn't exist at that stage? Did you discuss any
- 4 drawings at that meeting, do you remember?
- $5\,$   $\,$  A.  $\,$  I think,  $\,$  from memory, Studio brought a few drawings with
- 6 them which they laid out on the table. They had sent
- 7 some drawings, I think, to Mark prior to the meeting,
- 8 but it was very, very much an initial sort of sales
- 9 meeting, what products are there, what -- how do we
- build it, what's the access like. So a whole range of
- 11 high-level topics were covered.
- 12 Q. Once those key concept drawings had come into being, did
- you discuss those with Kevin Lamb or
- 14 Daniel Anketell-Jones?
- 15 A. Our key concept drawings, yes.
- $16\,$   $\,$  Q.  $\,$  How often did you have meetings with them, do you think,
- 17 to discuss those drawings?
- 18 A. Those drawings were produced quite quickly, so over
- a period of two or three weeks, I would have -- those
- 20 drawings were -- those key concept drawings were
- 21 produced. So during that two or three-week period,
- I must have sat down with them three or four times.
- $23\,$   $\,$  Q.  $\,$  I see. Would you have conferred with anyone else about
- those drawings, beside Mr Lamb and Anketell-Jones?
- 25 A. Yes, Mark Stapley would have been looking at them.

- 1 Rob Maxwell, our contracts manager at the time, would
- $2 \hspace{1cm} \text{have an input, because he's also interested in the} \\$
- 3 buildability and the deliverability of the project.
- 4 Q. Did any of those discussions, either with Mr Lamb,
- 5 Mr Anketell-Jones, Mr Stapley or Mr Maxwell, involve the
- 6 discussion of materials?
- 7 A. Only -- we knew at that stage what materials were being
- 8 used, that they were prescribed as Celotex for the
- 9 insulation and ACM for the panels.
- $10\,$  Q. You have mentioned that you would have internal progress
- $11 \hspace{1cm} \text{meetings in relation to the Grenfell Tower project.} \hspace{0.2cm} \text{In} \\$
- general, who would have been in attendance at those
- 13 meetings?
- 14 A. They weren't specifically for Grenfell, they were
- a project review meeting, so we would talk about the
- other projects as well as Grenfell. But in that, in
- those meetings that we had, Mark Stapley would have been
- there, Rob Maxwell, Dan, Kevin, me. On the Grenfell
- project, Ben may have been in there. On the other
- 20 projects we were doing, other project managers would
- 21 have been in as well.
- $22\,$   $\,$  Q. How often did you have internal  $\,$  progress meetings on
- 23 these projects?
- 24 A. They were irregular, so maybe once a month.
- 25 Q. So can we take it that you would have had internal

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- 1 progress meetings, including meetings about the
- 2 Grenfell Tower project, roughly once a month but
  - irregularly?
- 4 A. Yes.

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5 Q. Right.

Now, let's go to paragraph 67 of your statement,

- 7 page 17 {HAR00010184/17}. You confirm there that in
- 8 late March 2015:
- 9 "... I was aware of the debate that was going on as 10 to what the requirements for these fire breaks were ..."
- You see that?
- 12 A. Yes.
- 13 Q. You go on and explain and quote from one of the emails,
  - and there is some context to that and we will come back
- to that, I think, later on, but in general terms, can we
- take it from that as an example of your involvement that
- you were being kept abreast of a whole range of issues
- you were being kept abreast of a whole fange of issu
- during this project from materials to key concept
- drawings to cavity barriers, for example?
- 20 A. Yes

22

- 21 Q. Can we take it also that you were really closely
  - involved in the Grenfell refurbishment from the meeting
- with Studio E in September 2013 until the end of
- Harley's involvement in the project?
- 25 A. I was as closely involved in that project as all the

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- 1 other projects we were dealing with.
- $2\,$   $\,$  Q. What percentage or proportion roughly of your own time
- was spent dealing with the project in that time, in that
- 4 period?
- 5 A. With Grenfell?
- 6 Q. Yes, with Grenfell.
- 7 A. In the Harley Curtain Wall era, probably 10%. After
- 8 Harley Curtain Wall disappeared, probably 40%, because
- 9 we only had two projects running at the time.
- 10 Q. I follow.
- 11 I'm going to turn to a different topic, which is
- 12 regulatory requirements.
- Can we look at your statement at paragraph 30,
- 14  $\,$  please {HAR00010184/7}. You quote from the covering
- 15 letter for the Harley quotation for the building
- envelope, that's the quotation to Rydon.
- 17 A. Yes.
- Q. "Our offer includes for the design, supply and fix of acomplete envelope package, all in accordance with the
- 20 Clients Requirement Documents issued by yourselves."
- I have some questions about that.
- As part of the design element for Harley's work,
- would that involve reviewing the drawings produced by
- 25 A. We wouldn't review their drawings; we would use their

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- 1 drawings as a basis for our design.
- 2 Q. Right. And you would, as you say, use. You would
- 3 then -- is this right? -- produce detailed design
- 4 drawings of your own based on what Studio E had
- 5 provided?
- 6 A. Yes, we produced the production drawings, to make the
- 7 distinction.
- 8 Q. I follow.
- 9 Would you agree that part of Harley's responsibility
- 10 for the design, supply and fix would include ensuring
- 11 that the design of the façade complied with the relevant
- 12 statutory requirements?
- 13 A. Yes, but not in isolation.
- 14 Q. What does that mean?
- 15 A. There is a -- we produce -- when we received drawings,
- 16 the drawings from Studio E, and they were issued to us,
- 17 they're RIBA stage E. At that point, we believe that
- 18 what's being issued to us is compliant. So the premise
- 19 we start with is that the expectation is that the design
- 20 is compliant, and we then are producing the production
- 21 version of the architect's design.
- 22 Q. Does that tell us that nobody at Harley analysed the
- 23 Studio E drawings or the NBS specification, as contained
- 24 in the tender documentation, in order to ensure that
- 25 they complied with the relevant statutory requirements?

- 1 A. The -- we reviewed the NBS specification because that,
- 2. amongst other things, gave us the -- our design remit,
- 3 what part of the design we were responsible for. The
- 4 design that's come from the architect, we did look at.
- 5 You will notice that the first RFI that we produced,
- 6 which was the very first RFI on the project, was a query
- 7 about cavity barriers and firebreaks, seeking input from
- 8 the architect, from the -- from their fire consultants, 9
- and Building Control, about exactly where they wanted 10 them. So, yes, that was our response to their drawings.
- 11 Looking generally at where the cavity barriers were
- 12 placed, there was or there is -- the situation there is 13 you have one window within a compartment, so when there
- 14 wasn't an additional cavity barrier round the window,
- 15 that in itself didn't necessarily ring any alarm bells
- 16 because, for the fire to escape from the cavity back
- 17 into the building, it would have to go past a cavity
- 18 barrier. So this was something that is not uncommon in
- 19 the industry. If there's a single window within
- 20 a compartment, it quite often doesn't actually have
- 21 a barrier round it.
- 22 So this didn't -- in itself it doesn't raise a huge
- 23 red flag, but the very first thing we did was query
- 24 cavity barriers.
- 25 Q. Mr Bailey, I'm going to stop you at the end of that.

1 I hope it's the end of that answer, because it's quite

- 2 a long answer. I'm going to re-ask the question but I'm
- 3 going to break it down.
- 4 Just take the NBS specification, okay: did anybody
- 5 at Harley analyse the materials and products contained
  - in the NBS specification so far as concerned the
- 7 cladding to check whether it complied with the relevant
- 8 statutory requirements?
- 9 Α. Yes.

6

- 10 Q. They did?
- 11 A. Yes.
- 12 Who was that?
- 13 It would have been Daniel. Α.
- 14 O. I see.
- 15 Did anybody at Harley analyse the drawings that had
- 16 come to Harley from Studio E to check to see whether
- 17 they complied with the relevant statutory requirements?
- 18 A. Yes, and we believe that they did.
- 19 Q. You say you believe that they did. What I'm really
- 20 trying to get at here is whether you, Harley, operated
- 21 on the assumption that somebody else had done the
- 22 checking first, or whether you yourself checked?
- 23 It was the expectation that it had been done by Studio E
- 24 before it came to us.
- 25 As far as the drawings are concerned -- is this

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- 1 right? -- Harley proceeded on the assumption that
- 2 Studio E had checked all the drawings that they had
- 3 produced and satisfied themselves that they complied
- 4 with the statutory obligations and requirements?
- 5 A.
- 6 Q. Does that tell us that nobody at Harley checked the
- 7 drawings for statutory compliance?
- 8 A. I think that's a bit harsh, but yes.
- 9 Q. Well, you say a bit harsh; I don't want to be harsh,
- 10 I just want to get to the bottom of what happened.
- 11 Were there checks carried out by Harley on the
- 12 Studio E drawings for compliance?
- 13 A. No.
- 14 O. Right.
- 15 Do you accept that, as a specialist subcontractor
- 16 responsible for design, supply and fix of the façade on
- 17 the Grenfell Tower project, the buck stopped with Harley
- 18 on products and design?
- 19 A. No.
- 20 Why not? O.
- 21 A. Because there is a raft of layers with Harley, with the
- 22 architect, with the fire consultants, with
- 23 Building Control, to ensure that the products are -- or
- 24 the design is compliant.
- 25 Q. Are you saying that you were reliant on Building Control

1		to make sure that the products and design were	1	SIR MARTIN MOORE-BICK: and you were satisfied because of
2		compliant?	2	what you already knew about Celotex, based on the
3	A.	Well, ultimately, yes.	3	literature that you had been given?
4	Q.	Can you explain how that comes about, given that you	4	A. Yes, that's right.
5		were selling expertise and services as a specialist	5	SIR MARTIN MOORE-BICK: Is that right?
6		cladding subcontractor on this project?	6	A. That's right.
7	A.	If $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	7	SIR MARTIN MOORE-BICK: Thank you very much.
8		cladding and how it's attached to the building, how we	8	Yes, Mr Millett.
9		get it to site on time, how we make it fit . On	9	MR MILLETT: Mr Chairman, this may be a convenient moment.
10		particular items where we're not entirely clear, we ask	10	I was about to switch subtopic.
11		questions of the architect, of the specialist, of	11	SIR MARTIN MOORE-BICK: Oh, I didn't intend to break your
12		Building Control, to ensure that it complies.	12	line of questioning.
13	Q.	You say "of the specialist , of Building Control".	13	MR MILLETT: Not at all . It may be that a review of the
14		Are you telling us that, even though Harley was	14	notes may speed things up a little bit. But it may be
15		a specialist cladding subcontractor with a lot of	15	a convenient moment. I am happy to continue, but we are
16		experience, particularly in relation to overcladding	16	moving on to a slightly different subtopic.
17		high-rise residential buildings, you nonetheless relied	17	SIR MARTIN MOORE-BICK: All right.
18		on Building Control to tell you whether or not the	18	Mr Bailey, we're going to have a short break now so
19		products and design complied with the statutory	19	that you can stretch your legs and so on.
20		requirements?	20	While you're out of the room, I have to ask you,
21	A.	We're not we are not statutory compliance experts, so	21	please, not to discuss your evidence or anything to do
22		when we have a doubt about how something is done, we	22	with the Grenfell refurbishment with anyone else.
23		seek guidance, and Building Control are the experts on	23	We will take quarter of an hour and come back at
24		compliance, so that's and we don't talk to	24	11.35, please.
25		Building Control direct, everything that we supply, all	25	THE WITNESS: All right.
		53		55
_				
1		the drawings that we produce are passed through to the	1	SIR MARTIN MOORE-BICK: If you would like to go with the
2		main contractor, to the architect, who then pass those	2	usher, then, please.
3		on to Building Control for checking. And on the	3	(Pause)
4		specific items that we're talking about, the cavity	4	All right, 11.35, please.
5		barriers, we pushed that right up the chain so that	5	(11.18 am)
6		everybody looking at it, from all aspects, was happy	6	(A short break)
7		that the design complied.	7	(11.35 am)
8	SIR	MARTIN MOORE-BICK: Mr Millett, just allow me to	8	SIR MARTIN MOORE-BICK: All right, Mr Bailey, ready to carry
9		intervene for a moment.	9	on?
10		I wonder if you can just help me to understand this,	10	THE WITNESS: Yes.
11		Mr Bailey: if we reduce this to something specific like	11	SIR MARTIN MOORE-BICK: Thank you.
12		the insulation	12	Yes, Mr Millett.
13		Yes.	13	MR MILLETT: Mr Chairman, thank you.
14	SIR	MARTIN MOORE-BICK: did you consider it to be	14	Mr Bailey, we're going to turn to a different topic
15		Harley's responsibility to check what the	15	now, which is the contractual arrangements in relation
16		NBS specification provided for by way of insulation and	16	to this Grenfell Tower project specifically .
17		satisfy yourselves that it complied with the	17	Can I ask you to look at paragraph 47, first of all,
18		Building Regulations and ADB?	18	please. That's your Inquiry statement at page 12
19	A.	We checked the specifications , we knew that Celotex was	19	$\{HAR00010184/12\}$ . You say there at paragraph 47 that:
20		the named product, and we had Celotex in, we had read	20	"Towards the end of July [2014], Harley were
21		their literature, and they convinced us that it	21	officially notified of Rydon's intention to appoint it
22		complied.	22	as the Envelope Package sub-contractor. The 'Letter of
23	SIR	MARTIN MOORE-BICK: So I think what you're saying is you	23	Intent' refers to the 'Authorised Works' as 'Design of
24		did regard that as part of your responsibility	24	Facade Works' (for the sum of £30,000). Whilst no

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25 A. Yeah.

written contract was ever signed between Harley and

the responsibility for designing the entire façade?

2 2 price was agreed in around July 2014 in the figure of A. To the extent it was set out in the NBS specification. 3 3 £2,617,495.00." Q. Well, that qualification doesn't appear here, and I'm 4 4 Do you know why a contract was never formally agreed really just trying to understand your recollection about 5 between Rydon and Harley? 5 what the scope of the work was. 6 6 A. I don't. I'll just try the question again: did you 7 7 Q. Did it concern you that there was never a contract understand, having probably read this letter of intent, 8 8 signed between Harley and Rydon? that Harley's job was to design the façade? 9 9 A. No, it's not unheard of. A. Yes. 10 Q. Not unheard of, but did it concern you was my question? 10 Q. Yes. 11 11 A. No. Now, if we look on down the LOI, if you go to 12 It's not unheard of, but is it usual to have no formal 12 heading 1, "Compliance", just immediately below that, 13 13 written contract on a project of this size? you can see that it says that: 14 14 A. It's not usual, no. "The Authorised Works must comply with the 15 15 Q. Given that it wasn't usual, can you explain why it following ..." 16 16 happened? And there is a series of appendices, which include 17 A. I can't. 17 appendix D and appendix F. 18 Q. Did it cause any difficulties for Harley, not having 18 If you go over the page {HAR00000120/2}, you can see 19 19 a contract formally setting out the extent of the works what appendix F -- well, you can't, actually, but it 20 20 and Harley's responsibilities? does include appendix F. 21 21 A. No. Can we look at appendix D, first of all, which is 22 22 Q. Now, I think it's right, isn't it, that your scope of the subcontractor pre-contract interview, {HAR00000391}. 23 23 works, Harley's scope of works, was determined by the Did you look at this, do you think? 24 letter of intent, the LOI, sent by Rydon to Harley? 24 A. Yes, I think I did. 25 A. Yes. 25 Yes. Let's look at page 2 {HAR00000391/2} under 57 59 1 Q. Let's just look at that. If we can go to {HAR00005867}, 1 clause 4.2, please. That says, "Drawings", and 4.1: 2 2 please. This is the letter of intent, or rather this is "Revised/updated drawings to be issued to 3 3 an email, I should say, sent to you by Mark Harris on subcontractors offices electronically. A copy to be Δ Δ 25 July. Do you see that? held by site manager. You are responsible for checking 5 5 drawing revision with site manager prior to commencing A. Yes. 6 6 Q. He attached, among other things, the Harley signed work." 7 7 letter of intent with its appendices. So when you saw that, you understood it, did you? 8 8 Did you read them at the time? A. A. Probably not. 9 9 Q. And the "you" in this case is always Harley, isn't it, 10 10 Q. Why not? clearly? 11 11 A. There were a lot of -- well, there are some key It is. A. 12 documents in there I would have read. Other ones, 12 Under 4.2 specifically, "Subcontractor Drawings - n/a", 13 probably not, no. 13 and then you can see there are five items there with 14 Q. Well, would you have read the Harley signed letter of 14 dates: preparation, approval, re-submission, issued for 15 15 intent? construction and manufacturing period, and then a note: 16 A. Yes. 16 "All drawings and specifications received by us will 17 Q. You would have done, right. 17 be commented upon and approved in principle only. The 18 Did you take steps to make sure that your staff --18 subcontractor remains fully responsible for the design, 19 so Mark Stapley, Daniel Anketell-Jones, and perhaps Ben 19 including relevant compliances, design and dimensional 20 as well, Ben Bailey -- read the LOI? 20 integration." 21 21 A. No. Just looking at that, do you accept that Harley was 22 22 Q. Turning to the letter of intent itself, if we can, responsible and remained responsible for ensuring that 23 23 that's at {HAR00000120}, you can see there, under the design of the façade comprising the authorised works 24 item 1, "Design of Façade Works (the 'Authorised 24 met the relevant compliances? 25 Works')". Did you understand from that that Harley bore 25 A. Yes. 60

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Rydon, a scope of works and ascertainment of lump sum

- Q. And that included the Building Regulations and
   associated guidance, including Approved Document B?
- 3 A. Yes.
- 4 Q. Yes.
- 5 Did you expect your team on this project to be
- 6 sufficiently familiar with the requirements of the
- 7 Building Regulations and Approved Document B to be able
- 8 to design a safe cladding system?
- $9\,$   $\,$  A. Yes, and in instances where they were unsure, they would
- 10 seek guidance from the architect, Building Control and
- 11 other specialists.
- 12 Q. Which other specialists?
- 13 A. The specialists employed by Rydon, ie the fire
- 14 consultants.
- 15 Q. Is that Exova?
- 16 A. Yes.
- 17 Q. Right. We will come back to that, I think, later.
- Does it follow from the unqualified part of your
- answer that you recognised that Rydon, as the contractor
- buying your services as a subcontractor, would be
- 21 relying on Harley's familiarity with those statutory
- 22 requirements and their expertise?
- 23 A. Our expertise in the cladding, and if we required
- assistance with the statutory requirement, we would seek
- 25 it.

- 1 Q. Well, let me ask it again: does it follow from that part
- of the answer that wasn't qualified that, as a
- 3 contractor buying your services, Rydon buying Harley's
- 4 specialist subcontractor services, Rydon was relying on
- 5 Harley's familiarity with the Building Regulations and
- 6 Approved Document B?
- 7 A. Yes.
- 8 Q. Yes.
- 9 Can I ask you to look at appendix F, which is
- a schedule of information, which is {HAR00000396},
- 11 please. This is a list under the heading "Envelope
- Package, Schedule of Information". Do you see that?
- 13 A. Yes.
- Q. And under that it says, "Specifications", and under the
- third item there, do you see, "Section B Specification
- and Design requirements"?
- 17 A. Yes
- 18 Q. Now, we will come back to this document in a minute, but
- can we first turn to the contents page of the JCT
- $20\,$  contract between Rydon and the TMO, which is at
- $21 \hspace{1cm} \{ RYD00000001/2 \}. \hspace{1cm} Now, I \hspace{1cm} would \hspace{1cm} like \hspace{1cm} to \hspace{1cm} look \hspace{1cm} here \hspace{1cm} at \hspace{1cm} the \hspace{1cm}$
- $22\,$  same reference under part 2, where it says, "Section B -
- $23\,$  Specification and Design Requirements". Do you see
- 24 that?
- 25 A. Yes.

