## OPUS<sub>2</sub>

Grenfell Tower Inquiry

Day 105

March 11, 2021

Opus 2 - Official Court Reporters

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1	Thursday, 11 March 2021	1	we'll have a short break while the technical support
2	Thursday, 11 March 2021	2	
	(10.00 am)		team iron them out. All right? THE WITNESS: Okay.
3	SIR MARTIN MOORE—BICK: Good morning, everyone. Welcome to	3	•
4	today's hearing.	4	SIR MARTIN MOORE—BICK: We shall have a break during the
5	As usual, I'm joined by my fellow panel members,	5	morning and the afternoon in any event, probably around
6	Ms Thouria Istephan and Mr Ali Akbor.	6	about 11.15 during the morning and round about 3.15 in
7	MS ISTEPHAN: Good morning.	7	the afternoon. If you need any additional break at any
8	MR AKBOR: Good morning.	8	time, will you just indicate that and we will try to
9	SIR MARTIN MOORE—BICK: Today we're going to hear evidence	9	accommodate you.
10	from Mr Hamo Gregorian, who is the first of the	10	THE WITNESS: Thank you.
11	witnesses we're going to hear from the British Board of	11	SIR MARTIN MOORE-BICK: Very good.
12	Agrément.	12	Is there anything you would like to ask me or raise
13	So my first task is just to check that Mr Gregorian	13	with me before you start answering questions?
14	is with us and can see me and hear me clearly.	14	THE WITNESS: I can't think of anything, Mr Chairman.
15	MR HAMO GREGORIAN (called)	15	SIR MARTIN MOORE—BICK: Good. Well, thank you very much.
16	SIR MARTIN MOORE—BICK: Good morning, Mr Gregorian, are you	16	In that case, I'm going to invite Mr Millett to put
17	there?	17	some questions to you.
18	THE WITNESS: Good morning, yes.	18	THE WITNESS: Okay, thank you.
19	SIR MARTIN MOORE-BICK: And you can see me and hear me	19	SIR MARTIN MOORE—BICK: Thank you very much.
20	all right?	20	Yes, Mr Millett.
21	THE WITNESS: Just fine, yes.	21	Questions from COUNSEL TO THE INQUIRY
22	SIR MARTIN MOORE-BICK: Very good. Thank you very much	22	MR MILLETT: Mr Chairman, good morning, members of the
23	indeed.	23	panel, good morning, and Mr Gregorian, good morning and
24	On the screen in front of you, you should have the	24	thank you for attending this public inquiry to give your
25	words of an affirmation which you're going to make. Do	25	evidence. We are very grateful to you.
	1		3
1	usu haya shawa shawa?	1	Defens Latent and Linet confirm that you can
1	you have them there?	1	Before I start, could I just confirm that you can
2	THE MUTNECC NO.	2	
2	THE WITNESS: Yeah.	2	see me and hear me?
3	SIR MARTIN MOORE—BICK: Good. Could I ask you to make the	3	A. Yes.
3 4	SIR MARTIN MOORE—BICK: Good. Could I ask you to make the affirmation, please, by reading the words on the screen.	3 4	A. Yes. Q. If you have any difficulties in understanding any of the
3 4 5	SIR MARTIN MOORE—BICK: Good. Could I ask you to make the affirmation, please, by reading the words on the screen.  (Witness affirmed)	3 4 5	A. Yes.     Q. If you have any difficulties in understanding any of the questions I'm going to ask you, or you would like me to
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- 1 a signature there above the date, and your printed name.
- 2 Is that your signature?
- 3 A. It is indeed.
- 4 Q. Have you read this witness statement recently?
- 5 A. Yes.
- 6 Q. And can you confirm that the contents of this statement
- 7 are true?
- 8 A. Yes.
- 9 Q. Have you discussed your statement or your evidence with
- 10 anybody before coming here today?
- 11 A. No.
- $12\,$   $\,$  Q. Now, when you were working at the BBA -- and we will
- $\ \ \, \hbox{come to the dates shortly } -- \ \hbox{you knew an entity called}$
- 14 Alcoa, didn't you? Alcoa?
- 15 A. Yes, I have dealt with Alcoa.
- $16\,$   $\,$  Q. Yes. Now, we have been calling it Arconic in this
- 17 Inquiry because it had a change of name after your
- 18 involvement. So I'm going to call it Arconic, so that
- $19\,$  you understand that when I use the word "Arconic", I'm
- referring to Alcoa.
- 22 Q. Is that clear to you?
- 23 A. That's fine, yeah.
- $24\,$   $\,$  Q. I'm going to be asking you mainly about the initial
- 25 assessment and the certification of Reynobond ACM

- 1 cladding panels which were certified by the BBA under
- 2 certificate 08/4510 dated January 2008, which is the
- 3 document we can see -- and we don't need to go to it
- 4 now -- at {BBA00000047}.
- 5 Now, looking back at the history, is it right that
- 6 you were the project manager or product assessor who
- 7 co-ordinated the assessment for the original issue of
- 8 that BBA certificate in 2007?
- 9 A. That's correct, yes.
- $10\,$   $\,$  Q. And the project was BBA number S3/41014. Do you
- 11 remember that?
- 12 A. I believe that was the project number, yes.
- 13 Q. Is it right that, for that assessment, the BBA created 14 a technical dossier or technical file?
- 15 A. Sorry, what was the question again?
- $16\,$   $\,$  Q. For that assessment, the BBA created a technical dossier
- or technical file .
- 18 A. Yes. Yes.
- 19 Q. I'll call the contents of that the technical file, and 20 for reference purposes, for our records, it's
- 20 for reference purposes, for our records, it
- 21 {BBA00008042}.
- 22 A. Right.
- 23 Q. Now, I'm going to start by asking you some questions
- $24\,$  about your background and your training.
- You were at the BBA is this right? between

- 1 2004 and July 2010.
- 2 A. That's correct, yes.
- 3 Q. And you retired from the BBA in July 2010. Does that
- 4 mean you retired from your career or you finished
- 5 working at the BBA and went somewhere else?
- 6 A. I retired from my career. I retired, period.
  - Q. Right, okay.

7

8

9

- Now, can we look at your witness statement, please,
- at page 2  $\{BBA00011096/2\}$ , and look at paragraph 4
- 10 together. You set out your qualifications there, and we
- 11 can see them on the screen.
- 12 In paragraph 4(c) you refer to the fact that you are
- 13 a chartered engineer, MIMechE. Is that a reference to
- you being a chartered engineer in the Institution of
- 15 Mechanical Engineers?
- 16 A. That's correct. A chartered engineer would be a member
- of an institution, one of which was the Institution of
- Mechanical Engineers, and I was a member.
- 19 Q. Yes, I see
- 20 If we look at paragraph 5, you say:
- 21 "My working background has primarily been in the
- 22 field of design, within the construction industry.
- 23 I worked for the BBA from January 2004 to July 2010 as
- 24 Project Manager."
- 25 A. That's correct.

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- $1\,$   $\,$  Q. Is it right that you had a lengthy career in design and
- 2 construction before joining the BBA?
- 3 A. Yes. I've had a lot of experience in design and
- 4 assessment of structures, mainly relating to the
- 5 construction industry of course. I worked for
- 6 Taylor Woodrow, as they were then, for about 12 years.
- 7 Q. What were the dates during which you worked for
- 8 Taylor Woodrow?
- 9 A. I think —— I can't —— I worked 12 years and I think I ——
- 10 I was made redundant from there because Taylor Woodrow
- started slimming down their operation, so I think I was
- there from 19 ... maybe 19 ... late 1988, possibly, to
- 2000, something like that.
- 14 Q. Right.
- When you joined the BBA, did you join it as
- 16 a project manager?
- 17 A. Yes
- 18 Q. And when you joined, did you have any experience from
- your previous work of cladding projects?
- 20 A. Not cladding as such, no.
- 21 Q. No.
- Now, did you have any experience of construction on
- 23 the exterior of high-rise buildings at all?
- 24 A. I've dealt with structures, mainly steel structures, but
- 25 I've done analysis work, mainly stress analysis work,

- 1 a variety of components, variety of structures.
- 2 Q. Right. Well, we'll come back to that in a moment.

Can I ask you to look at your witness statement on page 3 {BBA00011096/3}, please, paragraph 10, if we can just scroll down to that.

You say in paragraph 10, at the top of the page:

"Behaviour in relation to fire is not my area of expertise, so compliance of the product with fire regulations would have been checked by a fire expert (e.g. BRE)."

Would you routinely ask a fire expert to check data on behaviour in relation to fire?

- 13 A. Yes, on projects I seem to remember we always consulted14 a fire expert.
- Q. Would you routinely ask a fire expert to check any
   statements that were made by the client about the fire
   data?
- 18 A. The statements would generally come from -- as far as 19 I remember, they would come from the fire expert.
- Q. Where a client made statements about what the data
   represented, would you ask a fire expert to check those
   statements?
- 23 A. Erm ... I can't ...

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24 (Pause)

25 I can't answer that, to be honest. I'm not sure

9

- whether they were informed before the certificate was issued or ... I can't remember that. All I know is that the classification and so on came from a fire expert.
- Q. I see. So is it right, then, that conclusions about
   whether a product complied with, for example, the
- 6 English and Welsh Building Regulations would come from 7 a fire expert, not from you?
- 8 A. That's correct, yes.
- 9 Q. Yes, I see.
- 10 A. I have no knowledge of fire ...
- 11 Q. Yes.
- Now, looking at the end of this paragraph,

  paragraph 10, you say, "e.g. BRE"; was that compliance

  check for fire normally outsourced outside the BBA or

  was it ever done in—house by an in—house BBA fire

  expert?
- 17 A. I think ... with regard to this particular project ——
  18 generally speaking I would say BRE have got their own
  19 facility and they would conduct tests to arrive at the
  20 classification . They would normally do that. In this
  21 case, again, I don't know whether the assessment was
  22 done without the test or ... I can't remember that.
- Q. No, my question was slightly different. My questionwas: what would happen normally?
- When you checked compliance, or when compliance of

10

- 1 a product with fire regulations was checked by a fire
  - expert, would that fire expert normally be outside the
- BBA, such as the BRE, or would it be done by an expert in—house within the BBA?
- A. I don't think we have a fire expert in BBA internally,
   so BRE would actually assess the product by fire expert.
- 7 Q. I see.
- 8 Was there any training on fire regulations and
  9 fire testing ever done in—house during your time at the
  10 RBA?
- 11 A. No. Not that I can remember, no.
- 12 Q. So when we are looking at going for fire expertise,
- would it normally be the BRE who would provide that
- 14 expertise?
- $15\,$  A. Erm ... I think that the report could come from BRE, but
- 16 there are also other organisations which would come up
- 17 with a report and we would base our statement on that,
- and BRE was one of the experts we would consult --
- 19 Q. I see
- 20 A. -- to arrive at the fire performance.
- $21\,$   $\,$  Q. Now, as at 2007, did you have any experience yourself of
- 22 fire safety testing of products?
- 23 A. No.
- $24\,$   $\,$  Q. Had you any familiarity with, for example, the
- 25 British Standard 476 suite of tests?

1.

- $1\,$   $\,$  A. I must have consulted during my employment, but I can't
- 2 remember anything from it now. So I have no knowledge
  - of -- I don't know the details, how the test is done.
- 4 So, again, it's outside my area of expertise.
- $\,\,$   $\,$  Q. Would the same apply in relation to the European tests
- 6 and classification regime?
- 7 A. Yes.

3

2.2

- 8 Q. Were you aware -- and I think it would follow that the
- 9 answer is no, but let's see what you say -- that there
- was a difference between the UK testing regime, the
- 11 British Standard 476 suite of tests, on the one hand and
- the European testing, EN 13501 regime, on the other?
- A. I have no knowledge of fire issues, so I really wouldn't know the difference.
- 15 Q. Going back to a question I asked you a moment ago, when
- you said you would go to the BRE as one of the experts
- 17 that you would consult: who generally was the individual
- 18 at the BRE that you would normally consult on matters of
- 19 fire safety and fire compliance?
- 20 A. If help was required, as in this case I believe it was,
- 21 that's what I would do. I would first of all approach
  - my technical manager, who was Brian Haynes. Because of
- his long-standing relationship or association with the
- BRE, he's quite knowledgeable on fire issues, so I would
- probably consult him first .

- 1 Q. Right. But when you went outside the BBA, which
- 2 individual at the BRE would you consult?
- 3 A. I think ... again, I can only concentrate on this 4 particular project and my contact with regard to this project was Sarah Colwell. 5
- Q. Yes, I see. Sarah Colwell on this project. Can you 6
- 7 remember any names on other projects?
- 8 A. No, no.

- 9  $\ensuremath{\mathsf{Q}}.$  In your time at the BBA, do you remember whether the BBA 10 or the BBA's customers had a preference for using the UK
- 11 national standards for surface spread of flame leading
- 12 to class 0 or the European standards, or no preference?
- A. I can't answer that, to be honest. As I said, I have no 14 knowledge of fire at all , so anything -- any issues
- 15 relating to fire I would consult an expert, if it was 16 required
- Q. I think, in the light of the exchanges we've had so far, 17 18 we can take the next few questions quite quickly.
- When you joined the BBA, did you have any knowledge 19 at all of the Building Regulations? 20
- 21 A. With regard to fire, you mean?
- 2.2 Q. Well, generally, number one.
- 2.3 A. Yes, of course, but not fire . I know very little with
- 2.4 regard to fire safety issues.
- 25 Q. Does that also mean that, at the end of 2007, when you

13

- 1 started discussing the content of the BBA certificate,
- 2 then in draft, with Arconic, that you had very little
- 3 knowledge of the requirements of ADB?
- A. That's correct.
- Q. Can we look at the technical file, please, 5
- 6  $\{BBA00008042/19\}$ , please. This is on the technical
- 7 file . If we go to page 129  $\{BBA00008042/129\}$  — this is
- 8 the section D, which has the safety information in it
- 9 at D as you can see there.
- 10
- 11 Q. But if we go to 129 we can see an extract from Approved
- 12 Document B, namely section 12, "Construction of external walls". 13
- Does the fact that this document was on the 14 15 technical file indicate that you would have had some
- 16 familiarity with it at the time it was placed on the
- 17 technical file?
- 18 A. We would include this just for the record, but as I say,
- 19 I don't ... I never had any details, I never went into 2.0 details. It was just there as a record.
- 2.1 Q. Who put this document on the technical file?
- 2.2 A. The project manager would normally compile a technical 23
- 2.4 Q. And for this project, by which I mean the issue of the
- 25 Arconic BBA certificate in January of 2008, you were the

1 project manager, were you?

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- 3 Q. Yes, and so did you put this document on the technical 4 file?
- 5 A. Yes, I must have, I must have done, yes.
- Q. Did anybody tell you to put this document on the 6
  - technical file, or did you work out for yourself that it
- 8 was relevant?
- 9 A. We -- yes, I decided that it will have been relevant,
- 10 because it's to do with safety issues, fire safety
- 11
- 12 Q. Right. Was this the first time that you had encountered 13 Approved Document B?
- 14 No, I think I may have come across it before, but, as
- 15 I say, I only had a very limited knowledge of the
- 16 approved document.
- 17 Q. Can you remember —— and I know it's difficult so many
- 18 years ago -- what it was that prompted you to think that
- 19 section 12 of Approved Document B was relevant to the
- 20 task you had?
- 2.1 A. Er ...

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(Pause)

- To be honest, I can't. This is to do with cladding, 23
- 2.4 and as far as I was concerned, it was relevant.
- 2.5 Construction of external walls ... So I think it was

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- 1 relevant.
- 2. Q. Okay
- 3 Were you ever given any training specifically on the 4 approved documents within the Building Regulations --
- 5
- 6 Q. -- and specifically Approved Document B?
- 7 A. No.
- 8 Q. No.
- 9 Can we -- and again. I think we can take this quite 10 quickly, but just to put it in front of you -- look at
- 11 page 133 {BBA00008042/133}, please, still within the
- 12 technical file. This is an extract from Approved
- 13 Document B known as diagram 40, as you can see, which is
- entitled "Provisions for external surfaces or walls". 14 15 If you look at the diagrams at the bottom of the
- 16 screen, you can see that there is "d. ANY BUILDING", and
- 17 "e. ANY BUILDING", and with letter d you've got
- 18 a boundary of less than 1,000 millimetres for a building
- 19 of 18 metres or more in height, and e, same again, but 2.0 this time 1,000 millimetres or more.
- 21 Can you see that there are parts of these two 2.2 diagrams which are shaded? Yes?
- 23 A.

2.5

- 24 Q. So you have one on the left which is fully shaded, and
  - the one on the right, letter e, which is partly shaded.

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1 "Any dimension over 18m" is the part that's shaded. class B-s3, d2 or better (European class)" on the other, 2 Then on the right-hand side of the screen, you can 2 that they were different ideas? 3 see, under the rubric "Key to external wall surface 3 A. Again, I don't know the details. I've mentioned this classification ", the second box down, which has the before. The statement was given to me with regard to 4 4 5 corresponding shading, says: 5 fire performance and I just included it in the "Class 0 (national class) or class B-s3, d2 or certificate . Everything -- all the assessments relating 6 6 7 better (European class)." 7 to fire came from a fire expert, and I have no -- I had 8 Were you familiar with diagram 40, this page of ADB, 8 no input in that at all. 9 and specifically this part of it that I've just shown 9 Q. Let me just try one more question on you, and forgive 10 you? 10 11 A. All I knew in this regard was Approved Document B 11 If you look at the bottom of diagram 40, you can see 12 allowed the use of materials of limited combustibility 12 that there is a note, note 1, which says: 13 to be used above 18 metres. That's all I know with 13 "The national classifications do not automatically 14 14 regard to this. I may have looked at the details as equate with the equivalent European classifications, 15 shown here, but I can't remember -- I mean, I never went 15 therefore, products cannot typically assume a European 16 16 into details because, as I say, this wasn't my area. class unless they have been tested accordingly." 17 17 That note there, is that something that you noticed 18 A. It was way outside my area of expertise, really. 18 at the time, do you think? 19 Q. Yes, I understand. And the reason I'm asking you is --A. Yes, I must have read it and ... yes, I must have read A. I know very little about the approved document, and that 20 20 2.1 I do -- it was within my knowledge, the 18-metre 2.1 Q. What did you understand by it, do you remember? A. Er ... 2.2 restriction was -- I was aware of that. 22 2.3 Q. I'm asking you because this page is on the technical 23 (Pause) 2.4 2.4 The relationship between the European classification file. Did you read this page when considering the 25 BBA certificate in 2007? 2.5 and the Building Regulations cannot be assumed to be the 17 1 A. Yes, I must have. I must have read this, yes. 1 same -- cannot be assumed exactly the same, so I'm just Q. Did you understand what was meant or signified by the 2 guessing that ... 3 shaded area, "Class 0 (national class) or class B-s3, d2 3 (Pause) or better (European class)"? So let's say class 1 European might be different to A. Again, I can only repeat what I've said, I just ... class 0 in UK. So all I'm saying is that you can't --5 6 Q. Yes. I mean, did anything, when you saw this, give you 6 it's saying you're not -- well, it's exactly what it pause to question it? 7 7 says: you can't exactly equate the European 8 8 A. Yes, I really can't go into detail at this stage because classifications to the UK. 9

- 9 I have very little knowledge of fire. All I know is 10 limited  $\,--\,$  materials of limited combustibility could be 11 used above 18 metres, but as to whether the panels in
- 12 question were of limited combustibility, that I would
- 13 leave to the fire expert.
- 14 Q. Yes
- 15 A. I have very —— at the moment, I can't —— I mean, these 16 details don't mean very much to me. But I know that at 17 the time I was aware of this 18-metre restriction.
- 18 Q. I understand. Let me just try two questions on you with 19 the caveat you've given.

2.0 The first is, you say you knew that there was 21 a restriction above 18 metres, save in relation to materials of limited combustibility; did you understand 2.3 or think at the time that there was a difference between 2.4 the concept of limited combustibility on the one hand 25 and the concept of "Class 0 (national class) or

18

But other than that, I really don't know. I just don't -- as I say, again, at the risk of repeating myself, fire was not within my area of expertise, so I just cannot ... I must have read it at some stage. But, as I say, all statements and fire performance assessments came from the fire expert.

15 Q. Let's turn to your role, then,

16 You confirmed that you were a project manager at the BBA

18 A. That's correct.

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19 Q. As a project manager, am I right to understand that you 2.0 don't necessarily have all the technical skills to make 21 all the relevant assessments yourself?

That's correct. 2.2

23 Q. And you would manage other people's input into the 2.4 assessment; is that right?

25 A. That's correct.

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- 1 Q. Are there areas you would have the technical skills to assess yourself?
- 3 A. My main role within the BBA was -- I was assigned to the
- 4 structural department, and I would just manage projects
- 5 as normal by consulting various sections, would have the
- 6 input into the draft certificate which I would make
- 7 a start on, and I also -- as I say, I looked at the
- 8 structural aspect. My area of expertise was in
- 9 structures, strength of materials, structures. That
- 10 I could make assessments. But on top of that, I would
  11 also offer any advice or technical support to any of th
- also offer any advice or technical support to any of the departments as required.
- 13 Q. Now, I would like to ask you some questions about the reporting lines at the time.
- In 2007, did you report to Geoff Gurney?
- 16 A. I believe so. I think somewhere around that time,
- 17 I think the BBA was undergoing some organisational
- changes, so Geoff Gurney was my section head.
- 19 Q. And who did he report to?
- 20 A. He reported to the technical manager, Brian Haynes.
- 21 Q. He reported to Brian Haynes.
- Did Brian Haynes have any expertise in fire
- 23 regulation? I think you mentioned earlier he did.
- 24 A. Yes, he --
- 25 Q. -- was that?

21

- 1 A. I wouldn't call him an expert within the BBA, but
- 2 I think he's had a long association with BRE and he's
- 3 gained a lot of knowledge with regard to fire. So
- 4 certainly he knows -- he knew much more than I did,
  - so ...

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- 6 Q. And Geoff Gurney, did he have any fire expertise?
- 7 A. No. No. Perhaps more than me, because of his longer
- 8 service.
- 9 Q. Did Brian Haynes have input generally to the technical
- work of the sections in relation specifically to fire?
- 11~ A. I'm sure he would have -- the draft certificate would
- circulate in a loop, going between the various sections, and they would make a comment, and eventually the
- and they would make a comment, and eventually the
- certificate would be looked at by Brian, and I'm sure he would have looked at fire quite carefully.
- $16\,$   $\,$  Q. Who was responsible for the technical sign—off of
- certificates which were issued as a result of your work?
- 18 A. In my case, the section head would sign. Again, as
- 19 I say, bearing in mind there was an organisational
- 20 change going on, I'm not sure if Geoff Gurney was our
- section head, but normally that's what would have
- happened, the section head would sign off, but only with

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- 23 respect to the particular discipline --
- 24 Q. Yes.
- 25 A. -- which was structures, in my case.