- $1\,$  Q. So what's happening is that appendix F contains the same
- $2\,$   $\,$   $\,$  reference in the subcontract as contained in the head
- 3 contract between Rydon and the TMO; yes?
- 4 A. Yes.
- 5 Q. Yes.
- 6 Now, if we can look at page 179 {RYD00000001/179} of
- 7 this document, the ICT D&B contract between Rydon and
- 8 the TMO, this is where we find section 2B. This says or
- 9 is entitled, "Architectural Employer requirements are
- contained within", and then you can see, "Architectural
- NBS in Appendix A/Architectural". Do you see that?
- 12 A. Yes.
- 13 Q. This is the NBS specification that was prepared by
- Studio E and provided to Harley with the tender
- 15 documents.
- 16 A. Yes.
- 17 Q. I say that. Do you agree with that?
- 18 A. Yes.
- 19 Q. Was it your understanding that Harley's contract with
- Rydon, the subcontract, required Harley to consider the
- 21 NBS specification?
- 22 A. Yes.
- 23 Q. And would you agree that it would be, to all intents and
- purposes, impossible for Harley to produce a proper
- 25 tender for the project and to conduct detailed design

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- work unless Harley had considered the NBS specification?
- 2 A. Yes.
- 3 Q. Yes.
- 4 Now, going back, if we can, to appendix F, which is
- 5 {HAR00000396/3}, please, we see that that appendix also
- 6 incorporated, if you look at the top of page 3, at the
- 7 last L0 but one, "L01212 SPEC 001". Do you see that?
- 8 A. I do
- 9 Q. Yes. Do you happen to know what that might have been?
- 10 A. I don't.
- 11 Q. Let me help you. That was a specification produced by
- 12 Curtins Consulting. Let me show that to you. That's
- 13 (ART00000914), please. This is dated 1 March 2013. You
- can see that it's entitled "LO1212-SPEC-001", produced
- by Curtins Consulting, and entitled "Structural
- Performance Specification for the Design, Supply and
- Application of Overcladding Systems to Grenfell Tower".
- Did you look at this document at the time, do you think?
- 20 A. I'm not sure I've ever seen this document.
- Q. Right, even though it was referred to in thesubcontract?
- 23 A. Yes.
- 24 Q. Really?
- Would you accept, just looking at its description,

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1 that it was an important document because it sets out Q. No. You may not have seen the document before, as you 2 2 the specification for the design, at the very least, of said, but just casting your eye, if you would, down the 3 3 the overcladding system for Grenfell? list of British Standards, are these standards which are 4 4 A. Yes. familiar to you? 5 Q. Can you explain why you didn't look at this document? 5 A. Some are and some aren't. 6 6 A. Whilst it's referred to in the letter of intent, I'm not Q. Let's look at one particular one, the pre-penultimate, 7 7 sure it was ever supplied. so third from the bottom: 8 8 Q. You say you're not sure it was ever supplied; does that "BRE Publication: Fire Performance of External 9 9 Thermal Insulation for Walls of Multi Storey Buildings mean that you have looked into this and --10 10 A. No. 2nd edition 2003." 11 Q. Right. I see. 11 Was that familiar to you at the time as 12 Now, let's see how we go with it. At section 1, if 12 an applicable standard? 13 13 If that's BR 135, yes. you can go to that, please, page 3 {ART00000914/3}, it 14 says under "General", in the second line, second 14 What about this publication, BRE publication, second 15 15 edition? sentence: 16 "All works shall be designed, supplied and 16 No, I don't know. 17 constructed by the Contractor." 17 Q. Right, okay. Maybe it --18 Whether or not you saw this document historically, 18 -- the same. A. 19 19 do you accept that in this case, you -- Harley that It may be the same thing. 20 is -- were the subcontractor engaged to design the 20 What about the last one: 21 21 "Centre for Walling & Cladding Technology ([C]WCT): building envelope? 22 22 Standards for Walls with Vertical Rainscreen 1998." A. Sorry? 23 23 Q. Well, the contractor is Harley in this case. A. 24 A. Yes. 24 Q. You read that. I think you told us you were familiar 25 25 Yes. As such, Harley had to design, supply and with that. 67 1 construct the building envelope. 1 A. Yes. 2 2 A. Yes. Q. All right. 3 3 Q. Yes. Now, do you accept that you, Harley, were obliged to 4 4 be familiar with and apply each of those publications, Now, let's look at section 4, which is page 7 5 {ART00000914/7}. This sets out the standards of 5 and particularly the publications I've just picked out, 6 6 the BRE 135 publication and the CWCT standard? compliance. You see it says, "Compliance with General 7 7 Standards", and there is a list there of standards of A. Yes. 8 8 compliance that all design, components and workmanship Q. If we look at page 9 {ART00000914/9}, please, next page, 9 9 under section 6, "Design", and look at the third bullet must comply with. 10 Would you agree with me that Harley was under 10 from the bottom, you can see that it refers to the need 11 11 an obligation to Rydon, through this document, to ensure for effective fire barriers. At the top part of the 12 that the design, components and workmanship must comply 12 page, you see that the document requires the designer, 13 with each of those requirements and recommendations? 13 the constructor, to consider the effects of the need for 14 14 effective fire barriers. A. Yes. 15 15 Q. Including the statutory requirements, the Were you aware that that was an obligation that 16 16 Building Regulations 2000 and subsequent amendments, and Harley owed to Rydon? 17 indeed the BRE digests and information papers. 17 A. And then at page 11 {ART00000914/11}, under section 7, 18 A. Yes. 18 Q. 19 19 Q. Yes. you can see that the contractor -- the title is 20 20 "Overcladding", and we can see here, if you look at If we look at section 5, which is page 8 21 {ART00000914/8}, this is entitled "Specific Standards of 21 7.1.13, it says that: 22 22 Compliance", and here is a list of specific standards "The system should comply fully with the 23 23 applicable to the building envelope. Were you familiar recommendations of the BRE document 'Fire Performance of

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with this list?

A. No. As I said, I've not seen this document before.

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External Thermal Insulation for Walls of Multi Storey

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Buildings', second edition, 2003."

1 So that's 135, and then again at 7.1.14: 2 "The system shall not be a fire risk at any stage of 3 installation, nor shall it constitute a fire hazard 4 after completion if for any reason the insulant becomes 5 exposed." 6 Again, did you understand that those were 7 obligations which Harley owed to Rydon? 8 A. Yes. 9 Q. Yes. 10 Now, let's just look, if we can, at the BRE 11 publication of 2003, that's the second edition, and we 12 will also look at the one in 2013, the third edition. 13 Starting with the second edition,  $\{BRE00005554/2\}$ , 14 if we start there, please, this is the document. 15 Just looking at the first page of it, is that 16 something that you were familiar with at the time of the 17 contract? 18 A. Yes. 19 Q. Summer 2014. It was. 20 Now, we can see it's authored by -- if we look at 21 the next page {BRE00005554/3} -- Sarah Colwell and 22 Brian Martin, and this document sets out design 23 principles for external cladding referred to by the 24 Curtins specification. 25 My first question is this: did you look at this 1 document specifically during the Grenfell Tower 2 refurbishment? 3 A. I didn't, no. 4 Q. You didn't. Did you look at it before starting on the 5 Grenfell Tower project? 6 A. I think I looked at it a few years ago. 7 Q. What, before the project? 8 A. 9 Q. What had caused you to look at this document? 10 A. General reading. 11 Was it a specific project that had prompted you to look 12 at this? 13 A. I can't recall. 14 O. Right. 15 Did you refresh your memory ever in relation to this 16 document or was this a one-off read? 17 A. It was a one-off read. 18 Q. Right. How many years before the Grenfell Tower project 19 was that one-off read? 20 A. I'm guessing five years. 21 Q. Right. 22 Are you aware or were you aware that this document, 23 which you call and I think is for short called BRE 135,

2 referred to at paragraph 12.5 of Approved Document B?
3 A. I couldn't give you the paragraph number.
4 Q. No, fair enough.

Q. Were you aware that specifically, specifically, it's

5 Can we look at page 7 {BRE00005554/7} of this
6 document, please. This is a reference to a fire in 1999
7 in a housing block in Scotland, and you can see the
8 picture, figure 1, Garnock Court, Irvine. This was one
9 of the fires I asked you about earlier this morning and
10 you said you had no recollection of, I think.

Looking at this document, are you sure that was quite right, if in fact you had read this document?

 $13\,$   $\,$  A. Yes, the name of the building didn't register with me.

14 Q. Right.

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Now, if we look at page 9 {BRE00005554/9}, you can see that the mechanisms of fire spread are described there by figure 2, both in text form and in a picture.

Did you understand, having read this document, even though five years or so before Grenfell, or before your involvement on it, that you understood that cladding systems can create the opportunity for rapid unseen flame spread --

23 A. Yes

24 Q. -- which causes an unacceptable risk to the occupants?

25 A. Yes.

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Q. Was that something that you appreciated during your timeworking on the Grenfell Tower project?

3 A. Yes

Q. Now, did you realise that this guidance also warns that
 external cladding systems offer a potential route for

6 fire spread through multistorey buildings?

7 A. Yes.

Q. And that close attention should be paid to the
installation of cavity barriers to inhibit the spread of
flame in the event of a fire involving an external
cladding system?

12 A. Yes.

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Q. Let's look at page 10 {BRE00005554/10}, paragraph 3, it
 refers to cavities, and it says there:

"If flames become confined or restricted by entering cavities within the external cladding system, they will become elongated as they seek oxygen and fuel to support the combustion process. This process can lead to flame extension of five to ten times that of the original flame lengths [and this is in bold] regardless of the materials used to line the cavities. This may enable fire to spread rapidly, unseen, through the external cladding system, if appropriate fire barriers have not been provided (Figure 4)."

Was that statement of principle something with which

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referred to specifically in Approved Document B?

A. Yes.

2.4

2 Grenfell Tower project? 3 3 A. Yes. 4 4 Again looking at page 10 at paragraph 5, "Fire Service 5 intervention", it says: 5 6 6 "Where the external cladding system is not 7 7 significantly contributing to the spread of fire from 8 8 one storey to the [next], then intervention by emergency 9 9 services should prevent continued fire propagation by Do you see that? 10 10 way of the building envelope. However, where the A. Yes. 11 external cladding system is contributing to the fire 11 Q. 12 propagation rate, the potential exists for the fire to 12 13 affect multiple storeys simultaneously, thus making 13 14 firefighting more difficult." 14 15 15 Again, is that a principle, even in general terms, 16 16 with which you were familiar at the time of your 17 involvement in Grenfell? 17 A. 18 18 A. Yes. 19 19 Just one or two more references, then. Page 17 20 20 {BRE00005554/17}, please, third paragraph down, this 21 21 deals with "System-specific details: ventilated 22 22 cavities ". You can see there that it says, third 23 23 paragraph down: 24 24 "Once the fire is within the cavity, it may 25 25 propagate unseen through the system if adequate fire 73 1 barriers are not employed. This may result in 1 2 2 significant risk of system collapse or fire break out at 3 3 significant distances from the fire origin." 4 4 So does that tell us, and did you understand at the A. I --5 time, that the guidance was requiring close attention to 5 Q. You didn't? 6 6 be paid to the installation of cavity barriers to A. I didn't know. 7 7 inhibit the spread of flame in the event of a fire 8 8 involving an external cladding system? 9 9 A. Yes. 10 Q. Then on page 17 a little bit lower down, under the 10 11 11 heading "Performance of materials in fire ", do you see 12 it says, first of all, "Insulation" and then it says: 12 O. Right. 13 "The performance of insulating material when 13 14 subjected to this type of fire scenario has been 14 15 15 outlined in the previous section. Typically, 16 non-combustible materials are used in these systems as 16 17 it is difficult to prevent fire entering the cavity and 17 18 spreading through the insulating material." 18 19 19 Again, did you understand that? curated or collected? 20 20 A. Yes. 21 Q. Then bottom of page 17 over to page 18 {BRE00005554/18}, 21 at more generally.

you were familiar at the time of your involvement on the

1 limited combustibility (as defined in Tables A6 and A7 2 of Approved Document B). Typically cementitious-based products through to natural products such as stone veneers and coated metal panels."

And it goes on about that.

Then it says, four lines up from the end of that bullet point, halfway through that mini paragraph:

"Metal panels such as aluminium ..."

"... may fall from the system if the strength of the fixings is affected by the local fire source. They may also melt, generating molten metal debris if exposed directly to the sustained flame envelope."

Again, was that a warning or risk that you were familiar with at the time of the Grenfell Tower project?

Now, the guidance available for the majority of the period of Grenfell Tower project was in fact contained in the 2013 edition of this document, BR 135, and it contained further warnings. Can we just look at that, {CEL00003364}, please. Again, it 's by Sarah Colwell and a new editor, Tony Baker.

Just looking at the front page, is this a document, the third edition, 2013, that you read?

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A. I don't think I've seen that one.

Q. Don't think you've seen it, right. Did you know that

a further edition had been published in 2013?

Q. How can you account for that? How did you not know that an updated edition of BR 135 had come into being, given

your experience and position in the industry?

A. I'm not sure actually how we're alerted to updates of certificates or new publications.

A. So there's not a circular issued saying, "By the way,

there's a new publication, here it is", you have to

actively go and look for it.

Q. Was there no system in place in Harley whereby guidance

documents such as this one, which was official or

semi- official because it's referred to in ADB, were

A. No, and I think that's something that needs to be looked

22 Q. Right.

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Just looking at the bottom of that first page, did you know that this document had been produced on behalf of Celotex?

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we can see it says, under "External panel":

from non-combustible through to combustible.

"Materials used for external panels used can vary

·" Non-combustible materials and materials of

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A. Well, no.

2 Q. Right.

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3 Just help me with this: did you know of any 4 relationship at the time, given your role in the

- 5 industry, between Celotex and the BRE?
- 6 A. No. I'm a little surprised.
  - O. Let's look at the document. Page 11 (CEL00003364/11),
- 8 please. I'll take this very quickly.

9 Paragraph 2.1, you can see halfway down it says, it 10 refers to regulatory systems and then in the third

11 paragraph it says:

> "These potentially conflicting requirements are highlighted in the area of innovative materials and designs, which are being driven by the need to construct more energy-efficient and sustainable buildings. In order to meet these design challenges, the range of new and innovative materials and designs of systems being offered as potential solutions has also increased the volumes of potentially combustible materials being used in external cladding applications."

21 Do you see that?

22 A. I do.

23 Was that something as a general principle you were aware

- 24 of at the time?
- 25 A. Yes.

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1 Q. If you look on at page 22 {CEL00003364/22},

2 paragraph 6.4.1, under the heading "Insulation", I just 3 want to show you that:

4 "Performance of materials in fire.

5 "Insulation.

> "As it can be difficult to prevent fire entering the cavity and spreading in these systems, the selection of the insulation materials used and the design of the fire barriers to close these cavities are particularly

10 important."

11 Again, at the time of the Grenfell Tower project, 12 were you familiar with that as a general principle, even

13 though you may not have seen this document?

14 A. Yes.

15 Q. Yes. Can I then go back to the LOI.

16 SIR MARTIN MOORE-BICK: Mr Millett, I'm just wondering

17 whether this document was produced -- I can't scroll

18 un --

19 MR MILLETT: Yes, I've just had a note from those behind me,

20 Mr Chairman. Perhaps I can just clear that up.

21 Mr Bailey, I asked you about production on behalf of

22 Celotex Limited. That may be my fault for

23 misunderstanding what that means. So I may have to

24 revisit that later. But I would withdraw the question

25 about the production of this document by Celotex -- A. Okay.

2 Q. -- or any relationship between Celotex and the BRE.

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4 Just for the record. We may need to clarify that later 5

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6 If we go back to the letter of intent,

7 {HAR00000120/2}, clause 2(b), if we can just look at

8 that, it says:

> "The draft Building Contract is available for inspection by you at our offices ."

11 Do you see that?

12 "You are deemed to have notice of all its provisions 13 and its provisions are incorporated in this Contract

Just looking at that, that's a pretty common

14 insofar as they relate to the Authorised Works." 15

16 provision, isn't it, for a subcontract?

17 A. It is.

18 Q. Did you therefore understand that the provisions of the

main contract between the TMO and Rydon were

20 incorporated into the subcontract, so far at least as

21 they referred to the design or related to the design of

22 the façade?

23 I didn't appreciate that at the time, but looking at

24 what it says now, I would agree with you.

25 Q. Right. You say you didn't appreciate it at the time;

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1 can you explain why not?

2 A. No.

3 Q. Did you not yourself sit down and just review the whole

4 suite of contracts to make sure you knew what Harley was

5 being committed to?

6 A. No.

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7 Q. Was that common as a matter of practice for you?

(Pause)

9 A. Normally we actually have a contract which you can read

10 through. This is -- the way this is issued as a letter

11 of intent, yeah, that is -- that's causing this issue,

12

13 Q. Yes. So your not knowing that the head contract had

14 been incorporated into the subcontract was abnormal; is

15 that right?

16 A. Yes, and as I say, we never actually had the formal

17 contract through.

18 Q. No. I'll come to that, I think. But I think the answer

to my question is that it was not normal for you not to

20 know that the head contract terms were incorporated into

21 the subcontract?

22 A. Correct.

23 Q. Right.

24 Does that tell us that, at least in simple terms,

25 you didn't know that Harley owed the same obligations to

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albeit, as we subsequently found out, it wasn't what it

2 2 A. Yes. was sold to us as. 3 3 Q. Let's look at clause 2.17.1 on page 22 {RYD00000001/22}. Q. Did anybody at Harley, to your knowledge, ever take the That provides -- and again, it's quite long -- that the 4 4 opportunity to inspect the head contract between Rydon 5 and the TMO? 5 contractor, which is Rydon in this contract: 6 6 A. Not to my knowledge, no. "... shall (to the extent set out in clause 2.17.2.1 7 7 O. So can we proceed on the basis that Harley's involvement below) be fully responsible in all respects for the 8 8 in this project proceeded without any familiarity at all design of the Works including ..." 9 with what Rydon had promised it would do for the TMO? 9 Then it goes on to say at clause 2.17.1.2, do you 10 10 A. Correct. 11 Q. Is that unusual, in your experience? 11 "... not limited to the co-ordination and 12 Unusual but not unheard of. 12 integration of all design and the interface between 13 13 Q. Right. design elements for the Works whether carried out by the 14 14 If we can look at the main contract, this is Contractor or by any other party engaged on the Works 15 15 {RYD00000001}. This is the first page. It's dated and the Contractor shall adopt and take responsibility 16 16 30 October 2014, this is the formal signed version, and for any design work in relation to the Works which may 17 it's a design and build contract. Can we take it that 17 be carried out or which may have been carried out by 18 you knew at least that? 18 professional consultants or specialist Sub-Contractors 19 19 A. Yes. or by any other person at the request of the Employer." 20 20 Q. At the time of the Grenfell Tower project, how familiar Did you know that Harley was taking on that 21 21 were you with design and build projects? obligation vis-à-vis Rydon? 22 22 A. Reasonably. Probably a third of the jobs that we do are A. No. 23 23 design and build. Q. Then at 2.17.1.3, the contractor will be fully 24 24 Q. Can we look at page 19 {RYD0000001/19}, please, and responsible in all respects for: 25 25 I would like you to look with me, please, at "... selection of goods and materials and the 1 1 clause 2.1.5.1, which is a specific clause inserted into satisfaction of performance specifications included or 2 2 the head contract, and it says: referred to in the Employer's Requirements, the 3 3 "The Contractor warrants [so that's Rydon warranting Contractor's Proposals, this Contract or any Change." 4 4 to the TMO] that it has not used and shall not use and Again, did you know that Harley was taking on that 5 has exercised and shall continue to exercise the 5 obligation vis-à-vis Rydon? 6 6 standard of skill and care required by clause 2.17.2.1 A. No. 7 7 to ensure that it has not and shall not specify Q. If we look a little further down at clause 2.17.2.2 on 8 8 authorise cause or allow to be used in the Works any page 23 {RYD00000001/23}, it says that: 9 9 products or materials which ..." "... the Works will when completed comply with any 10 Then there are four sub-subclauses there, the first 10 performance specification or requirements included or 11 of which says, this is 2.1.5.1.1: 11 referred to in the Employer's Requirements or the 12 "Do not conform with British or European Standards 12 Contractor's Proposals, this Contract or in any Change." 13 (where appropriate) or Codes of Practice (or where no 13 The same question again: did you know that Harley 14 such standard exists do not conform with a British Board 14 was taking on that obligation vis-à-vis Rydon? 15 15 of Agrément Certificate )." A. No. 16 Did you understand that Harley was taking on that 16 O. Clause 2.17.2.3: 17 obligation vis-à-vis Rydon? 17 "Subject to clause 2.17.2.1, the Contractor shall 18 A. No, but we wouldn't supply stuff that didn't conform as 18 design and construct the Works in compliance with all 19 19 a matter of course. Consents (including the discharge of any reserved 20 Q. What did Harley do to ensure that it wouldn't supply 20 matters in planning consents relating to the Works),

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stuff that didn't conform, as you put it?

A. The key components were set out in the prescriptive

NBS specification, and we knew that Reynobond had

knew that the Celotex came with its certification,

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an Agrément certificate which complied with this, we

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Rydon that Rydon owed to its client, the TMO?

Statutory Agreements, Statutory Requirements, relevant

codes of practice British Standards or EU equivalents

been provided to the Contractor at the date of this

and manufacturers recommendations and the requirements

of the insurers of the Employer (insofar as details have

1 Contract )." 1 design relating to Harley's obligations or which 2 2 Again, the same question, I am afraid: did you know informed them. 3 3 that Harley was taking on that obligation vis-à-vis So my question again, in general terms -- I'm sorry, 4 4 I'm going to repeat it -- do you accept that you would Rydon? 5 A. No. 5 have to look at the NBS specification and yourself make 6 6 Q. Would you agree that the reference to statutory sure, Harley make sure, that the product actually 7 7 requirements and relevant codes of practice would complied with the Building Regulations and Approved 8 8 include the Building Regulations 2010 --Document B, rather than simply taking it on trust that 9 A. Yes. 9 somebody else had done that job? 10 10 Q. -- as a matter of practice? A. Yes. 11 11 Q. Thank you. A. Yes. 12 Would you agree that, in order to ensure that Harley 12 Can I ask you to look at the head contract again, 13 13 please, {RYD00094235/64}. This is the contract between complied with the contractual obligations that were 14 14 incorporated into Harley's letter of intent with Rydon Rydon and the TMO. Again, this is the conformed version 15 15 from the head contract, as specialist contractor, Harley executed on 30 October 2014. 16 16 would have to analyse the specification and the drawings On this page, we can see clause 2.2.1: 17 provided by the architect to ensure that it was possible 17 "All materials, goods and workmanship used in the to comply? 18 18 execution of the Works shall be of such kinds and of 19 19 (Pause) such quality as are necessary to enable the Contractor 20 20 to comply with his obligations under this Contract." A. Yes. 21 21 Q. And to develop the design, your contract with Rydon Then it says: 22 22 required Harley to analyse the specification and design "The Contractor shall not make any substitution for 23 23 intent, again to ensure that you were able to comply any materials goods or workmanship specified or 24 24 with the Building Regulations? described in the Employer's Requirements or (if not 25 25 (Pause) specified or described in the Employer's Requirements) 85 87 1 1 A. Yes. as set out in the Contractor's Proposals or in the 2 2 Q. And that would mean, would it, that you would have to specifications revised and returned to the Contractor by 3 look at the NBS specification and yourself make sure 3 the Employer in accordance with the Contractor's Design Δ 4 that the product actually complied with the Submission Procedure set out in Schedule 1 without the 5 Building Regulations and Approved Document B, rather 5 prior consent (not to be unreasonably withheld or 6 6 than simply taking it on trust that that exercise of delayed) in writing of the Employer." analysis had already been done by somebody else? 7 7 Now, I know that's a bit of a mouthful, but would 8 8 A. I think there was an expectation that, by the time it you agree with me that, as far as this contract applied 9 came to us, it was compliant. With regard to the 9 to Harley, Harley were under an obligation to ensure 10 Celotex in particular, we carried out what we thought 10 that any product substitutions had to be approved by 11 11 were the necessary checks to ensure that it complied, Rydon? 12 and we were convinced that it did. Unfortunately, it 12 13 didn't, and that's gone past us, the architect, Exova, 13 Q. So Harley wasn't allowed simply to substitute a product 14 Building Control, and ... 14 without getting approval first from Rydon. 15 15 Q. Mr Bailey, would you just pause for a moment. A. Correct. 16 SIR MARTIN MOORE-BICK: Mr Bailey, I'm going to have to ask 16 Q. Now, can we look at {HAR00010155}. This is Harley's 17 you just to raise your voice a little bit, if you would? 17 quotation that it gave to Rydon in January 2014, 18 A. Sorry. 18 29 January 2014. There is the first page of it. 19 19 SIR MARTIN MOORE-BICK: It's not always very easy to hear I would like you to go, please, to page 9 20 what you're saying. All right? Thank you very much. 20 {HAR00010155/9}, where we can see a cost summary. There 21 MR MILLETT: Mr Bailey, I don't mean to be critical, but 21 is a long list of bullet points there about what it is 22 22 I do understand what you want to tell us about Celotex you're going to do for a total quotation there of 23 23 specifically, and we will come to FR and RS5000 in due £3.2 million-odd. Do you see that? 24 24 time. I'm just trying to get a feel at the moment for A. 25 the general propositions applicable to any product in 25 You can see in that list that under the last bullet

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1		point:	1		being the same as the main contract conditions.
2		"Design, drawings, survey and schedules for	2	Q.	All right.
3		procurement: £110,978."	3		Were you familiar with the subcontract conditions,
4		Do you see that?	4		the articles of agreement and subcontract conditions of
5		Now, if you or Harley and anyone else at Harley had	5		DOM2?
6		seen anything in the draft contract that you thought was	6	A.	Broadly, yes.
7		beyond your expertise, or that you wouldn't expect to do	7	Q.	At the time?
8		within either the total budget or the specific	8	A.	Yeah.
9		sub-budgets for each head, you would have picked Rydon	9	Q.	Yes, broadly. Well, let's look at them. It's
10		up on that, wouldn't you?	10		{INQ00011211}. These are the subcontract conditions for
11	A.	We would.	11		use with the domestic subcontract DOM2 articles of
12	Q.	Let me try it a different way: you wouldn't have quoted	12		agreement, and this is the 2011 edition, which we
13		for something that you weren't qualified to do?	13		believe was the current edition at the time of your
14	A.	No, we wouldn't.	14		involvement in the Grenfell Tower project.
15	Q.	And you wouldn't have quoted a figure which was too low	15		Just looking at its rather colourful, if not garish,
16		for the work that you thought was required?	16		first page, was that something familiar to you at the
17	A.	No.	17		time, do you think?
18	Q.	No.	18	A.	I think we may have actually had the 2010 edition,
19		If , having seen the NBS specification and the	19		but
20		employer's requirements and related drawings, Harley had	20	Q.	Right. But were you familiar with that edition?
21		thought that there were any concerns or flaws in the	21		The 2010, yes.
22		design, then Harley would have flagged that up in the	22	Q.	·
23		quotation and priced accordingly?	23		that there was a difference?
24	A.	We would have done, yes.	24	A.	I
25	0.	Were you aware of any concerns at the time about the	25	Q.	I'm not aware of a difference, but
		89			91
		07			71
1		employer's requirements or the design?	1	A.	I'm not sure that
2	A.	No.	2	Q.	Let's see how we go with this.
3	Q.	Can I go back to the letter of intent.	3		Are you saying that you were familiar with the 2010
4	SIR	MARTIN MOORE-BICK: Forgive me a minute, Mr Millett,	4		edition but not the 2011 edition?
5		I think the usher wants to have a word with me.	5	A.	Yes.
6		(Pause)	6	Q.	I see. Well, let's see if it's any different.
7		I'm sorry, yes, on you go.	7		Can I can you to look at page 7 $\{INQ00011211/7\}$ , and
8	MR	RMILLETT: Can I ask you to go back to the letter of	8		clause 2.1.1. This is under the heading "Obligations of
9		intent at $\{HAR00000120/2\}$ , please, and particularly	9		the subcontractor":
10		paragraph 2(b), and that says:	10		"The Sub-Contractor shall carry out"
11		"The Articles of Agreement and Subcontract	11		Do you see where it says that?
12		Conditions of Dom 2 will apply SAVE WHERE they are	12	A.	Yes.
13		modified by the terms of this Contract. The draft	13	Q.	"The Sub-Contractor shall carry out and complete the
14		Building Contract is available for inspection by you at	14		Sub-Contract Works in a proper and workmanlike manner in
15		our offices . You are deemed to have notice of all its	15		compliance with the Sub-Contract Documents, the
16		provisions and its provisions are incorporated in this	16		Construction Phase Plan and other Statutory
17		Contract insofar as they relate to the Authorised	17		Requirements"
18		Works."	18		Did you understand that, from this, the statutory
19		What did you understand that to mean in the context	19		requirements would include the Building Regulations
20		of this letter of intent? This is something you say you	20		2010?
21		think you did read.	21	A.	Yes. All the work we carry out needs to be in
22		(Pause)	22		compliance with the Building Regulations.
23	A.	As I'm reading that, this now, I $\dots$	23	Q.	Yes, okay. And that that meant that Harley, under this
24		(Pause)	24		incorporated set of standard terms, had an obligation to
25		I don't read that as the subcontract conditions	25		comply with the Building Regulations in relation to all

- 1 the work it did?
- A. Whether there was a contract or not, we had anobligation to comply with the Building Regulations.
- 4 Q. Indeed, indeed.

Did Harley have a formal process in place for conducting a compliance check of each of the materials to be used in the facade the subject of the LOI?

- $8\,$   $\,$  A. On the products that we had used previously, and we have
- 9 all the BBA certificates for, it's a very quick check.
- 10 On the products we haven't used before, specifically
- $11 \qquad \quad \text{Celotex, there is a process that we go through to check} \\$
- 12 off that it does comply.
- 13 Q. What was that process?
- 14 A. We looked at, or our technical department looked at the
- $15\,$  certificates they gave us, we had meetings with them, we
- sent our drawings to them, to make sure they were happy
- that we were using it in the correct place, and we were
- convinced by them that they were compliant.
- Q. Let's just quickly then look at one or two moreprovisions in this subcontract.
- 21 Clause 2.4.1 on page 8 {INQ00011211/8}. I'll try
- and take this quite quickly. This is under "Materials,
- goods and workmanship". Just looking at it -- I'm not
- going to read it all out because time will get short,
- but looking at it, were you familiar with that
  - 93
  - 1 obligation as an obligation which Harley owed to Rydon?
- 2 A. Yes.
- 3 Q. Yes. Page 9 {INQ00011211/9}, similarly, same question,
- 4 2.12.1, clause 2.12.1, this is, "Divergences from
- 5 Statutory Requirements", just have a look at that,
- 6 2.12.1.
- 7 Again, my question is: were you familiar with that
- 8 obligation as an obligation which Harley owed to Rydon?
- 9 A. Yes.
- $10\,$  Q. So would you agree with me that you were required, or
- Harley was required, to notify Rydon if there were any
- $12 \qquad \quad \text{discrepancies between the design and the statutory} \\$
- 13 requirements?
- 14 A. Yes.
- 15 Q. That again would involve positively checking whether the
- products proposed by the client, for example in the
- NBS specification or the employer's requirements, were
- compliant with the relevant statutory standards?
- 19 A. Yes.
- $20\,$   $\,$  Q. So, again, would it follow from that that you would
- 21 accept that a specialist subcontractor should warn
- either the main contractor or the designer, if
- different, that there is a serious flaw in the design if

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- 24 it spots one?
- 25 A. Yeah, and if we had spotted it in the design, it

- wouldn't have been on the building.
- $2\,$  Q. Looking at clause 2.13.1 at the bottom of the right-hand
- 3 page there, "Design Liability", just have a look at
- 4 that, if you would, and my question is the same again.
  - I will give you a moment to look at it.
    - (Pause)
- 7 Again, would you agree that you were familiar with
- 8 the obligation as an obligation which Harley owed to
- 9 Rvdon?
- 10 A. Yes.

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- 11 Q. That would mean that Harley was taking on full
- responsibility for its design work to the standard of
- an architect or other appropriate professional designer
- holding themselves out as competent to do the work?
- 15 A. Yes.
- $16\,$   $\,$  Q.  $\,$  Can we assume that Harley intended to  $\,$  comply with that
- obligation as it went through the project?
- 18 A. Of course.
- 19 Q. Did that extend to ensuring that any designer who worked
- on the project was appropriately qualified and competent
- 21 to do so?
- 22 A. Yes.
- 23 Q. And for the purposes of the Grenfell Tower project, did
- 24 that include Daniel Anketell-Jones?
- 25 A. Yes.

- 1 Q. And Kevin Lamb?
- 2 A. Yes.
- 3 Q. Did you see anything in the contractual documents or in
- 4 anything in your discussions with Rydon which you felt
- 5 in any way operated to limit Harley's obligations as
- 6 a designer of the cladding system in any way?
- 7 A. I think in the NBS specification it states that we are
- $8\,$   $\,$  responsible for the thicknesses and the engineering of
- 9 the cladding.
- 10 Q. Yes. My question was: did you see anything either in
- $11 \hspace{1.5cm} \text{the contractual documentation that you did review or} \\$
- anything in the discussions you had with Rydon which you
- thought operated to limit Harley's obligations as the
- designer of the cladding system in any respect?
- 15 A. Yes, the NBS specification.
- 16 Q. What is it in the NBS specification that you say
- operated as a limitation on Harley's obligation in the
- 18 respects I've just identified?
- 19 A. Because it's in -- I can't tell you the exact clause,
- 20 it 's a design responsibility to determine the thickness
- 21 of materials to be used.
- 22 Q. Did you think that that limitation meant that you
- 23 weren't responsible for any of these other things in the
- 24 contract that I have been taking you through?
- 25 A. That ... whatever we do needs to be compliant with

1 Building Regulations. That's not -- whether that's in 1 certainly the inference. 2 2 the contract or not. We need to do the job properly. Q. Right. Who did he make that not quite as blunt as that 3 3 In terms of selection of products, that's not our statement to? 4 4 responsibility; that is in the prescriptive NBS. A. To me. 5 Checking the materials are compliant is something that 5 Q. Anyway, you did sign it. Did you ever say to him, 6 6 we would do routinely. With the key product of Celotex, "Well, look, we're not the designer and we never 7 7 we did carry out our checks. promised you that we would design"? 8 8 Q. Can I then take you to the collateral warranty dated A. No. 9 25 April 2016. 9 Q. Can I look at page 4 {TMO10000033/4} with you, 10 10 A. Yes. clause 3.1: 11 Q. That's at  $\{TMO10000033\}$ . This is a formal contract, and 11 "The Design Sub-Contractor warrants and undertakes 12 we can see from page 1 that it's between Harley Façades 12 to the Beneficiary that: 13 13 Limited and the TMO as the beneficiary and Rydon as the "3.1 it has performed and shall continue to perform contractor, and it's entitled "Collateral Warranty, 14 14 all of its duties and obligations under or arising out 15 Sub-contractor". If you look at page 2  $\{TMO10000033/2\}$ 15 of the Design Sub-Contract ..." 16 16 you can see the date of the execution of this document, Now, before you signed this warranty in April 2016, 17 which is 25 April 2016. Do you see that? 17 did you yourself take the trouble to look back at 18 18 exactly what had been agreed as between Harley Curtain 19 19 Q. If you go to page 7 {TMO10000033/7}, you can see that Wall and Rydon in the original arrangements or drafts or 20 20 there is an execution block there and it's executed by the LOI or the correspondence? 21 21 two of its directors. Can you identify those No, we hadn't actually, as I think we spoke earlier, 22 22 seen the head contract, or various appendices to it. signatures? 23 23 A. That's mine and my wife's. She is company secretary Indeed, you told us that before. My question is: before 24 rather than director. 24 you put your formal signature on this formal document, 25 25 Q. Yes, thank you. did you look back and find out for yourself exactly what 97 1 1 Let's go back to page 2 {TMO10000033/2}, please. had been agreed as between Harley Curtain Wall, as it 2 2 This warranty under paragraph 1 expressly calls, if you was, and Rydon? 3 3 A. No, because it was, "Sign it or else", basically. look at the very top, Harley the design subcontractor. 4 4 Do you see that? At the very top, "Harley Façades Q. Do you accept, looking at clause 3.2, that Harley had 5 Limited", and then there is the registration number and 5 an obligation to act with the care and skill of 6 6 address. a properly qualified and competent cladding specialist? 7 7 A. Okay, yes. A. We'd have that obligation whether we signed this or not. 8 8 Q. And it's defined as the design subcontractor, and the Q. And that would include in respect of the design of the 9 9 cladding? original contract between Rydon and Harley Curtain Wall 10 is referred to as the design subcontract. Do you see 10 A. Yeah, to the extent that we were responsible for 11 11 an element of design, yes. that? 12 12 Can we look at your statement, then, at paragraph 48. A. Yes. 13 13 Q. Now, presumably -- is this right? -- when you signed This is  $\{HAR00010184/12\}$ , at the bottom, and over to 14 this warranty in the April of 2016, you were happy with 14 {HAR00010184/13}. You refer there to what was going on 15 15 those labels, were you? in July 2014, which is the discussion between Rydon and 16 16 A. Not entirely. At the time the collateral warranty came the planners about whether it was going to be face-fixed

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or cassette for the rainscreen.

31 July 2014, where he says:

Do you see, you quote from Simon Lawrence's email of

"... that the Project Client had 'just confirmed to

Reynobond Champagne colour (as shown on the mock-up) for

the main body of the building and the cladding will be

the "cassette" fixing version'. He went on to say in

his email of 31st July 2014: 'It is unlikely that the

planning that they are looking to proceed with the

final payment.

Q. Who suggested that?

A. I think Steve Blake.

Q. Right. Who did he suggest that to?

Q. Who at Rydon?

A. Rydons.

out, it was the time of the final account, and it was

A. To me. It wasn't quite as blunt as that, but it was

suggested that if we didn't sign it, we wouldn't get our

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1 Planners will have any major issues with the above 2 proposals as they have wanted "cassette" fixings from 3 the start. It may be wise not to order the champagne 4 colour until we have 100% assurance but you can 5 certainly start getting things rolling. Full design can 6 now start." 7

So I've shown you the lead-up to that, and the reference to full design.

Then if you look at the bottom of that paragraph on page 13, the last three lines, it says:

"As far as Harley were concerned, the reference to 'full design' above related to Harley refining the architects' design for the external facade. In the NBS specification, at page 6 of 11 of section H92, the same description of 'full design' was also used."

That being so, can you explain why the design of the subcontract that Harley signed didn't confine Harley's responsibility in the way you say?

- 19 A. Well, the subcontract or -- we didn't actually have 20 a subcontract, or the collateral warranty.
- 21 All right. Let me try it a different way.

22 Can you explain why there are no terms in the LOI or 23 the appendices to the LOI or any of the documents contained by reference in the LOI, including the head contract, or in DOM2, which we have been looking at, or

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- 1 in the collateral warranty, which operate to confine 2 Harley's responsibility in the way you have suggested in
- 3 your statement?
- 4 A. The NBS specification was part of that letter of intent.
- 5 So are you saying that, despite what's contained in the
- 6 LOI, the appendices to the LOI, the Curtins document 7 that's referred to by reference, DOM2 and the head
- 8 contract and the collateral warranty, the
- 9 NBS specification operated to limit Harley's obligations
- 10 as a designer; was that your understanding at the time?
- 11 A. Yes.

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- 12 SIR MARTIN MOORE-BICK: Well, can you just help me, then, to
- 13 understand what the limit was? Because when I asked you
- 14 earlier, I think you accepted that it was part of
- 15 Harley's responsibility to satisfy itself that the
- 16 products specified in the NBS specification were
- 17 suitable and complied with the relevant legislation. So
- 18 what limitation did the NBS specification impose?
- 19 A. It's certainly that we need to check materials that
- we're supplying are compliant, but with the limit ... 21 the design is not our design. The design comes down
- 22 from the architect. We have a responsibility to check

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- 23 that the products are compliant to the best of our
- 24 skill, and that what we put up there stays on the
- 25 building. So what we're not doing is taking over

1 everybody else's design responsibility. We need to play

2 our part, but we're not absolving everybody else from

3 their role.

4 SIR MARTIN MOORE-BICK: Yes. All right, thank you very 5 much

6 Yes, Mr Millett.

- 7 MR MILLETT: Well, let's look at the NBS specification, if 8 we can. I think in general terms, we've got this much 9 so far from your evidence today, Mr Bailey: in order to 10 produce your quotation for the work, you would have had
- 11 to have reviewed and did review the NBS specification.
- 12 A.
- 13 Q. Yes. Let's look at that, {SEA00000169/64}. This is the 14 part of the NBS specification, H92, which deals with
- 15 rainscreen cladding; can you see that?
- 16 A.
- 17 It says it's to be read with preliminaries and general 18 conditions. Do you see?
- 19 A. Yeah.
- 20 Q. Do you see that if you look at item 11 it says:
- 21 "Information to be provided with tender
- 22 "In addition to the cladding specified in the below 23 clauses 120 & 123 submit comparative supply and install 24
- costs per m2 of the whole cladding system for the
- 25 following alternative materials ..."

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- 1 Do you see that?
- 2 A. Yes.

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3 Q. If we look at item 210 on page 68 {SEA00000169/68}:

"Rainscreen cladding system and associated features: Complete detailed design in accordance with this specification and the preliminary design drawings and submit before commencement of fabrication.

"Related works: Coordinate in detailed design."

10 Then if we look at item 215, immediately below that, 11 it says:

12 "Design proposals

13 "Submission of alternative proposals: Preliminary 14 design drawings indicate intent. Other reasonable 15 proposals will be considered."

16 Just looking at each of those three items, 11, 210 17 and 215, first of all, did you yourself look at those at 18 the time of this contract?