- 1 Q. Specifically at the end of 2007, beginning of 2008, who
  - was the section head, was that Geoff Gurney?
- 3 A. Again, I can't remember.
- 4 Q. Did Brian Haynes, do you remember, check statements
  - specifically asking you about 2007, early 2008, at that
- 6 time made in BBA certificates about a product or
- 7 a system's behaviour in relation to fire?
- 8 A. Sorry, the question was: did ... sorry?
- 9 Q. Did Brian Haynes check statements which were made in BBA
- 10 certificates about products --
- 11 A. I'm sure that was his sort of main interest in
- 12 actually -- in fire, so I'm sure he would have looked at 13 fire aspects quite carefully.
- 14 Q. And specifically in relation to the Reynobond 55 panel,
- did Brian Haynes in fact check the statements made about
- 16 fire performance —
- 17 A. Yes, yes. 18 Q. — in 2007/2008 and —
- 19 A. Yes, yes.
- 20 Q. He did.
- 21 Can I then go back to the question we were looking
- 22 at earlier about the BRE. You've given us a little bit
- 23 of information about that.
- Going back, if we can, to page 3 of your statement
- 25 {BBA00011096/3} at paragraph 10, you have given the

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- $1\,$   $\,$   $\,$  example of the BRE there at the end of paragraph 10 as
- an example of an external fire expert that the BBA would
- consult in relation to matters of fire safety. You
- 4 I think have also said that the BBA would use other
- 5 organisations. Did that include Warringtonfire or
- organisations. Did that include warningtonine c
- 6 Exova?
- 7 A. Yes, we might have consulted Warrington for some tests
- 8 and so on, yes.
- 9 Q. To the best of your recollection, during your time at
- $10\,$   $\,$  the BBA, did the BBA have any formal agreement or
- consultancy agreements with the BRE or with Warrington?
- 12 A. I never got involved in the contractual matters, so I'm
- guessing there was a contract between the various
- 14 parties
- 15 Q. You're guessing. Let me be a little bit more focused.
- Do you remember whether the BBA paid for example the
- BRE to check statements about fire performance on
- 18 certificates ?
- 19 A. Yes, I'm -- again I'm not sure how -- what the
- $20\,$  contractual agreement was, so I can't answer that, to be
- 21 honest.
- 22 Q. Okay.
- 23 Again focusing on paragraph 10, you say:
- 24 "... compliance of the product with fire regulations
- 25 would have been checked by a fire expert ..."

- 1 Was that invariably the case? In other words, did 2 the BRE or other external fire expert check every 3 certificate issued by the BBA where performance in 4 relation to fire was stated?
- 5 A. The report would come up with a classification of some sort, and we would include that within the body of the 6 7
- Q. When you say the report, which report? 8
- 9 A. The test reports.
- 10 Q. Yes, I'm sorry, I'm not sure I perhaps made my question 11
- 12 When you say in your statement "compliance of the 13 product with fire regulations would have been checked by a fire expert", did the BRE check every certificate for 14 15 fire performance?
- A Fr --16

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- Q. Every certificate the BBA issued. 17
- 18 A. I don't think that was the norm. I don't think that was 19
- 20 Q. You don't think that it was the norm? So on what 2.1 occasions would the BBA go to the BRE or other external 2.2 fire expert for assistance?
- 2.3 A. In a case such as this, where there was a query, there 2.4 was something to be clarified, with regard to the
- 25 coatings on the panels and so on. Whenever there was

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- 1 a problem, we would consult a fire expert like BRE.
  - Q. I see. But do I take it from what you've told us that when you didn't think there was a problem, you wouldn't need to go to the BRE or other similar external expert?
- 5 A. I think we would generally -- again, I can't remember all the projects I've been involved in, but generally 6
- 7 the test report would give a classification and we would
- 8 include a statement accordingly.
- 9 Q. Can you give us some sort of idea about what sort of 10 queries or need for clarification would arise which 11 would prompt you to go to the BRE, for example?
- 12 A. Yes, in this case, of course, we had to get some 13 information from Alcoa, or Arconic, and bearing in mind 14 this was a confirmation certificate, we had to be 15 absolutely sure as regards the fire performance, so just 16 to make sure, we had to consult BRE.
- 17 Q. Was there a particular problem that you perceived in the 18 records leading up to the issue of the certificate, or 19 what you saw on the technical file, which prompted 2.0 you --
- 21 A. Basically. I understand the actual colour, for instance. 2.2 has got a major bearing on the fire performance, so
- 23 I needed clarification with regard to that, and
- 2.4 of course with regard to the back face of the panel,

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- 25 again, because of my lack of familiarity with fire

- 1 issues. I had to consult -- I had to make sure that the 2 right classification goes on to the certificate
- 3 Q. Yes.

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- Now, let's turn to BBA certificates and types of them
- 6 You mentioned a moment ago that this was 7 a confirmation certificate . Can I just understand what that is. Is it a certificate which confirms data which 8 9 has come from another organisation?
- 10 A. Not confirming data, but basically to check that the
  - product put forward complies with the requirements of
- 12 the UK Building Regulations, of course, just confirming
- 13 that it's good enough to be put onto the -- onto
- 14 a cladding system.
- 15 Q. And what would you -- sorry. Go ahead. I'm sorry,
- 16 I overspoke. Do you want to continue your answer?
- 17 A. Yeah, basically to confirm that this particular product.
- 18 which was assessed by a UEAtc member -- do I need to
- 19 expand on UEAtc, or you're familiar with that?
- 20 Q. Well, do tell us what you want to tell us.
- 2.1 A. UEAtc is a European technical approvals body, and
- 22 certification bodies like BBA and the CSTB are members
- 2.3 of it, and all assessment work by any of the
- 2.4 certification bodies is acceptable -- mutually
- 25 acceptable to other certification bodies within the

27

- 1 approval body.
- 2. Q. I see.

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2.0

- 3 A. It's a European group of certification bodies.
- Q. Yes, and when you issue a certificate such as this one,
- 5 are you confirming the fire safety, for example, against 6 particular underlying data?
- 7 A. Again, fire, I cannot comment, because I have very
  - little knowledge of fire issues, but basically it
- 9 confirms that this particular product, for instance, met 10 with the Building Regulations in this country.
- 11 Q. I see
- 12 Now, is it right --
- 13 A. It's not confirming the data, it's confirming whether,
- 14 based on the data, the product could meet our
- 15 Building Regulations and standards.
- 16 Q. And in order to make that confirmation, you would have
- 17 to look at the data, wouldn't you?
- 18 A. Yes, indeed.
- 19 Q. And would the data that you would normally look at to
  - issue a confirmation certificate include test data or
- 21 classification data which had come from UEAtc bodies
- 2.2 such as the CSTB in France?
- 23 A. Exactly, yes
- 2.4 Q. Yes, I see
- 25 Now, is it right that some certificates were leaders

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- 1 and some were followers, using the BBA parlance?
- 2 A. That's correct, yes.
- 3 Q. And is it right that leaders would be submitted to 4 a panel of experts to review as well as to the
- 5 certificate holder and others at the BBA?
- A. Yes 6
- 7 Q. Am I right in thinking that the BBA certificate for Reynobond that was issued in January 2008 was both 8
- 9 a confirmation certificate and a leader?
- 10 A. I think that was the case, yes.
- 11 O. Would a leader certificate require more attention and
- 12 expertise to assess than a follower? 13 A. Not necessarily, that just depends on the complexity of
- 14 the product, really
- 15 Q. Now, can I show you the certificate --
- A. Oh, sorry. Apologies for that. With the avis tech --16
- with the confirmation certificate, the timespan was 17 18
- shorter. Instead of nine months, which was the normal 19
- time given to a normal certificate, with confirmation it
- 2.0 was shorter, because all data was for all intents and 21 purposes acceptable to BBA. So that's all I can say
- 2.2 with regard to this particular type of certification .
- 2.3 Q. Right.
- 2.4 Can you just explain as briefly as you can what the 25 difference is or was between a leader certificate and

29

- 1 a follower certificate?
- A. If a similar product or a system was already given 2
- 3 a BBA certificate, that would be a follower. In the
- case of a leader certificate, it would have been the
- 5 first time such a thing was being assessed. So, in this
- case, I think this was a leader. But, having said that, 6
- I think we had covered similar products. Bearing in
- 8 mind this is not a system we have assessed; it's
- 9 a product. The panel was the product we were assessing.
- 10 Q. And just to confirm something I think you said a moment
- 11 ago, is it right, just to be clear, that a leader
- 12 certificate would have to be submitted to a panel of
- 13 experts to review?
- A. Yes 14
- 15 Q. And those would be outside the BBA: ves?
- 16 A. Er ... I think so, yes. Yes. From memory, I think that 17
- 18 Q. Now, I'm going to show you the certificate. We will
- 19 come back to it in detail, but just to fix it in your
- 2.0 memory. It's {BBA00000047}, if we could just have that
- 21 up. please.
- 2.2 This is the certificate in its final form, and you 23 can see the number on the top right-hand corner of the
- 2.4 screen: 08/4510.
- A. Yeah. 25

30

- 1 Q. "Product Sheet 1- Reynobond Architecture Wall Cladding 2 Panels '
- 3 If you go down to the bottom of the screen, you will
- 4 see that there is a date of issue, and it's
  - 14 January 2008.
- So that's the certificate . Just to be clear, do you 6
- 7 recognise that document?
- 9 Q. Yes, thank you, and that's the one you project—managed
- 10 when you were at the BBA?
- 11 A. That's correct.

A. Yes, I do.

- 12 Q. Now, can we have a run-up to that in chronological 13 terms, and we'll start in 2004.
- 14 Do you remember that Arconic first made
  - an application to the BBA for assessment in March 2004?
- A. I was never —— I can't remember that. 16

"Dear Claude

- 17 Q. Right.
- 18 Can we go to {BBA00008042/627}, the technical file.
- 19 At the bottom of the page, you will see that there is
- 2.0 an email from you to Claude Wehrle on 1 June 2004 in
- 21 which you say:
- "I am in the process of drawing up a Contract for 23
- 2.4 the Subject.
- 2.5 "Please confirm whether the sub-frame to which the

- 1 panel is attached is to be included in the assessment."
- 2 Can we take it from that, Mr Gregorian, that you
  - read the application form in some detail at that stage?
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- 5 Q. What was your role in drawing up a contract for the
- 6 subject?
- 7 A. Erm ... I think I -- the project manager would draw up
  - a contract, and with the approval of the section head,
- 9 it would just go through. So I'm -- I do recognise this
- 10 particular email, yes.
- 11 Q. Would you read the technical file thoroughly in the
- 12 process of drawing up a contract such as this?
- 13 A. The technical file was compiled after the project was
- 14 completed.
- 15 Q. I see
- 16 Let's move forward, then, to 2006, because we know
- 17 that the BBA offered this contract but it wasn't taken
- 19 Do you remember that in 2006 Arconic again sent 20 an application form to the BBA materially identical to 21 the application they'd made in 2004?
- 2.2 A. Again, I can't remember that.
- 23 Let's look at a document,  $\{MET00053158\_P14/100\}$ , please.
- 2.4 This, Mr Gregorian, is an exhibit from Claude Wehrle's
- 2.5 exhibits to his witness statement to the Inquiry. It's

1 a letter which is sent by the BBA, as you can see, to 1 A. I really wouldn't -- I can't comment, because, as I say, 2 Colin Southgate of Arconic, dated 23 August 2006, and this was a contract which was offered, but I don't think 2 3 its title, "Assessment of Reynobond 55". Do you see 3 we were under an obligation to sort of stick to this particular detail. So we were at liberty, I think, to 4 that? 4 If you go to the second paragraph, you can see that 5 5 do the assessment in the way the BBA would approach this there was a fee, and although it's not very clear, the assessment. I think we were at liberty to divert to 6 6 7 figure is £20,495. Do you see that? 7 some extent from the contract --8 8 A. Yes Q. Yes. 9 Q. Do you recognise that document, do you think? 9 A. -- as it's stated here. But I'm quite sure it was the 10 10 A. Yes, I remember having seen it, yes. panel that was being assessed and the certificate 11 Q. Well, let's look at what's attached to it, because there 11 actually makes that clear. 12 is an attachment. 12 When you look at 1.2, please, same page but at the top Can we go to page 102 {MET00053158 $\_$ P14/102}, please. 13 13 of the screen, under "Product type", where you see that 14 14 This is an assessment specification which was part of it says "system", "composite wall cladding system", what 15 that document, and you can see at the top it's got a new 15 would be or what was indicated by the word "system" 16 reference, S3/41014, and it's dated 22 August 2006. 16 there. do vou remember? 17 17 Just looking at it, do you think this was a document A. I think, as I say, the intention was to draw attention 18 vou drew up? 18 that these composite wall panels would be used in 19 A. Yes, this is a sort of standard format of offering 19 a cladding system, but it's not meant to be an accurate 20 20 definition of the product we were assessing. 2.1 Q. Yes. If you look under the items under "General" --2.1 Q. Were you intending to capture simply the flat product, 2.2 A. Yes. 22 the panel itself , or the product as fabricated into 2.3 23 Q. -- you can see number 1.1: cassette or rivet -fix, or attached to a fixing system? 2.4 "Product name: Reynobond 55. 2.4 Our assessment was to ensure that the cladding material. 25 "Product type: Aluminium/polyethylene composite wall 2.5 this composite material, could be used in any cladding system, be it cassette or riveted. Our assessment 1 cladding system." 1 2 Note the word "system" there. 2 stopped at the fixings. Anything beyond that would not 3 Then if we look at section 2.1, "Product range", it 3 be covered by the certificate . I think the certificate 4 makes that clear. 5 "Composite panels made up of a Polyethylene core 5 Q. Yes 6 sandwiched between two pre-painted, 0.5 mm thick, 6 Can I then ask you about the avis techniques, if 7 7 aluminium sheets. Three thicknesses ... ' that's the right way of pronouncing it. Can we please go to  $\{MET00053158\_P13/173\}.$  This is 8 8 It goes on to explain what those are and the sizes. 9 9 Below that, under "Ancillary items", it says: part of the application form sent to you by Mr Wehrle in 10 "Alcoa aluminium support rails (or similar approved) 10 2006, and you can see that this is a list of reports 11 11 that supported the application at that time. In the top 12 "Any sub-framing and its attachment to the substrate 12 two rows you see it says, "Avis technique", can you see 13 13 wall are outside the scope of this assessment as are that on the left - hand side there? 14 other miscellaneous construction details." 14 A. Yes 15 15 If this offer had been accepted by Arconic at the Q. In the next cells you can see that these were offered 16 time, then it's this assessment specification that we 16 for structural and system for cassettes, structural and

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A. Yes.

approach this assessment differently, ie to approve just

have been looking at which would define the final scope

A. I think it  $\,--\,$  at some stage we must have decided to

of the product certified?

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2.0 21 a panel by itself rather than the whole system. 2.2 Q. Yes, and I'm going to ask you in detail about that. But

23 generally speaking, just on the face of it, would it be 2.4

this assessment specification which would define the

25 final scope of the product certified?

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cladding system, cassette or riveted, they would assess the whole system. That's the impression I got. And

Q. What did avis technique structural and system for

cassettes and for riveted mean to you at the time?

A. I think CSTB had a different approach with regard to

assessment. They would assess different types of

Did you see this document in 2006, do you think?

36

system for riveted.

transcripts@opus2.com +44 (0)20 3008 5900

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1 obviously when you asked for information, that's what 2 they had, that's what they provided. But our job was to 3 extract information with regard to the panel on its own, 4 from the document at the time.  $\ensuremath{\mathsf{Q}}.$  When you saw "structural and system", did you think that 5 included or excluded fire? 6 7 A. Sorry, with regard to fire? Q. Yes. When you saw "Avis technique structural and 8 9 system" for both cassettes and rivet, did you think that 10 that included or excluded an assessment for fire? 11 A. I'm only guessing for different fixing systems, they 12 would have their own assessment in relation to fire. 13 14 Did you look, do you remember, at the CSTB avis 15 technique documents themselves that underlay this part 16 of the application? 17 A. Yes, I must have seen the avis technique, yes. 18 Q. Yes Can I just show you those, then. 19 20 Can we go back to Mr Wehrle's exhibit part 14, 21  ${MET00053158\_P14/8}$ . You can see this is technical

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opinion 2/04-1083, and if you look down a little bit,

you can see it says, "REYNOBOND Cassette System".

Let's have it at the same time on the same screen,

 $\{MET00053158\_P14/64\},$  please. We can see that this is 1 technical assessment 2/04-1083, and this is 1081 on the 2 3 right-hand side of the screen. We have 1083 on the left, 1081 on the right, and this one is for the riveted 5

please, page 64 of the same exhibit run

When you looked at this application, did you notice that there were two different technical opinions from the CSTB, one for the cassette system and one for riveted system?

10 A. Yes, basically because their approach to assessment was 11 different . They were assessing the system rather than 12 just the panel on its own.

13 Q. Yes. Did you read these, do you think, at the time?

A. I think I -- yes, I vaguely remember this, yes. 14

15 Q. Yes. And, as you say, there is nothing about these 16 assessments, these technical assessments, about

17 fire safety? 18 A. I suppose not.

19 Q. You say you suppose not; do you remember that?

2.0 A. Er --

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2.1 Q. I don't want to take you through it all --

2.2 A. I think with regard to fire, I think we were 2.3 concentrating on the actual panel, and that's why we

asked that test results be provided for us to assess the

25 actual panel rather than the system.

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1 Q. When you say "system", do you mean specifically as 2 fabricated as opposed to -

3 A. I mean the panel and including the substructure.

4 Q. Right. So that would be the panel as fabricated and the 5 substructure?

A. And the substructure, yes. I think that's the 6

avis tech -- the CSTB approach. But I think in this

8 country, the approach was different, we would just

9 approve the actual panel and whether it was suitable to

10 be incorporated in a cladding system.

11 Q. Yes, but just to be very clear, when you say the panel 12 and including the substructure, do you mean the panel as

fabricated, in other words as a rivet or as a cassette.

14 and the substructure?

15 A. Yes, yes.

16 Q. You do.

17 Now, can I then turn to the discussions you had with 18 Arconic starting in November 2006, and can we start in 19 this exhibit run, please, and go to page 114

20 {MET00053158\_P14/114}. 21

This is an internal Arconic document, Mr Gregorian, 22 so you may not have seen it before, and you are unlikely 23 to have seen it at the time.

2.4 It's dated 2 November 2006, and you can see that 25

it's a visit report created by Arconic, and written by

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1 Colin Southgate, as you can see from the right-hand side

2. of the document at the top, location: Garston, Watford,

UK. Were those the BBA offices at the time?

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Q. The date of the visit, 2 November 2006, and you can see 5 6 who was present: we've got, for the BBA, Bob Keyse,

7 John Albon and you. Do you see that?

8 A. Yes

9 Q. And on the other side, the Arconic people present were 10 Colin Southgate and Andrew Rich.

11

12 Q. Just pausing on the words next to your name there,

13 "Eng system dept", is that engineering system

14 department?

15 A. Engineering system department, ves.

16 Q. Do you remember this meeting at all?

17 A. Erm ...

18 Q. Late 2006.

19 A. I can't remember, to be honest. I -- no, can't 2.0

remember.

21 Q. All right.

2.4

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2.2 Let's look down at the document then and see how

23 much of it you can help us with

If you look at item 1, you can see:

"Reason for visit: Exploratory call to [assess]

1 situation as follows with C. Weh [Claude Wehrle] in Brian Haynes to make sure that that was the case. 2 attendance.' 2 Q. And was that the case specifically in relation to fire? 3 Do you remember whether Mr Wehrle attended in person 3 A. Yes, especially on fire, yes. 4 or whether he attended by telephone? 4 Q. Yes. 5 A. I can't remember definitely. 5 Now, we'll come back to this document in just Q. Can we go down to point 2, "Details of visit". It says: 6 6 a moment. 7 "After a general discussion with BK and CS threat to Do you recall a discussion at that time about 8 stop all dealings with BBA unless a satisfactory 8 reducing the cost of the assessment contract for 9 solution was found re both the above potential 9 Arconic? 10 10 approvals. BK had arranged for the BBA persons A. I can't remember that. 11 responsible for each product to be in attendance." 11 Q. Do you remember whether Arconic wanted to reduce the 12 If we scroll down to page 115 {MET00053158\_P14/115}, 12 cost of the assessment by providing data rather than 13 please, we can see that there is a meeting B, and it 13 conducting more tests? Do you remember that? 14 14 "Meeting B - RB-55 proposal dated 23.8.06 with 15 15 Q. Going back to the document, just underneath where we 16 16 Hamo Gregorian were. it savs: 17 "BBA confirmed that they would look at the original 17 "I have suggested that it could be better to 18 proposal and try to reduce the cost. They will use CSTB 18 validate the material RB rather than the whole system. details as a Basis of Validation, but are concerned that 19 19 This way a cross connection can be put together." 2.0 UK building Regs are more demanding than French regs!! 2.0 It goes on below that: 21 Also enclosed was fire regulation input - This will not 21 "BBA - Certification for 4mm thick  $\times$  RB-55 material. be needed if BBA have latest certs from Warrington 22  $"\mathsf{CTSB}\,-\,\mathsf{Certification}\;\mathsf{for}\;\mathsf{RB}\,+\,\mathsf{Systems}.$ 22 2.3 research covering PE Cores.' 23 "This way our 2 products materials RLX & RB 2.4 2.4 [Reynolux and Reynobond] can be approved on paper which Then it says on the right-hand side. "[Claude Wehrle]/CS", we think that's Claude Schmidt, 2.5 will cover most needs such as the NHBC/NBS 1 both of Arconic, "to send full Certs to BBA". 1 organizations." Can you confirm what "CSTB details" means there, Do you recall this discussion, or at least the gist 2 2 3 when it says, "They will use CSTB details as a Basis of 3 of the discussion suggested by this note? A. This was what I was referring to. I think the approach with CSTB and BBA were different in this respect, and 5 A. Basically the assessment done by CSTB leading to the 5 6 avis technique. 6 I think we were trying to push this idea that the panel 7 7 Q. So that's a reference, is it, to the avis technique could be assessed separately from the rest of the documents that Arconic --8 8 system. 9 9 A. I think so, mainly, but they might provide other Q. I see. So by "whole system" here in that line, where it 10 information as well. 10 says, "it could be better to validate the material RB 11 Q. Right. 11 rather than the whole system", did that mean validating 12 Is it right that the BBA was still looking for 12 the material rather than the fabricated panel, in other 13 fire safety certification? 13 words cassette fixing system or rivet fixing system? A. That's correct, yes. 14 A. From this, obviously fire was an important issue and, as 14 15 I say, I can't remember the actual meeting, but ... were 15 Q. I see 16 just concentrating on the fire aspect. 16 What was the so-called cross-connection that was 17 Q. Right. 17 desired here that's referred to? 18 When it says, "[they] are concerned that UK 18 A. Sorry, I don't understand the question. 19 building Regs are more demanding than French regs", 19 Q. Well, I'm just asking you about that second sentence in 2.0 2.0 looking at the document, it looks as if that's that paragraph, where it says, "This way a cross 21 21 a reference to the BBA having that concern. connection can be put together". What was that 2.2 Do you remember whether that's right, that the BBA 2.2 cross-connection, can you recall? 2.3

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Regulations were more demanding than French regulations?

did have a concern at the time that UK Building

A. At some stage I must have consulted possibly

products were, to be honest. No, I can't remember that. 44

A. I can't remember that, no. I'm not sure what two

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2.5

1 Q. A little bit earlier in your answers, you said that you 2 think you were trying to push this idea that the panel 3 could be assessed separately from the rest of the 4 system.

> When you say the panel as opposed to the system, can you just explain a little bit more what you mean about that difference? What was the panel, and what was the

- A. As I say, the approach the BBA adopted was to try and assess the panel on its own and whether it is suitable to be put on a system. So I think the BBA certificate actually makes it clear that the panel could be incorporated in a cladding system which would have to be designed by a consulting engineer, let's say.
- 15 Q. Yes. Now -

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- A. So anything beyond the actual fixings was not covered by 16 17 the certificate . It's probably a much safer approach 18 than the -- covering the whole system.
- 19 Q. When you say "to try and assess the panel on its own", 20 I just want to be as clear as I can here, do you mean 2.1 the raw panel before it's fabricated into a fixing 22 system, rivet or cassette, or do you mean the fabricated 2.3 panel?
- 2.4 A. The actual panel itself would have certain physical properties which should be used to design the fabricated

- 1 panel. Does that answer your question?
- 2 Q. Not really.

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- When you're drawing this distinction between the panel and the system, I understand what you mean by a system, but when you say panel, do you mean the panel before it's fabricated for fixing as rivet or cassette, or the panel as fabricated for rivet or cassette?
- 8 A. No, it would be just the panel as a material.
- 9 Q. Right.
- 10 Now, when we come back, then, to this document, 11 "This way a cross connection can be put together", what 12 did that mean, do you think, or do you remember?
- 13 A. Sorry, which paragraph is that?
- 14 Q. It's the paragraph in the middle of the screen, which 15 says:
  - "I have suggested that it could be better to validate the material RB rather than the whole system. This way a cross connection can be put together."
- 19 What was the cross-connection?
- A. I think that must have referred to the two systems and 2.0 21 the cross-connection would be the fact that it's just 2.2 the panel being assessed. I'm guessing that's what this 23
- 24 Q. Right.
- 2.5 A. The idea being is to stay away from the CSTB approach,

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1 which was covering the two types of system, and 2 concentrate on the composite panel material itself.

3 Q. I see

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So when this says "the material RB rather than the whole system", your understanding or your recollection was that this was a suggestion relating to the raw

- 8 A. That's correct.
- 9 Q.  $\,\,--$  rather than the fabricated panel  $\,\,--$
- 10 A. That's correct.
- 11 Q. -- as opposed to --
- 12 A. Yes
- 13

14 Now, just a question going back to the assessment 15 specification which we saw earlier, which defined the 16 scope as being the system, and you said: well, that 17 could change. Would it be normal for such a change to 18 be made, or would it be exceptional?

- 19 A. It's not very often we came across something like this, 20 and to the best of my recollection, this is probably the 21 first one I've ever come across. Normally products or
- 22 systems are quite straightforward, but this was slightly
- 23 different.
- 2.4 You say it was the first one you'd ever come across.
- 2.5 Did that raise any suspicions in your mind about what

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- 1 Arconic was trying to do?
- 2 A. No, I think, as I say, the BBA approach was that it was 3 much better to assess a product than the system.
- Q. Before we leave this document, two things.

First of all, you can see that here it says "I have suggested"  $--\,$  and that's an Arconic person has suggested -- "that it could be better to validate the material RB rather than the whole system"; you said earlier that it was you or the BBA who was pushing the idea that the panel could be assessed. Can you remember whose idea it was to have the panel, as you define it,

- assessed as opposed to the system? 13 A. I can't remember who it was who originated this, but
- 14 I think the BBA policy was to -- somebody decided that
- 15 it's much safer to approve a product than a system.
- 16 because control over a system is a lot more difficult
- 17 than control over the quality of a product, of a panel
- 18 for instance.
- 19 Q. Did your understanding that the BBA was only certifying 2.0 the raw panel, as opposed to the fixing system, rivet or
- 21 cassette, ever change between the date of this meeting.
- 2.2 November 2006, and the date of the issue of the
- 23 certificate in January 2008?
- 2.4 No. As far as I know, we were assessing the panel and 25 its suitability for inclusion in a cladding system.

Q. Can we then go to the bottom of the screen and the the CSTB data for some of the aspects of the assessment? conclusion according to this meeting note. It says: 2 A. That would be my guess, and Bob Keyse would have agreed "Very positive meeting and hard tactics may have 3 to that, I guess MR MILLETT: Mr Chairman, is that a convenient moment? helped our situation. 4 SIR MARTIN MOORE-BICK: Yes, I think we've run rather long, "RB proposal will be lower. 5 "Prepared to work with the CSTB data. 6 but that will do, yes. "AAP-M [Arconic] do need BBA for UK market." 7 MR MILLETT: Mr Chairman, I'm sorry about that, you're quite Can you help us with what is meant there by "hard 8 SIR MARTIN MOORE—BICK: Mr Gregorian, it's time we had 9 10 Let me ask the question this way: did you detect a break. I'm sure you'd like one. that Arconic were driving a hard bargain with you? 11 We will stop now until 11.35, please. THE WITNESS: Okay, thank you. 12 A. No. I can't remember the details of this meeting at 12 13 SIR MARTIN MOORE-BICK: I must ask you, please, while we're Q. Right. 14 on the break, not to talk to anyone about your evidence A. -- obviously, I mean, marketing were involved in this, 15 or anything relating to it. All right? THE WITNESS: No problem. and it must have emanated from marketing. 16 SIR MARTIN MOORE-BICK: Thank you very much. We will see 17 Before I leave this note, can I just correct one 18 you a bit later then. Thank you. thing. I said that CS stood for Claude Schmidt; 19 THE WITNESS: Thank you. in fact, it stands for Colin Southgate, just to correct 20 (11.21 am) that for the record. 21 (A short break) Do you remember that after this meeting Bob Keyse 2.2 (11.37 am) SIR MARTIN MOORE-BICK: Welcome back, everyone. We're going 2.3 told you that you could reduce the technical time on the 2.4 to continue hearing from Mr Gregorian. A. I must — that must have happened, I can't remember. 2.5 I can see you there, Mr Gregorian. Can you see me 51 Q. Let's look at a document,  $\{BBA00008042/623\},$  that's the 1 and hear me all right? THE WITNESS: Yes. technical file. This is an email chain between you and 2 Bob Keyse at around this time. If we see the bottom of 3 SIR MARTIN MOORE-BICK: Good. Thank you very much.

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- the screen, there is an email from you to Bob Keyse,
- 5 2 November.
- 6 A. Yeah.

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- 7 Q. You confirm to him that the technical time can be 8 reduced to 120 hours. Do you remember that?
- 9 A. I can't remember it, but that's what I must have said. 10 The reason for that being a different approach to the
- 11 assessment, and the -- but the fact that the avis
- 12 technique would provide all the information we need.
- 13 Q. Yes
- 14 Do you remember that -- well, if we go to the top of 15 the page, we will see it. The top of the page, second 16 email down, the new cost was, as you can see, £18,015. So that was a reduced cost, wasn't it?
- 17 18 A. I suppose, yes. Yes.
- 19 Q. Yes
- 2.0 The cost reduction that was agreed and the reduction 21 in technical hours that was agreed, was that as a result 2.2 of the meeting on 2 November 2006 --
- 23 A. It must have been, yes. I can't remember. It must have 24
- 2.5 Q. Right. Was that reduction made because you could use

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If you're ready, Mr Millett, we'll carry on.

MR MILLETT: Yes, Mr Chairman, thank you. 5

6 Can we please go back to the note of the meeting at 7 Watford on 2 November 2006 at {MET00053158\_P14/114}.

I showed you this note before.

If we can just go to the top of the page, please, on the screen -- and I showed you this when we first looked at this note -- it says that one of the people present was John Albon.

Do you recall whether Mr Albon was present 13 throughout the entire meeting which you attended?

14 15

A. I can't remember, no. 16 Q. Specifically, if we could go down, please, to page 115

 $\{\mbox{MET00053158\_P14}/\mbox{115}\},$  the next page, you can see that 17

18 there's meeting B which we've just been examining in

19 detail; can you confirm, do you know or do you remember

whether Mr Albon was present for meeting B?

2.1 A. I can't remember, no.

2.2 Q. Moving forward in time, there was a further meeting with

23 Arconic on 7 February 2007. That's in the same document

2.4 run at page 131 {MET00053158\_P14/131}, where we will

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2.5 find, again, an Arconic internal visit report of

2.0

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1 7 February 2007. Now, again, this is not a document 2 that you are likely to have seen before. 2  $^{\prime\prime}-$  confirm the assessment specification (which 3 You can see that the date of the visit in the title 3 product to be certified - also FR?) ..." block at the top is, as I say, 7 February 2007, and in 4 4 Now, do I take it that you have no independent 5 the header you can see that it was a visit to the BBA at 5 recollection of this meeting? Garston in Watford, and you can see underneath the line A. I can't remember this meeting. 6 6 7 who the people attending were. You've got 7 Q. No, all right. Let's see how we go with the document. Colin Southgate and Rich, and Scheidecker as well, and 8 Looking at that second paragraph I have just read 8 9 then on the other side you have you, Hamo Gregorian, and 9 out to you, where it says "The BBA agrees to make the 10 10 also Bob Kevse. certification on the product without to be linked to 11 Do you remember this meeting? 11 a specific system", did that mean, do you remember at 12 12 A. No. I don't. all, that you agreed to certify the panel as the product 13 Q. If we look under the heading "Reynobond", please, at the 13 regardless of what fixing system was used to put it on second paragraph down, under that heading it says: 14 14 15 "The need of the BBA certification is always more 15 A. That's right. I must have discussed it with the 16 16 and more important " marketing people and most probably with Brian Haynes as 17 That's the first paragraph there. 17 18 They say at the end of that paragraph: 18 Q. Now, at this time --19 "Alucobond is the only ACM supplier with this 19 A. That was the approach that we would normally take in 2.0 approval at the time being, but it will be a real 20 a case like this. Instead of the system, we would 2.1 [ differentiation ] point for the coming month." 2.1 approve the material, and whether it was suitable for 22 Do you remember that being said or words to that 2.2 inclusion in a cladding system. 2.3 2.3 Q. Yes effect being said? 2.4 2.4 A. I think the impression I got was that was generally the Now, at this time, were you aware, do you remember, 25 case, just talking to colleagues, a BBA certification 2.5 that RB 55 could be applied in either rivet -fix or 1 was very important to any prospective or potential 1 cassette-fix? 2 certificate holder. So although I can't remember this 2 A. Again, bearing in mind it was the material we were 3 particular incident, but I think it was generally 3 assessing, it would have been suitable for both systems. accepted that the BBA certificate was very important to Q. Yes, suitable for both, certainly; but were you aware 5 all manufacturers. 5 that, to be used at all, Reynobond 55 had to be Q. Was that for commercial reasons, marketing reasons? 6 6 fabricated into a fixing system, either rivet or 7 A. I think so, yes. 7 cassette?  $\ensuremath{\mathsf{Q}}.$  If we look in the second paragraph, it says, if you read A. That's correct, yes. 8 8 9 9 Q. Indeed, do you accept that you had seen that fact from with me: 10 "The BBA agrees to make the certification on the 10 the CSTB avis technique approvals that were on the file 11 product without to be linked to a specific system. 11 for the 2006 application? 12 "Possible fixing system will be simply [mentioned] 12 A. Yes 13 in the certification . 13 Q. Did you realise that in fact the panel itself in its raw "It means we will have only 1 approval for all our 14 14 form was unusable unless it was fabricated? 15 application, instead to make one approval per system 15 A. Well, the fact that the material was suitable for 16 "If people will ask for more details we will use the 16 fabrication, we would consider, we would make sure that 17 17 it could be fabricated for installation in the cladding CSTB specific approvals. 18 "[ Initially their] quotation was on 24.000£ but 18 system. 19 after [negotiation], CSO obtained to have it for 19 Q. That wasn't quite my question. Let me try it again. 2.0 16.500£. 2.0 Were you aware, did you realise, that the panel 21 21 itself in its raw form couldn't be used at all unless it

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2.4

2.5

Q. Yes.

And then if you look at the bottom of the action 54

sent our technical [ literature ] ... "

"- sent our french building approvals in english ...

"- sent the documents of our CSTBat approval ...

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was fabricated into one or other of those two fixing

A. You mean at this stage?

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2.4

- 1 A. That was the whole purpose of the assessment, to make 2 sure that it could be, based on the avis technique and 3 the CSTB data, that it could be fabricated.
- 4 Q. When you say it could be fabricated, are you saying that
- 5 the purpose of the certification by the BBA was to cover the fabricated product, fabricated as a rivet -fix or 6
- 7
- A. The BBA certificate would cover the suitability of the 8 9 material for fabrication which would be used in
- 10 a cladding system.
- 11 Q. Right.
- A. That is the whole purpose of the BBA certificate, to 12 13 make sure whether that material was suitable to be fabricated and put in a cladding system. 14
- 15
- 16 Can we agree that the BBA's purpose was to certify 17 the panel, whether it was used in a rivet system or 18 a cassette system?
- 19 A. That's correct, ves.
- Q. Why did the BBA agree to do that? 20
- 21 A. It's ... it's a much safer way of certification than --
- 2.2 and obviously cheaper, in this case it's a simpler
- assessment. So I think it's appropriate to do that, and 2.3 2.4 that was the BBA approach. If you include the cladding
- 25 system right back to the brickwork, for instance,

- 1 there's too many unknowns which you have to take care
- 2 of, and we tried to steer away from that.
- 3 Q. Just to be clear again -- I want to make sure that we are not at cross-purposes-- there are three concepts:
- 5 there is what I would call the raw panel, ignoring the
- fixing, ignoring the fabrication into a fixing; there is 6
- 7 the fabricated panel, which is fabricated for
- a particular fixing, rivet or cassette; and there is the 8 9 system into which you put the fabricated panel. Do you
- 10 understand what I mean by those three separate concepts?
- 11
- 12 Q. So my question is whether the BBA was agreeing to 13 certify the raw panel regardless of whether it was
- 14 fabricated into a rivet or cassette?
- 15 A. The BBA assessment was to make sure that the raw panel
- 16 material was suitable. Whether it be rivet-fix or
- cassette-fix, that was immaterial as far as the 17
- 18 BBA certificate was concerned. We just concentrated on
- 19 the suitability of this material to be fabricated and 2.0
- put in a cladding system.
- 2.1 Q. Did you have any thoughts at the time about what
- 2.2 Arconic's rationale for having you certify the raw
- 23 panel, as I would call it, was?
- 2.4 A. To my recollection, there was no objection to that, but

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25 they had a different approach to assessment of these

- panels to what BBA did.
- 2 Q. What was their approach?
- 3 A. Their approach was to approve each cladding system on
- 4 its own, rivet and ... as far as I remember, they would
- 5 approve the whole system, cladding system, riveted or 6 cassette.
- 7 Q. What was the purpose of simply mentioning the possible
- 8 fixing systems in the certification if all that you were 9
  - certifying was the raw panel?
- 10 A. The drawings that were included were just to draw to
  - the -- draw attention to the fact that the panels -- the
- 12 main use of the panels was to be included in a cladding
- 13
- 14 Q. Why was that relevant to your certificate?
- 15 A. Well, as I say, the intention was to make sure it was
- 16 suitable, the product was suitable to be included in
- 17 a cladding system. But I think we make it clear in
- 18 the -- well, the BBA made it clear that it's the panel
- 19 that's the object of the assessment.
- 20 Q. We'll come back to this topic later when we look at the 2.1
- certificate itself, Mr Gregorian.
- 22 Can I ask you whether you remember any discussion of
- 2.3 why they wanted approval for both fixing types?
- 2.4 A. Sorry, why CSTB wanted ...?
- 25 Q. Yes -- no, why the client, Arconic, wanted it.

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- A. I guess that's where the -- that's in compliance with 1
- 2. the avis technique, that's --
- 3 Q. I see.

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- A. That's probably why -- you know, they had the avis
- technique before the BBA certificate, so I suppose 5
- that's why they were asking for that. 6
- 7 Q. When you look at the paragraph that we have been looking
  - at, you see four lines down, if we could have the
- 9 document back on the screen, please
- 10 {MET00053158\_P14/131}, it says, can you see, four lines
- 11 down in that paragraph:
- 12 "If people will ask for more details we will use the
- 13 CSTB specific approvals."
- 14 What did you understand, doing the best you can with
- 15 your recollection, what CSTB specific approvals were?
- 16 A. Sorry, I can't quite locate the line you were referring
- 17
- 18 Q. Okay. It's under the big "Reynobond" title, second
- 19 paragraph or second block of text under that, and four
- 2.0 lines down, it says:
- 21 "If people will ask for more details we will use the
- 2.2 CSTB specific approvals."
- Do you remember what those CSTB specific approvals 23
- 2.4 were?
- 25 A. I can't remember, no.

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- 1 Q. Specifically, what I'm really trying to get at was 2 whether that was a reference to the avis technique 3 approvals which didn't deal with fire, so far as we can see, or whether that's a reference to CSTB fire tests. 4
- 5 A. Yes, I think the intention there is to try and use the avis technique as much as possible, for our purposes, 6 7 for our assessment.
- 8 Q. Yes
- 9 Looking at the line above, it says:
- 10 "It means we will have only 1 approval for all our 11 application, instead to make one approval per system."
- 12 Do vou know or can vou remember Arconic's rationale 13 for only wanting one approval instead of one approval 14 per system?
- 15 A. I can't -- no, I can't comment on that, to be honest.
- 16 Q. Can I suggest something to you and see if you can 17 comment: was it because it would be cheaper for Arconic
- 18 to have one approval for all the applications as opposed
- 19 20 A. I'm guessing, yes, that might have been one of the 2.1 considerations.
- 2.2 Q. Right. But you don't know, you're guessing; is that 2.3 your evidence?
- 2.4 A. Me, no, I can't comment on that.
- 25 Q. Fair enough.

- 1 Now, we saw from the 2006 file, as I mentioned 2 a moment ago, that the BBA had on its file the CSTB 3 avis technique approvals, didn't it?
- 4 A. Yes
- 5  $\ensuremath{\mathsf{Q}}.$  And do you remember I showed you these, there were two separate ones: one for cassette and one for rivet; yes? 6
- 7 A. Yeah.
- 8 Q. Why wouldn't it have made sense for the BBA to make its 9 own assessment on each fabricated system, in other words 10 a BBA assessment on rivet and a BBA assessment on 11 cassette, in the same way that the CSTB have done?
- 12 A. As I say, we -- BBA philosophy was, I think, from 13 engineering standpoint, the probably more sensible, 14 because the variables in a system were much more 15 complicated than just approving a panel for suitability .
- 16 Q. Right.
- 17 A. Yeah. So we adopted that approach for assessment of 18 this particular product.
- 19 Q. Could the BBA have insisted on assessing cassette and rivet separately in the same way that the CSTB had done 2.0 21 under the avis technique approach?
- 2.2 A. No, as I say, I thought, from a quality control point of 23 view, it was a much more sensible approach to assess the 2.4 product rather than the system.
- 25 Q. Right.

62

- 1 Who would have made the final decision to assess
  - just the product, as you call it, or the raw panel, as
  - I call it, as opposed to the fabricated version?
- 4 A. I can't remember. This must have been discussed amongst 5 several parties
- Q. Now, we move forward a month to March 2007. 6
  - After this meeting, do you remember that Arconic
- 8 sent another application form at the end of
- February 2007? Do you remember that? 10 A. Sorry, could you repeat?
- 11 Q. Yes. Do you remember that after this meeting, Arconic
- 12 sent another application form for a contract?
- 13 A. I can't remember that.
- 14 Q. Let's skip ahead. Can we go to page 1 of the technical
- 15 file {BBA00008042/1}. This is the certificate contract,
- 16 as you can see there, and there is a reference on it, if
- 17 you look at the top right - hand corner --
- 18 A. Yeah
- 19 Q. -- S3/41014, and it still bears the date 22 August 2006.
- 20 Can you just confirm that that in fact was the
- 2.1 original date of the 2006 application, and it just
- 22 hasn't been changed in this document?
- 2.3 A. Yes
- 2.4 Now, we can see that there is a price, if you look
- 2.5 a little bit further down the page, under item V, "The

- 1 Fee". It's £16.527, and no VAT.
- If we turn a little bit up the screen to  $\ensuremath{\mathsf{II}}$  , you can 2 3 see "The Subject":
- 4 "Proprietary name: Reynobond - Architecture."
- 5 Somebody has written "Architecture" in there in
- 6 manuscript, and then underneath that:
- 7 "Nature of product or process:
  - Aluminium/polyethylene composite wall cladding ..."
- 9 "System" was typed, but then that's been deleted in 10 manuscript and somebody has written in hand, "panels".
- 11 Do you see that?
- 12 A. Yes

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- 13 Q. Do you know who wrote that?
- 14 A. I can't remember who wrote that, but obviously at some
- 15 stage we had decided that this is a better approach and
- 16 the contract was changed accordingly.
- 17 Q. I see. Does that change reflect the agreement or
- 18 arrangement arrived at in Watford in the meeting earlier
- 19 in February 2007 that we have been discussing?
- 2.0 A. It must have been as a result of that, I suppose,
- 21 I can't comment on that.
- 2.2 Q. Right.
- 23 Now, we know, as I've shown you, the certificate 2.4 that was eventually issued in January 2008. I want to
- 25 look a little bit more closely at the assessment that

1 led to that certificate . 2 Can we turn on in the technical file, please, to 3 page 11 {BBA00008042/11}. This is the assessment 4 programme sheet. If one looks at the top left -hand side 5 of the screen, you can see that, and the product name there is "Reynobond 55 Wall Cladding System", as you can 6 7 see in the middle of the page, and again, it still bears the date of 22 August 2006. 8 9

Do you recognise this document?