- 19 A.
- 20 Q. What did you understand by what those provisions were 21 telling you, in general terms?
- 22 That we're completing -- the architect's produced his
- 23 design; we're taking that design and making it fit the building. 24

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25 Q. Right.

contracts we have gone through this morning, Harley's

2 2 let me put the question a different way. responsibility as a designer was limited? 3 3 Can you explain, on the basis of what I've just A. Well, it was determine sizes, thickness of panels, 4 4 shown you, what it was that led you to think that types, sizes, number of fixings, suit backing and layout 5 Harley's obligation in respect of design was limited in 5 and details of supporting steelwork. 6 6 Q. That wasn't, surely, all that Harley was responsible any way? 7 7 A. Yes. We need to scroll back up the NBS specification. for, was it, or was that your understanding? 8 8 Q. Do you want to see page 64? A. That is the -- not solely, but that is the key point 9 9 A. I'm not sure which page I want to see. that we're responsible for. 10 Q. Well, I showed you item 11 on page 64, "Information to 10 Q. And do you say that it was your understanding at the 11 be provided with tender"? 11 time that those two lines there overrode everything 12 Which is the next page over? 12 we've seen in the contract about Harley's responsibility 13 13 Q. I then showed you page 68, which is the page we were on. as a designer? 14 14 210, "Design", and 220. What we have is the main contract that has been passed 15 15 A. Sorry, if I could actually see the whole document -down through us, we didn't actually have a contract with 16 16 Q. I don't think I can do that, I'm afraid, with the system Rydons, we had a letter of intent, and this is the basis 17 we're operating. 17 that we were working. In any job that we do we need to 18 18 comply with building regs, and ensure that what we put A. Okav. 19 19 Q. Perhaps -- and I know this is difficult with a document up is right, no matter what the architect designs. What 20 20 such as this in an exercise such as this -- can you tell we didn't do is take on the design to absolve everybody 21 21 me, at least in rough terms, what it is you think you're else of their responsibility. 22 22 looking for? Q. I don't think there is any suggestion of absolution, 23 23 A. It says contractor's design -- complete design Mr Bailey, whether today or at any time. What I'm 24 24 responsibility for things of materials and ... simply putting to you or asking you about is how it came 25 25 It may be that it's page 69 {SEA00000169/69}. I think about that your understanding was that Harley's design 105 107 1 1 I may know what you may be looking for. If I'm wrong responsibility was limited by these words, given the 2 2 about that, please let me know. lengthy provisions in the contracts that we have been 3 3 It's page 69, let's look at 342: looking at. 4 4 "Contractor's design of rainscreen generally A. If we go back to the clause that was in the Rydons 5 "Design responsibility: Determine sizes and 5 letter of intent, that didn't strike me as tying the 6 6 thickness of panels and types, sizes and numbers of subcontract we had into the main contract. I may have 7 7 fixings to suit backing wall and the layout and details misread that, misunderstood that, but that's not how 8 8 of supporting steelwork. I read it. Or how -- I didn't see it -- how I'm reading 9 9 "Design standard: To CWCT Standard ... it now that's not how I understood it. 10 "Structural and fire requirements ..." 10 Q. Well, let's move on a little. 11 11 And they're there set out: Let's go back, if we can, to Harley's quotation for 12 "Design: Complete the design in accordance with the 12 the works of 29 January 2014, {HAR00010155}. This 13 designated code of practice to satisfy specified 13 14 performance criteria. 14 based on the NBS specification and the drawings in the 15 15 "Functional requirements: As specified in this employer's requirements? 16 section, with fire stopping to the requirements of the 16 A. In general terms, yes. 17 Building Regulations. 17 Q. In general terms. 18 "Additional requirements: As specified in this 18 If we look at {HAR00010155/2}, this is the covering 19 19 section." letter, so it's within the package. This is a letter to 20 I'm sorry to fish around and ask you by way of 20 Rydon signed by Mike Albiston, whose name emerged 21 guesswork whether that's what you're looking for. 21 earlier as the estimating manager. He says in the 22 22 A. It is. second paragraph:

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of a complete envelope package ..."

"Our offer includes for the design, supply and fix

We looked at that by reference to your statement

Q. It is, right.

What is it in that at the time, therefore, that led

you to think that, despite everything we've seen in the

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Do we see anything in there that limits -- sorry,

earlier on. If we go to page 9 {HAR00010155/9}, and we looked at this again before, and look at the final bullet point, which we did look at:

"Design, drawings, survey and schedules for procurement: £110,978."

That was what he included for that, and then he offers alternatives and options, including Reynobond cladding. If you look at page 10 {HAR00010155/10}, can we just look at that, you see he says, "Alternatives and options".

11 A. Yeah.

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12 You see that. Then under that, "Rainscreen Cladding". 13 In the middle of the page he is offering Reynobond 14 rainscreen cladding at certain prices and Alucobond 15 rainscreen cladding.

> Now, I'm asking you to see that because I want next to go to a document. There will be a question after this, but can you look at a document at {SEA00011490}, please. This is an email from Kevin Lamb to Simon Lawrence of 22 August 2014. You were not copied in on that, but Studio E were, as was Mr Anketell-Jones. Kevin Lamb says:

23 "Simon,

> "Please find attached some preliminary drawings to prove the basics of design & set out, prior to us

> > 109

producing a full design package."

A full design package.

Now, those are two documents I've shown you.

Can I now ask you to look at your witness statement at page 11 {HAR00010184/11}, paragraph 42. You say there, and let's just look at the first two sentences. You say:

"In the course of correspondence between Mark Harris and Deborah French about materials being proposed and the installation of the mock up, Deborah French answered a number of queries posed by Mark Harris. For example, she writes: 'In terms of Butt Jointing Sorry but we do not recommend this - The min gap between the panels is 10mm we have to allow for the correct expansion of the panels. 10mm as a joint is very small but you can ask the fabricator to produce a thin painted strip to match the Reynobond colour which will reduce the amount of black joints, I know there will be an up-charge for this to allow for the ali strip and painting but not sure what this would be "."

Just looking at that and the documents I've shown you, can we take it that Harley understood that the scope of Harley's works extended to the design of the cladding system, as a general proposition?

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A. As a general proposition, yes.

Q. And it looks from your statement that there were

2 actually discussions between Deborah French of or

representing Reynobond, or representing Alcoa, or

4 Arconic as they became, and Mark Harris, without any

5 reference to Studio E at all, about the façade drawings 6

in the summer of 2014?

7 A.

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8 Q. Does that tell us that Harley knew that it had to 9 perform and complete the full design as quoted for in 10 the quotation of the cladding, and to that extent had

11 discussions with the rainscreen manufacturer in order to

12 assist it to do so?

13 Α. The cladding system that we produce is the -- are the 14 physical components that we put up there. This 15 particular detail that Mark is sending through to 16 Reynobond to comment on is a fabrication drawing. So 17 where we've taken the architect 's design of how he wants 18 the panel to look, this is a fabricated production 19 drawing of how it would physically be made. This isn't 20 something that we would show to the architect . It 's --21 exactly how it's made, the dimensions, how the hook-ons 22 work, are not something for the architect. This was 23 sent to Reynobond to make sure that they were happy with

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the size of the panel, the detailing, the machining

detailing on the panel. So there are different things.

1 So when we talk about design, there is the 2 production design and there is the sort of system 3 design. They are subtly different.

4 Q. Mr Lamb's reference in his email to Simon Lawrence on 5 22 August to a "full design package", does that not 6 include both what you describe as the production design 7 and system design; it's the full package?

8 A. It is.

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9 Q. Did anyone at Harley, when they received the preliminary 10 designs from Studio E, actually undertake 11 an investigation or an interrogation of the employer's

12 requirements before developing the designs further?

13 Α. The design was undertaken based on the architect's 14 drawings and the NBS specification.

15 Q. Did anyone at Harley at the start of its involvement ever investigate the work that Studio E had done to 16 17 check its quality and report on whether that work was 18 satisfactory and compliant with statutory standards?

19 No, there was the expectation that it would be.

20 Q. You just proceeded on that assumption without verifying 21

22 A. When we looked at it, there was nothing that stood out 23 to us that it was non-compliant.

24 Q. Right.

25 Did anyone at Harley notice that the drawings that 112

1	you had received did not contain 1:5 ratio drawings?	1		Arconic) were well aware of the Grenfell Project and
2	A. No, and there wasn't we wouldn't necessarily expect	2		what the Reynobond ACM was being used for. Having
3	to see 1:5 drawings from the architect .	3		reviewed Harley drawings for the Grenfell Project, Alcoa
4	Q. Would it not have assisted you in the design process to	4		(now Arconic) never raised any concerns or questions
5	have seen 1:5 drawings?	5		about its use."
6	A. It may have.	6		Do you see that?
7	Q. Would the cavity barrier strategy have been clearer,	7	A.	Yes.
8	for example, if there had been 1:5 drawings?	8	Q.	Then you go on to say:
9	A. Probably.	9		"CEP, one of the largest ACM panel fabricators in
10	MR MILLETT: Mr Chairman, I'm in the middle of a probably	10		the UK, who supply ACM panels to many other contractors
11	quite lengthy passage of questions, which I might be	11		and cladding companies, were also involved in
12	able to shorten over the break.	12		discussions about the use of the Reynobond ACM and
13	SIR MARTIN MOORE-BICK: Well, it might be a good idea to	13		supplied this material for the project."
14	stop at that point.	14		Now, I read that all to you. Are you suggesting
15	MR MILLETT: Yes, it might be.	15		here that Arconic or CEP had some sort of responsibility
16	SIR MARTIN MOORE-BICK: Good, all right.	16		for the design of the cladding system?
17	Mr Bailey, we're going to have a break now so we can	17	Α.	Not for the design of the cladding system, but if they
18	all get some lunch. We will resume at 2 o'clock,	18		are supplying a product that they believe to be
19	please.	19		dangerous, they would have told us.
20	THE WITNESS: Okay.	20	Ω	Right.
21	SIR MARTIN MOORE-BICK: Please remember not to talk to	21	Α.	
22	anyone about your evidence or anything to do with the	22	л.	would have told us.
23	refurbishment over the break. All right?	23	Q.	Yes. The reason I ask about design is because you say
24	Thank you very much, if you would like to go with	24	Ų.	having reviewed Harley drawings for the Grenfell
25	the usher, please.	25		project, Alcoa never raised any concerns or questions,
25	the usher, please.	23		project, Alcoa never raised any concerns or questions,
	113			115
1	(Pause)	1		and nor did CEP.
2	Thank you, 2 o'clock, please. Thank you.	2		It's your reference to drawings which prompts the
3	(1.00 pm)	3		question, you see.
4	(The short adjournment)	4	A.	Yes.
5	(2.00 pm)	5	Q.	It appears that you're saying that because maybe this
6	SIR MARTIN MOORE-BICK: All right, Mr Bailey, ready to carry	6		is wrong Harley drawings were seen by Alcoa and CEP,
7	on?	7		and they never warned or uttered any warning about those
8	THE WITNESS: Yes.	8		drawings, that somehow indicated to you that they were
9	SIR MARTIN MOORE-BICK: Very good, thank you very much.	9		acceptable; is that what you're saying?
10	Yes, Mr Millett.	10	A.	Yes.
11	MR MILLETT: Mr Bailey, still on the subject of design and	11	Q.	So you are suggesting that Arconic or CEP had some sort
12	design responsibility , can I ask you please to go to	12		of responsibility for the design of the cladding system?
13	your witness statement at page 28 (HAR00010184/28).	13	A.	I think the use of the of those panels on the
14	I would like us to look together, please, at	14		building, yes.
15	paragraph 112 on that page. It starts on the page	15	Q.	That's a slightly different question. What is it you
16	before. But you say there perhaps we should start at	16		are saying, to be crystal clear, Arconic and CEP had
17	the page before, actually, if we go back to that page,	17		responsibility for?
18	{HAR00010184/27}. You say:	18	A.	For approving the use of the Reynobond product in that
19	"I believed the Reynobond ACM was compliant for a	19		application.
20	number of reasons."	20	Q.	I see.
21	That's the context. Then over the page, back at 28,	21		You then say at paragraph 42 it's earlier on, at
22	you say about halfway down:	22		page 11 {HAR00010184/11} of your statement, if we can
23	"As far as Harley were concerned"	23		just go to that, please, four lines up from the bottom.
24	Do you see that? You say:	24		You say at paragraph 42:
25	"As far as Harley were concerned, Alcoa (now	25		"I would have expected Alcoa (now Arconic) or CEP to
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- 1 have identified any significant issue with the design or 2 choice of materials. No concerns were ever raised by
- 3 them as to the use of their product for the
- 4 refurbishment of Grenfell Tower."
- 5 What was your expectation there expressed based on?
- 6 A. If the material wasn't appropriate to be used, they
- 7 would have told us.
- 8 Q. Right.
- 9 A. If you're talking about the specific reference to
- 10 design, that is the fabrication design of the panel, as
- 11 opposed to the design of the cladding system.
- 12 Can you explain that distinction, in brief terms?
- 13 A. The -- when we make a -- when a panel is made, it's
- 14 routed, it's folded, there are size limitations on it,
- 15 there are bending angles limitations, and there are wall
- 16 thicknesses in terms of the hook-on position. So if
- 17 some of those fabrication details weren't appropriate,
- 18 they would have warned us.
- 19 Q. These are the fabrication details specific to the
- 20 Grenfell Tower project, are they?
- 21
- 22 Q. I see. So you were relying, were you, on CEP and the
- 23 manufacturers, particularly Reynobond, to warn you if
- 24 the product wasn't suitable for the project; is that
- 25 what you're telling us?

- 1 A. Yes. We believed it was, just to be clear, but if there
- 2 was some reason that it wasn't, we would have expected
- 3 Reynobond in particular to say, "Do not use this
- 4 product".
- 5 Q. Was it your understanding at the time that Reynobond --
- 6 take Reynobond -- itself understood that it had assumed
- 7 responsibility for the appropriateness of the panels,
- 8 whether the design of the panels or the product and
- 9 materials themselves, for use on the Grenfell Tower
- 10 project?
- 11 A. Yes.
- 12 What is it that led you to have that understanding about
- 13 what they thought?
- A. Because they've seen the project, they know how big it 14
- is, they know where it is. They were actively talking 15
- 16 to the architects before we were ever involved with the
- 17 project.
- So, yeah, I mean, that's  $\dots$  that's why we believe 18
- 19 that they have approved and recommended their product
- 20 for that job.
- 21 Q. Was it normal for Harley to rely on the warnings or
- 22 absence of warnings from the manufacturer and seller of
- 23 materials to be used in a cladding system in order to
- 2.4 satisfy itself that they were safe?
- 25 A. We looked at the BBA certificate for the product to

- 1 satisfy ourselves that they're safe, but if Reynobond
- 2 knew something that we didn't, as the manufacturers, we
- 3 would then expect them to tell us.
- 4 Can we look at Harley's quotation, and we're switching
- 5 topics. We're going to come back in due course to the 6
  - BBA certificate for Reynobond, so I'm not leaving that
- 7 there, just so you know.
- 8 I want to turn to your quotation again. We've seen
- 9 it. It is {HAR00010155/12}, please. This is under the 10 tender conditions. It's part of the tender conditions,
- 11 under the heading "Technical". At paragraph 6, you will
- 12 see it savs:
- 13 "If Harley have not been engaged as the paid façade
- 14 concept designer we cannot control the likelihood that 15 the priced façade solution will be suitable for the
- 16 client, the risk for non-compliance must logically rest
- 17 with the paid facade concept designer. Harley will
- 18 simply price to the prescriptive drawings and
- 19 specifications."
- 20 Would you agree that in this case you were the paid
- 21 façade concept designer?
- 22 A. No.
- 23 Q. Why is that?
- 24 We didn't  $\ --\$  the façade concept came from the architect .
- 25 So you say Studio E was the paid façade concept

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- 1 designer?
- 2 A. Yes.
- 3 To your understanding at the time, did Studio E know
- 4
- 5 Α. I don't know.
- 6 Q. You see, looking at clause 6, you say:
- 7 "If Harley have not been engaged as the paid façade
- 8 concept designer we cannot control the likelihood that
- 9 the priced façade solution will be suitable for the client ..."
- 10

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- 11 Are you saying that you didn't know or couldn't
- 12 control whether the façade solution you were pricing was
- 13 suitable for Rydon, as your client?

(Pause)

- 15 A. No, I think what we're saying there is if something has
- 16 been missed from the concept design and we haven't
- 17 picked it up, that's not -- that is something that we
- 18 would re-price later.
- 19 Q. Did you yourself take any steps or did you know of
- 20 anyone in Harley who took any steps to tell Studio E or
- 21 Rydon that, because you weren't the paid façade concept 22 designer, you were not in a position to control whether
- 23
- or not the priced façade solution was suitable for the
- 24 client?
- 25 A. No.

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1 Q. Why is that? 2 2 A. Other than this clause here. 3 3 Q. If Harley had been the paid façade concept designer, 4 4 what would it have done differently from what it did? 5 A. It may well have used different products, a different 5 6 6 layout. So we would have been starting as a paid façade 7 7 concept designer back in 2012 or 2013. At the stage 8 8 that we were involved with it, the materials had been 9 9 set out in the NBS, so we had -- it was a prescriptive 10 10 design that we were working to. 11 Q. Can you, in the light of that answer, please go back to 11 12 page 2 {HAR00010155/2} of this document, where 12 13 13 Mr Albiston, who is presenting this quotation to Rydon, 14 14 says in the second paragraph, we saw it earlier: 15 15 "Our offer includes for the design, supply and fix 16 16 of a complete envelope package ..." 17 It doesn't say, "We are not developing the façade 17 18 concept and we're not being paid for the concept as 18 19 19 a paid façade concept designer". Can you explain how 20 20 the two reconcile? 21 21 The concept design is done before we're involved. 22 22 That's done by Studio E, who pass the design out to 23 23 a number of tendering main contractors, who then go to 24 24 a number of subcontractors. So we couldn't be the 25 25 façade concept designer, because we're a subcontractor 121 1 1 to a main contract tenderer. So we can only price what 2 2 has been developed before we became involved. 3 Q. Having a design developed to the point at which you 3 4 4 become involved, do you at least accept this: that from 5 that point on, when pricing for the design, supply and 5

question I'll read to you:

"Did anyone at Harley form a view as to whether the design of the façade complied with the relevant Building Regulations and associated guidance, in particular the parts of the Building Regulations relevant to fire safety?"

Your answer is:

"In terms of fire safety and design, what was important to us was the choice of materials and cavity barriers. As to that, as I explained in answer to Q10a above, we formed the view that the design was compliant."

Do you accept that, in order to, as you put it, form a view that the design was compliant from a fire safety perspective, Harley would have positively to make an assessment of the fire safety and compliance in respect of each and every material component in the system?

A. Yes.

If we look at question 10a on the previous page, page 41 {HAR00010184/41} you are asked there:

> "What consideration was given to compliance of the design with the relevant Building Regulations and associated guidance?"

> > You answer at paragraph 166, you say in the third

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6 fix of a complete envelope package, Harley could 7 control, within the scope of the complete envelope 8 package for which it was responsible for the design, the 9

10 A. Well, the key components to that were selected by 11 others.

suitability of that design for the client?

12 You see, Mr Albiston is presenting this quotation on behalf of Harley as a quote for the design of a complete envelope package, not part of it. So my question, 15 again, is: how do you reconcile your distinction between being a paid façade concept designer and not with what 17 he is quoting for here as design of a complete envelope 18 package?

19 A. Because the concept design is done long before we're 20 involved, and we are taking that concept design into 21 a package that's -- of cladding that's put on the 22 building.

23 Q. Let's look on, then, at paragraph 167 of your statement 24 at page 42 {HAR00010184/42}, please.

At 167, this is an answer to a question, and the 122

line:

"We would not have used materials which were not compliant or safe, nor would we have designed an external façade which was not compliant or safe. At no stage did anyone raise any questions or concerns about either the materials used or the design of the external façade."

Now, do you accept that that answer doesn't actually tell us what actual consideration Harley gave to compliance, does it? It doesn't do that?

11 A. No.

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12 So can I ask the question: what consideration itself 13 independently did Harley itself actually give to 14 compliance of the design with the relevant 15 Building Regulations and associated guidance?

16 A. We checked the BBA certificate for Reynobond, which is 17 class 0, and we checked the Celotex details and believed 18 that that was compliant as well.

19 Q. Right. We will come back to those in due course.

20 Can I then ask questions about a slightly different 21 topic, but still about scope of your work, and that's 22 windows.

23 If you go to paragraph 29 of your statement, page 7 24 {HAR00010184/7}, you say:

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"Between the end of January and beginning of

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Official Court Reporters

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1		February 2014, Harley submitted a number of quotations	1		finished, the area was free for the internal finishes
2		for the external envelope work for the Grenfell Project	2		guys to carry on, regardless of whether we were there or
3		in support of a number of tenders submitted by potential	3		not.
4		main contractors Wates Limited, Mullaley Construction	4	Q.	Maybe, but I think the answer to my question is: there
5		Limited, Keepmoat Limited and Durkan Limited) which	5		was no co-ordination
6		included Rydon. These quotations were all identical and	6	A.	No.
7		included, as requested, alternative options for cladding	7	Q.	either on site or off site.
8		panels, window types and window reveals as part of a	8	A.	No.
9		'value engineering' exercise (i.e. providing different	9	Q.	No.
10		costing options for the client) for budgetary purposes."	10		Can I ask you to look at a statement of Mr Dixon,
11		We'll look at paragraph 33 in a minute. My first	11		Mark Dixon from SD Plastering. That's at
12		question is: is it right that Harley was initially	12		{SDP00000196/3}, paragraph 13 of his statement. He says
13		requested to quote for work to replace the windows?	13		there, under the heading, "Instructions to Refurbish the
14	A.	Yes.	14		Internal Window Surrounds":
15	Q.	Then let's look at paragraph 33 on page 8	15		"In or around April 2015, I was asked by an employee
16		{HAR00010184/8}. You say there at the bottom:	16		of Rydon, whose identity I cannot recall with certainty,
17		"Whilst work in relation to internal window reveals	17		if SDPL would provide a quotation for undertaking
18		was quoted for at this stage, this work did not form	18		cosmetic works in finishing off the surrounds to newly
19		part of the final contract which was agreed at around	19		installed windows in each residential unit at the
20		£2.6 million . Rydon had indicated that this work would	20		Grenfell Tower."
21		be carried out by another contractor, although in April	21		Okay? Then he sets out who he dealt with there.
22		2015 Rydon would return to Harley to ask us whether we	22		If you go on in the statement to paragraph 29
23		would carry out the work."	23		that's by way of background for your benefit at
24		Did you or anyone else at Harley make any enquiries	24		page 6 {SDP00000196/6}, he then says this:
25		as to who it was who was going to be undertaking the	25		"SDPL initially experienced difficulties undertaking
		125			127
1		work in respect of the internal window reveals?	1		the Works due to the fact that, amongst other things,
2	A.	No.	2		SDPL was reliant on Harley having removed the old glass
3	Q.	Does it follow that you didn't know whether the work	3		window pane(s) from the old aluminium window frame(s)
4		that they were going to be doing included design work on	4		and installing the new glass window pane(s) in the new
5		the internal window reveals or whether it was just	5		window frame(s) ('the Glass Works') before the Works
6		product procurement?	6		could commence. Consequently, on 29 May 2015,
7	A.	I don't know.	7		I circulated a proposed sequence of works for the
8	Q.	Do you know whether any meetings were held between the	8		completion of the Works to Rydon's site manager, Daniel
9		subcontractor undertaking the internal window works and	9		Osgood, with a view to streamlining the relevant
10		Harley to ensure that nothing was missed between the	10		processes and procedures so as to enable SDPL to
11		two?	11		complete the Works within Rydon's programme of work"
12	A.	There were no meetings.	12		Now, in terms of the installation of the windows
13	Q.	There were no meetings.	13		themselves, is it right that that remained part of
14		Do you know how work was divided up as between the	14		Harley's work?
15		installers working on the façade for Harley on the one	15	A.	Yes.