10 A. Yes. I do.

11 Q. Did you prepare it?

12 A. I think so, ves.

13 Q. Looking at the date of this document, and I know it says August 2006, would you have prepared it for the initial 14 contract pricing? 15

A. Er ... yes, I think so, yes. 16

17 Q. Right.

18 Can we just be clear, do you think you might have 19 prepared this at the same time as preparing the offer 2.0 for the contract in 2006 and then just not updated it 2.1 when it came to finalising the contract in 2007?

2.2 A. Yes, I suppose —— yes, yes, I ——

 $\ensuremath{\mathsf{Q}}.\ \ \ensuremath{\mathsf{I}}\ \mbox{don't}$  want to lead you into error by suggesting that, 2.3 2.4 but we're trying to work out the dates.

2.5 A. Yes, it clearly says "cladding system", but obviously

1 the contract has been changed, and so has the pricing, 2 and the number of hours I think must have been changed 3 as well accordingly.

Q. Yes. I see.

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Can we then just be clear whether, even though there was that change from system to panels that we've discussed, you would still have followed the assessment programme set out in this document when doing your assessment for the certificate that was ultimately

11 A. As soon as it was established that we were assessing the 12 cladding panels, I would assess the product accordingly.

13 Q. Right.

Let's look at item 4.1, about a third of the way down the screen, "Safety". Then under "Assessment/test work", it says:

17 "Strength and stability:

"Behaviour under wind loads.

19 "Resistance to hard and soft body impacts.

"Behaviour under thermal actions.

21

2.2 "Behaviour under fire."

23 Do you see that?

24 A Yes

2.5 Q. If you look at the columns to the right of that, we can

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1 see that the assessment for strength and stability is 2 25 hours, "Assess CSTB data". Do you see that?

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Q. But for fire it's five hours, "Consult BMH". 4

> Why would more hours be needed to be devoted to strength and stability rather than fire?

7 A. That's my area of expertise generally, and there's a lot 8 of details to look at, so ... bearing in mind this is 9 an estimate of hours, it's not meant to be -- there's no

10 way you can estimate these things accurately. And the

11 CSTB data, again, that presents a challenge as well. So

12 I think 25 hours was sort of sensible.

13 Q. Why would more hours be given to strength and stability 14

15 A. There's quite a few things you need to check when it

comes to -- I mean, I would -- by calculation or 16

17 analysis. I would have to confirm that the product was 18 good enough for wind load and so on in the UK.

19 Q. Would the same degree of care and analysis not be

20 required to confirm whether the product was good enough

21 for fire in the UK?

22 A. With fire, it's just a matter of looking at test data

23 and checking against compliance with our

2.4 Building Regulations, so there's no -- as far as I know.

2.5 there's no analytical method to confirm one way or the

1 other.

Q. But you do, I think, accept that you would need to look 2.

3 at the test data for fire?

A. Yes, yes, of course, yes.

5 Q. Who would decide how many hours would be required for 6

each of these safety elements?

7 A. I think I would probably consult with my section head,

8 and bearing in mind he had a lot more experience than I, 9 we would come up with -- you can see the hours go in

10 steps of five, so it's not meant to be very accurate at

11 all, it's just an estimate.

12 Q. In the far right column, we can see the steps, and for

strength and stability it says "Assess CSTB data". Is 13

14 that referring to the CSTB avis technique documents we

15 saw on the technical file?

16 A. Yes, some information would have come from avis

17

18 Q. Yes, I see. And for fire, as we've seen, it says

19 "Consult BMH". Is that Brian Haynes?

2.0 A. Yes

21 Q. Why did it say consult Brian Havnes?

2.2 A. Well, because of the issue regarding the perhaps lack of

23 information that we had in the CSTB documents.

24 Q. Right.

2.5 A. Or, rather, basically because I wasn't sure how to

- assess fire aspects, I had to consult Brian Haynes.
- 2 Q. What precise question or query led you to think that you 3 needed Brian Haynes' input?
- 4 A. As I say, Brian was the —— was my main port of call with
- regard to assessment of fire, and just to confirm that 5
- the material with the appropriate coating was suitable, 6
- 7 so I had to confirm that with Brian. There was no way
- 8 I could assess it myself, so I had to consult Brian. 9 Q. Did you know yourself what test data or classifications
- 10 you were looking for in order to be able to assess this
- 11 product for fire safety?
- 12 A. No.
- 13 Q. I see. So would it follow from that that, even in
- respect of that question, you would have to consult 14
- 15 Brian Havnes?
- 16 A. Exactly, ves.
- Q. I see. Did you consult Brian Haynes as a matter of 17
- 18 fact?
- 19 A. I did. I referred the matter to Brian, who then
- 20 consulted BRE for their advice.
- 2.1 Q. Do you know what he did? Do you know what Brian Haynes
- did? 2.2
- 2.3 A. I remember — strangely enough, I remember the
- 2.4 conversation he had with Sarah Colwell. Because
- 25 I didn't get a response from Sarah in writing, I asked

- 1 Brian to contact her and, as I say, because of his long
- 2 association with BRE, he was advised that -- as to the
- 3 classification of this material, and we included the
- appropriate statement in the certificate .
- Q. Were you party to that conversation?
- A. I -- actually, yes, I was -- strangely enough, I do 6
- 7 remember being in the room while he was talking to
- 8 Sarah.
- 9 Q. So was there a meeting between --
- 10 A. It wasn't a meeting, he was talking on the telephone.
- 11 I remember that. And soon after that, he signed off the 12
- 13 Q. Right.
- Can I just see if we can explore this a little bit 14
- 15 more.
- 16 First of all, when was the conversation between
- 17 Brian Haynes and Sarah Colwell?
- 18 A. After I must have consulted -- talked to -- after
- 19 I talked to Brian, I think he -- and I mentioned the
- 2.0 fact that I'm not getting a response from BRE, he
- 21 immediately got on the phone and spoke to Sarah. That's
- 2.2 my recollection.
- 23 Q. So, in terms of timing, you said earlier that it was 2.4
- soon after the conversation that he signed off the 25 certificate; that was January 2008. By reference to
  - 70

- that, when do you think this conversation took place?
- 2 A. I can't remember.
- 3 Q. Right.
- 4 Now, you say you were in the same room as
- 5 Brian Haynes and he telephoned Sarah Colwell; is that
- right? 6
- 7 A. That's correct, yes.
- Q. Could you hear both sides of the conversation or only 8 9 Brian Haynes' side?
- 10 A. No, just Brian.
- 11 Q. I see.
- 12 A. It wasn't a long conversation, but Brian was advised
- 13 that -- as to the suitability of the -- this particular
- 14 material for fire performance
- 15 Q. Right.
- Do you know whether Sarah Colwell had in front of 16
- 17 her the draft certificate or any test data relating to
- 18 fire for Reynobond 55?
- A. No, I wouldn't know that. Obviously we must have 19
- 20 supplied some information with regard to the product.
- 2.1 SIR MARTIN MOORE-BICK: Forgive my interrupting, Mr Millett.
- 22 Mr Gregorian, just help me with this: you said
- 23 a moment ago that you couldn't get any response from
- 2.4 BRE. Do you remember saving that?
- 25

- 1 SIR MARTIN MOORE-BICK: I took it from that that you had
- 2 contacted BRE yourself to ask for their assistance.
- 3 A. That's correct, yes
- SIR MARTIN MOORE-BICK: Would I be right in assuming that
- 5 you sent some form of information to the BRE in order to
- obtain their assistance? 6
- 7 A. Exactly, yes.
- SIR MARTIN MOORE—BICK: Can you tell us what it was, please? 8
- 9 A. Documents, appropriate documents, maybe test data and so
- 10 on. Anything to do with -- anything that was necessary
- 11 to make a fire assessment. I can't tell you exactly
- 12 what it was, but it was all the information that Sarah
- 13 would need to make an assessment
- SIR MARTIN MOORE-BICK: Right. Well, some of that 14
- 15 information was presumably test reports, was it?
- 16 A. Yes, I'm sure, yes, there must have been some test
- 17
- 18 SIR MARTIN MOORE-BICK: Right. Can you remember in what
- 19 form you sent them or how you sent them?
- 2.0 A. Most probably by email.
- 2.1 SIR MARTIN MOORE-BICK: Right. Thank you very much.
- 2.2 Yes, Mr Millett, carry on. Thank you.
- 23 MR MILLETT: Yes
- 24 A. Thank you.
- 2.5 Q. We are going to come to some of that later on, I think,

- 1 when we explore the precise documents in a bit of 2 detail.
- 3 Can I just understand this conversation. Did 4 Mr Haynes report to you what Sarah Colwell had told him 5 after the conversation had ended?
- A. He didn't, he just ... basically he just approved or 6 7 rather checked and okayed the particular statement 8 relating to fire.
- 9 Q. Yes. I see.
- 10 A. I have no details as to what conversation went on.
- 11 I have no idea. All I know is that I distinctly 12 remember him talking to Sarah.
- 13 Q. And to be clear, am I right in thinking that the data in 14 the CSTB avis technique documents were not considered at 15 all to the best of your knowledge, either by Sarah Colwell or Brian Haynes, in relation to any claim 16 17 about the fire performance of Reynobond 55?
- 18 A. I think it would be safe to assume that there was no --19 not enough information in the avis technique, but that's 20 probably why we had to check with fire experts.
- 2.1 Q. Yes
- 22 Now, just covering this off, can we go to your witness statement, please, at page 4  $\{BBA00011096/4\}$ . 2.3 2.4 I just want to look at something you say in your 25 statement at paragraph 5(d). You say, in response to

73

- 1 the question:
- 2 "In particular, what consideration the BBA gave to:
- 3 "i. the fire performance information therein  $\dots$ "
- Your response is at paragraph 20 and you say:
  - "Fire safety is a specialist area. It would have been normal for an internal or external fire expert to confirm compliance with UK Building Regulations. The statement in the certificate would have been based on the advice given by the fire expert."
- 10 Am I right in thinking that, on this occasion, in 11 relation to this certificate, ultimately that was 12 Sarah Colwell?
- A Frm --13

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- 14 Q. That fire expert was Sarah Colwell?
- A. Yes, I think it's -- yes, yes. Yes. Through Brian, our 15 16 assessment of fire would have come from a fire expert, 17 and in this case it was Sarah, Sarah Colwell.
- 18 Q. Yes. Now, you say "Through Brian"; did Brian Haynes 19 himself perform any assessment on the fire safety of 2.0 Reynobond 55 with Sarah Colwell's help?
- 21 A. No. I think he must have been advised by Sarah, based on 2.2 what Sarah had in front of her as regards test data and 23
- 2.4 Q. You say that the statement in the certificate would have 25 been based on the advice given by the fire expert; did

- 1 Brian Haynes actually word those statements for the
  - certificate, or did the wording come from Sarah Colwell?
- 3 A. No, the wording didn't come from Sarah Colwell. We
- 4 just -- we put the wording in, and if the classification
- was in accordance with what the fire expert had advised, 5 Brian would okay it, he would sign it off. 6
- 7 Q. Do you remember whether Brian Haynes checked his wording
- 8 with Sarah Colwell after he had put it in the 9
- certificate but before it was signed off? 10 A. Not to my knowledge. I mean, as I say, all Brian would
- 11 want to know was whether this particular material
- 12 classification is what the statement says.
- 13 Q. I see. So just to be as clear as we can, on
- 14 fire safety, can we take it that the precise language of
- 15 the wording of the certificate was Brian Haynes', based
- 16 on what he had understood the advice from Sarah Colwell
- 17 was?

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- 18 A. The statement wasn't Brian Haynes' in entirety.
- 19 Q. No. in relation to --
- 20 A. These are -- yeah. These statements are quite standard
  - format in BBA certificates, so where a classification
- 22 was involved, he would most probably check that the
- 23 classification was compliant with Building Regulations.
- 2.4 but the wording doesn't come from -- didn't come from
- 2.5

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- 1 Q. We will come to the certificate shortly . I'm just 2 trying to get an understanding of the role Sarah Colwell
- 3 played in the precise wording of the certificate .
- In relation to matters of fire safety, was it
- 5 Brian Haynes who actually drafted the language, based on
  - what he understood from Sarah Colwell's advice?
- 7 A. The draft would most probably have come from a similar
- 8 certificate, and, as I say, there's a standard format
- 9 that we use. Brian would have checked that the
- 10 statement was correct, and he would have ... I was most
- 11 probably with him when he actually signed off the
- 12 certificate
- Q. Yes. 13
- 14 Now, were you responsible for drafting the technical 15 content other than fire and selecting the diagrams and
- 16 images in the certificate?
- 17 A. Yes, I normally would decide what goes on the
- 18 certificate .
- 19 Q. Did the BBA have stock phrases or generic statements 2.0
  - that could be slotted in, used from other certificates?
- 21 A. Yes, yes, yes, that was common procedure.
- 2.2 Q. Common procedure.
- 23 Who decides whether it's appropriate to copy across phrases from other certificates? Would that be you or 2.4
  - would it be Brian Haynes when it comes to fire safety?

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- A. No, I would draft a certificate based on a similar product, for instance, just to make sure that well, I would try and make sure they were relevant, and then circulate it within the different sections.

  O. Well, let's turn to the certificate in detail now. Can
  - Q. Well, let's turn to the certificate in detail now. Can we go to {BBA00000047}. I showed you this earlier on in your examination but we now need to look at the detail.

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On the first page, you can see that there is a dark blue header as I showed you, "Product Sheet 1-Reynobond Architecture Wall Cladding Panels", and then you can see underneath "Product scope and summary of certificate", it says:

"This Certificate of Confirmation relates to Reynobond Architecture Wall Cladding Panels, aluminium/polyethylene composite panels used to provide a decorative/protective facade over the external walls of buildings."

Then there's an image on that right—hand side.
First question is: was that title, "Reynobond
Architecture Wall Cladding Panels", chosen to indicate
that it was certifying the product, in other words the
panels?

A. It was just — the picture would be supplied by the
 certificate holder, and the intention there is to make
 sure that the cladding material could be used in

77

- a cladding system such as this. There's no other way that you can depict a panel. A panel wouldn't make any sense. So unless you put a picture in there, you wouldn't know what the function of it was.
- Q. We'll come back to this page shortly, but can we go to page 3 {BBA0000047/3}, please. At the top there you will see, in the dark blue band, the word "General", and underneath it you see it says this:

"This Certificate relates to Reynobond Architecture Wall Cladding Panels comprising an aluminium/polyethylene composite material, fixed to an aluminium sub—frame, to provide a decorative/protective rainscreen façade over the external walls of buildings."

As we saw on the front.

Then it says:

"The sub—frame and its attachment to the substrate wall are outside the scope of this Certificate as are other miscellaneous construction details."

Does that mean the metal rails that the cladding is fixed to?

- A. That's correct, yes. It's not covered by thecertificate. That's correct.
- Q. Yes. What about other elements of the façade build—up,
   such as the insulation and the cavity barriers, they're

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25 presumably --

1 A. No, they're not covered at all.

2 Q. -- outside -- no

Now, if you go down to the next blue header

"Technical Specification", you can see "Description",
and underneath that it says:

"1.1. The Reynobond Architecture Wall Cladding Panels comprise two 0.5 mm thick aluminium alloy sheets ..."

Then there is a specification there:

"... bonded to either side of a core of low—density polyethylene (LDPE). The panels are available either plain edged (riveted system) or flanged (cassette system) to suit architectural requirements (see Figure 1). A Duragloss or PVDF coating available in various colours protects the exposed face. A polyester primer protects the unexposed face. The products are also available in a fire—retardant grade (FR)."

If we skip down to subsection 1.4, it says this, if you just read with me:

"Plain edged panels are riveted directly to the aluminium sub—frame. Flanged panels are hung from the sub—frame using T—slots fitting onto pintle on the sub—frame. Flange widths can vary to suit the design requirements (see Figure 1)."

There is a little footnote, as you can see,

79

underneath that which relates to the word "subframe",
and again it says, "Not covered by this Certificate".

Now, the figure 1 that's referred to there is apparent if you look a little bit lower down the same page. If we can scroll down to figure 1 and have that fully on the screen, you can see that it says:

"Figure 1. Reynobond Architecture panels and typical fixing systems."

There within figure 1 you can see two systems: you've got on the left riveted system and on the right cassette system.

Do you remember where those diagrams came from?

- $13\,$   $\,$  A. They must have come from the CSTB documents.
- 14 Q. So not from Arconic; is that right?
- A. They might have come from Arconic, but normally I would
   imagine CSTB would include some details of this nature
   in their certificates .
- 18 Q. Do you recall how figure 1 came to be on this 19 certificate?
- A. It was considered appropriate to include these just to
   show what can be done with this cladding material —
   with this panel material.
- Q. Was it you who decided that figure 1 should be inserted in this certificate?
- $25\,$   $\,$  A. We -- it is quite normal, accepted practice within BBA

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- 1 to include some details, construction details of this 2 nature.
- 3 Q. It's a bit more, isn't it, than showing what can be done 4 with this cladding material; isn't the certificate
- 5 telling the reader that the panels, whether riveted or
- cassette, are covered by the certificate? 6
- A. I think we do make it clear that any substructure would
- 8 not be covered, or insulation or any fixings would not
- 9 be covered. This is just to show how the material could 10 be used in a cladding system.
- 11  $\ensuremath{\mathsf{Q}}.$  Well, you say that. Let's just go back to 1.4. You can
- 12 see the footnote 1 there, "Not covered by this 13 Certificate", and that relates, doesn't it, to the
- 14 subframe, and that's consistent with the exclusion of
- 15 the metal subframe on the front of the certificate; yes?
- A Yes 16
- Q. So what this certificate is clearly excluding -- is this 17 18
- right? -- is the subframe.
- 19 A. That's correct. Anything to do with the fixing to the 20 subframe and the subframe to the brickwork,
- 2.1 substructure, is irrelevant. These are just details to
- 22 show how the material could be used in a cladding
- 2.3 system.

3

2.4 Q. Yes, anything to do with the fixing to the subframe and 25 the subframe to the brickwork, the substructure, you say

- 1 would be irrelevant. What I'm suggesting to you is not
- 2 excluded is the form of fabrication, in other words the
  - panel as fabricated in rivet and as fabricated in
- cassette is included.
- A. The dimensions of the panels would be decided by design,
- by a suitably qualified engineer. So it could be any 6
- 7 dimension, providing it satisfies resistance, for
- 8 instance, to wind load or impact loads. There are so
- 9 many structural considerations. So a structural
- 10 engineer could design this material to span between the
- 11 metal rails, for instance, depending on the wind load.
- 12 If it's -- if the wind loading -- if the design wind
- 13 load is too high, obviously the metal rails will be
- 14 closer to each other.
- 15 Q. Did you draft section 1.1 and section 1.4?
- 16 A. Sorry, I can't see 1.1.
- 17 Q. Yes, can we just scroll up, please. There, 1.1 and 1.4
- 18 are now visible on the screen, I think, Mr Gregorian,
- 19 for you.

2.0

21 this certificate?

Do you remember whether you drafted those parts of

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- 2.2 That would have been based on the contract.
- 23 Q. Right. Based on the contract? 24 A. Yes.
- 2.5 Q. But was it you, I'm asking whether --

Q. Can we go to your statement, please, at page 4

A. Yes, yes, I must have done that, yes.

- $\{BBA00011096/4\}$ , and I would like to go back to where we were, which was the question at question (d):
  - "In particular, what consideration the BBA gave to ..."
  - And you have seen (i). I would like to go to (ii).
- The question is what consideration the BBA gave to:
- "ii . the fact that CSTB issued separate certificates for cassette and for face fixed (riveted) fixings?"
- 11 Your answer there is:
- 12 "In normal operation, both types were considered
- 13 suitable for incorporation in a cladding system. For
- 14 behaviour in relation to fire, consideration would have
- 15 been by a fire expert. (see answer to 5di above)."
- 16 If we look at the bottom of the page, I just want to 17 look at question 7:
- 18 "What products did Certificate 08/4510 cover? In 19 particular, please address the variants:
- 2.0 "a. core type-standard (PE) or fire retardant (FR)."
- 21 Then over the page  $\{BBA00011096/5\}$ , looking at (b),
- 22 which is what I want to focus on:
- 23 "b. fixing method - face fixed (riveted) or
- 2.4 cassette.'
- 2.5 Your answer is, "Both."