15 installers working on the façade for Harley on the one 16 hand, the envelope, and those working on the internal 17 window reveals themselves?

18 A. The Harley work finished with the windows and the EPDM 19 to the side of it.

20 Q. Does that tell us that in fact there was no

co-ordination between the trades?

22 A. No.

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23 Q. Right.

24 A. Sorry, just to clarify that: because we were independent 25 of the internal finishes, it was only once we had

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cladding; that was Harley's responsibility, was it? 23 A. No, the -- internally that was the -- the window linings 24 would close that.

What about the gaps left by moving the window frames

forward of the concrete curtain wall to sit within the

Similarly, any cavity barriers which were to be

installed in or around the window cavity?

25 Q. Internally that was the window linings would close that. 128

A. Externally, yes.

Q. Externally.

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- 1 So with the windows pushed out to sit in the cladding
- $2 \hspace{1cm} \text{beyond the concrete curtain wall, physically where } \operatorname{did}$
- 3 Harley's responsibility end and SD Plastering's begin?
- $4\,$   $\,$  A.  $\,$  SD Plastering's began closing the gap between the back
- 5 of the window to the concrete.
- 6 Q. Did you ever have a discussion, either with Rydon or
- 7 with SD Plastering themselves, about what materials and
- 8 products were to be used on the inside of the windows
- 9 where they met the edge of the work that you had done?
- 10 A. No.
- 11 Q. Did you ever take any steps to understand what it was
- 12 that Rydon or SD Plastering were intending to do in
- $13 \qquad \quad \text{respect of the areas around the windows on the inside} \\$
- where they met your work?
- 15 A. No.
- 16 Q. If you didn't know what was going around the windows on
- the inside, how would you know whether your own design
- for the windows and the window surrounds within the
- façade were adequate or safe?
- $20\,$   $\,$  A. There was an expectation that the internal lining work
- 21 would have been done correctly.
- 22 Q. That expectation was never the subject of any discussion
- or verification or analysis by Harley that we can see in
- 24 the evidence; is that right?
- 25 A. That's correct.

- 1 Q. Why is that?
- $2\,$   $\,$  A. Because it wasn't part of our package and it was
- 3 something being undertaken by Rydon.
- $4\,$  Q. If you didn't know -- well, I think I've asked that
- 5 question.
- 6 So does it come to this: that you just trusted
- 7 whoever it was that Rydon subcontracted to do the window
- 8 reveals to get it right, without further investigation?
- 9 A. Yes, it wasn't part of our package.
- 10 Q. Well, you say, "It wasn't part of our package"; was it
- 11 not part of your responsibility in ensuring a safe
- $12\,$  system to satisfy yourself, as far as you could, that
- 13 what was going into the structure on the inside of the
- windows, where it touched what you were doing, did not
- $15 \hspace{1cm} \text{endanger the safety and integrity } \hspace{0.1cm} \text{of } \hspace{0.1cm} \text{what you were} \\$
- designing and applying to the building?
- 17 A. It wasn't something that we considered, we just expected
- that it would be done properly.
- $19\,$  Q. I'm now going to turn to a different topic, which is
- 20 Reynobond and the rainscreen.
- $21 \hspace{1cm} \hbox{Can we start \ with paragraph 20 of your statement,} \\$
- 22  $\,$  please, page 5 {HAR00010184/5}. You say there:
- $^{23}$  "Harley was first alerted to the Grenfell Tower
- refurbishment project ('the Grenfell Project') by
- 25 Jason Tisbury, National Sales Manager of CGL Systems, in

- April 2013. Jason Tisbury had passed on Harley's
- details to Bruce Sounes of Studio E, the architects for
- 3 the Grenfell Project."
- 4 So can we take it from that that you, or at least
- 5 Harley, initially became alerted to the Grenfell Tower
  - project by this company, CGL Systems --
- 7 A. Yes.

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- 8 Q. -- in April 2013?
- 9 A. Yes.
- $10\,$   $\,$  Q. As early as that. That was at an early stage of the
- 11 project, wasn't it?
- 12 A. Yes.
- 13 Q. I mean, it was before -- in fact, many months before --
- it was put out to tender.
- 15 A. Yes.
- 16 Q. Now, let's look at the email. It's at {HAR00015399},
- dated 25 April 2013, and it's sent to undisclosed
- recipients, subject: "project leads", and there seems to
- be an attachment. He says:
- 20 "Morning,
- 21 "I have just passed your details to the following
- 22 Architect for two live projects in London, one is a
- 23 tower called Grenfell Tower where the client Westminster
- 24 council are looking to overclad an existing building,
- 25 the other a new leisure centre in Heston where shingles

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- 1 are being proposed."
- 2 Then Bruce Sounes' details are set out at the bottom
- 3 there
- 4 I think Mark Harris was one of the undisclosed
- $5 \hspace{1cm} \text{recipients} \hspace{0.2cm} \text{who received this} \hspace{0.2cm} \text{email}.$
- 6 A. I believe that's true.
- 7 Q. Yes.
- 8 Did Harley have a previous relationship with
- 9 CGL Façades?
- 10 A. Yes.
- 11 Q. What was that relationship?
- 12 A. They are a cladding panel fabricator, similar to CEP.
- 13 Q. Right. And what was the nature of your relationship
- 14 with them?
- 15 A. They supplied panels to us on other projects.
- $16\quad Q.\quad Right.\quad And\ did\ they\ supply\ more\ or\ less\ \ or\ the\ same\ as$
- 17 CEP?
- 18 A. Over the years, CEP had probably supplied more to us
- 19 than CGL.
- $20\,$   $\,$  Q.  $\,$  Do I take it from that that CGL and Harley had worked
- 21 together on prior projects?
- 22 A. We had, yes.
- 23 Q. Do you know which ones, as at 2013?
- 24 A. Not offhand. I can find out if --
- 25 Q. Right.

- 1 A. -- you're interested.
- Q. Offhand -- if you don't know, then you don't know --
- 3 what about Chalcots?
- 4 A. No, that was CEP.
- 5 Q. And Ferrier Point?
- 6 A. I think that was CEP, though it may have been CGL,
- 7 I can't recall which was which.
- 8 Q. Did Harley often get projects this way, with
- $9\,$  a fabricator letting you know that this project was
- 10 live, or a project was live?
- 11 A. Actually, it's very common. Not just talking about
- cladding, but talking about window or curtain wall
- projects, a lot of the manufacturers and suppliers have
- an army of sales reps who -- I think they're called
- architectural reps, that go round to architectural
- practices and talk about projects that are coming up.
- Schueco, Kawneer, in terms of the curtain wall and
- window side, do it, as do CGL and CEP. So this is
- a very, very common thing.
- 20 Q. Right.
- 21 Can we look at {SEA00007603}, please. This is
- an email from Mark Harris to Bruce Sounes of
- 23 25 April 2013, "Cladding Scheme Grenfell Tower" and
- attachments "Castlemaine", "Chalcots", "Clements", and
- 25 Mark Harris says:

- $\ensuremath{\mathtt{T}}$  "Following up on the contact from Jason at CGL, this is just a quick email to confirm our interest in the
- proposed over-cladding scheme for Grenfell Tower.

  "Over-cladding tower blocks is very much what
  - "Over-cladding tower blocks is very much what we do, and specifically in London, hence our keen interest in Grenfell.
  - "I've attached a small selection of tower block project info sheets, and would welcome the opportunity of meeting up with you to talk through your
- 10 requirements."

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- 11 It's fair to say, I think, from that that
- 12 Mark Harris was describing Harley's expertise as
- $13 \hspace{1cm} a \hspace{1cm} specialist \hspace{1cm} cladding \hspace{1cm} contractor \hspace{1cm} or \hspace{1cm} subcontractor.$
- 14 A. Correct.
- 15 Q. Would it be normal for Mark Harris, as your independent
- salesperson, as it were, to reach out to an architect in
- this way?
- 18 A. Yes.
- $19\,$  Q. Is it fair to say that, as a specialist cladding
- 20 subcontractor, this was just the kind of project that
- 21 was well suited to Harley's expertise at the time?
- 22 A. Yes.
- 23 Q. Now, he attached a number of project information sheets,
- and we've seen them: Castlemaine, Chalcots, Clements.
- Were all three of those projects in which ACM rainscreen

- 1 panels were used?
- 2 A. Yes.
- 3 Q. Had Harley done jobs where ACM was not used, for example
- 4 zinc honeycomb?
- 5 A. No, we haven't used zinc honeycomb. We've used
- 6 aluminium honeycomb.
- 7 O. Right. What about Rockpanel as a rainscreen?
- 8 A. No. Never used Rockpanel.
- 9 Q. Is it fair to say that a significant number of Harley's
- building envelope refurbishments up to 2013 had used ACM
- 11 cladding?
- 12 A. Yes.
- 13 Q. Do you know what kind of percentage, even roughly?
- 14 A. On the high-rise towers, I would probably say 70%.
- 15 Q. Right.
- Had you or anyone else at Harley previously sought
- any information from Alcoa -- Arconic, as it became --
- about the fire safety of Reynobond ACM panels for those
- 19 previous projects?
- 20 A. Well, we'd had the BBA certificate from it -- from them.
- 21 Q. Yes, and you said earlier in your evidence that you had
- 22 had that in 2008.
- 23 A. Yes.
- 24 Q. Did you receive that certificate in respect of
- a particular project?

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- 1 A. Yes, for Chalcots Estate.
- 2 Q. For Chalcots, okay. Did you ask for it or was it just
- 3 sent to you as a matter of course, do you remember?
- 4 A. There is a -- it's a sort of fairly long story with
- 5 Chalcots.
- 6 Q. Well, I'm not sure I want the long story, I just want
- 7 the short version of an answer to the question.
- 8 Do you remember whether the BBA certificate came to
- 9 you on Chalcots as a result of a request or --
- 10 A. It came as a request from Rydon to Reynobond.
- 11 Q. And who at Rydon requested the BBA certificate?
- 12 A. I think it was Steve Blake.
- 13 Q. Right, thank you. And then he sent it on to you, did
- 14 he?
- 15 A. Yes.
- 16 Q. I don't wish to stop you giving me some more context
- behind that if it's relevant, but I think it's enough
- 18 for my purposes --
- 19 A. Okay.
- 20 Q. -- to know how it came to you.
- Is this right: when ACM was subsequently used on
- later projects, such as, for example, Castlemaine, you
- didn't ask for a revised or new certificate, you used
- 24 the one you had had on Chalcots?
- 25 A. I can't say for sure that we didn't get a new

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1 1 certificate sent to us from Reynobond for that. Studio E's Draft proposal of the design intent for the 2 Certainly they sent us a copy of the certificate for 2 cladding, wind load calculations and an excerpt from the 3 3 Grenfell Engineer's report specifying U values." 4 4 Q. Do you know why Steve Blake asked to see the BBA Then at 22 you describe the meeting, and you say: 5 certificate for the ACM panel on the Chalcots project? 5 "During the meeting several aspects of the project 6 6 were discussed including available rainscreen products, A. Yes. 7 7 O. And why is that? interface details, work programme, access, design, and 8 8 A. We'd started the Chalcots project using a different budget." 9 9 Then over the page {HAR00010184/6}, you say: product, something called Etalbond, which is a similar 10 10 ACM. We had put it up on the first block. By the "The architects wanted to discuss cost to help them 11 time -- there are five blocks at Chalcots. By the time 11 with the budgeting for the project. As part of this 12 we were halfway through the second block, we noticed the 12 discussion a number of cladding options were discussed 13 13 including Zinc (Proteus HR) and ACM, as well as the panels were delaminating. We then went through quite 14 14 a lengthy process of swapping out delaminating panels. cladding configuration i.e. cassette versus face fixed." 15 15 There were a load of consultants involved with this, at Can you just help me, what discussions did you have 16 16 this stage, Barry Josey from Bickerdike Allen, Sandbergs with Mark Harris prior to the meeting about the strategy 17 were involved. 17 to be adopted at the meeting? The decision then came to change the panels, take 18 18 A. I can't recall. 19 19 the Etalbond off and replace them with something else. Q. In your experience, was it normal or usual to have 20 20 Steve then employed Wintech, who were another cladding a preliminary meeting with an architect to develop or 21 21 consultancy, and asked for their opinion of what other discuss the design and materials before the project was 22 products were available. So they sent Steve 22 even put out to tender? 23 23 a spreadsheet of other panels which they thought were A. 24 equivalent and suitable to be used at Grenfell -- sorry, 24 Q. Mr Rek of Studio E told us -- and this is 25 25 at Camden. The -- and Steve was keen, for whatever {Day12/66:24} -- that it was unusual in his experience. 137 139 1 1 reason, to run with Reynobond as opposed to Alucobond, Would you disagree with that? 2 2 and he then asked for all the certificates to do with A. Yes. 3 3 Reynobond, primarily because we didn't want to have the Q. I see. 4 4 same problem with delamination. Now, you go on to say at paragraph 22, and I've 5 So there was a lot of investigation done into 5 shown you this already, Proteus and ACM as well as the 6 6 Reynobond at that point, which is why I'm very familiar cladding configuration. 7 7 with the BBA certificate, because we studied it quite You say at the end: 8 8 hard, and ... yeah, so that's why we -- you know, that's "At this meeting it seemed that the architects had 9 9 the research we did into Reynobond at that stage. 10 Q. Okay, thank you. 10 as they were looking to achieve an industrial type 11 11

A. It's not just us looking at it, and Rydons; we had Bickerdike Allen, Sandbergs and Wintech, all involved with that project, and on completion of the project we actually had warranties for the use of that product on those 24-storey buildings signed by Reynobond.

16 Q. Right.

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I would like to turn to the meeting on 27 September 2013 at the Hays Galleria venue. You deal with this at paragraph 21 of your statement on page 5 {HAR00010184/5}, if we can just look at that. You say:

"On 27th September 2013, Mark Harris (Harley's Commercial Manager) and I met with Bruce Sounes and Tomas Rek of Studio E in relation to the Grenfell Project. In advance of the meeting Tomas Rek sent Mark Harris Studio E's scope elevation drawings series,

provisionally decided on zinc because of its appearance look."

12 Did Studio E say that they favoured zinc for its 13 appearance?

14 A. Yes.

15 Q. Are you aware of any reason why their preference for 16 zinc at this stage was anything other than entirely 17 aesthetic?

18 A. No.

19 Can we see {ART00001487}, please. This is Bruce Sounes' 20 email of the same day, later that day, in fact 21 immediately after the meeting, to Phillip Booth, who was 22 Artelia, and Peter Maddison at the TMO, as well as

23 others, and he says:

24 "Dear All

"We met with Harley Curtain Wall this morning to

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discuss the project. They are very keen and have been tracking the project for some time."

Do you see that?

4 A. Yes.

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Q. "They are specialists in this type of project ... They pointed to Ferrier Point as a being very similar to Grenfell, although it is triple glazed and super insulated. We had forwarded them sample details and the elevation measure beforehand."

Then I just want to focus on paragraphs 1 and 2.

"1. Their 'back of a fag-packet' budget, based on
the areas is 'around £3m', of which would include £250k
for the mast climbers and zinc rainscreen cassettes."

Just note that reference there.

"This equates to 18% over our Stage D budget of £2.3m (assuming access costs fall under Preliminaries).

"2. Their recurring experience is that budgets force clients to adopt the cheapest cladding option: Aluminium Composite Material (ACM), face-fixed. We have offered to forward a more detailed take-off so they can provide a more accurate budget. A Zinc Composite Panel is also available which is cheaper to install than a cassette."

Now, I've read that to you in full because my question is: do those paragraphs of this email accord

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- with your recollection of what was discussed at that meeting?
- 3 A. I can't recall the exact -- what was exactly said, but
- 4 it would seem the sort of thing that might be discussed,
- 5 yes.
- $6\,$  Q. At this stage, was there any preference in your mind or
- 7 Mr Harris' mind, so far as you knew it, for face fixing
- 8 or for cassette fixing, one or the other?
- 9 A. No.
- Q. Did you detect any preference on the part of Studio Efor cassette or face-fixed?
- 12 A. I can't be certain of this, but --
- Q. What impression were you given at this stage in respectof the flexibility about the material choices?
- $15\,$  A. At this -- at that stage, I don't think they had made up
- their mind what they wanted.
- 17 Q. Was there any discussion about the safety of zinc
- cladding panels as compared with ACM cladding panels?
- 19 A. No.
- $20\,$   $\,$  Q.  $\,$  Do you know who at the meeting initially  $\,$  introduced the
- idea of ACM cladding as an option for Grenfell?
- $22\,$   $\,$  A.  $\,$  It could have been Studio E, or it may have been us,
- 23 I don't know.
- 24 Q. On the face of the email, where he says at paragraph 2
- 25 "Their recurring experience" -- that's Harley --

1 A. Yeah.

Q. -- "is that budgets force clients to adopt the cheapestcladding option: Aluminium Composite Material (ACM),

cladding option: Aluminium Composite Material (ACM),
 face-fixed ", it looks from that as if it was you who

5 initially introduced the idea of ACM. Can you comment

6 on that?

7 A. No, well, we knew that they were talking to other

8 cladding companies and manufacturers long before we were

9 involved, and the statement that clients generally go

for the most cost- effective cladding solution, which is

11 ACM and face-fixed, that statement is just a statement

of fact.

13 Q. You say you knew that they were talking to other

14 cladding companies. How did you know that?

15 A. I think it's something that they mentioned whilst theywere talking to us.

17 Q. Who did they refer to as other cladding companies?

 $18\,$  A. I don't know. I now know who they are, but at the time

 $19 \hspace{1.5cm} \text{they weren't specific about who they were talking to}. \\$ 

20 Q. Right. You say you now know who they are.

 $21\,$   $\,$  A. Yes. I'd forgotten who they are, but I know they're

22 there, yeah.

23 Q. Who are they?

 $24\,$  A. They were talking to CEP long before us.

25 Q. Right. When you say cladding company --

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1 A. Yes, CEP and --

2 O. That's a fabricator.

 $3\,$  A. That's a fabricator -- they also -- yes, they're

4 a fabricator.

 $5\,$   $\,$  Q. Were they talking , to your knowledge, to any specialist

cladding subcontractor --

 $7\,$   $\,$  A. They were, and I did find out. I've forgotten who they

8 were.

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9 Q. Was there any discussion at this meeting about the

10 material for insulation as opposed to rainscreen?

 $11\,$  A. I can't recall , but there was a U-value calculation

12 given. I presume that that would have specified the

Celotex in there, but I don't think it was particularly

14 discussed.

15 Q. Okay, I'll come back to that in a moment.

Was it your understanding in general terms that

Studio E would have relied on what Harley was telling it

18 at this meeting, only to present material options that

were suitable for use on Grenfell Tower?

20 A. I would think that Studio would only present materials21 that were suitable for use.

22 Q. Yes, and to the extent that you were advising them or

helping them, they would be relying on you, as the

24 specialists.

25 A. Yeah, and we certainly wouldn't recommend a product that

- 1 we didn't believe was compliant.
- 2 Q. No, that's not my question. Let me ask it again.
- 3 Was it your understanding from this meeting that
- 4 Studio E would be relying on Harley only to present
- 5 material options, options in respect of materials, that
  - were suitable for use on Grenfell Tower?
- 7 A. I'm not sure they would be relying on us at all.
- 8 Q. So is the answer to my question: no, you did not think
- 9 Studio E would be relying on Harley to present materials
- 10 that were --
- 11 A. Correct.

- 12 O. I see.
- 13 So what was the point of the discussion, then, if
- 14 Studio E were not entitled to rely on what you, as the
- 15 specialist potential subcontractors, were telling them
- 16 about choices of material?
- 17 A. We went through a range of different products that may
- 18 be -- that could be used, and all of the things that --
- 19 all the products we discussed we believed would be
- 20 compliant.
- 21 Q. Was there any specific discussion, as far as you can
- 22 recall, at this meeting about whether ACM as the
- 23 rainscreen material was suitable for a building of this
- 2.4 height, namely a building in excess of 18 metres?
- 25 A. I ... it was just taken as read during the discussions

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- 1 that it was, otherwise we wouldn't be talking about it.
- 2 Q. I see. So no specific discussion but an assumption all
- 3 round is that --
- 4 A. Yes.
- 5 Q. -- the gist of what you're telling us?
- 6 A. Correct.
- 7 Q. Did anybody at that meeting raise concerns about whether
- 8 the use of ACM on Grenfell was appropriate?
- 9 A. No.
- 10 Q. Now, we've looked at paragraph 2 of this email. Do you
- 11 remember whether you or Mark Harris expressed
- 12 a particular preference for any type of product?
- 13 A. Not at that stage, no.
- 14 Q. So you didn't express a preference for ACM cladding at
- 15 that meeting?
- 16 A. No.
- 17 Q. Is that what you're saying?
- 18 A. Correct.
- 19 Mr Sounes has got you down in his email -- and don't
- 20 forget, this was only a matter of hours, if not minutes,
- 21 after it had finished -- as saying:
- 22 "Their recurring experience is that budgets force
- 23 clients to adopt the cheapest cladding option: Aluminium

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- 24 Composite Material (ACM), face-fixed."
- 25 Was that in fact your experience?

- 1
- 2 Q. On what other projects had that occurred prior to this
- 3
- 4 A. I think all of the face-fixed ACM projects that we've
- 5 carried out. So that would have been Chalcots, would
- 6 have been Ferrier. It's the way it always ends up.
- 7 O. Right.
- 8 Were there any projects that you had done involving
- 9 ACM which were cassette?
- 10 A. At that stage, no, there weren't.
- 11 Q. No. Really? Okay.
- 12 So does that tell us that, on all the projects you
- 13 had done so far, all of the clients had been forced to
- 14 adopt ACM face-fixed on the grounds of budgetary
- 15 considerations?
- 16 A. I can't speak for the clients, but my --
- 17 Q. But your understanding is --
- 18 A. -- yes.
- 19 Q. Right, thank you.
- 20 Did you yourself or anyone else at Harley to your
- 21 knowledge consider, either on this project or any of
- 22 those prior projects where ACM face-fixed was used, the
- 23 relative fire performance of ACM face-fixed as opposed
- 24 to any other form of rainscreen?
- 25 We believed that the ACM was fully compliant with

- 1 Building Regulations.
- 2 Q. Yes, I know, you have said that. My question is
- 3 a different one. I will repeat it.
- 4 Did you yourself or, so far as you know, anyone else
- 5 at Harley actively consider, either for this project or
- 6 any of those prior projects you have referred to where
- 7 ACM face-fixed was used, the relative fire performance
- 8 of ACM face-fixed in comparison with any other form of
- 9 rainscreen product?
- 10 A. Erm ... no. Although, we've always had our doubts about
- 11 high-pressure laminates. We've never used those.
- 12 Would you agree with this proposition: that at least at
- 13 this stage, of all the professionals working on the
- 14 overcladding of Grenfell Tower, Harley were in the best
- 15 position, as the specialist cladding potential
- 16 contractor, to make an assessment of whether any of the
- 17 materials to be used in the cladding system at Grenfell
- 18 were compliant with statutory requirements?
- 19 Not at this stage.
- 20 Q. Okay, not at this stage, but later on?
- 21 A. I don't think, with regard to the materials, we were any
- 22 better positioned than anybody else.
- 23 Just moving to the question of the insulation at this
- 24 meeting, can I ask you to look at Bruce Sounes' witness
- 25 statement, which is at {SEA00014273/114}, please. If we 148

1 look at paragraph 271, he says, two-thirds of the way 2 down that paragraph: 3 "When I met Harley ..." 4 And this is a reference to the 27 September meeting, 5 because we can see that from the previous paragraph: 6 "... I believe I had a lingering uncertainty about 7 PIR because this was a high-rise and I had not been 8 involved in a high-rise before. I believe, but I cannot 9 say for sure, that I asked Ray Bailey a question about 10 the acceptability of using rigid foam insulation on 11 a high-rise building, probably at the end of the 12 meeting. If I did, I don't recall he provided a 13 definitive response." 14 Do you recall Mr Sounes raising this query with you 15 during that meeting? 16 A. Absolutely not. 17 Q. You say absolutely not; are you categorical about that 18 in your recollection? 19 A. It would have struck me as an odd question to ask. 20 Q. Why is that? 21 A. Well, if they -- well, they specified -- well, two 22 things: they have specified the PIR, and it's a product 23 that we hadn't used on the high-rise building at that 24 stage. 25 You say they have specified the PIR. Is that entirely 149 1 right, given that this is September 2013, some months 2 prior to the compilation of the NBS specification? 3 A. Correct, that was picked up from the U-value 4 calculation . 5 Q. Were you provided with the U-value calculation prior to 6 this meeting? 7 A. We were, yeah. 8 Q. You were, I see. So that comes from an earlier 9 document, and then you say, "It's a product we hadn't 10 used on a high-rise building at that stage". 11 A. Yes. 12 Q. So this would have jumped out at you? 13 A. It would have. 14 Q. Was the fact that PIR, as you say, had already been 15 specified for this building not something that already jumped out at you, given that you hadn't used PIR 16 17 before?

A. No, it -- the question would have leapt out at me, that it has been specified and they're asking us, what do we Q. Now, Mr Sounes was asked about this exchange, and he said -- I wonder if we can actually have his evidence up, so I can put it to you. It's the transcript for

1 {Day20/46:24}. Ms Grange asked Mr Sounes, at line 24: 2 "Question: Do you have any recollection of 3 discussing insulation with Mr Bailey of Harley at that 4 meeting? Can you actually recall discussing the 5 insulation, as distinct from the rainscreen panels? 6 "Answer: I believe I asked him about the 7 acceptability of using a rigid foam, and I might not 8 have mentioned it was Celotex. 9 "We did discuss insulation in the round, because we 10 discussed the assembly of the façade, the sequence, how 11 it would all be supported. So in a general sense we did 12 discuss insulation. 13 "On reflection, I believe one of the reasons I might 14 have been prompted to ask, not just any kind of 15 lingering uncertainty, but I think we were shown several 16 pictures of the Ferrier Point Tower under construction, 17 and those in-progress construction you could quite 18 clearly see were -- the insulation was mineral wool. 19 "Question: Yes. 20 "Answer: That's in hindsight. Those pictures have 21 been disclosed by the Inquiry, but we didn't receive 22 digital copies until six months later, I believe." 23 Now, do you recall Mr Sounes asking about the 24 acceptability of using a rigid foam on a high-rise 25 building, as he says? 151 1 2 Q. Did you show Mr Sounes pictures of the Ferrier Point 3 tower under construction? 4 A. I think Mark sent over some photographs of buildings 5 that had been done prior to the meeting, but that's 6 a matter of record, I can't --7 Q. Can I seek to jog your recollection by showing you one 8 or two of the pictures? 9 A. Sure. 10 Q. First of all, {SEA00003497}. Looking at this, did you 11 show Bruce Sounes and Tomas Rek this image or similar 12 images at the Hays Galleria meeting? 13 A. I can't recall, but yes, probably. 14 O. Let's look at another one: {SEA00003516}. The same 15 question: do you recall showing Studio E this image at 16 the Hays Galleria meeting? 17 A. I can't recall whether it was that specific image or 18 not, but entirely possible. 19 Q. Would you agree with me that it 's quite apparent from 20 these images that the yellow material we can see is 21 mineral wool insulation? 22 A. It is. 23 Q. Do you recall discussing whether the insulation to be

used on Grenfell was mineral wool or rigid foam, in

contrast to the insulation used on Ferrier Point?

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know about it.

A. That's what would have leapt out.

Q. I see, I follow.

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- A. I can't recall. 2 Q. Did Studio E ever ask you, or indeed to your knowledge 3 anybody else at Harley, about the suitability of the 4 Celotex insulation or about its compliance with fire 5 performance requirements? 6 A. Not to my knowledge, no. 7 Q. What impression were you given by Studio E about the 8 flexibility in the choices of insulation material at 9 this stage? 10 A. There were none. 11 Q. There were no choices? 12 No choices. 13 Q. So does that mean that the choice has already been made 14 and it was the insulation that had already been picked 15 in the U-value document you referred to? 16 A. Yes.
- 10 11. 103.
- 17 Q. I see.
- Was there any discussion about cavity barriers at this meeting?
- 20 A. No.
- 21 Q. What about shortly after this meeting, do you remember?
- 22 A. I don't believe so.
- 23 Q. Right.

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Can I ask you to look at Mr Rek's statement. He is Studio E as well. {SEA00014278/30}, paragraph 124,

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please. He says there, under the heading "Cavity
Barriers", as item G in his statement, in the second
sentence:

"I do not recall how Studio E sourced these cavity

barriers [those are the Downer Cladding Systems barriers] but my drawings show cavity barriers at the floor and party walls. I think I discussed cavity barriers with Harley but they may have been included in our drawings before Harley and Studio E were in contact in autumn 2013."

Do you recall whether you discussed cavity barriers at the Hays Galleria meeting or afterwards, later in

13 2013?

14 A. I don't recall any discussions about the cavitybarriers.

Q. So when Mr Rek says he thinks he did discuss cavity
barriers with you, do you think that's right or do you think that's wrong?

19 A. I think that's wrong.

20 Q. Right.

Do you remember whether Tomas Rek ever consulted you or anybody else at Harley to your knowledge in relation to the cavity barrier scheme?

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25 to the cavity barrier sen

A. Not to my knowledge.

25 Q. Mr Sounes' evidence was that he had thought that

Tomas Rek had consulted you on the cavity barrier

2 strategy. Just for our references, and perhaps yours as

3 well, that's {Day21/74:20-26} and {Day21/82:23-25}. We

don't need to go to that, that's for our benefit.

5 A. Yes.

6 Q. But I wouldn't mind your comment on that. Do you agree 7 that Mr Sounes' recollection is correct, that Mr Rek did

8 consult you on the cavity barrier strategy?

9 A. No, I don't, and certainly when we got the contract, the 10 first question that we had was asking questions of

Studio E with regard to the cavity barriers.

12 Q. I see.

In general terms, just coming back to the meeting, what was your impression of the budget which had been

set by the client at that stage?

A. I don't think we knew the budget. My recollection is
 that Mark did a back-of-a-fag-packet price and then sent
 it over to Bruce Sounes.

Q. Yes. When you gave the back-of-a-fag-packet figure of
 approximately £3 million, did that include the estimated
 cost of design, procuring and installation of the entire

22 facade?

23 A. It's the back-of-a-fag-packet, so we have a square
24 metreage rate that we can -- we're comfortable being

able to put a system on the wall, and that's

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an all-inclusive price, but of course until we get exact details of what they want, the exact size of the

3 building, it is only a -- it is a ballpark figure.

4 Q. I see. So you have got a per measurement figure.

5 A. Yes

6 Q. And the reason it was ballpark, as you put it, is because you didn't know the precise measurements of the

8 building?

9 A. Or the precise make-up of what we were doing, whether it 10 was going to be --

11 Q. I understand that. But I think the answer to my

question is yes, it includes the cost of design, the cost of procurement and the cost of installation of the

14 whole façade.

15 A. Yes.

16 Q. Yes.

Now, he then goes on to say, if we can go back to the email, please, which is at {ART00001487}, second paragraph again:

20 "A Zinc Composite Panel is also available which is21 cheaper to install than a cassette."

 $22 \hspace{1cm} \hbox{Do you remember discussion about that in } \hbox{particular?}$ 

A. I don't. At one point there was a NedZink productproposed, and that wasn't by us, we had not dealt with

NedZink before, but a zinc composite panel is the same

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1 as an ACM, except the outer face is zinc as opposed to 2 aluminium.

3 Q. Right.

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Can I just go back, then, to a document I haven't shown you, {HAR00005992}. This is the email from Bruce Sounes of Studio E to you and Mark Harris which follows the meeting:

"Dear Mark, Ray,

"Thank you very much for the conversation this morning. It was very useful and I'm especially grateful you could come into London. We will follow up early next week with a quantity take-off from our model. I've communicated your 'back of a fag packet' figure to the Q.S and it is over budget - which is to be expected but some firmer budgets will help focus everyone's

"We're looking seriously at Nedzinc's(sic) composite panel. The small sample we have in the office looks like Alucobond but is apparently zinc."

What did you understand Mr Sounes' reference to focusing everyone's minds to be or to mean?

A. I'm not sure I can speak for Bruce Sounes, but I would imagine that there is a budget somewhere that may need to be exceeded or increased to give them the look that they want.

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- 1 Q. Yes. To cut to the chase, were you concerned that your 2 back-of-a-fag-packet estimate of about £3 million
- 3 appeared to Mr Sounes to be too high at that stage and
- Δ may need revising downwards?
- 5 A. No, we were at the start of a fairly long process.
- 6 Q. Yes, I know that, but to answer my question, were you
- 7 concerned at the time that your back-of-a-fag-packet
- 8 figure -- I know it was a back-of-a-fag-packet ballpark
- 9 figure -- of £3 million might have been too high and
- 10 needed to be reduced?
- 11 A. No. I wasn't concerned.
- 12 Q. He says, as I've shown you in the second paragraph, that 13 they're seriously looking at NedZink's composite panel,
- 14 and he refers to the sample in the office.
- 15 Is it fair to say that initially, to your
- 16 impression, the architect's preference was for a zinc
- 17 cladding product?
- 18 A. Yes.
- 19 Did you express any concerns that it would be
- 20 challenging to provide a zinc product within the
- 21 back-of-a-fag-packet budget of £3 million?
- 22 A. I can't recall.
- 23 Q. Now, after that meeting, on 4 October 2013, do you
- 24 recall that Studio E asked Harley for an information and
- 25 costings about a NedZink product?

A. I think it's a matter of record, yeah.

2 Yes. Let's look at {HAR00005461}. This is an email

3 from Bruce Sounes on that date to Mark Harris, copied to 4 you, with some drawings attached. In the third

5 paragraph, Mr Sounes says:

> "The clients response to your budget was 'what about aluminium?' We haven't had samples or cost back from NedZink but this could be ideal if it eliminates the need for fabricated trays and is true zinc ..."

Then it says:

"Would it be possible to come back with budget costs? Or what would the material cost uplift be for a Nova composite versus a metallic/faux-zinc Reynobond

15 Do you know what efforts, if any, Harley went to to 16 obtain pricing for the NedZink product?

17 A. I don't offhand. I'm sure we provided some prices.

18 Okay, let's just pursue this a bit more. {HAR00005997}.

19 This is an email from Mark Harris to Bruce Sounes,

20 18 October 2013, copied to you. Let's look at the 21 second paragraph:

22 "We've put a budget spreadsheet together [which you 23 can see is attached], which is based on using the 24 Reynobond Natural Zinc product, fabricated into

cassettes, as a starting point."

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1 Do you know why Reynobond was being proposed at this 2 stage rather than any other aluminium panel 3

manufacturer?

4 A. No.

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Then he goes on in the fourth paragraph to say:

"The most expensive option is obviously the natural zinc cassettes. If standard ACM was to be considered (in a zinc colour), face fixed, the saving could potentially be over £500k."

10 Then he goes on to say:

11 "As said when we met, we have a number of examples 12 of high rise residential blocks in London where standard 13 aluminium face fixed ACM was used. We can forward some 14 photo images, or arrange site visit as and when 15 required."

16 Do you know what Mark Harris was referring to there 17 by the phrase "standard ACM"?

18 A. As a standard -- a standard ACM is one with a standard 19 colour paint finish as opposed to a special effect,

20 which --

21 Q. Right. And what would constitute non-standard ACM?

22 It's a non-standard -- it should say non-standard finish Α. 23

24 Q. I see. So you're talking about finishes?

25 A. Yes.

- Q. Do I take it from that that the distinction between 2 standard and non-standard is not a distinction between
- 3 PE and FR, fire retardant or fire resistant core?
- 4 A. No.
- 5 Q. Right.

6 Do you know why face-fixed is so much or was so much 7 cheaper than cassette?

8 A. Yes. With face-fixed, if you have a panel, for example, 9

that's a metre square, you take a metre square flat 10 sheet, cut it up and put some holes around the side of

11 it and -- the fabrication of that is very quick and

12 easy, and you have got a square metre of panel on the 13

wall from a square metre of panel from the stock sheet. 14 If you use a cassette, you have probably

15 150 millimetres all round for the sides which are folded

16 in, so to get a metre square face area, you're now using 17

1.7 metres of panel to achieve 1 metre on the wall, and

18 the fabrication cost is a lot, lot higher.

19 Q. So two things, then: you need more of them to cover the

20 square foot area or square metre area, and you have to

21 have the fabrication costs?

- 22 A. Yeah.
- 23 Q. Right.

24 Do you know whether Mark Harris' prices would

25 include a fabrication cost?

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- A. They would, yeah.
- 2. Q. Just help me with this: when Harley buy or source
- 3 cassettes from a fabricator such as CEP, is there
- Δ a supply contract as between CEP and Harley?
- 5 A. There's an order.
- 6 Q. There's an order?
- 7 A. Yeah.
- 8 Q. And the price that you're quoting is a price that you
- 9 get from CEP, is it?
- 10 A. Our price that we're quoting to the client is the
- 11 panels, the insulation, the rails, the assembly, the
- 12 design, so all sorts of things are added to it. The
- 13 actual panel cost is an element of our final sell costs.
- Q. So is the chain like this: Reynobond sells the panel to
- 15 CEP, CEP buys the panel, fabricates it, sells it to you
- 16 for a higher price, and then you quote an even higher
- 17 price to the client?
- 18 A. Yes.
- 19 If it's face-fixed, you don't need the fabricator?
- 20 A. No, we need the fabricator .
- 21 Q. What does the fabricator do?
- 22 A. He chops the sheet up to the required size and puts the
- 23 holes in it.
- 24 Q. Right.
- 25 Again, a question: do you know why Mark Harris was 162

- 1 promoting ACM, and particularly Reynobond ACM, at this
- 2 stage, 18 October 2013?
- 3 A. I'm not sure that he is --
- 4 Q. No, that's a fair answer, and I need to show you the
- 5 Harley budget cost document. Perhaps I should just do
  - that. That's at  $\{SEA00002275\}$ . There it is. We're
- 7 going to come back to that in a very few minutes, but
- 8 just to ask the question again based on the enclosure to
- 9 the document, to the email.

10 You could see that here is the budget,

11 18 October 2013, and you can see from the second and

12 third items it's a "Reynobond zinc cassette rainscreen

13 cladding Finial screen crown (no insulation )", and there

14 is a price for that, and then underneath that,

15 "Reynobond zinc rainscreen spandrel cladding and

16 insulation", there is a price for that, and then there

17 are other Reynobond products identified lower down.

18 Do you see that?

- 19 A. Yes.
- 20 So Reynobond is there. If we go to page 2 of this --
- 21 well, perhaps we don't need page 2 at the moment, but
- 22 you can see that Reynobond is the product that's
- 23 referred to in there as the rainscreen, and my question
- 24 is: why only Reynobond?
- 25 A. I'm -- I don't know. I presume they had actually had

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- 1 prices for zinc previously.
- 2. Q. Do you know why Mark Harris didn't include quotes for
- 3 NedZink panels in this email, given that that was one of
- 4 the products in which Mr Sounes was interested?
- 5 A. I ... I don't at that stage, but I do recall Mark trying
- 6 to get some prices for some alternatives, and after
- 7 three weeks they just sent back a square metre rate with
- 8 extra overs for corners and bends, so it wasn't -- the
- 9 information we got back from the supplier was actually
- 10 useless.
- 11 Q. Yes.
- 12 Did you or anyone else at Harley suggest Alucobond
- 13 as a panel to Studio E?
- 14 A. I ... the ACMs that we were discussing were generic
- 15 ACMs, and I think Reynobond seems to have been the one
- 16 that was settled on because of the earlier discussions
- 17 that Mark had with CEP and Debbie French, I presume.
- 18 Q. Right. Does that explain why Harley was so keen to
- 19 stick with Reynobond, because of a relationship?
- 20 A. I don't think we're particularly -- we have 21 a relationship, but we're a cladding supplier, we can
- 22 supply whatever the client wants.
- 23 Q. Can I show you the Alucobond product brochure. That's
- 24 at {SEA00014431}. Are you familiar with this document
- 25 from work on other projects, do you think?