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- 1 Looking at that answer there, can I take it from
- 2 that that, as far as you were concerned, the certificate
- 3 covered Reynobond both in its fabricated form in rivet, and in its fabricated form as cassette?
- 5 A. The certificate would cover -- the material could be
- 6
- used either as face—fixed or riveted, and both were
- 7 considered suitable. So, in other words, the material 8
- could be used to -- any of these two configurations.
- 9 Q. And the certificate covered the product in use in those 10 two situations?
- 11 A. Yes, yes.
- 12 Q. Yes. So you agree then, I think, that the reader of the
- 13 certificate would expect that any technical claim made
- 14 in the certificate would apply equally to the panel
- 15 fabricated into a cassette as to the panel fabricated
- 16 into a rivet?
- 17 A. Yes
- 18 Q. Yes. Thank you.
- 19 So can we agree that when the certificate says
- 20 "product" or uses the word "product", it means product
- 21 in both forms of fixing system, as opposed to the
- 2.2 subframe and the other fixing --
- 23 Again, the product has got certain fire resistance
- 2.4 properties which were covered. But all this is saying
- 2.5 is that both fixing methods were suitable as regards the

1 material use. 1 Q. Yes. I see. 2 Q. Yes, I understand. 2 Now, let's go to page 5 {BBA00000047/5}, please, and 3 Can we then stick with your statement and go back to 3 look in detail at section 6. I'll read to you sections 4 the question I showed you you'd answered a second or two 4 6.1 to 6.3, to start with. In fact, it's probably best to read the whole thing. Forgive me, this may take 5 ago on the previous page, please {BBA00011096/4}. 5 I read it out, but I skipped over it. Question 7(a): a moment or two, but it's important you see the whole 6 6 7 "What products did [the] Certificate ... cover? In 7 thing, I think. 8 It's under the rubric, "Behaviour in relation to 8 particular, please address the variants: 9 "a. core type - standard (PE) or fire retardant 9 fire", and it says: (FR)." 10 10 "6.1. A standard sample of the product, with 11 Your answer is at paragraph 23, if we just go to 11 a grey/green Duragloss 5000 coating, when tested for 12 that on page 5  $\{BBA00011096/5\}$  at the top. Do you see 12 reaction to fire, achieved a classification of B-s2, d013 13 in accordance with EN 13501-1:2002. A fire retardant "Samples of the products covered are described in 14 14 sample of the product, with a gold-coloured Duragloss 15 sections 6.1 and 6.2 of the Certificate." 15 finish, when tested for reaction to fire, achieved 16 Also -- let's cover these off while we can -- if you 16 a classification B-s1 d0 in accordance with 17 17 EN 13501:2002. look at (c), coating type: 18 "Duragloss (PE), PVDF (FR)." 18 "6.2. A fire retardant sample of the product, with 19 And coating colour: 19 a metallic grey PVDF finish, when tested in accordance 2.0 "Grey/green (PE), metallic grey (FR)." 2.0 with BS 476-6:1989, achieved a fire propagation index 21 So that's what you say in your statement. 21 (I) of 0 and, when tested in accordance with 22 Let's look at the statements in the certificate 22 BS 476-7:1997, achieved a Class 1 surface spread of 2.3 23 flame itself now, please. Can we go back to the certificate 2.4 {BBA00000047/2}. The blue header at the top says 2.4 "6.3. As a consequence of sections 6.1 and 6.2, the "Regulations", as we can see there, and it says: 2.5 products may be regarded as having a Class 0 surface in 85 1 "In the opinion of the BBA, Reynobond Architecture 1 relation to the Approved Document B of The Building Regulations ... and a 'low risk' material as defined in 2 Wall Cladding Panels, if used in accordance with the 2 3 provisions of this Certificate, will meet or contribute 3 ... The Building (Scotland) Regulations ... The to meeting the relevant requirements of the following unexposed side of the products may also be regarded as 5 Building Regulations." 5 having a class 0 surface. Then if you go down to the second item down, B4(1), 6 "6.4. These performances may not be achieved by 6 7 7 do you see, "External fire spread"? Can you see that? other colours of the product and the designations of 8 8 a particular colour should be confirmed by ... A. Yes. 9 Q. It says next to "Comment": 9 And then it sets out various tests in various 10 "The panels are judged to meet the Class 0 10 different subordinate jurisdictions. 11 requirements. See sections 6.1 to 6.6 of this 11 Then 6.5: 12 Certificate.' 12 "6.5. For resistance to fire, the performance of 13 13 Now, first, do you remember who drafted or a wall incorporating the product, can only be determined formulated those words, "The panels are judged to meet 14 14 by tests from a suitably accredited laboratory, and is 15 15 the Class 0 requirements"? not covered by this Certificate. 16 A. I think this was standard format of expressing 16 "6.6. Cavity barriers should be incorporated behind 17 classification of products. 17 the cladding, as required by the national Building 18 Q. Right. So is that an example of you, as it were, 18 Regulations, but should not block essential ventilation 19 cutting and pasting or copying across --19 pathways. Particular attention should be paid to 2.0 2.0 A. Yes, yes, I think so, yes. preventing the spread of fire from within a building 2.1 21 Q. So, just to be crystal clear, this isn't a form of words breaching the cladding system through window and door 2.2 that had come from Brian Haynes or perhaps suggested by 2.2 openings.' 23 23 Now, I just want to look at some of those

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statements. I've read you the entirety of section 6 so

that you have it in your mind.

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A. No, it's something that I would put forward for comment

to the appropriate department.

1 Can we start with the statement at section 6.2, Now, those are the FR tests from 2003 done under 2 please, "A fire retardant sample of the product, with 2 BS 476-6 and 7. 3 a metallic grey PVDF finish". 3 Can we now go back, please, to page 5 of the 4 Can we go to page 163 of the technical file, that's 4 BBA certificate, {BBA00000047/5}, and look again at  $\{BBA00008042/163\}$ . This is the Warringtonfire test 5 5 section 6.2. It says there -- I've read it before, I'll report number 132316, as you can see, done under part 7 6 6 just show it to you again: 7 of BS 476. If we look at the second page of that report 7 "A fire retardant sample of the product, with at page 165  $\{BBA00008042/165\}$ , you can see paragraph 3, 8 a metallic grey PVDF finish, when tested in accordance 8 9 there is a description of the test specimens there, and 9 with BS 476-6:1989, achieved a fire propagation index 10 10 (I) of 0 and, when tested in accordance with in the second paragraph it says: 11 "The product was 'Reynobond 55 FR (colour reference 11 BS 476-7:1997, achieved a Class 1 surface spread of 12 12 "RAL 9006 Metallic grev")', a composite coated aluminium flame.' 13 panel having an overall thickness of 4mm ... comprising 13 Is it right that the two tests I've just taken you 14 through quite quickly are tests of the specimen 14 a 3mm thick Fire Retardant Core ...' 15 If you skip to the next paragraph: 15 mentioned in section 6.2 of the BBA certificate? 16 "The decorative (test face) aluminium sheet was A. Again, I'm not familiar with the ... I'm guessing at 16 17 coated on the exposed face with a 5 micron thick epoxy 17 some stage the fire expert would have looked at this. 18 primer and a 20 micron thick PVDF coating." 18 but it's really -- I can't go into detail as regards the 19 If we look at the next page of this report at 19 statements. I think whatever we have said in 2.0 page 167  $\{BBA00008042/167\}$  — there are blank pages in 20 paragraph 6.2 must have been a statement of fact. 21 between, I'm afraid -- at the very bottom of page 167 2.1 Q. Yes. Now --22 you see the "Test Results and Classification", and in 22 A. So --2.3 the capitals in bold at the bottom of the page, it says 2.3 Q. Sorry, do you want to continue? I'm so sorry, I spoke 2.4 2.4 across you. Do you want to say something more? Have 25 "IN ACCORDANCE WITH THE CLASS DEFINITIONS GIVEN IN 2.5 you finished your answer? 91 BS 476: PART 7: 1997, THE SPECIMENS TESTED ARE 1 1 (Pause) CLASSIFIED AS CLASS 1."  ${\sf SIR\ MARTIN\ MOORE-BICK:\ I\ suggest\ you\ carry\ on,\ Mr\ Millett.}$ 2 2. 3 Now, if we go on to page 169 {BBA00008042/169}, this 3 MR MILLETT: Right. is the second issue of this report and it's dated Mr Gregorian, we've seen no summary reports stating 5 12 September 2003, as you can see, and if we look at the 5 that these two tests amount to a class 0 result. Do you test that goes with it, this is the part 6 test, this is 6 6 know why that is? 7 7 in the technical file , page 177  $\{BBA00008042/177\}$ . We A. No, I have no knowledge of -- as I've mentioned before, 8 8 can see that it's a Warringtonfire test report I would rely on the assessment by fire experts. 9 9 number 132317, this time under part 6 of BS 476. Q. Right. 10 If we go down to page  $179 \{BBA00008042/179\}$ , 10 Maybe you can't help with this in the light of that 11 paragraph 3, you can see again the description. It's in 11 answer, but was it your experience at the time, late 12 the same format, second paragraph: 12 2007, that there would normally be a summary report 13 "The product was 'Reynobond 55 FR (colour reference 13 which would consider the test data that I've just shown 'RAL 9006 Metallic grey') ..." 14 14 you and say whether the material met the requirements of 15 15 Et cetera, and the same decorative (inaudible), and class 0? 16 it says again it comprises a 3-millimetres thick fire 16 A. Sorry, if there's a summary report? 17 17 Q. Would it be normal for there to be, in your experience 18 So this is a test on the same product as the one we 18 at the time, a summary report saying class  $\boldsymbol{0}$  as a result 19 were just looking at but done under part 6. 19 of these tests? 2.0 A. I can't remember. I can't remember. We have the test results at page 181 2.0 21 21  $\{BBA00008042/181\}$ , and at the bottom of that page we can Q. Do you remember whether you or somebody else, anybody. 2.2 see the test results there, and there they are set out. 2.2 looked at the data from these two FR test reports and 23 For completeness, if we can go to page 183 23 decided that they met the criteria for class 0?

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Yes, as I say, a fire expert would have looked at this

document and come to this conclusion, and we would

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 $\{BBA00008042/183\}$  and see the date of issue:

12 September 2003

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- include it in the certificate as appropriate.
- 2 Q. And you would have understood, would you, at the time,
- 3 that these results together amounted to achieving
- 4 a class 0 result?
- A. I wouldn't know about that. I don't know how the 5
- assessments are done. I would just include the 6
- 7 appropriate statement.
- 8 Q. Right.
- 9 A. And make sure that the technical manager also approved 10 the statement
- 11 Q. Yes. Again, bearing in mind your last answer, at least
- 12 looking at the scheme of section 6, were you clear in
- 13 your mind at the time that section 6.2 and the results
- 14 identified in it only applied to Reynobond with an FR 15
- core and not to Reynobond with a PE core? A. That's what the statement seems to suggest, yes. 16
- 17 Q. Yes, but were you clear in your mind that that's what it 18 meant?
- 19 A. I would take this --
- 20 Q. Right.
- 2.1 A. -- as relevant to fire retardant sample of the product,
- 22 yes, that's all I can conclude. This is a statement of 2.3 fact.
- 2.4 O Yes

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25 A. That's all it is.

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- ${\sf Q}.\;\;{\sf Did}$  you know at the time -- let me ask it this way: did 1
- 2 you have any understanding at the time about whether
- 3 Reynobond 55 with a PE core had been tested under
- 4 BS 476-6 and 7?
- 5 A. I can't remember
- Q. Did you understand at the time that the statements in 6 7 paragraph 6.2 did not apply to Reynobond 55 with a PE 8
- 9 A. Again, this is a detail that I can't comment on.
- 10 Q. Let's then look at section 6.1, just above it. Again, 11 I've read this to you, but I'll just read you the

12 precise words again:

- "A standard sample of the product, with a grey/green Duragloss 5000 coating, when tested for reaction to fire, achieved a classification of B-s2, d0 in accordance with EN 13501-1:2002. A fire retardant sample of the product, with a gold-coloured Duragloss finish, when tested for reaction to fire, achieved
- 19 a classification B-s1, d0 in accordance with
- 2.0 EN 13501:2002.1 21
- Did you understand at the time, or intend by the 2.2 wording, that "standard sample" referred to Reynobond 23
- 2.4 A. No, I have no ... the details are quite alien to me, to

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25 be honest. 3 A. I would put it in this format, but the actual 4 classifications and so on don't mean very much to me.

Q. You say that; did you not draft this part of the report,

or did somebody else draft this part of the certificate?

- Q. Did vou not understand that when you were writing 5
- a standard sample of the product, even as a formula from 6
- 7 another document, you were referring to the non-FR8 standard PE version of the product?
- 9 A. That's right, that's what the statement seems to 10 suggest, yes.
- 11 Q. You say it seems to suggest that. I'm just trying to 12 get inside your mind at the time this document was 13

14 When you wrote "a standard sample of the product", 15 did you understand that you were referring to the PE 16 core as opposed to the FR core?

- 17 A. Yes
- 18 Q. Yes.

19 Can we look at the technical file, please, at 20 page 147 {BBA00008042/147}. This is what we've called 21 test 5A or classification 5A, and just looking at it

22 with me, it's a reaction to fire classification report

number RA05-0005A under 13501-1. At the bottom of the 23

2.4 page you can see that its date of issue is 7 January

2.5 2005, and just a little above that, the commercial brand

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1 is "REYNOBOND 55 PE riveted system". You see that?

2. A. Yes

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3 Q. If you go to page 149 {BBA00008042/149}, please, you can 4 see that there is a product description under

5 paragraph 2 on that page, and you can see that it's 6

described as a:

"Composite panel consisting of a low density polyethylene core thermally bonded (using a 70 [micron] thick polyethylene film) between two precoated aluminium

11 "Tested system: riveted on metallic substructure."

Then underneath that, at the bottom of the next

13 block of text, it says:

"Finishing coat: DURAGLOSS 5000.

15 "Colour: grey/green."

16 Then if we go down to page 153  $\{BBA00008042/153\}$ , we 17 can see the classification , B-s2, d0, and below that you 18 can see there's a date: 7 January 2005, and the

19 signatures at the bottom from the CSTB.

But a little bit above that, under "Field of application", you can see it says:

2.2 "This classification is valid for the following 23 product parameters.

2.4 Then the second bullet point there says:

25 "Only for the system riveted on any metallic

1 substructure.' 1 product we were assessing, so whether it's riveted or 2 Now, my first question is: is this document familiar 2 cassette-fixed was to some extent irrelevant 3 to you? 3 Q. I would like to come back to that answer in a few 4 A. I must have looked at it at some stage, but I can't 4 moments if I can Can I just back up a little bit, and let's see 5 remember the details. 5 Q. Right, okay. It was on the technical file and we know together -- because it will help your recollection, 6 6 7 from other evidence we'll come to that you were sent it 7 I think -- how you came to see this document. by Arconic in 2007, so I'm going to assume you were Can we go, please, to  $\{MET00053158\_P15/90\}$ . This is 8 8 9 familiar with it. 9 an exhibit to Mr Wehrle's statement, and this is 10 1.0 Can we go back, then, to section 6.1 of the an email from you to Mr Wehrle on 15 May 2007. You tell 11 BBA certificate at of that document {BBA00000047/5}, and 11 him that good progress is being made in relation to the 12 12 can we have that up on the screen at the same time as assessment but you need further information, and you set test 5A, classification 5A. Put the two up together. 13 13 out four paragraphs there. The first one says: That's  $\{BBA00008042/147\}$ , if we can have that, please, 14 14 "Reaction to Fire test data for the standard PE 15 at the same time. 15 panel. If not available, you will need to arrange for the tests to be done, as for the FR product. Please 16 Just looking at those side by side, does the 16 17 certificate at section 6.1 record classification 5A? 17 note that the French classification, as described in the 18 A. Erm ... 18 Avis-Technique, is not recognized in the UK. Fire test 19 (Pause) 19 reports for the FR product already submitted with your 20 Q. Let me see if I can help. 20 application." 2.1 If you go to page 153  $\{BBA00008042/153\}$ , as I showed 21 Then if you look up the screen, you can see that he 22 22 you, where you've got the actual classification in sends you, on 25 May 2007, the classification report 5A, 2.3 there -- and I appreciate this is a long time ago, so 23 and take it from me that that is what he sends you: 2.4 2.4 vou need to see the documents -- vou can see the "Hello Hamo 25 classification report 5A has the classification 2.5 "Please find enclosed the fire reaction certificate 97 99 for our product Reynobond PE." 1 B-s2 d01 2. A. Yes. 2 Then if you look a little bit above that, please, if 3 Q. If you cast your eye to the left - hand side of the screen 3 you go to page 96 {MET00053158\_P15/96}, I think you will under 6.1, you can see it says that the standard sample need, you go back to him and you say in response to him, 5 of the product when tested for reaction to fire achieved 5 also on the same day, 25 May: a classification of B-s2, d0 --6 "Claude 6 7 A. Yes. 7 "The document is acceptable. Thank you. Q. -- under EN 13501. "I look forward to receiving your response to 8 8 9 Looking at those two documents now together, can you 9 items 2. 3 and 4 of my email below." 10 confirm or tell us that at section 6.1, the reference to 10 So you asked him for the test data for PE, and he 11 the classification there is a reference to this 11 sent you classification report 5A that I've shown you. 12 classification in this classification report? 12 When he sent it to you, did you study it? 13 A. Yes, I can confirm that, yes. 13 A. Again, not having enough knowledge, there was no point 14 Q. Yes, and that pertains, doesn't it, to PE-cored 14 in me — all I was interested in was the classification . 15 15 I couldn't study it in detail. I would just look at the Revnobond -- ves? 16 A. Yeah. 16 classification Q. In riveted system and only in riveted system; yes? Q. So when you told him that the document was acceptable, 17 17 18 A. Again, this was a document provided by CSTB, so that is 18 acceptable for what? 19 how they would assess fire performance. 19 A. Acceptable for our purposes. 2.0 2.0 Q. Yes. My question was that it pertains not only to Q. Which were? 21 PE-cored Reynobond but to PE Reynobond in the riveted 21 A. Which were to assess the fire performance of the

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2.2

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2.4

product.

If we go back to page 153 {BBA00008042/153}, please,

of the technical file . I showed you this, but I want to

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system; yes?

A. Yes. But as far as our assessment was concerned, it's

quite immaterial or irrelevant how the fixing was done.

98

As far as we -- the BBA was concerned, it was the

- 1 show it to you, again. This is under the "Field of 2 application"
- 3 Did you notice that it said, "Only for the system 4 riveted on any metallic substructure"?
- 5 A. Yes
- Q. You did? 6
- 7 A. Yes.
- Q. Did that tell you that the fire classification result 8 9 contained in classification report 5A that Mr Wehrle had 10 sent you at your request was valid only for Reynobond that was 4 millimetres thick and for the riveted 11
- 12 variant?
- 13 A. Again, I must have discussed this with somebody, most probably Brian Haynes, to see whether the data supplied 14 15 was sufficient for our purposes. As I say, other than
- 16 that. I couldn't do any assessment at all. I mean ... Q. Did you notice that the fire classification report he 17
- 18 was sending you applied only to rivet?
- 19 A. Yes, but, as I say, because we were assessing the 20 product, the fact that it's riveted I thought was
- 2.1 immaterial, was irrelevant. 2.2 Q. Well, you say that. Let's take that in stages.
- Did you ask yourself how, if the classification 2.4 report Mr Wehrle had sent you only covered the rivet 25 system, it could apply validly to the cassette system?

- A. That is all the information we had from CSTB, so ...
- Q. Going back to section 6.1 of the certificate, please,
- 3 {BBA00000047/5}. You can see what's said there, and
- I've read it to you now twice, but you can see it
- 5 doesn't refer to the fact that classification 5A was of 6 the rivet system only.
- Cutting to the heart of the point, the question is: 8 why not? Why doesn't it say --
- 9 A. Sorry, which paragraph was that?
- 10

2.3

- 11 A. 6.1. Yeah.
- 12 Q. You say:
- 13 "A standard sample of the product ... achieved a classification of B-s2, d0 ..." 14
- 15 The question is: why doesn't it say a standard 16
- sample of the product in rivet fixing? 17 A. Again, because it was -- as far as the fire performance
- 18 was concerned, it was irrelevant in what context -- it 19 was just the actual surface, the spread of flame,
- 2.0 I think, I believe these things refer to, and it was
- 21 irrelevant how they were fixed. As I say, the
- information we got from CSTB was a riveted one, but 2.3
- I believe, maybe as a result of my discussion with 2.4
- Brian, we decided that's suitable irrespective of the
- 25 fixing methods

102

- 1 Q. Given that the CSTB had provided test data on the 2
  - product in riveted form and to be used only in that
- 3 fabrication, why did you consider that drawing the
- 4 distinction between rivet and cassette in this
- 5 subsection of the certificate was irrelevant?
- A. Because, as I say, we were -- it was covering the panel 6 7 material, not the fixing method. And with regard to
- 8 resistance to fire, I would suggest it would have been
- 9 irrelevant as to what fixing method was used.
- 10 Q. Well, that may be true in relation to resistance to
- 11 fire, but of course this is about reaction to fire,
- 12 isn't it?
- 13 A. Again, that shows my ignorance of this particular
- 14 subject. I have no -- I have very little knowledge of
- fire issues. 15 Q. Right.