- $1\,$  A. I'm not sure I'm familiar with that particular document,
- 2 but we do know Alucobond, yes.
- 3 Q. You know Alucobond.
- 4 A. Yes.
- 5 Q. In any of the high-rise residential overcladding
- 6 projects that you've done, did you use Alucobond?
- 7 A. Yes, we had Alucobond, I think it was on Ferrier Point.
- 8 Q. Ferrier Point, okay, right. So you were familiar with
- 9 Alucobond's products, then, I take it?
- 10 A. Yes.
- 11 Q. Let's look at page 32 (SEA00014431/32) of this document,
- then, because you can see from that that there are three
- types of panel: Alucobond, Alucobond Plus and
- Alucobond A2. Do you see that? Alucobond itself comes
- with a PE core, and I'm summarising it, but you can see
- 16 that, I think --
- 17 A. Yes.
- 18 Q. -- from the picture. Alucobond Plus comes with
- a mineral filled core; yes?
- 20 A. Yes.
- 21 Q. And Alucobond A2 comes with an A2 rated core.
- Were you aware of these different products in late
- 23 2013 available from Alucobond?
- 24 A. I wasn't, no.
- 25 Q. Can you explain why you didn't or no one else at Harley

- 1 took steps to look into Alucobond as a separate product
- 2 supplier, particularly given what they were offering so
- 3 far as rainscreen panel products were concerned?
- 4 A. No.
- 5 Q. I suppose it would follow that you had never advised
- 6 anyone at Studio E of the existence of these different
- 7 products?
- $8\,$   $\,$  A.  $\,$  I think Alucobond was discussed and it appeared in the
- 9 NBS specification .
- $10\,$   $\,$  Q.  $\,$  It was in the NBS specification , but was there any
- discussion about it at these meetings?
- $12\,$   $\,$  A. When we were at the meetings we were talking generically
- 13 about ACMs.
- 14 Q. Did you give any consideration as to whether any of
- these products here on this page might have been
- suitable for use at Grenfell?
- 17 A. We didn't get into the detail of Alucobond.
- $18\quad Q.\quad \text{Did your knowledge and experience of Alucobond's}$
- products from earlier projects and the fact that they
- 20 come with different cores not cause you to ask similar
- 21 questions of Reynobond, for example, do they come with
- 22 an FR core or a mineral core?
- 23 A. No. As I say, I wasn't aware of this particular
- 24 document.
- 25 Q. No, but in general terms, did Harley ever investigation

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- with Reynobond whether they could provide the same core
- 2 product that Alucobond provided?
- 3 A. No.

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- 4 Q. Can you explain why that is?
- 5 A. Well, the two products that Reynobond provided -- and
  - the term "Reynobond", when we talk about -- no one ever
- 7 talked about Reynobond PE, it's always Reynobond, and
- 8 the FR product which appears on the same BBA
- 9 certificate, both of those products are rated as
- 10 class 0, and the only difference in the European
- 11 Standard is that the FR product produces slightly less
- smoke than the standard Reynobond product.
- 13 Q. Was that how you saw it at the time?
- 14 A. Yes.
- 15 MR MILLETT: I see.
- Mr Chairman, this is probably an appropriate moment
- 17 for a short break.
- 18 SIR MARTIN MOORE-BICK: Yes, if that suits you.
- 19 MR MILLETT: Yes, thank you.
- 20 SIR MARTIN MOORE-BICK: Right. We will have a short break
- 21 now, Mr Bailey.
- 22 THE WITNESS: Okay.
- 23 SIR MARTIN MOORE-BICK: We will take 15 minutes. Come back,
- please, at 3.35. No talking to anyone about your
- evidence, please, or anything do with it.

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- 1 THE WITNESS: All right.
- 2 SIR MARTIN MOORE-BICK: You go with the usher now, she will
- 3 look after you. Thank you very much.
- 4 (Pause)
- 5 Right, 3.35, please. Thank you.
- 6 (3.19 pm)
- 7 (A short break)
- 8 (3.35 pm)
- 9 SIR MARTIN MOORE-BICK: All right, Mr Bailey, ready to carry
- 10 on?
- 11 THE WITNESS: Yes.
- 12 SIR MARTIN MOORE-BICK: Thank you. Yes.
- 13 MR MILLETT: Mr Chairman, thank you.
- Mr Bailey, can we go back to Mr Harris' scope of
- works spreadsheet of 18 October we looked at before the
- 16 break, {SEA0002275}, please. It was attached to the
- email we saw. Do you think you read this at the time?
- 18 A. I probably glanced over it.
- 19 Q. Right.
- Now, we can see that it said on page 2
- 21 {SEA00002275/2}, under heading "2. Design", if we just
- look at that:
- "Our budget allows for a full design package incl;
- GA's, detailed design of system and interfaces, samples
- 25 (no full working mock up allowed for), material

schedules, and production drawings. It also allows for site surveys, O&M's, and covers a sum for PI insurance."

Now, we looked earlier on in your evidence at the LOI from the summer of 2014. This is a much earlier document; this is October 2013.

Do you agree, having seen this, that Harley was right from the outset offering to provide Studio E with full design services within its budget?

9 A. Yes.

- 10 Q. And that understanding never changed after that, did it?
- 11 A. Well, this was -- sorry, this was in October, this one?
- 12 Q. Yes.
- A. Yeah, within the limitations of what was set out in the
   NBS specification, we did allow a full design package.
- 15 Q. Before we leave the budget, can I ask you to look at
- $16 \hspace{1cm} page \hspace{0.1cm} 2 \hspace{0.1cm} under \hspace{0.1cm} "Exclusions", \hspace{0.1cm} a \hspace{0.1cm} little \hspace{0.1cm} lower \hspace{0.1cm} down \hspace{0.1cm} the \hspace{0.1cm} page \hspace{0.1cm} \\$
- $17 \hspace{1cm} \text{we're looking at.} \hspace{0.2cm} \text{Do you see it says "Exclusions"} \\$
- 18 there?
- 19 A. Yes.
- 20 Q. It says there:
- 21 "Exclusions -
- 22 "...
- 23 "No allowance for fire rated products."
- What does that mean?
- 25 A. This is to do with fire rated glass, which is used to

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- 1 protect walkways, and that would have potentially
- a 60-minute insulation and 60-minute integrity screen,
- 3 and those are very, very expensive, and sometimes sort
- 4 of got dropped into the specification . So it only
- 5 relates to fire rated screens.
- 6 Q. Right. You say it's fire rated glass. I mean, on the
- face of it, there is no reference to glass there.
- 8 A. No.
- $9\,$  Q. It just says "fire rated products", and to the untutored
- eye, that would include FR ACM. Does it not include FR
- 11 ACM?
- 12 A. No, it means simply fire rated screens.
- 13 Q. Right.
- Can I ask you to look at {HAR00005996}. This is an email from Mark Harris to you on 25 October 2013 at
- 16 13.08, if you see that. It's the second email down,
- 17 first of all . This is from Tomas Rek to Simon Walker at
- SIG, the cladding manufacturing, 25 October 2013, and
- 19 then we can see that Tomas Rek passes Mark Harris'
- details to SIG and asks them to send a quote directly to
- 21 him. You can see that?
- 22 A. Yes.
- 23 Q. Then Mark Harris sends this email string to you, same
- day, "FYI", and says:
- 25 "Looks like our old mates at Studio E are now

- referring all manufacturer's to us on Grenfell. Can't be bad!"
- What do you understand "old mates at Studio E" to have meant in this context?
- 5 A. I think that's just a Markism.
- ${\sf 6} \quad {\sf Q.} \quad {\sf A}$  "Markism", okay.  $\; {\sf Had} \; {\sf Studio} \; {\sf E} \; {\sf and} \; {\sf Harley} \; {\sf worked} \;$
- 7 together previously?
- 8 A. No.
- 9 Q. So you say it 's a "Markism". To your understanding, did 10 this Markism mean that Harley had got in early and were
- able to exert some influence on Studio E, at least in
- respect of product selection?
- 13 A. Not with regard to product selection, but it does mean14 that we've got a foot in the door.
- 15 Q. Right, a foot in the door in the sense that whichever
- 16 contractor won the tender, you would be strongly in line
- 17 for subcontract?
- 18 A. No.
- 19 Q. Foot in what door in what sense, then?
- $20\,$  A. Well, that it gives us a little bit of an edge, but no
- 21 more than that, because depending which main contractor
- wins the tender, they will go out to, depending who they
- are, four to six cladding subcontractors to get their
- price. So we don't -- the fact we're doing a little bit
- of work at this end is trying to give ourselves a little

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- 1 bit of an edge, but there's no guarantees in this
- 2 whatsoever.
- 3 Q. Is it fair to say that in forwarding enquiries from
- 4 cladding manufacturers directly to Harley, as we can see
- 5 they were doing, Studio E were letting Harley take the
- 6 lead in the selection of materials at this stage?
- 7 A. No.
- 8 Q. So why were they doing all that, then? Why were they
- 9 sending you the material or the quotes?
- 10 A. Well, I think at this stage we were still doing budgets,
- so it's -- if you're talking to -- this is, I think --
- yeah, these are suppliers, this is SIG suppliers,
- 13 they're talking -- giving us prices so that Mark can
- 14 include them in his budget.
- 15~ Q. Let's go to {HAR00010172}, and I would like to have
- 16 pages 2 {HAR00010172/2} and 3 {HAR00010172/3} put up
- side by side, please.
- This is an email from Mark Harris to Tomas Rek of 7 November 2013 at 8.23, as you can see from the bottom
- of page 1, over to the top of page 2. Now, you're not
- copied in on this, but Mark Harris is, as is Mike--
- sorry, you are copied in on this, and you can see that
- 23 Mr Harris says, "Good morning Tomas".
- Then under "Proteus HR Composite £282m2", he says:
- 25 "Quite what finish this is based on, I have no idea

(due to lack of information). I have to say, from
Harley selfish point of view, our preference would be
to use ACM. It's tried & tested (on many Harley
projects), and we are confident in the cost base. That
said, we are of course an envelope contractor, and would
be happy to clad the build in the material of choice."

Is it fair to say, looking at that, that Harley was positively encouraging the use of ACM cladding at an early stage as suitable for Grenfell Tower?

- 10 A. No, I don't think we were pushing it particularly.
- Q. Well, we can see what Mr Harris says, expressing a clearpreference for ACM as tried and tested, confident in the
- cost base, and I'm really seeking to ask whether you
- agree that that tells us that Harley was positively
- encouraging Studio E to use ACM?
- 16 A. No, I don't think that's positively encouraging to go
- 17 that route.
- 18 Q. Why was Harley's preference for ACM?
- 19 A. Because we had a supply chain, in fact a multiple supply
- $20\,$  chain, for ACM, we're confident of the cost base and the
- $21\,$  lead times for it, so from that point of view it's
- a more reliable product to supply.
- 23 Q. Right. And given that Harley had a preference for ACM,
- 24 why was Harley telling Studio E that it preferred ACM
- for use at Grenfell?

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- 1 A. For those reasons.
- $2\,$   $\,$  Q. Right. So do you accept that Harley did have
- 3 a preference for ACM at Grenfell?
- 4 A. Yes.
- Q. Did that preference extend to a particular ACM productor supplier?
- 7 A. No.
- 8 Q. Do you agree that price and/or aesthetics were the
- 9 dominant factor in those discussions relating to panel 10 options?
- 11 A. Between Bruce and Mark, yes.
- 12 Q. Yes.
- Looking at this email, and the expression of this preference, would you agree that Harley were, in
- essence, advocating the selection of ACM cladding panels
- and actively seeking to persuade Studio E to change
- their provisional specification from zinc to ACM?
- 18 A. No.
- Q. Or at least to use ACM as an option, an alternative option in the NBS?
- 20 option in the NB
- 21 A. No.
- Q. So why do you think Mark Harris told Mr Rek at this
- stage, November 2013, that Harley's selfish point of
- view preference would be to use ACM? What was the point
- of him telling him that?

1 A. Well, there were a number of different products being

2 talked about, of which -- over which Harley had no

- 3 control at all, and I think probably Studio E didn't
- 4 have a lot of control. The client at the end will
- 5 choose what they want on the building. So of the
- 6 products which are being talked about, Mark's expressed
- 7 a preference for ACM.
- $8\,$  Q. Can I ask you to look at a different document, which is
  - Deborah French's police witness statement, which she
- 10 made on 14 September 2017, so very nearly three years
- $11 \hspace{1cm} \text{ago.} \hspace{0.2cm} \text{It's } \{ \text{MET00019063/2} \}, which has paragraph numbers. \\$
- 12 At paragraph 4, she says:
- "Reynobond Aluminium Composite Material ('ACM') was
   made, so far as I was aware, with either a polyethylene
- core ('PE') or a fire resistant core ('FR'). The
- Reynobond stainless steel composite material ('SSCM')
- and Reynobond zinc composite material ('ZCM') were
- produced with only an FR core."
- Now, it would appear from what we saw earlier that
- 20 Alcoa also produced a zinc composite material, or ZCM.
- 21 Were you aware of that at the time of your involvement
- 22 in this project?
- 23 A. That Reynobond do a zinc composite material?
- 24 Q. Yes.
- 25 A. Yes.

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- 1 Q. Yes, and Alcoa also -- sorry, yes, Reynobond do, yes.
- Was that material, zinc composite material, ever
- 3 considered for use on Grenfell?
- 4 A. I don't know. There may have been mention of it
- 5 somewhere, because basically it would be the same stuff
- 6 as NedZink.
- 7 Q. Were you aware that zinc composite material, or ZCM, was
- 8 only produced with a fire resistant or FR core?
- 9 A. No.
- 10 Q. Did it occur to you that one of the consequences of
- $11 \hspace{1.5cm} proposing \ an \ aluminium \ composite \ material \ instead \ of \ a$
- $12 \hspace{1cm} \hbox{zinc composite material was that the core could be} \\$
- 13 formed of polyethylene and therefore not necessarily
- fire retardant or fire resistant?
- 15 A. No.
- 16 Q. Were you aware that in fact an FR core ACM panel was
- 17 available from Reynobond?
- 18 A. Yes, only because it was on the BBA certificate.
- $19\,$  Q. Which I think you told us you read when it was first
- 20 promulgated or published in 2008.
- 21 A. Yes.
- 22 Q. At the time of the discussion of ACM for use on
- Grenfell, as we've just seen in Mr Harris' email, in
- October and November 2013, does it follow that you were
- aware that an ACM panel from Reynobond could be supplied

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1 with an FR core? A. That's the only place I could see where this product 2 2 A. Logically, yes. would stand out. 3 3 Q. Were you aware at the time of any difference in attitude Q. Well, you say logically . 4 A. Well --4 as between FR core and PE core that CEP or other 5 Q. It would follow from the fact that you had read the BBA 5 fabricators had? 6 6 A. No. certificate that you did know. 7 7 A. Yes, that's correct, but on the advertising material, Q. Did CEP have a particular preference for PE as opposed 8 8 all the information we had from Reynobond at that time, to FR? 9 9 the only -- there was no play made about FR materials, A. Not that I'm -- no, and whether this is relevant, 10 the only place it appeared was in the technical table at 10 Geof Blades' witness statement, he said he had never 11 the back, resistance to fire, and both that and the PE 11 heard of FR. 12 core were classed -- were signed off as class 0. So 12 0. Does that surprise you? 13 13 it's not -- in later editions they've actually made A. Yes. 14 14 quite a big issue of the FR, but certainly at the time Q. Did you ever have a discussion with Geof Blades on this 15 15 we were looking at that, it was a product that was or any other project about FR? 16 virtually -- it was never talked about. 16 A. No. 17 Q. So is the gist of what you're telling us this: at the 17 Q. Can we look at {HAR00010160}, please. Now, this is, at 18 time of your discussions with Studio E about the choice 18 page 1, as you can see, a sales progress report form for 19 19 of Reynobond ACM in October and November 2013, you knew the Grenfell Tower project which was compiled by 20 20 that Reynobond supplied an FR cored ACM? Mark Harris, starting on 1 March 2013. Can we look at 21 21 page 3 {HAR00010160/3} in that, please. He's written A. Yes. 22 22 Q. But you didn't discuss it? there, against the date, 5 December 2013, as the 23 23 A. No, it was -- as I say, it was class 0 rated, the same penultimate entry: 24 24 as the ordinary Reynobond. "FILE NOTE: Call received from Simon Lawrence at 25 25 Was there a price difference, did you know, between FR Rydon to advise that they attended the main contractor 177 179 1 1 core and PE? project Intro meeting with the client and architect 2 2 A. At that stage, because no one had ever discussed the FR, yesterday, and others in attendance included Keepmoat, 3 3 we didn't know that there was a price difference. Durkan, and Wates. When the architect gave a slide show 4 4 I imagine that there would have been a price difference, presentation of the scheme, Harley's name was included 5 but as I understand it now, it's £1 a square metre more, 5 on the slide and verbal reference was made to the 6 6 that's all. So from our point of view, if it had been assistance that we provided." 7 7 offered at a £1 a square metre, we would have bought it, Did you see this file note at the time, do you 8 8 you know, and you would wonder why, if there is that think? 9 little price differential between the two, anybody would 9 A. No. I wouldn't have done. 10 10 Q. Right. Do you know how Mark Harris -- and we can ask stock both types. Q. Did you actually at the time consciously think, "I have 11 11 him about this -- kept this document? Was it available 12 a choice here" --12 to everyone in the office? 13 A. No. 13 A. It was. Q. -- "between PE and FR and I'm going to plump for PE"? 14 14 Q. Did you keep a check on it on the projects you were 15 A. No. 15 involved with? 16 Q. What did you think was the point in Reynobond having in 16 A. No, I kept in touch verbally with Mark. 17 their product range an FR panel for ACM if the fire 17 Q. Right. 18 performance was the same, class 0 in both cases? 18 When he says, "Harley's name was included on the 19 A. That's a very good question. 19 slide and verbal reference was made to the assistance 20 Q. And what's the answer? 20 that we provided", do you know or did you know why Rydon A. The only use I would have thought that -- the 21 was telling Harley that? 21 22 application for that would have been on a walkway, if we 22 A. I don't know why Rydon told us that.

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a fire escape route.

Q. How would that have made a difference?

were within a metre of an adjacent building, or on

178

23

2.4

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Q. Did you get the impression from what you knew -- and you

to have Harley in there as its subcontractor?

may not have seen this document -- that Rydon were keen

- A. No, we -- we've worked with Rydon before and had a good
- 2 relationship with them, but when these projects come
- 3 out, they go to a number of cladding subcontractors to
- 4 get prices. So they may have preferred to work with us,
- 5 but that was by no means any guarantee that we would get
- 6 the work.
- 7 Q. The picture seems to be here that Harley was, even at
- 8 this stage -- so late 2013, pre-tender -- influential in
- 9 the choices of cladding material, both as regards
- 10 Studio E and in fact now, as it seems, as regards Rydon.
- 11 Would that he fair?
- 12 A. No.
- 13 Q. So how can you explain why it was important for
- 14 Mr Lawrence at Rydon to tell Harley that it had provided
- 15 great assistance or assistance in relation to the
- 16 project at that stage?
- 17 A. Sorry, why it was important for him to tell us?
- 18 O. Yes.
- 19 A. I ... I think he was just chatting to Mike about the job
- 20 and said, "Guess what I've seen".
- 21 Q. Yes. It looks on the face of it that here is Rydon
- 22 telling Harley that the architect is on side with the
- 23 appointment of Harley as the subcontractor because of
- 24 the assistance that it had provided. Is that a fair
- 25 summation of the position?

- 1 A. I think they would have been happy for us to be 2 appointed, yes.
- 3 Was it normal, in your experience, for Harley to be
- 4 closely involved in pre-tender discussions this way?
- 5 It's not unusual.
- 6 Q. Now, if we go to your witness statement, you say at
- 7 page 7 {HAR00010184/7}, if we can just look at that, in 8 paragraph 26 there, in the last line:
- 9
- "There was no particular advantage for Harley in 10 using the Reynobond ACM."
- 11 Now, that's your statement.
- 12 If we can look at a document, {RYD00003913}, please,
- 13 this is an email from Mark Harris to Simon Lawrence at
- 14 Rydon dated 22 April 2014, so this is post the winning
- 15 of the tender in March by Rydon, and in the third
- 16 paragraph there -- and you didn't see this at the
- 17 time -- he says:
- 18 "I would prefer to try and stick with Reynobond if 19 poss, nothing wrong with Alucobond of course, but I'm
- 20 not sure we can manage the cost so well if we go that
- 21 route!!"
- 22 Now, to what extent did you or anybody else at
- 23 Harley ever actually investigate using rainscreen
- 2.4 products supplied by Reynobond's competitors?
- 25 We were using -- or we've used Reynobond before, so we

- 1 have no issue -- sorry, Alucobond, we've no issue with
- 2 Alucobond.
- 3 Q. It's not quite an answer to my question. My question
  - is: to what extent did you or anybody else at Harley
- 5 ever actually investigate using products supplied by
- 6 Reynobond's competitors?
- 7 A. On Grenfell, I don't know. We've used Alucobond on
- 8 Ferrier Point, and subsequently used it on other
- 9 projects.
- 10 Q. Yes, I know, and you have explained that before. If
- 11 I were to suggest to you: you didn't look at any
- 12 competitors or any other manufacturers of rainscreen
- 13 products other than Reynobond, that's right, isn't it?
- 14 It would appear so, yes.
- 15 Q. Yes.
- 16 Why is it that Harley could manage the cost of
- 17 Reynobond better than it could with Alucobond, do you
- 18 know?
- 19 A. No.
- 20 Given that Harley had used Alucobond and Reynobond, as
- 21 you say in your statement, on a number of projects
- 22 previously, can you explain why there was such
- 23 a preference for Reynobond on the Grenfell Tower
- 24 project?
- 25 A. No.

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- 1 Q. Had you suggested Alucobond to Bruce Sounes at any
- 2 point, do you think?
- 3 A. Possibly. And the other thing that's interesting is
- 4 when we talk about -- nobody used to talk about ACMs,
- 5 this is a thing that's come out more recently.
- 6 Alucobond is the brand name. It's a bit like Hoover for
- 7 ACMs. So it's quite possible that when we talk about
- 8 Alucobond we mean ACMs, and ACMs we mean Alucobond. So
- 9 it's entirely possible we've spoken to Bruce Sounes
- 10 about Alucobond.
- 11 Q. Can I go to {HAR00010172}, please, and I want just now
- 12 to explore the relationship between Reynobond and
- 13 Harley, and just look at one or two documents on that
- 14 subject, if I may.

15 This is an email from Mark Harris to Bruce Sounes of

- 16 Studio E on 21 November 2013, so a little bit back in
- 17 time from where we were, and this is in the context of
- 18 the selection of materials, and you can see from the
- 19 bottom of the page that it follows on from Bruce Sounes'
- 20 letter or email to Mark Harris and Tomas Rek, copied to 21 you, about materials, and particularly about KME Proteus
- 22 square metre rate.
- 23 So this is a little bit later in November, but still
- 24 at the time when, just for context, the
- 25 NBS specification is being developed.

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1 He says: 2 "Apologies for the delayed response. Only just 3 received a response from Reynobond. They were holding 4 out on us because they were originally talking with 5 another company, and were concerned about maintaining 6 loyalty, on the basis that the other company introduced 7 them to the project. Once I pointed out how much 8 business we do with Reynobond, it focused their 9 attention !!' 10 How much business did Harley do with Reynobond --11 Alcoa, that is -- as at the end of 2013?

- 12 I couldn't tell you off the top of my head.
- 13 Q. Well, was it a lot, a little?
- 14 A. Well, we'd done the five blocks at Camden, we'd done
- 15 a block at Heathrow, and I can't remember on
- 16 Little Venice whether that was Alucobond or Reynobond,
- 17 so there was a -- we did quite a lot of business with
- 18 both of them.
- 19 Q. Right. How much business with Reynobond was ACM
- 20 business? When we say Reynobond, does that mean ACM?
- 21
- 22 Q. Right. And that was all PE, not FR?
- 23 A. Yes.
- 24 Q. Who were the individuals at Harley who customarily dealt
- 25 with individuals at Reynobond?

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- A. Primarily Mark.
- 2 Q. And who was it at Reynobond or Alcoa -- I think they
- 3 were still called that at this time -- with whom
- Δ Mark Harris customarily dealt?
- 5 A. Well, Deborah French.
- 6 O. Yes.
- 7 A. But a lot of the conversation was through CEP and
- 8 Geof Blades at CEP.
- 9 Q. Right, so there was a triangle, roughly?
- 10 A. Yes.
- 11 Q. Do you know how and when Mark Harris' commercial
- 12 relationship with Deborah French began?
- 13 A. The first reference I have to Deborah French and
- 14 Reynobond would be 2008.
- 15 Q. In the context of what project?
- 16 A. Chalcots Estate.
- 17 Q. Right.
- 18 Do you know whether any incentives were provided to
- 19 Harley by Reynobond to use their products over other
- 20 cladding manufacturers?
- 21 A. No. No, they weren't, not --
- 22 Q. Did --
- 23 A. No -- not no, I don't know the answer, but no, they
- 24
- 25 Q. So no better prices, no better terms and conditions?

- A. Well, price is always a factor, depending on the
- 2 project, so there are some projects that Alucobond may
- 3 want and that particular time they'll give us a better
- 4 rate, but that's just normal commercial business.
- 5 Q. Now, in this email, we can see that Mr Harris is drawing
  - attention to the strength of the relationship between
- 7 Reynobond and Harley. Was it your impression at the
  - time that that relationship was such that Harley was in
- 9 a better position with Reynobond as opposed to any other
- 10 suppliers of rainscreen?
- 11 I think Mark would have been able to squeeze a little
- 12 bit more, a little bit of price out of Reynobond.
- 13 Q. I see.

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- 14 A. So he's -- there are plenty of ACM manufacturers out
- 15 there, and we only deal with two of them.
- 16 It looks from this as if Mark Harris had persuaded
- 17 Reynobond to engage with Harley rather than its
- 18 competitors who might have been out there competing to
- 19 supply rainscreen on the Grenfell Tower project; is that
- 20 a fair reading of this email?
- 21 In terms of engaging with us, yes.
- 22 Q. Yes.
- 23 It doesn't mean to say that Reynobond didn't give the
- 24 same price to our competitors.
- 25 Can you go to your statement, then, at paragraph 27,

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- 1 page 7 {HAR00010184/7}, please. You say there that:
- 2 "Harley discussed cladding options being considered
- 3 by Studio E with Deborah French in the Autumn of 2013."
- Δ Who at Harley had those discussions? Was that
- 5 Mark Harris?
- 6 A. Yes. I --
- 7 Q. Were you privy to or can you tell us anything about the
- 8 nature or content of those discussions?
- 9 A. I think -- I've seen some email chains where
- 10 Deborah French is sending emails to Mark, and Mark is
- 11 sending them back, and I think there may even be some
- 12 emails with Studio E involved.
- 13 Q. Could you look at page 28 {HAR00010184/28} at
- 14 paragraph 112 of your statement. Ten lines or so up
- 15 from the bottom, you say:
- 16 "Having reviewed Harley drawings for the Grenfell
- 17 Project, Alcoa (now Arconic) never raised any concerns 18
- or questions about its use."
- 19 We looked at that earlier before in your evidence.
- 20 This is a slightly different question.
- 21 Do you remember which Harley drawings were sent to 22 Deborah French?
- 23 Α. No, I don't.
- 24 Did you or to your knowledge anybody else at Harley make
- 25 Deborah French aware that Grenfell Tower was a high-rise

- 1 building which exceeded 18 metres in height? 2 A. Yes, and I think -- I know that -- I know now that
- 3 Deborah French and Geof Blades met with
- 4 Studio E Architects way before we were ever involved, so
- 5 they were in full knowledge of the project completely
- 6 independently of us.
- 7 Q. Do you know when that was?
- 8 A. I think it was -- from documents I've read, I think it
- 9 was February 2013, although it may have been earlier.
- 10 Q. Do you know whether Ms French knew what other materials
- 11 were to be used within the cladding system, for example
- 12 RS5000 or FR5000 as it then was?
- 13 A. I don't know.
- Q. Can I ask you to look at {CEP00049719}, please. This is 14 15 an email from Deborah French at Alcoa, later Arconic, to 16 Neil Wilson, Geof Blades and Roy Fewster at CEP, and 17 it's dated 13 May 2013. I just want to look at it with 18 you in some detail. She says, "Hi", and the subject is

19 "BBC Report Ref ACM in UAE": 20 "As you may be aware there had been some reports via 21 BBC concerning a fire on a building in UAE regarding

22 ACM.

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"As a business we are aware of this report and our technical team are following the details, but in the meantime I wanted to add some thoughts that may help if

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you get questions from your customers/clients etc.

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

"At this stage we will continue to offer both PE& FR core and continue the close working relationship we have with our Approved Fabricators to make sure the right technical support, Reynobond Specification and Materials are being used and installed on Reynobond Projects.

"Many thanks for making me aware of the reports and for your continued support.

"Warm Regards

20 "Debbie."

21 Were you made aware at this time or at any time 22 thereafter, May 2013, of this email or the gist of its 23 contents, do you think?

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24 A. No, I'm shocked.

25 Q. Why are you shocked? A. Well, they're actually talking about the fire and the

2 cores, and they're telling CEP, and none of that's been

3 fed back down to us.

4 Q. You say you're shocked; did you not see this email in

5 the course of --

6 A. No.

7 Q. -- preparing your witness statement?

8 A. I've not seen that.

9 Q. Right.

10 Were you aware -- I think it would follow, I think 11 I know the answer to this, but I have to ask it -- that

12 the fire performance of ACM would differ perhaps

13 considerably depending on whether a PE or FR core was

14 being used?

15 A. I ... the BBA certificate I've seen shows that they're

16 both class 0, with one producing slightly less smoke

17 than the other. I know when the fire tests were carried

18 out after the tragedy that both the FR and the PE core

19 failed the tests.

20 Q. Can I then turn to the Booth Muirie quote. Are you

21 familiar with what that means?

22 A. Yes, I know Booth Muirie.

23 Q. Let's see if we can take this quite quickly.

24 Can I ask you to be shown {BLM00000014/3}, please.

25 This is an email from Mark Stapley to Stuart Murden at

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1 Booth Muirie dated 25 February 2015. It's copied to 2

Ben Bailey, your son:

"Hi Stu

4 "Further to our earlier telephone conversation, 5 please find attached our panel requirements for Grenfell 6 Tower. Please can you provide us with your most 7 competitive price and also confirm lead times.

8 "If you require any further information, please do

9 not hesitate to call." 10 Were you aware at this time, February 2015, that 11

Mr Stapley had approached Booth Muirie for a quote? 12 I wasn't.

13 You weren't aware? Q.

14 A. No.

3

15 Now, take this from me, and it can be checked if I'm

16 wrong about this, but Alcoa/Arconic had given a price

17 for Reynobond ACM per square metre of £23.75p to

18 Booth Muirie, but the price that Arconic gave to CEP at 19 this time was £23.25p per square metre, a 50p difference

20 per square metre.

21 Did you know that Arconic had given CEP a better 22 price for ACM than Booth Muirie?

23 Α.

24 Does it surprise you that they did that?

25 A. It's 50p difference, it's ...

1	Q.	Yes, but does it surprise you that there was	1		"I've attached a copy of the Ojeu, plus a copy the
2		a difference?	2		latest Abi report, typical elevation, and an image of
3	A.	Not especially , no.	3		the existing tower facade."
4	Q.	Can you account for it?	4		You can see the attachments there.
5	A.	There may it may be to do with the quantity that they	5		Is it right to say that Mark Harris was liaising
6		buy and they get a bulk order discount.	6		with Rydon at really a very early stage, August 2013,
7	Q.	Can I ask you to look at {BLM00000009}, please. This is	7		regarding Grenfell?
8		an email of 6 July from Ben Bailey to Booth Muirie's	8	A.	Yes.
9		"Enquiries" email address this is at the bottom of	9	Q.	Yes.
10		the page providing drawings to quote against the	10		Now, we've well, let's look at this. It's
11		Grenfell Tower project:	11		{RYD00001398}, this is an email of 27 September 2013,
12		"Please can you quote an expected lead time as	12		just after the Hays Galleria meeting we discussed
13		well"	13		earlier this afternoon. We can see that it's in fact
14		Your response to it is the next day from Jim Blair	14		the same day, in the middle of the afternoon, so only
15		to Ben Bailey, 7 July:	15		a few hours after that meeting, and it's an email from
16		"We are awaiting a reply from Reynobond as to	16		Mark Harris to Steve Blake and Jonathan Rowland and
17		whether we can procure materials quickly ."	17		you're copied in on it:
18		That then continues at the top of the page with	18		"Hi Steve
19		further exchanges on 8 July between Jim Blair and	19		"How are things progressing with the PQQ on Grenfel
20		Ben Bailey and others.	20		Tower?
21		Now, at this stage CEP had already started supplying	21		"As you might recall, we made contact with the
22		the Reynobond ACM in March 2015; that's right, isn't it?	22		architect about the cladding, back in April. He called
23	A.	Yep.	23		up a few days ago, and asked for a meeting. Ray and
24	Q.	Do you know why it is that Booth Muirie were approached	24		myself met with Bruce Sounes and Tomas Rek of Studio E
25		for a quote after Harley had already engaged CEP to	25		Architect's this morning.
		193			195
1		fabricate the panels for Grenfell?	1		"We had a good session talking about several
2	A.	It may be because CEP were slow in delivering the panels	2		aspects, including; available products, interface
3		or meeting the programme. This is one of the advantages	3		details, programme, access, design, and budget costs.
4		that we spoke of earlier about the use of ACM, because	4		We spoke extensively about Ferrier Point, being that
5		we actually have a number of suppliers who can provide	5		there are a number of strong similarities between
6		us with the same thing.	6		Ferrier and Grenfell . I think they might well pay
7	Q.	Right. Do you know that or is this something I should	7		a visit to Newham in the near future!
8		be asking Ben Bailey?	8		"When are you expecting to hear back on your PQQ
9	A.	As I say, I suspect that's the answer.	9		submission?"
10	Q.	Right, okay.	10		I have read that in full to you so you can see the
11		Now, I want to turn to a different topic, which is	11		full extent of the exchange or the statement there.
12		the relationship between Harley and Rydon. Can we start	12		Rydon at this stage weren't formally involved in the
13		with {RYD00001228}. This is an email of 24 August 2013,	13		project, were they?
14		so pre-tender, from Mark Harris to Jonathan Rowland at	14	A.	No.

"Hi Jonathan

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"Are you guys tracking a project called Grenfell Tower?

19 "We have been tracking this one for quite a while. 20 The application was withdrawn, but some updated

Rydon, and you're copied in on this. It says:

21 elevations have appeared on the planning portal, and the 22 Ojeu has been advertised.

23

"This one has 'our' name written all over it. It's typical of the type of work we were jointly involved with at both Chalcots and Ferrier.

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to put on their list?

Q. And they were just a potential contractor.

Yes, that's what the PPQ is for.

aware of developments; yes?

Q. And that would be something for the TMO to decide, who

Q. Exactly. But nonetheless, here is Harley keeping Rydon

Did you have a personal contact at Rydon at this

point?

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A. Yes.

A. Yes.

Q. Yes.

- A. How do you mean a personal contact?
- 2 Q. We can see that Mark Harris talks to Steve Blake. Let's
- 3 start with Mark Harris. Were Steve Blake and
- 4 Mark Harris well known to each other?
- 5 Steve Blake was the contracts manager at Chalcots and
- 6 became the contracts director at Ferrier Point. So on
- 7 those two projects, yes, we knew Steve Blake.
- 8 Q. And Steve Blake was known to you, presumably, as well?
- 9 A. Yes.
- 10 Q. From Chalcots and Ferrier Point?
- 11 A. Correct.
- 12 Yes
- 13 Would it be unusual for Harley to be talking to or
- 14 nudging along a potential project with a possible
- 15 potential contractor even before the tender process had
- 16 really got going?
- 17 A. Yeah, it's not unusual. A lot of these projects we get
- 18 involved with can run for years before they come to
- 19 fruition, so it really isn't unusual to be talking to
- 20 potential main contractors.
- 21 Q. Right.

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- 22 Can I ask you to go to {HAR00000913}. This is
- 23 an email from Mark Harris to Simon Lawrence, copied to
- 24 Steve Blake and others, including you, 7 February 2014.
- 25 Now, 7 February 2014 is at a time when the tender

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- 1 process is ongoing, it hadn't been decided:
- 2. "Morning Simon
  - "Just another quick update on what we know so far. According to Keepmoat, they declined in the end due to tender timescales (as did Wates). I believe this leaves you guys, Durkan, and Mulalley.
  - "I spoke with Mulalley yesterday, and the chap there said he had been busy on another tender and won't get around to looking at it until early next week. Durkan are the only ones that have shown any interest at all, but to be honest, they have no pedigree with this type
  - "Hopefully all this means that Rydon will be [in] a strong position. It's all down to you now Simon, no pressure!!
- 16 "Kind Regards
- 17 "Mark Harris."
- 18 You were copied in on this. To your understanding,
- 19 why was Harley keen to ensure that Rydon was kept so up
- 20 to date with the progress of the bid for the main
- 21 contractor and the doings of other potential competitors
- 22 in the bid?
- 23 A. I think it's because we had a better relationship and
- 24 history with Rydon than the other main contractors.
- 25 Q. Right. It looks from this that Harley was keen to see

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- 1 Rydon appointed as the principal contractor on Grenfell,
- 2 is that a fair --
- 3 A. I think that's a fair point.
- 4 Q. Can we look then at the tender, {ART00002087}, just
- 5 looking at page 1 of that. This is the tender
  - submission, and it's dated 13 February 2004. You can't
- 7 see it from this page, but take that from me.
- 8 Do you recognise this document from its first page?
- 9 A. No.

6

- 10 Q. You don't?
- 11 A. No.
- 12 Did you ever see the tender submission?
- 13 A. No.
- 14 Q. You didn't?
- 15 A. No.
- 16 Do you remember whether you or anybody else were asked
- 17 to provide Rydon with information about Harley for
- 18 putting into their tender submission?
- 19 A. I don't remember, but it wouldn't have surprised me if
- 20 Mark supplied some information for them.
- 21 Q. Right.
- 22 Did you know that Harley had been asked to
- 23 provide -- let me put this a different way.
- 24 Did you know that Harley CVs for particular
- 25 executives were held by Rydon?

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- 1 A. No, but again, I'm not surprised. They could have come
- 2 off previous projects we worked on with them.
- 3 Well, let's look at page 44 (ART00002087/44) of this
- 4 document. We can see here -- and this is deep into it,
- 5 and this is part of the CVs for the people that would be
- 6 working with Rydon on the team, and here it says:
- 7 "Grenfell Tower.
- 8 "Harley Curtain Wall Ltd - supply chain partner to 9
- Rydon Construction."
- 10 Pausing there, at this time, mid-February 2013, what
- 11 arrangements were in place as between Rydon and Harley
- 12 to make Harley Rydon's supply chain partner?
- 13 A. None.
- 14 Can you explain why Rydon was telling its potential
- 15 client, the TMO, that Harley was its supply chain
- 16 partner?
- 17 A. No, particularly as they were suddenly telling us that
- 18 our price was too high and "Can we have some money off,
- 19 please".
- 20 Q. You can see that Mr Anketell-Jones' CV details are set
- 21 out there, and if we flip over the next page, we can see
- 22 there are other CVs for other people, like Mark Stapley.
- 23 A. Yeah.
- 24 Q. And the next page, please, Rob Maxwell. Next page,
- 25 please -- I'm not sure that one takes us very far, but

1	certainly you can see the ones I've shown you, and it	1	SIR MARTIN MOORE-BICK: Thank you very much for being here
2	looks from this document perhaps you can't comment	2	today, we look forward to seeing you tomorrow, and if
3	that Harley and Rydon were being presented by Rydon as	3	you go with the usher, she will look after you.
4	a joint venture or joint partnership.	4	THE WITNESS: Thank you.
5	A. I think that looks correct.	5	SIR MARTIN MOORE-BICK: Thank you very much.
6	Q. Did you know that?	6	(Pause)
7	A. I didn't know that.	7	Good, thank you very much. We will stop there and
8	Q. Right.	8	resume at 10 o'clock tomorrow morning, please.
9	Did Rydon ever come to you and say to you, "Look,	9	Thank you.
10	we're including some CVs of your surveying team and your	10	(4.26 pm)
11	designer in our tender submission, can you just make	11	(The hearing adjourned until 10 am
12	sure they're accurate before we send them out"?	12	on Wednesday, 9 September 2020)
13	A. I don't know.	13	on Wednesday, 5 september 2020)
14	Q. Right. So you can't explain why Mr Stapley's,	14	
15	for example, CV was included in here?	15	
16	A. I suspect it was requested by Rydons and Mark must have	16	
17	sent it over.	17	
18	Q. To your knowledge, did anybody at Rydon seek to tailor	18	
19	the CV of each of these individuals to the range of	19	
20	skills and the job that they were supposed to do on the	20	
21	Grenfell Tower project if Harley were appointed as	21	
22	subcontractor?	22	
23	A. I this is a new document, so I don't know what it	23	
24	does.	24	
25	MR MILLETT: Mr Chairman, I'm looking at the clock as it	25	
23	WIN WILLETT: WE CHAIT MAIL, I'M TOOKING AT THE CLOCK AS IT	23	
	201		203
1	ticks towards 4.30. I'm going to have a go at the next	1	
2	topic, but I may not complete it.	2	INDEX
3	SIR MARTIN MOORE-BICK: You've got five minutes. Is it	3	MR RAY BAILEY (affirmed)1
4	worth starting it?	4	Questions from COUNSEL TO THE INQUIRY2
5	MR MILLETT: I don't think I'm going to complete it in	5	
6	five minutes. I might. I think better not try it.	6	
7		O	
_	SIR MARTIN MOORE-BICK: Probably wiser.	7	
8	SIR MARTIN MOORE-BICK: Probably wiser.  MR MILLETT: Yes. Is that a convenient moment?		
8 9	•	7	
	MR MILLETT: Yes. Is that a convenient moment?	7 8	
9	MR MILLETT: Yes. Is that a convenient moment? SIR MARTIN MOORE-BICK: I think it probably is, yes,	7 8 9	
9 10	MR MILLETT: Yes. Is that a convenient moment?  SIR MARTIN MOORE-BICK: I think it probably is, yes, thank you.	7 8 9 10	
9 10 11	MR MILLETT: Yes. Is that a convenient moment?  SIR MARTIN MOORE-BICK: I think it probably is, yes, thank you.  Well, Mr Bailey, we're going to call a halt there	7 8 9 10 11	
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