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- 17 Regardless of the amount of knowledge you had, could
- 18 you not see that the test data you were being sent
- 19 related only to the product in rivet form, and therefore
- 2.0 any claim for fire performance that you could make in
- 21 the certificate had to relate to the product in rivet
- 22 form and not generally?
- A. No, as I say, I must have discussed this with somebody, 2.3
- 2.4 with a fire expert possibly, and, as I say, it was just
- 2.5 the material we were covering and I felt -- I must have

- 1 felt the fixing method was irrelevant.
- 2 Q. You knew at the time you drafted this certificate that
- 3 there were two fixing methods, because they're clearly
- spelt out in the certificate, aren't they, fixing and
- 5 cassette; yes? You nodded, but you say yes?
- 6 A. Yes

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- 7 Q. Did you therefore realise that there should also have
  - been an equivalent test and classification report for
- 9 the cassette-fixing system?
- 10 I think the BBA certificate makes it clear. The fact
- 11 that we've included some details as to how it could be
- 12 fixed to a substructure is just to show what the product
- 13 can be used -- in what context it could be used, nothing
- 14 more.
- 15 Q. Did you discuss with a fire expert whether you could
  - safely ignore the distinction between rivet and cassette
- 17 when identifying the standard sample's fire performance,
- 18 as you do in section 6.1?
- 19 A. Not -- I can't remember any conversation with regard to
- 2.0 advice from a fire expert, but I must have discussed it
- 21 with Brian. I didn't make this decision, that the
- 2.2 fixing method was relevant with regard to fire
- 23 performance.
- 2.4 Q. Who did?
- 2.5 A. I can't remember. I mean, I must have been advised by

1	somebody that it's that the data that the CSTB has	1	SIR MARTIN MOORE-BICK: Thank you very much. I think it is
2	supplied could be used to assess the panel product on	2	helpful to know that.
3	its own.	3	MR MILLETT: Mr Gregorian, can we now go to your witness
4	Q. Without distinguishing between rivet and cassette?	4	statement at page 6 {BBA00011096/6}, please. I would
5	A. That's right.	5	like to look at Inquiry question 14 on that page. In
6	Q. You say, "I must have been advised by somebody"; can you	6	doing this, I'm picking up from where we left off before
7	tell us who that would have been?	7	the lunch break.
8	A. I can't, to be honest. As I mentioned, I've got very	8	You can see there that question 14 is:
9	little knowledge of fire issues, and I must have	9	"Did you consider the field of application of the
10	consulted with somebody, and they must have thought:	10	product(s) certified in Certificate 08/4510?"
11	yes, we could use this data to assess the panel product.	11	Your answer is at 33, and you say:
12	MR MILLETT: Mr Chairman, is that a convenient moment?	12	"The fields of application considered would have
13	SIR MARTIN MOORE-BICK: Yes, Mr Millett, I think it is.	13	been those in the CSTB certificate and as set out in the
14	We're going to take to break now, Mr Gregorian, so	14	application form."
15	we can all get some lunch, you included. We will come	15	Is it your evidence, so that we're clear, that you
16	back, please, at 2 o'clock.	16	did consider the field of application set out in
17	During the break, please take care not to discuss	17	classification 5A that we've seen?
18	your evidence or anything relating to it with anyone	18	A. Well, the CSTB would define what the field of
19	else.	19	application was, and as members of UEAtc, the CSTB's
20	THE WITNESS: Certainly.	20	definition were acceptable to BBA.
21	SIR MARTIN MOORE—BICK: Thank you very much. See you at	21	Q. Yes. The question is: did you consider the field of
22	2 o'clock then.	22	application, and the answer in your statement is, "The
23	THE WITNESS: Yes.	23	fields of application considered would have been those
24	SIR MARTIN MOORE—BICK: Thank you.	24	in the CSTB certificate". My question is: did you
25	(1.00 pm)	25	actually consider, did you actually think about, the
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(The short adjournment) (2.00 pm)3 SIR MARTIN MOORE-BICK: Good afternoon, everyone, welcome back. We're going to continue hearing evidence from 5 Mr Gregorian at this point. So, Mr Gregorian, are you there, and can you hear me  $\,$ 6 7 and see me? THE WITNESS: Yes, I can hear you and see you. 8 9 SIR MARTIN MOORE-BICK: Good, thank you very much indeed. 10 Are you ready to carry on? 11 THE WITNESS: Yeah. 12 SIR MARTIN MOORE-BICK: Good. In that case, I'll invite 13 Mr Millett to put some more questions to you. 14 When you're ready, Mr Millett. 15 MR MILLETT: Yes, Mr Chairman, thank you very much. 16 Before I continue with my questions, there is 17 something I just ought to make clear to those watching, 18 and that is Mr Haynes. As we understand it, Mr Haynes 19 was very seriously ill in the months leading up to the 2.0 end of last year and sadly passed away in the last few 21 months, and so has been unable to come to give evidence 2.2 to the Inquiry. 2.3 So, Mr Chairman, I hope that that clarifies any

questions that people might have about why Mr Haynes is

106

not able to come to give evidence.

field of application of the product as set out  $--\,$ 

2. A. I must have thought about, yes.

3 Q. Yes. The reason I ask is because the BBA certificate doesn't say anything about the European result B being

5 limited to rivet form, does it?

6 A. No, because, as I've mentioned before, the fixing method 7 was considered irrelevant because we were assessing the 8 panel material.

9 Q. Yes. You have told us that, but just to be clear, you 10 agree, I think, that the certificate also doesn't say 11 that a reader of it should check the field of 12 application with Arconic, does it?

13 A. No, I can't remember a statement such as that, no.

14 Q. Do you know why it doesn't?

15 A. Erm ... 16

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(Pause)

We've just followed the format of the certificate and ... I'm not sure if that would have been ... as I say, bearing in mind, as I say, it's the material we're considering, I'm not sure if the application would be relevant. It's just a comment. I'm just saving that the BBA certificate had a certain format, and I'm just assuming that field of application was not meant to be in the certificate . I can't comment on that beyond that.

108

2.4

- 1 Q. How would a reader of this certificate know that the 2 European class B was relevant only to the rivet fix of 3 the product?
- $4\,$  A. Well, I think we do say somewhere in the certificate
- 5 that it's got to be -- the whole certificate has got to
- be read in entirety, so whoever was looking at that should have had some knowledge as to how — technical
- 8 knowledge as to how the product could be used. I think
- $9 \hspace{1.5cm} \mbox{that's the impression we do get} \hspace{.1cm} --\hspace{.1cm} \mbox{you try and get in}$
- 10 the BBA certificate.
- 11 Q. There is nothing in the certificate which tells us that
  12 the class B fire classification stated in it relates
  13 only to Revnobond 55 in rivet—fix.
- 14 A. No, no.

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- 15 Q. No, so my question is: how would a reader know that?
- 16 A. Again, it's the material, the panel material we were
- considering, and the method of fixing was considered
- 18 irrelevant . So they could based on the details given
- in the certificate , they could form, fabricate
- $20\,$  a particular panel size, and providing all the criteria
- were met, they would install.
- Q. Can we go back to the certificate, then, please, at
   {BBA00000047/5}. Look at section 6.1 on that page. It
   savs:
- 25 "A standard sample of the product ... achieved

109

- 1 a classification of B-s2, d0 ..."
- How would anybody reading that section know that it was only a standard sample of the product in rivet form as opposed to in cassette form that had achieved that classification?
  - A. No, again, as soon as you mention a fixing method, people would assume that you can only use that particular panel with a rivet form, but, as I say, the fixing method was considered irrelevant because we were assessing the panel material.
- Q. Going back to page 3 {BBA00000047/3}, then, please, lookat paragraph 1.1, the second line:
  - "The panels are available either plain edged (riveted system) or flanged (cassette system) to suit architectural requirements (see Figure 1)."
  - If the difference between riveted system and cassette system was irrelevant and you were only certifying the raw panel, what was the point of inserting that sentence and going to the trouble of inserting figure 1?
- 21 A. That's just an example. It's meant to be an example of 22 what panels are currently available. There's -- you 23 could choose -- consulting engineers could choose any
- dimension, any panel size, and this is just meant to be
- 25 an example of what was available.
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- Q. Why was the certificate telling the reader, by example, what was available?
- 3 A. That must have been the standard format of the
- certificate . I really wouldn't know, you know. Again,
   it's a format that the BBA had adopted for a long time
- 6 for panels such as this.
- Q. Why does the certificate not tell the reader that ineither of these systems as fabricated, the fabricated
  - panel falls outside the scope of the certificate?
  - (Pause)
- 11 A. I think there is some reference to this, isn't there,
- 12 somewhere in the -- perhaps the back page of the
  - certificate ? I think ... I seem to remember there's
- $14\,$  something to say that the ... it's just the panel
- $15 \hspace{1cm} \text{material we are assessing, especially with regard to} \\$
- 16 fire .

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- 17 Q. Well, take it from me that there's nothing in this
- 18 certificate which tells the reader that the fabricated
  - systems, fabricated for rivet or fabricated for
- 20 cassette, fall outside the scope of the certificate . My
  - question is: why is that, if it was irrelevant?
- 22 A. I can't answer that.
- $23\,$   $\,$  Q. If you look down at paragraph 1.4, you can see there's
- $24\,$  a footnote relating to the subframe, which is very
- 25 clearly identified as "Not covered by this Certificate".

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- 1 If you were intending to exclude from the cover of this
- 2 certificate the riveted system and the cassette system
- 3 as identified in figure 1, why didn't you make it clear,
- 4 as you had with the subframe?

(Pause)

- $\ensuremath{\mathsf{6}}$   $\ensuremath{\mathsf{A}}.$  With hind sight, we could have amplified that aspect
- 7 a bit more clearly in the certificate .
- $8\,$   $\,$  Q. Going back to paragraph 6.1, please, on page 5  $\,$
- $9~~\{BBA00000047/5\},$  when it says:
- ${\small 10} \qquad {\small "The standard sample of the product }... \text{ when tested}$
- for reaction to fire, achieved a classification of
  - B-s2, d0 ..."
- Do you accept that a reader of that sentence would
  be led to think that what had achieved a classification
- be led to think that what had achieved a classification
- $15\,$  of B–s2, d0 was the product in both rivet and cassette
- 16 fabrications?
- $17\,$   $\,$  A. Well, we -- in this particular section, we just state
- 18 facts, this particular panel was tested to this, and
- that's all that's saying. There's no reference to the
- 20 fixing method at all. So if I were reading this,
- 21 I would take it as that is how the material behaves in
- 22 fire .
- 23 Q. What material, Mr Gregorian?
- 24 A. The material tested.
- 25 Q. What was tested was the material in a rivet form, wasn't

1 2 A. No, but I think, as far as I remember, a sample has been 3 tested. There is no reference to whether it was fixed 4 or -- whether it was rivet-fixed or cassette-fixed 5 So, again, I have to emphasise, I don't know much about fire, so -- or very little, I know very little 6 about fire, so I can't constructively comment as to why 8 this particular statement appears as it is . But I'm 9 quite sure that the product we were assessing had

nothing to do with the fixing method, it was just

basically making sure that the panel was suitable for

inclusion in a cladding system.
 Q. The product you were assessing, you say, had nothing to
 do with the fixing method; if that's the case, can you
 explain what figure 1 is doing in the certificate?

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- 16 A. Again, it was normal practice for some details to be 17 included. You had to give the certificate holder some 18 indication of his product, how he was going to use it, 19 and that was one way of doing it. We always included 2.0 some detail irrespective of whether they're covered by 21 the certificate -- irrespective of whether, yes, they 22 were covered by the certificate or not. I think we do 2.3 make it clear in the certificate that -- what is 2.4
- 25 Q. Do you accept that the reader of this certificate, when

113

- seeing the words, "A standard sample of the product", would think that both rivet and cassette versions were
- 3 covered by the classification B-s2, d0?
- 4 A. If I were reading this, that's the conclusion I would have come to.
- 6 Q. And do you accept that that was a wrong conclusion?
  - A. No, I think in the context of the assessment subject, which was the actual panel material, I would assume that the fixing method was irrelevant. That's what I would conclude from reading that statement.
- $\begin{array}{lll} 11 & \text{Q. Do you accept $--$ I'll$ try this one more time $--$ as } \\ 12 & \text{a matter of fact that when a reader is told that} \\ 13 & \text{a standard sample of the product achieved} \\ 14 & \text{a classification of B-s2, d0 in circumstances where it} \\ 15 & \text{was only the riveted version of that product which had} \\ 16 & \text{achieved that standard, the reader would be misled?} \\ \end{array}$
- 17 A. This statement points to a sample, it actually refers to 18 a sample. A sample could be any suitable dimension for 19 a test facility. So, again, the way I would read this 20 is it's irrelevant how it's fixed to the substructure. 21 That's how I would interpret it.
- Q. You see, given that the test itself , the classification
   B-s2, d0, was only on the rivet-fix, do you accept that
   the reader would not realise that and might be misled

25 into thinking that it applied to both fixings?

114

- 1 A. It would be right to assume that it would apply to both
  2 fixing types. He wouldn't be wrong. But, as I say, if
  3 I were reading this, I wouldn't take notice of how the
  4 panels were fixed to the substructure.
- Q. Well, with great respect, Mr Gregorian, he would be
   wrong because, as I've shown you, the classification of
   B was only achieved on the rivet form and not the
   cassette form.
- 9 A. That's true, but as far as our assessment was concerned, 10 it was considered irrelevant.
- 11 Q. Can we then look at 6.2:
- "A fire retardant sample of the product ..."
  - I've read that to you.
- Can we have at the same time on the screen technical file page 155 {BBA00008042/155}. This is
- $\begin{array}{lll} {\rm 16} & {\rm a \ \ classification \ \ report \ from \ the \ CSTB \ in \ relation \ to \ the} \\ {\rm 17} & {\rm FR \ product} -- \end{array}$
- 18 A. Yes.

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- Q. -- which was on the file. You can see that the date of
   that is 19 October 2006, and you can see from the middle
   of the page that it relates to Reynobond FR.
- 22 If we go to page 157 in that document
  23 {BBA00008042/157}, keeping the left—hand side of the
  24 screen where it is, you can see that the product
- description there in the third line down is:

115

- 1 "Tested system: riveted on metal substructure."
- 2 So you have the FR on rivet.
- If you go to the final page of this report, page 161 {BBA00008042/161}, you can see the classification:
- 5 B-s1, d0. Again, underneath it, under "Field of
- 6 application", paragraph 4.3, it tells you that:
- 7 "This classification is valid for the following 8 product parameters:
- 8 product parameters:
  9 "— A thickness of 4 mm"
  - "— A thickness of 4 mm."

    And then underneath that:
- 10 And then underneath that: 11 "This classification is valid for the following
- "This classification is valid for the following end use conditions:
- "— Riveted system on metal substructure."
- 14 Is this the test that is referred to in
- paragraph 6.2 of the certificate?
- 16 A. Yes, this is the CSTB data we would have received and it would have been perfectly acceptable to the BBA.
- 18 Q. I'm so sorry, I've taken you to 6.2. I mean the second 19 half of 6.1, I apologise, where it says:
  - "A fire retardant sample of the product, with
- 21 a gold-coloured Duragloss finish  $\dots$  achieved
- 22 a classification B-s1, d0 ..."
- Am I right in thinking that it's the test on the right—hand side of the screen --
- 25 A. Yes.

2.0

1	Q.	—— which is the basis of the claim for fire performance	1		"Text will be amended as advised."
2	•	in that second sentence of paragraph 6.1?	2		Yes?
3	Α.	Yes.	3	A.	Yes.
4	Q.	Yes.	4	Q.	Then on 1.3 Mr Wehrle writes:
5	·	Now, let's look and see how this document came to be	5	•	"Can you add the 2 dimensions 2000 x 3000 and
6		on the technical file . I think I can take this quite	6		2000 × 4000."
7		shortly.	7		Again, you have said in response in green:
8		Do you recall that this was requested by Mandy Osman	8		"Text will be amended as advised."
9		in November 2007?	9		That's you again, is it?
10	Α.	Yes, I know Mandy, worked with her, yes.	10	A.	Yes.
11		Let's go to {MET00055859/2}, please, and just trace the	11	Q.	Then on 6.1 he says:
12		emails through. This is an email, second email down,	12		"Can you add the results of our fire certification
13		from Mandy Osman to the BBA. You can see she writes to	13		for Reynobond FR (B-s1, d0).
14		Claude Wehrle on 22 November 2007. She encloses a copy	14		"Test report send to Hamo some month ago."
15		of the proposed certificate and asks for his written	15		And then you say in green:
16		approval. She then says at the bottom:	16		"I do not appear to have received this report.
17		"As this Certificate is the first of a type to be	17		Please resend."
18		put into the 'new' format, we shall circulate the draft	18		If we scroll up to the bottom of page 1
19		to the regulatory authorities and our Technical	19		{MET00055859/1}, second email from the bottom, you can
20		Assessors for their comments. You will be sent a	20		see there that in response to this email from you, with
21		further copy then for your approval."	21		your green comments in it, Claude Wehrle comes back to
22		If you go up to the first email on this page, you	22		you and says:
23		can see it's a response from Claude Wehrle to	23		"Hello Hamo.
24		Mandy Osman and to you, and he says:	24		"Please find enclosed the document for our Reynobond
25		"Hello,	25		FR certification ."
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		117			117
1		"I've [got] some remarks"	1		If you look at the attachment $$ you can't see the
2		This email, which is 23 November, has some text in	2		attachment to that, but in fact the attachment is the
3		blue and red. The red is Claude Wehrle's, and there are	3		certificate of 2006 we've just been looking at for rivet
4		some comments in green.	4		in FR.
5		If we scroll up to the very bottom of page $1$ in this	5		At the top of page $1$ , second email down, a little
6		email chain $\{MET00055859/1\}$ , we can see that at the very	6		bit later the same day, you say:
7		bottom of the page, you say, the same day,	7		"Claude
8		23 November 2007:	8		"The report is fine.
9		"Claude	9		"I'll add appropriate statement to section 6.1."
10		"Please see my response below (in green)."	10		Can we take it from the email run I've shown you
11		Do you see that?	11		that it was Claude Wehrle who asked you specifically to
12	Α.	Yes.	12		include the European classification for $FR\mathrm{-cored}$
13					D la 12
14		Can we take it that the green text on page 2 is yours?	1.3		Reynobond?
15		Yes, yes.	13 14	A.	We would do that $$ we would have to do that. We need
	A.			A.	· ·
16	A.	Yes, yes.	14		We would do that $$ we would have to do that. We need
	A.	Yes, yes. If we go back to the top of page 2 $\{MET00055859/2\}$ ,	14 15		We would do that $$ we would have to do that. We need to put the information in the certificate , so $\hdots$
16	A.	Yes, yes. If we go back to the top of page 2 $\{MET00055859/2\}$ , then, let's look at the email from Claude Wehrle to	14 15 16		We would do that $$ we would have to do that. We need to put the information in the certificate , so $\dots$ Yes. He wants you to add the results, you say
16 17 18 19	A.	Yes, yes.  If we go back to the top of page 2 {MET00055859/2}, then, let's look at the email from Claude Wehrle to which you have responded.  You can see:  "On 1. Description:	14 15 16 17 18		We would do that $$ we would have to do that. We need to put the information in the certificate , so Yes. He wants you to add the results, you say "I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to summarise that and to agree with me that it was
16 17 18 19 20	A.	Yes, yes.  If we go back to the top of page 2 {MET00055859/2}, then, let's look at the email from Claude Wehrle to which you have responded.  You can see:  "On 1. Description: " instead of 'A duragloss coating a PVDF	14 15 16 17 18 19		We would do that $$ we would have to do that. We need to put the information in the certificate , so Yes. He wants you to add the results, you say "I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to
16 17 18 19	A.	Yes, yes.  If we go back to the top of page 2 {MET00055859/2}, then, let's look at the email from Claude Wehrle to which you have responded.  You can see:  "On 1. Description:	14 15 16 17 18		We would do that $$ we would have to do that. We need to put the information in the certificate , so Yes. He wants you to add the results, you say "I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to summarise that and to agree with me that it was
16 17 18 19 20 21 22	A.	Yes, yes.  If we go back to the top of page 2 {MET00055859/2}, then, let's look at the email from Claude Wehrle to which you have responded.  You can see:  "On 1. Description: " instead of 'A duragloss coating a PVDF coating' can you write 'A Duragloss or PVdF coating protects the exposed face in many different colors to	14 15 16 17 18 19 20 21	Q.	We would do that $$ we would have to do that. We need to put the information in the certificate, so Yes. He wants you to add the results, you say "I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to summarise that and to agree with me that it was Claude Wehrle who asked you specifically to include that European classification for FR—cored Reynobond? Yes, that's $$ yes, I suppose so, yes.
16 17 18 19 20 21 22 23	A.	Yes, yes.  If we go back to the top of page 2 {MET00055859/2}, then, let's look at the email from Claude Wehrle to which you have responded.  You can see:  "On 1. Description: " instead of 'A duragloss coating a PVDF coating' can you write 'A Duragloss or PVdF coating protects the exposed face in many different colors to outside exposure. The unexposed face is protected with	14 15 16 17 18 19 20 21 22 23	Q.	We would do that —— we would have to do that. We need to put the information in the certificate, so  Yes. He wants you to add the results, you say  "I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to summarise that and to agree with me that it was  Claude Wehrle who asked you specifically to include that  European classification for FR—cored Reynobond?  Yes, that's —— yes, I suppose so, yes.  We don't see that you asked him, having received the
16 17 18 19 20 21 22 23 24	A.	Yes, yes.  If we go back to the top of page 2 {MET00055859/2}, then, let's look at the email from Claude Wehrle to which you have responded.  You can see:  "On 1. Description: " instead of 'A duragloss coating a PVDF coating' can you write 'A Duragloss or PVdF coating protects the exposed face in many different colors to outside exposure. The unexposed face is protected with a polyester primer.'"	14 15 16 17 18 19 20 21 22 23 24	Q.	We would do that —— we would have to do that. We need to put the information in the certificate, so  Yes. He wants you to add the results, you say "I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to summarise that and to agree with me that it was Claude Wehrle who asked you specifically to include that European classification for FR—cored Reynobond?  Yes, that's —— yes, I suppose so, yes.  We don't see that you asked him, having received the report he sends you, whether there was an equivalent
16 17 18 19 20 21 22 23	A.	Yes, yes.  If we go back to the top of page 2 {MET00055859/2}, then, let's look at the email from Claude Wehrle to which you have responded.  You can see:  "On 1. Description: " instead of 'A duragloss coating a PVDF coating' can you write 'A Duragloss or PVdF coating protects the exposed face in many different colors to outside exposure. The unexposed face is protected with	14 15 16 17 18 19 20 21 22 23	Q.	We would do that —— we would have to do that. We need to put the information in the certificate, so  Yes. He wants you to add the results, you say  "I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to summarise that and to agree with me that it was  Claude Wehrle who asked you specifically to include that  European classification for FR—cored Reynobond?  Yes, that's —— yes, I suppose so, yes.  We don't see that you asked him, having received the

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1 you think you did ask him for that? 2 A. I can't remember. 3 Q. It doesn't appear that you did, and my question would 4 be: on the basis that you didn't, why didn't you? 5 A. Erm ... (Pause) 6 7 I can't answer. I can't answer that. I mean. 8 I don't know the details, I can't remember what went on during our communication. 9 10 Q. So far —— I'm sorry, do you want to —— 11 A. No, sorry. SIR MARTIN MOORE-BICK: On you go, Mr Millett. 12 13 14 So far, everything we have been looking at by way of 15 reports from CSTB have been classification reports. We've seen test 5A for the PF rivet and we've seen the 16 17 2006 test for FR in rivet. We've seen no underlying 18 test data on which those classifications are based. 19 Do I take it from that that you never asked Arconic 20 for the underlying test data? 2.1 A. I think our assessment was based on whatever information 2.2 they supplied. 2.3 Q. Did you realise that under the contract that Arconic had 2.4 with the BBA, Arconic was obliged to send all relevant 25 test data to you? 121 1 A. They must have done. Q. Well, you say they must have done --3

- A. I can't I mean, for fire assessment we would require
- documentation and Arconic would have had to supply that,
- 5 and our assessment would have been based on the
- 6 BS 476-6/7 test and whatever other information CSTB or
- 7 Arconic would provide.

reports were based?

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- 8 Q. Did you notice that you -- I'm sorry, I started asking 9 my question, I think, before you had finished your 10 answer. Maybe not.
- 11 Did you notice that although you had classification 12 reports, Arconic had not provided you with the 13 underlying test data on which those classification
- 15 A. Sorry, can you repeat the question? I can't quite hear.
- 16 Q. Did you notice that you didn't have any underlying test
- 17 data which supported the classification reports I've 18 shown you?
- 19 A. I think that there is a good chance the CSTB document, 2.0 the avis technique, would have had some information. 21 And whether the Warrington fire test was done previously
- 2.2 to that, I can't remember, I couldn't comment.
- 23 Q. Specifically in relation to the test data underlying the 2.4 classification reports for fire that we've seen, did you
- 25 notice that Arconic had not sent you that underlying

fire test data?

- 2 A. I suppose from the communication I can only conclude
- 3 that they hadn't, so I had to chase.
- 4 Q. So can we take it that you accepted -- the BBA
  - accepted -- the classification reports from the CSTB as
- the basis of your certification of Reynobond 55 as 6
- 7 having Euroclass B without looking at the underlying 8 test data?
- 9 A. I think that's quite -- it's normal procedure actually
- 10 between UEAtc members.
- 11 Q. It's normal procedure, is it? 12 A. It is, yes, yes.
- 13

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Now, as I've shown you, I think probably too many times, Mr Gregorian, we've seen that both the European classification reports from the CSTB for Revnobond 55 related to the fabrication in rivet -fix. We know now that Arconic did another test on Reynobond PE in cassette-fix.

Can we look at that test report, please. It's at {ARC00000536}. I'll just show you this document and see whether you're familiar with it.

You can see that it's a reaction to fire test report number RA05-0005B according to European Standards EN 13823 and ISO 11925-2. We have called this test 5B.

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1 It says at the very top "K7 System", and then there is an exclamation mark in a triangle, "Not classified 2 3 because the test had to be interrupted".

If we look at the document on its face, just the 5 first page of it I think will probably do for this 6 purpose, is this a document you've ever seen before?

- 7 A. I must have come across it, I suppose, I can't remember.
- Q. Right. Let's look at page 3 {ARC00000536/3}. You can 8 9 see that it bears the date of test of 2 December 2004. 10 and a little bit lower down it refers to the commercial
- brand as "REYNOBOND 55 PE Cassette system". Do you see 11
- 12
- A Yes 13

2.4

2.5

 $\ensuremath{\mathsf{Q}}.$  At the bottom of the page, we can see, right at the 14 15 bottom, that there is a date, 7 January 2005, and signed by the CSTB there. 16

17 If we go to page 7  $\{ARC00000536/7\}$ , we can look at 18 the results for specimen  $1\,--$  and there was only one 19 specimen -- and there are the results set out for the 2.0 product Reynobond 55 PE. You have got the FIGRA, the 21 THR and the SMOGRA figures set out across the page, and 2.2 then under "Comments", if you look at the bold text at 23 the very end of that little block of text, it says:

> "The tests were stopped after 850 seconds; the results are not usable but give an idea of the fire

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- 1 behaviour of the product."
- 2 Now, there is no evidence that we've seen in the
- 3 documents, Mr Gregorian, that the BBA ever received this 4 document. To the best of your recollection, is that
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- A. I certainly can't remember seeing this document. 6
- Q. Do you remember whether Arconic ever told you that they'd done a European test under EN 13501 on the
  - cassette variant of Reynobond PE?
- 10 A. I can't remember that either, no. 11 Q. Did you ever discuss with Claude Wehrle any tests at all
- 12 done on cassette-fix Revnobond?
- 13 A. No. I don't think so.
- 14 Q. Do we take it from that that you were simply not aware 15 of the fire performance tests on Reynobond that were 16 done on cassette?
- 17 A. Again, I can't remember the ... whatever information was 18 lacking, so I'm guessing, again, because it was not 19 entirely relevant to our assessment, I'm guessing we
- 20 didn't ask for it.
- 2.1 Q. Right.
- 22 Now, just to go back to a point we have been looking at earlier, you had on the file in 2006 the two 2.3 2.4 avis technique reports from the CSTB, one for rivet and one for cassette. You remember looking at those this
  - 125
  - morning with me? So you knew that there were two 1
- different kinds of fabrication so far as the CSTB was 2 3 concerned; yes?
- 4
- 5 Q. Yes, and you knew that there was a CSTB classification 6 for rivet for fire.
- 7 Did you notice, regardless of whether it was 8 relevant, that there wasn't one that you had for 9 cassette, whether in PE or in FR?
- 10 (Pause)
- 11 A. Again, from memory, I might have considered this, but, 12 as I say, because we were assessing the panel, not --13 with the exclusion of the fixing system, we didn't chase 14 for anything else, we just used whatever CSTB had 15 provided
- 16 Q. Let me try it this way: did you ever have a conversation with Mr Wehrle along the lines of, "Well, look, Claude, 17 18 we've got your CSTB reports avis technique for rivet and 19 cassette, but we've only got rivet tests for fire; do 2.0 you have any cassette tests for fire?" Did you ever
- 21 have a conversation along those lines?
- 2.2 A. No, I can't remember having such a conversation, but 23 again, because it was irrelevant, I didn't feel the need 2.4 to pursue that information.

126

25 Q. If the distinction between the two was irrelevant, as

- 1 you tell us, did you wonder why there were two separate
- 2 reports done by the CSTB under avis technique, one for
- 3 cassette and one for rivet?
- 4 A. You ask for information from CSTB and they provide
  - whatever they have, so ...
- Q. Yes, I appreciate that, but did you ever ask yourself: 6
  - I wonder why there are two separate reports, one for
- 8 cassette and one for rivet, if the distinction between 9
  - them for your purposes was irrelevant?
- 10 A. Yes, I think -- yes, that's what I assumed, because
  - again, we were assessing the product and either of these
- 12 reports would have been -- could have been used for our 13
- Q. When you say, "That's what I assumed", what did you 14 15 assume?
- A. Well. I assumed whatever information they'd provided was 16 17 sufficient for us to make an assessment
- 18 Q. Do I take it from that that you, as a matter of fact,
- 19 never asked Mr Wehrle why you had received test data for
- 20 the rivet -fix but no test data for the cassette-fix?
- 2.1 A. That's correct, I didn't ask him for anything else.
- 2.2 Q. And that's because you thought that the distinction
- 23 between them was irrelevant, even though you had clear
- 2.4 separate CSTB avis technique reports for cassette and
- 2.5 rivet respectively?

127

- 1 A. That's correct, yes.
- 2 Q. Now, can we look at Brian Haynes' witness statement,
- 3 please. That's {BBA00010784/11}, paragraph 45. You can
- see a question in bold from the Inquiry at the top of
- 5 the screen, top of page 11. The question goes as
- 6
- 7 "What information on fire performance was Alcoa
- 8 asked to provide to the BBA prior to the certification
- 9 in 08/4510? Did you or anyone at the BBA ask Alcoa for
- 10 all relevant test data in respect of Reynobond
- 11 Architecture Wall Panels? If not, why not?"
- 12 The answer he gives is at paragraph 45, and he says
- 13 this .
- 14 "From evidence on the file, Alcoa was asked, by the 15 Product Assessor, to provide evidence for the reaction
- 16 to fire performance for the standard panel, as was
- 17 already available for the FR grade product.
- 18 "In making this request BBA assumed that all
- 19 relevant data would be supplied."
- 2.0  $\label{eq:definition} \mbox{Did you expect } -- \mbox{ this is my question to you,}$
- 21 Mr Gregorian -- that when the BBA asked for evidence of
- 2.2 the reaction to fire of PE panels, you would have
- 23 expected Arconic to provide you all relevant data? 2.4 Yes, ideally that's what should have happened, but
- 2.5 I think we made assessments with whatever data were

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- 1
- 2 Q. You say, "Ideally that's what should have happened"; why
- 3 was that an ideal? Why should it not have happened as 4 a matter of course?
- 5 A. Well, there's -- the idea is to ask for information from the client, but you don't always get what you want, so 6 7 we think of other ways of assessing the product.
- 8 Sorry, you were reading this paragraph, but I can't 9 see it on the screen.
- 10 Q. Oh, I'm sorry, and I'm slightly surprised about that 11 because it's still on my screen. Can you not see 12 paragraph 45 and 46 of Mr Havnes' statement?
- 13 A. Oh, yes, yes.
- Q. Would you like me to read it to you again? 14
- 15 A. Yes, if you would, yes.
- Q. The answer to the question that you can see in bold is: 16
- 17 "From evidence on the file. Alcoa was asked, by the 18 Product Assessor, to provide evidence for the reaction 19 to fire performance for the standard panel, as was 2.0 already available for the FR grade product.
- 21 "In making this request BBA assumed that all 22 relevant data would be supplied."
- 2.3 So that was what I was asking you about.
- 2.4 A. Yes. Yes, that's what we normally expect the client to 25 provide, but they provided whatever they had.

129

- 1 Q. Would you therefore have expected all the relevant data
- 2 to have included the fire test data that I've just shown
- 3 you in relation to the cassette version in early 2005,
- namely test 5B?
- 5 A. Erm ...

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(Pause)

- 7 I can't answer that question, to be honest.
- 8 Q. Let me try it this way: if Arconic was sitting on test 5B and the BBA was assuming that all relevant test 10 data would be supplied, do I take it that the BBA would
- 11 assume that test 5B would be supplied?
- 12 A. Yes
- 13 Q. Yes
- A. Yes. 14
- 15 Q. Did the fact that Mr Wehrle had not provided you with 16 a classification report for PE cassette-fix, nor indeed 17 any test data for PE cassette-fix, ring any alarm bells
- 18 with you?
- 19 A. No. Again, back to my statement before, it was just the 2.0 panel we were considering and, you know, the fixing
- 21 method was considered irrelevant. I must have discussed
- 2.2 it with Brian at some stage and we were assessing the 23
- 24 Q. When you say that the distinction between rivet and
- 25 cassette was irrelevant, were you proceeding on the

- 1 assumption that, in those two different fixing systems,
- 2 there would be no difference to the fire performance of
- 3 the product?
- 4 A That's correct
- 5 Q. What was the basis of that assumption?
- A. Again, with my limited knowledge of fire issues, I must 6
  - have discussed it with Brian, and I must admit I agreed

its own, and the fixing method would be irrelevant.

- 8 with the conclusion, that we could assess the panel on
- 10 I sort of concurred with Brian. I must have done.
- 11 Q. My question really is: what was the basis, so far as you
- 12 remember, of the assumption that in different fixing
- 13 systems there would be no difference between them as to
- 14 the fire performance of the product?
- 15 A. What was the basis?
- 16 Q What was the scientific basis?
- 17 A. Again, I can't comment on that, because I don't know
- 18 enough about fire issues, but I think it's logical to
- 19 assume -- I thought -- I must have thought at that
- 2.0 stage, that it's -- you're testing the materials. How
- 21 it's fixed -- I mean, whatever test you do, it's fixed
- 22 to something.
- 2.3 Q. Did anybody at the BBA ever rigorously verify that
- 2.4 assumption, or try to?
- 25 A. No, as far as I know, no.

131

- 1 Q. Did anybody at the BBA at the time ever perceive that,
- in fact, in proceeding on that assumption, there was 2
  - a great deal of risk?
- A. No, as far as I know, no.
- 5 Q. Were you aware in general terms at the time of any
- 6 understanding or belief in the UK construction industry
- 7 or perhaps the European construction industry that
- 8 rivet - fix ACM would perform worse in fire tests than
- 9 cassette-fix?

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- 10 A. I wasn't aware of that. I don't know.
- 11 Can we then look at Arconic's claims for class 0 for PE.
- 12 It's a slightly different topic, but very much the same 13 documents
- Can we begin in the technical file, please, at 14 15 page 83, {BBA00008042/83}. Now, this is a brochure from
- 16 Reynobond which is on the technical file. It's called
- 17 "Discover new perspectives".
- 18 Looking at the front page, is this a document you
- 19 recall, do you think?
- 2.0 A. No, I can't remember, but it's quite normal for some
- 21 promotional literature to be included in the technical
- 2.2
- 23 Right. Can we look at page 104 {BBA00008042/104}.
- 2.4 I'm afraid this is going to have to be expanded
- 2.5 considerably, but in the bottom right-hand corner of the

132

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1.0

document you can see it has " $11/05\ GB$ ". You can just 1 2 see that in vertical print. Can you see that? 3 "Version 11/05 GB". 4 A Yes 5 Q. We've taken that to mean November 2005. Do you remember looking at this document on the 6 7 technical file when you were preparing this certificate? 8 A. No, I can't remember, no. 9 Q. Would it be typical for you or, to your knowledge, 10 anybody else at the BBA to review this sort of 11 literature as part of the assessment of a certificate? 12 A. No, we wouldn't review every single document that was 13 Q. No, but would you typically review this kind of 14 15 literature? Would you use it as part of your 16 assessment? A. No. No, I -- no, I don't think so. 17 Q. Let's just look at it, page 101  $\{BBA00008042/101\},$  and 18 19 see how far we go. 20 At that page you can see that there is a list of 21 fire certificates, and at the fourth line down, if we 22 could have that expanded, you can see that there is 2.3 a block of four UK entries there. Can you see that? 2.4 A Yes 25 Q. The first two relate to PE, and the second two relate to

133

FR 1 2 If we track across, we can see Warringtonfire 3 documents 132316 and 132317 for FR. Those are the reports from 2003 which I think we looked at before. 5 If you go up a little bit to the PE results above, 6 we can see that Arconic are saying in this document that 7 PE-cored ACM has a class 0 rating; yes? 8 9 Q. If you track across, you can see that, to support that, 10 the Warringtonfire documents 70707 and 70708 are 11

referred to. 12 Now, I've shown you that because it's on your file. 13 Were you aware at the time of Arconic's claim that ACM or Reynobond 55 with a PE core had class 0? 14

15 A. Sorry, the question is? 16 Q. Were you aware at the time you were preparing the 17 certificate that Arconic claimed in its product 18 literature  $\,\,--\,\,$  and this is an example of it on your 19 file  $\,--$  that Reynobond 55 in PE had class 0?

2.0 A. Again, not being familiar with the details, I must have 21 consulted a fire expert for this. I vaguely remember 2.2 this document, but I haven't gone into detail at all.

23 Q. No, all right. Let me try it a different way

This is a document which we can see, because we can read it, and it was on your file, by which Arconic claim

134

1 that Reynobond 55 in PE, in other words the standard, 2 had actually got class 0.

3 My question is: were you aware at the time that Arconic had claimed and was claiming that PE-cored 4 5 Revnobond 55 was class 0?

A. I can't remember. 6

> Q. We've got the documents referred to, certificate 70707 and 70708, and indeed a summary report. There is no evidence that we've seen that those certificates were actually ever sent to the BBA.

11 Can you help with that? Do you think they ever were 12 sent to the BBA?

13 A. I remember seeing some documents from Warrington, but, 14 as I say, I can't remember having seen this particular 15 report at all.

16 Q. Right.

17 Did you -- and I think the answer is no, but do 18 I take it from your evidence so far that you didn't 19 notice that this brochure indicated that there might be 2.0 more documents relevant to UK national classification 21 that you didn't have?

22 A. The Warrington report I think we had, and I think we -for all I know, the fire expert would have consulted 23

2.4 these particular documents for their assessment.

25 Yes, the FR you would have had, but the PE Warrington

135

1 documents, the two 70707 and 70708, we can't see that 2 you did have. My question is: did you notice that this 3 brochure was saying that those documents existed but you didn't have the reports?

5 A. No, I didn't notice, no, no.

6 Q. Did you have any document in your possession which 7 showed that Reynobond 55 in PE had actually been tested 8 under BS 476-6 and 7 and achieved a class 0

9 classification?

10 A. Sorry, what was your question again?

11 Q. Did you have any documents in your possession which 12 showed that Reynobond 55 in PE had undergone the BSI 13 test at 476 and had achieved a class 0 classification?

A. No, I —— no, I don't know, I just ... 14

15 Q. Did you know -- and I can take this shortly, I think --16 that in fact the certificates 70707 and 70708 related to a product called Reynobond RB 160 PE, not Reynobond 55? 17

18 A. I can't remember the details. I can't remember at all.

19 Q. Taking it from me that those two sets of tests, 70707 2.0 and 70708, were dated 9 May 1997 -- take that from me --21 would you be surprised to see that classification still

2.2 being referred to in a brochure seven years later, or

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24 Sorry, I don't understand the question.

2.5 Q. Let me try it a different way.

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1 Did you have any rule or thumb or policy perhaps 2 within the BBA about how old test data could be to form 3 the basis of a certificate? 4 A. I'm not aware of such a thing, but I'm guessing any test 5 data which might be used to some extent to assess fire performance would have been useful. But I believe there 6 7 is a time limit, but I have no idea as to what that time 8 limit is. 9 Q. Very well. 10 Can we then turn to the certificate again, the 11 BBA certificate {BBA00000047/5}, and look at 12 section 6.3. We have been through quite a lot of 13 material, and it's quite technical and it's a long time 14 ago, so let me try to help you by summarising where 15 I think we've got to so far, Mr Gregorian. 16 At this stage, we've covered three things. 17 Do you agree, then, first, that the BBA had 18 a European classification for rivet -fix PE core ACM in 19 grey/green showing it to be class B? You nodded. 2.0 That's a yes? 2.1 A. Sorry, which paragraph are you --2.2 Q. Just looking at 6.1 and 6.2. 2.3 A. Yeah. 2.4 Q. Summarising what they tell us and what we have been 25 through.

137

1 First of all , you have been sent a European 2 classification report for rivet-fix PE-cored ACM in a grey/green colour saying it's class B; yes? 3 4 Class B-s2, d0, 5 6 Q. Secondly, you have had a European classification for 7 rivet - fix FR core in gold, also class B, 2006. 8 A. Yes. 9 Q. Yes. 10 A. I'm not sure where you're reading the rivet --11 Q. I'm not reading, I'm just summarising where we've got 12 13 Let's start again. We've seen three separate classification reports or 14 15

test reports. We've seen, first of all, test 5A from 2005, which is a European classification for rivet - fix PE core in a grey/green colour showing it to be class B-s2, d0; yes?

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19 A. Yeah

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2.0 Q. Yes

21 We've also seen a European classification for 2.2 rivet - fix FR in a gold colour, also class B, that's 2.3 class B-s1, d0.

2.4 A Yeah

25 Q. Both of those are referred to in 6.1. 4 A Yeah 5 Q. Yes. So that's, in a nutshell, what 6.1 and 6.2 are 6 referring to.

class 0 for FR core in a metallic grey; yes?

We've also got, looking at 6.2, a set of results

from September 2003 under BS 476 achieving UK national

Can we now look at 6.3, and I want to look at this very carefully with you. At 6.3 it says:

9 "As a consequence of sections 6.1 and 6.2, the 1.0 products may be regarded as having a Class 0 surface in 11 relation to the Approved Document B of The 12 Building Regulations 2000 (as amended) (England and 13 Wales) ... '

14 I don't need to go on.

> If we skip to page 1 of the certificate  $\{\mbox{BBA00000047}/1\},$  which I said I would come back to, let's go to it now, and look under "Key factors assessed" there, third item down, "Behaviour in relation to fire". it says:

2.0 "In relation to the Building Regulations for 21 reaction to fire, the panels may be regarded as having 22 a Class 0 surface in England and Wales ..."

23 I want to examine with you the statement, the words, 2.4 "the panels may be regarded as having a Class 0 surface" in both of those parts.

139

1 My first question to you is: what do those words mean, the words "the panels may be regarded as having 2 3 a class 0 surface"?

A. I think, again, I've got to emphasise that this is 5 a wording that Brian looked at and approved. Generally the impression I get is "may be" means they are. It's 6 7 not -- it's not possibly; it 's they can be regarded as 8 a low-risk material. That's how I would read it.

9 Q. Well, how did you understand it at the time?

10 A. I think, yes, that's always the impression I get. When 11 they say "may be", it means they can be classed as 12 a material with low risk.

13 Q. Did you write that statement? Did you draft the words 14 "may be regarded as having a Class 0 surface"?

15 A. Again, this is a fairly standard sort of statement, but 16 I must have discussed it with Brian, who would have 17 approved the statement. I cannot -- I have no knowledge

18 of what is low risk, what is incombustible or whatever,

19 so I'm sure I would have okayed this particular

2.0 statement by discussing it with Brian.

21 Q. You say that this was a fairly standard sort of

2.2 statement; is this a wording, "may be regarded as having 23 a Class 0 surface", a phrase you took from somewhere

2.4 else?

25 A. Yes, there's a good chance there was a similar product

- 1 which I have actually included, but again, it's
- 2 something that they -- not only for fire, but all the
- other sections that would look at it, they would edit as appropriate.
- 5 Q. Is there --
- A. draft certificate isn't final. There are so many
   different sort of drafts. Eventually we get to the
   correct answer.
- 9 Q. When you chose the words you used here in the initial
  10 draft, why didn't you simply say, "The panels have
  11 a class 0 surface"?
- material; I've no idea.

  Q. Is there any reason why you chose to use the words "the
- $\begin{array}{ll} 19 & \quad \text{panels may be regarded as having a Class 0 surface", as} \\ 20 & \quad \text{opposed to using the words, "the panels have a class 0} \\ 21 & \quad \text{surface"?} \end{array}$
- A. I think because of the assessment we were carrying out, bearing in mind the front face was different to the back face of the panel, eventually we came to the conclusion that, irrespective of the differences between the two

- $1\,$  faces, it can still be regarded as a class 0 surface, as
- 2 per what -- bearing in mind, it's a composite material,
- 3 it's even probably more complicated than going to get
- 4 homogeneous material to assess. So this is the
- $\,\,$  5  $\,\,$  conclusion, despite all the various tests and so on, the
- 6 conclusion was it may be regarded as a class 0
- 7 surface ...

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- 8 Q. Let's go back to page 5 {BBA00000047/5}, and look at the 9 use of the expression in that part of the certificate, 10 you say, in 6.3, as I've shown you:
- "As a consequence of sections 6.1 and 6.2, the products may be regarded as having a Class 0 surface ..."
  - What was it about sections 6.1 and 6.2 that led to the consequence that the products may be regarded as having a class 0 surface?
- 17 A. Again, I have no knowledge of how the conclusions were
   18 drawn, all I know is that they've got there are two
   19 or three different samples which were tested, and the
   20 conclusion has been stated in 6.3.
- Q. Was it not clear to you at the time that, although FR
   had indeed passed BS 476 tests and achieved class 0, PE
   had not?
- 24 A. I can't comment on that, I can't remember the details.
- $25\,$   $\,$  Q. You refer in an earlier answer to there being expert

- 1 input on this, and you say Brian Haynes looked at and
- 2 approved this wording. Did Brian Haynes himself obtain
- 3 any expert guidance from outside the BBA on that wording 4 that we're looking at?
- 5 A. Yes, I believe —— I think Sarah Colwell was the only
- 6 consultant he actually communicated with. Whether he
- $7 \quad \text{had} \quad -- \quad \text{Brian Haynes was always in touch with BRE with}$
- $8 \hspace{1cm} \text{regard to fire} \; , \; \text{so if } \; \text{it had been discussed in my}$
- 9 absence, I wouldn't know.
- $10\,$   $\,$  Q. Did Brian Haynes, to your knowledge, take notes of his
- 11 discussions with the BRE on these occasions he was in
- 12 touch with them?
- 13 A. No, no, he had his own office, as technical manager, but
- 14 he was constantly in communication with BRE, as far as
- 15 I know.
- 16 Q. And, as far as you know, did he make notes of those
- $17 \hspace{1cm} \hbox{constant communications? Did he record the advice that} \\$
- 18 was given on each occasion?
- 19 A. No. With regard to this particular product or
- 20 generally?
- 21 Q. Let's start with this particular product.
- 22 A. No. The only conversation I seem to remember is with
- Sarah Colwell with regard to the fire assessment of this product --
- 25 Q. Yes, we will come to that in just a moment.

143

- 1 In general terms, then, was it Brian Haynes'
- 2 practice, to your knowledge, not to take notes of advice
  - given to him by external fire experts such as
- 4 Sarah Colwell?

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- 5 A. No, he wouldn't, no.
- 6 Q. So can you tell us how that advice would then be
- 7 recorded within the BRE other than in Brian Haynes' own
- 8 memory? Or perhaps it wouldn't be?
- 9 A. As far as I know, there were no written records of them.
- 10 I mean, obviously I didn't get a response from BRE, so
- 11 I asked Brian to look into it.
- 12 Q. Right.
- Was there ever a time in your time at the BRE when
- 14 external fire expertise advice of this nature, coming
- 15 from Sarah Colwell or perhaps other experts, was
- required to be formalised, memorialised in writing?
- $17\,$   $\,$  A. That's the general method. We always insist on written
- 18 ... when you write an email to a consultant, you expect
- $19\,$  a result . But in this case, it was rather unusual not
- $20\,$  to have a response, and that's why I talked to Brian.
- That's why I remember some of the details, because it
- 22 was unusual in that respect.
- 23 Q. Right. Well, let's pursue this a bit more.
- $24\,$  Can we go to technical file, page 505, please,
- 25 that's {BBA00008042/505}, and we can go to the bottom of

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the page. We can see an email to Sarah Colwell from you on 29 November 2007, copied to Brian Haynes, subject: "Reaction to Fire, Rainscreen Cladding".

We need to go over to page 507  $\{BBA00008042/507\}$  to see the rest of it . It says:

"Dear Sarah

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"We are currently assessing a composite panel, comprising two aluminium sheets bonded to a polyethylene core, for use in back ventilated and drained rainscreen cladding systems.

"The panel is coated on both faces with a 6 micron thick polyester primer. The exposed face is additionally protected by a 30 micron thick Duragloss or PVDF coating

"Based on testing and classification to EN 13501-1and BS 476-6 & 7. the exposed face has been assessed as having a Class 0 surface in relation to Approved Document B of the Building Regulations.

"As I'm sure you are aware, for buildings other than dwellings, the Regulations also require classification of the surface facing the cavity (Clause 12.9).

"No test data for the back face exists. However, as it has a much thinner coating and therefore less 'energy content' than the exposed face, we think it is not unreasonable to assume a Class 0 rating for the back

145

1 face too. This has indeed been demonstrated by tests on 2 similar products in the past."

First, do you accept as a matter of fact that the PE standard of Reynobond 55 had not been tested under BS 476 and did not have class 0, only FR did?

- 6 A. Sorry, your question again, please?
  - Q. Looking five lines down you say:

"Based on testing and classification to EN  $13501{-}1$ and BS 476-6 & 7, the exposed face has been assessed as having a Class 0 surface in relation to Approved

Do you accept that BS 476-6 and 7 only applied to the FR version of Reynobond 55 and not the PE version?

- 14 A. Again, I can't remember the details but I'm guessing 15 that that was the case.
- 16 Q. Yes. I mean, you had not seen, at the time you wrote 17 this email, any test data under BS 476-6 and 7 which 18 related to the PE core, only the FR core.
- 19 A. We do say something about the PE version in the 2.0 certificate, don't we?
- 21 Q. Can you just answer my question. I'll try it once more: 2.2 do you accept that, as a matter of fact, you didn't have 23 any test data under BS 476-6 and 7 relating to the PE 2.4 core version of Reynobond 55, only the FR?
- 25 A. Yes, I would accept.

1 Q. So when you told Sarah Colwell that the exposed face had

been assessed as having a class 0 surface, that was true

3 only in respect of FR; it wasn't true, was it, in respect of the PE, the standard?

- 5 A. That must have been the case. I can't remember,
- 6 I mean ...
- 7 Q. Why didn't you make that clear to Sarah Colwell at the 8 time?
- 9 A. Erm ... I think I must have -- I say I must have; the 10 intention here is to assess a particular panel with the
- 11 particular coatings. Now, I'm not sure if this material
- 12 was fire retardant type or the PE type. All I'm asking
- 13 in this email is if she could have a look as to how we 14 can assess this and provide the appropriate statement in
- 15 the certificate. That's all.
- 16 Q. I'm just trying to understand how you come to make the 17 statement to Sarah Colwell that you do in the sentence 18 we're examining

19 First of all, do you accept that when you tell her 2.0 that the exposed face has been assessed as having 21 a class 0 surface, that was true only in respect of the 22 FR but not true in respect of the --

2.3 A. The FR or the standard version would have been defined 2.4 by the PVDF coating or any other coating. I mean, the

2.5 intention is to see with this particular coating what

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1 would be her assessment. I would have no knowledge of

what a fire retardant version was, what a PE version 2

3 was. Basically this is the information we had and, as

far as I remember, I let Sarah have the necessary

5 information to make an assessment.

6 Q. When you said, "Based on testing and classification to

7 EN 13501", which is the European Standard, did you think 8

that classification of rivet PE as class B, as we've 9 seen, contributed in some way to the product's claim to

10 have class 0?

11 Again, the fixing method was considered irrelevant here.

12 Let's look and see what Brian Haynes says about this.

13 Can we go to his witness statement, please, at page 6

14  $\{BBA00010784/6\}$ , paragraph 28. He is talking about the

15 European tests, he is referring to the European

16 standards, and in the fourth line in that paragraph, can

17 you see, Mr Gregorian, he says:

18 "They were published as part of a much wider process 19 of Standards Harmonisation and, at the time of the 2.0 assessment in question, they were not widely recognised 21 by users in the UK. They could not be used to 2.2 definitively establish Class 0 performance as defined in 23 UK Building Regulations. However, they could be used to

2.4 classify performance in relation to EN 13501-1

25 (Harmonised European Classification Standard) which was

equally acceptable under Building Regulations Approved Document B."

Now, can we look at page 12, please, of the same statement {BBA00010784/12}, paragraph 53, under question 16. At the bottom of that page, Mr Gregorian, you can see a lengthy question set out by the Inquiry:

"Did the 2008 certificate for Revnobond Architectural Wall Panels (08/4510) indicate that all such panels achieved national Class 0? If not, why not?

"Please explain with particular reference to the contents of the certificate including: (i) 'KEY FACTORS ASSESSED' on page 1: (ii) section 13.1 on page 8: 'This certificate relates only to the product/system that is named and described on the front page'; and (iii) section 6.2 the tests to National Class 0 provided to the BBA "

The answer he gives is over the page on page 13 {BBA00010784/13}, and he says at paragraph 53:

"The Certificate did not state that all panels achieved national Class 0. The Certificate makes clear that not all colours were covered and it states that some products were tested and classified to EN 13501-1. As stated above, the Certificate goes on to state that the EN classified panels would be suitable in class 0 situations."

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1 Now, looking at your understanding at the time, did 2 you understand yourself that the European test results 3 could not be used to establish the British Standard

- 5 A. I never got involved in European Standards and 6 especially with regard to fire, I have no knowledge of 7 this at all.
- 8 Q. Was it any part of your thinking that because PE had 9 achieved a class B in rivet . it could be treated as if 10
- 11 A. I can't comment on that, it's way outside my area of 12 expertise.
- 13 Q. Right.

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I think you told us earlier that you did look at diagram 40 of Approved Document B, which we looked at earlier on in your examination. Did you realise when you were drafting this part of the report that European class B did not equate automatically with national class 0?

- 2.0 A. No, I've got no knowledge of that at all. All I knew, 21 that under Approved Document B it was acceptable to have 2.2 material of limited combustibility above 18 metres. 2.3 That's all I know. As regards classifications, as to
- 2.4 what constitutes a material of low combustibility,

25 I just wouldn't know.

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- 1 Q. Did you know that the tests for limited combustibility,
- whether under the European system or the British system,
- 3 the BS system, were completely different tests from the
- 4 tests of surface spread of flame and the other tests
- 5 leading to class 0?
- A. Again, I have no knowledge of this at all. I would have 6 7 consulted the fire expert.
- 8 Q. Why was it necessary to say anything at all about 9 class 0 for the purposes of the PE standard version of 10 Revnobond 55?
- 11 A. Because I believe that was the requirement of the
- 12 approved document, basically you need to have certain
- 13 classifications to be able to make an assessment on the 14
- 15 Q. But we saw diagram 40 and it said you could either use
- 16 class B or national class 0. Given that you had class B
  - for rivet, why was it necessary to say anything at all
- 18 about class 0?

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- 19 A. I can't comment on that. I don't know. I can't
- 20 remember, I mean ...
- 2.1 Q. Did Arconic ask you to put class 0 somewhere in this
- 22 certificate?
- 2.3 A. They may have done, but we would definitely have checked
- 2.4 the validity of that statement.
- 25 Q. Why didn't you simply say that because the standard PE

- 1 in rivet had achieved class B, it satisfied diagram 40
- 2 for use above 18 metres?
- 3 A. I can't comment on that, I wouldn't know.
- Q. Can you see how somebody reading this certificate might
- 5 have been misled into thinking that standard PE either
- had class 0, which it didn't, or could be regarded as 6
- 7 having class 0, but on a basis which you can't
- 8 understand or explain?
- 9 A. The certificate obviously has come to the conclusion —
- 10 or the fire expert, with the approval of Brian Haynes,
- 11 they must have come to the conclusion that they can be
- 12 regarded as class 0. But also the certificate refers to
- 13 the appropriate section for amplification on this.
- 14 Q. Now, we will come back to Sarah Colwell's response to 15 the email I've shown you after the break, which I'm
- 16 going to ask the Chairman to give us in a second.
- 17 Can I just ask you one question before we do, and
- 18 that is: do you remember whether the wording "may be
- 19 regarded as having a Class 0 classification " came from
- 2.0 Sarah Colwell?
- 21 A. There's a good chance Brian Havnes would have initiated 2.2
  - this . I -- and obviously they must have discussed the
- 23 issue between themselves and agreed that this was
- 2.4 an appropriate statement
- 25 Q. I think you're speculating. You say there's a good

1	chance, but doing the best you can $$ and I know after	1		Then you say in the third paragraph:
2	13 years it's difficult $$ do you remember whether that	2		"With regard to Reaction to Fire, in accordance with
3	phraseology was either specifically suggested by	3		the requirements of UK Building Regulations, we also
4	Sarah Colwell or actually approved by Sarah Colwell	4		need classification of the reverse (unexposed) side of
5	herself?	5		the panel. In Section 6.3, we have assumed, and stated
6	A. I can't make a comment on that. I don't know. I really	6		that 'the unexposed side of the products may also be
7	don't know.	7		regarded as having a class 0 surface'. However, we will
8	MR MILLETT: Very well, thank you very much.	8		still need documentary evidence showing that this is
9	Mr Chairman, is that a convenient moment?	9		indeed the case. The Warrington test report makes no
10	SIR MARTIN MOORE-BICK: Yes, I think it is, thank you very	10		specific reference to the performance of the reverse
11	much.	11		side."
12	Well, Mr Gregorian, we will have a short break at	12		Is it right that you understood that Arconic had to
13	this point. We will come back to resume at 3.35,	13		provide separate documentation showing the performance
14	please. In the meantime, please make sure not to talk	14		of the reverse side of the panel?
15	about your evidence to anyone else. All right?	15	Α.	Ideally , yes, on the particular product we were
16	THE WITNESS: Okay, thank you.	16		covering.
17	SIR MARTIN MOORE—BICK: Good. See you a bit later on.	17	Q.	In the paragraph there you refer to the Warrington test
18	THE WITNESS: Yes.	18	•	report. Was that the 2003 Warrington test report that
19	SIR MARTIN MOORE—BICK: Thank you very much, good.	19		we've seen on FR?
20	(3.20 pm)	20	Α	I can't remember.
21	(A short break)	21		Okay. Now, if we go to page 499 {BBA00008042/499} we
22	(3.40 pm)	22	۷.	can see the response, the same technical file. This is
23	SIR MARTIN MOORE—BICK: Welcome back, everyone. I apologise	23		his email of 5 December 2007, and he says:
24	for the slight delay, but we are now ready to continue.	24		"Hello Hamo,
25	So I'll just check that Mr Gregorian is there and	25		"After having checked with our paint laboratory and
23	30 1 II just check that IVII Gregorian is there and	23		Arter having encerted with our paint laboratory and
	153			155
1	can hear me and see me.	1		the different certificate we have today, I give you
2	THE WITNESS: Yes.	2		those two information in order to qualify the back face
3	SIR MARTIN MOORE-BICK: Very good, Mr Gregorian, and you're,	3		of our Reynobond panels.
4	I hope, ready to carry on, are you?	4		$^{\prime\prime}1-$ The only difference between front and back side
5	THE WITNESS: I am, yes.	5		is the thickness of the coating witch is 6 [microns]
6	SIR MARTIN MOORE-BICK: Thank you very much.	6		instead of 35 [microns]. So we have 14.2 g/m2 coating
7	In that case, I'll invite Mr Millett to put some	7		weight on the back face for 47.2 g/m2 on the front side.
8	more questions to you.	8		"2— Like you can see in the attached 'reaction to
9	THE WITNESS: Thank you.	9		fire classification report No. RA07-0182', our coated o
10	MR MILLETT: Thank you very much, Mr Chairman.	10		[aluminium] used for the skins of Reynobond are
11	Can we go back to the BBA certificate, please, and	11		classified as A1 (non combustible).
12	I would like to look at section 6.3 {BBA00000047/5}. If	12		"Can you please now let me know if you have all the
13	you look at 6.3, in the last sentence there it says:	13		required information to close our certification
14	"The unexposed side of the products may also be	14		process?"
15	regarded as having a class 0 surface."	15		You can see that there is an attachment to this
16	I want to look to see with you what supported that	16		email at the top there, "Reynolux A1 — RA07—0182". Car
17	statement.	17		we go to that. That's on the technical file in
18	Can we start by looking at the technical file,	18		a different part of it, page 139 {BBA00008042/139}. As
19	please, at page 535 {BBA00008042/535}. This is an email	19		one might expect, given the title in the attachment, it
20	from you to Claude Wehrle on 22 October, if we look at	20		relates to Reynolux. Can you see that in the middle of
21	the second half of the email run on the screen, and you	21		the page there?

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A. Yes.

25 A. It is, yes.

isn't it?

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"A copy of our proposed draft Certificate is

"Dear Claude

attached."

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Q. That's a totally different product from Reynobond 55,

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2		different product could be acceptable as the basis for
3		a claim for class 0 on the back side of Reynobond 55
4	A.	Again, I've got to emphasise that I have very little
5		knowledge of fire issues, but I would imagine the
6		substrate on which the paint has been applied, being
7		metal, that wouldn't catch fire, so the only fire issu
8		would have been the actual coating, which in this case
9		was much less than the front face coating, $\ensuremath{I}$ think
L 0		6 microns against 35 microns, I seem to remember.
L1	Q.	You're being asked to extrapolate, are you, from the
L2		results on Reynolux to a thicker surface on Reynobon

Q. Can you explain how a classification for a completely

nd? 13

A. I wasn't involved in decisions regarding that, so -

14 Q. I see

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15 A. — that's why I consulted fire experts for that.

> To be honest, I find it quite logical to assume that is the case, but again, I had to have confirmation from a fire expert.

19 Q. You say we had to have confirmation from a fire expert; 20 indeed, we've seen your email to Sarah Colwell of 2.1 29 November 2007, at least in part. Can we go back to 22 that. That's in the technical file at page 507 {BBA00008042/507}. We have looked at half of this, 2.3 2.4 let's look at the rest of it.

I was showing you this before the break, and you

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1 say, just below halfway down:

> "No test data for the back face exists. However, as it has a much thinner coating and therefore less 'energy content' than the exposed face, we think it is not unreasonable to assume a Class 0 rating for the back face too. This has indeed been demonstrated by tests on similar products in the past.

"Could you please comment on the validity of our assumption.'

If we see at page 505  $\{BBA00008042/505\}$  her response, it's in the second email from the top on that page, also dated 29 November, and she says:

"Hamo

"We would need to see the test data to be able to make any meaningful comment on the potential product performance. If you would like us to complete a review we would be happy to look at this for you and provide a proposal if necessary for any additional work or formal assessment."

Your response to that is a little bit above it, still on page 505, if we can just scroll up, please. You say:

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2.4 "I was not able to contact you by telephone, hence 25 e-mail.

"The attached documents are classification reports 2 for the 'standard' and 'fire retardant' versions.

3 "Testing to BS 476-6 & 7 has also been undertaken 4 but only hard copy of the reports exist.

"Please let me know if this is sufficient for your 5 6 purposes

> "If you need to have a chat, please give me a call when you are free.

"I'm not in this afternoon but I am in the office until 12:00 and the rest of the week."

11 Do you remember whether you actually had the chat to 12 which you refer?

13 A. With Sarah?

Q. Yes, with Sarah Colwell. 14

15 A. No, I couldn't get hold of her.

16 Q. Having been told by Warrington that the only solution 17 was to get tests done, why did you approach

18 Sarah Colwell?

19 A. To see whether our assumption was correct, bearing in 20 mind I must have discussed it with Brian regarding this, 2.1 and we were seeking confirmation from Sarah.

2.2 Q. Right.

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Now, we've got no evidence on the file that we've seen that Sarah Colwell ever responded to you or indeed to Brian Haynes. Did she, do you think, in response to

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1 this request?

2 A. As far as I remember, they -- well, there was no 3 response from her, because of her busy work schedule, so

that's why I contacted Brian to have a chat with her.

5 Q. Now, we can see from this email, before we leave it,

6 that you sent her -- can you look at the attachment

7 line — the two European tests for Reynobond 55: first

8 of all, the test for PE, which had a Euroclass B-s2, d0,

9 that was classification 5A we looked at earlier: and

10 also Revnobond FR at B-s1, d0, which was the 2006 test.

11

12 Q. You didn't send her the 2003 BS 476-6 and 7 tests that 13 had been done by Warringtonfire for FR, did you?

14 A. Where I say only hard copy exists —-

15 Q. That's what you're referring to, is it?

16 A. Yes, so --

Q. Why didn't you send her those? 17

18 A. Well, as I say, I was expecting a response, and I didn't

19 receive a written response, but based on  $-\!-\!$  I think

20 based on the actual specification that was supplied by

21 Arconic, or Alcoa, I'm guessing she was able to assess

2.2 the fire performance of the back face based on what she

23

24 Q. Can we go to -- I'm so sorry, I keep thinking you have 25 finished your answer.

Can we go to your statement, please, at page 4 {BBA00011096/4}. You can see Inquiry question 6 in

"What information on fire performance was Alcoa asked to provide to the BBA prior to the certification in 08/4510? Did you or anyone at the BBA ask Alcoa for all relevant test data in respect of Reynobond Architecture Wall Panels? If not, why not?"

You answer at paragraph 22, can you see? You say:

"From the correspondence available, and to the best of my recollection. Alcoa provided information relating to the front face of the panels which had a PVDF coating of thickness 35 microns. The back face of the panels had a polyester primer coating of 6 microns. On the advice of BRE's fire expert, our Technical Manager accepted that, in fire, the back face of the panels would perform at least as well as the front face."

As I think we've seen in your statement already at paragraph 39 {BBA00011096/7}, you say it was Brian Haynes who sought the advice of Sarah Colwell.

Are you able to shed any further light on when that advice was given?

2.3 A. When, sorry?

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2.4 Q. On when that advice was given? Are you able to tell us when that advice was given?

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- 1 A. What advice is that, sorry?
- Q. The advice that we see in the last sentence of your 2 3 paragraph 22:
- "On the advice of BRE's fire expert, our Technical 5 Manager accepted that, in fire, the back face of the panels would perform at least as well as the front 6 7 face '
- 8 A. Yeah, this is the conversation I was referring to, the 9 telephone conversation with Sarah.
- 10 Q. I see. So that's the conversation that Brian Haynes had 11 with Sarah Colwell that you listened in on but couldn't 12 hear what she was saying?
- A. That's correct. Again, I don't know what Sarah said. 13 It was a short conversation between Brian and Sarah, and 14 15 I sort of got the approval from Brian soon afterwards.
- 16 Q. And when Brian Haynes reported to you what Sarah Colwell had told him, is the totality, all of the advice that he 17 18 got from her, reflected in that last sentence in 19 paragraph 22?
- 2.0 A. Yes, I would imagine that was the conclusion that Brian 21 came to, based on the advice given by Sarah.
- 2.2 Q. Did Sarah Colwell, to the best of your knowledge, 23 explain to Brian Haynes, or did Brian Haynes tell you 2.4 why it was technically acceptable to use the Reynolux 25 classification to draw any conclusions about the fire

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- performance of the back face of Reynobond --
- 2 A. No, there was no explanation, but I think we both agreed
- 3 that it's a reasonable assessment, because there's less
- 4 paint, so there's better fire performance with regard to 5 the back face.
- Q. That's a process of extrapolation, isn't it? Was there 6 7 any technical basis that you knew of which would permit
- 8 extrapolation from the results of the test on one 9 product to another product?
- 10 A. No. I mean, because I wasn't sure about this
- 11 extrapolation, we sought confirmation from BRE. 12 I would like to turn back to the certificate, please, to
- 13 look now at section 6.4 on colour. If we go back. please, to {BBA0000047/5}, and it says there, 14
- 15 paragraph 6.4:

16 "These performances may not be achieved by other 17 colours of the product and the designations of

18 a particular colour should be confirmed by ..." 19

Then you set out some tests there.

2.0 Now, do we understand from your witness statement 21 that coverage of the BBA certificate was limited to the 22 colours expressly set out in the certificate, so

- 23 grey/green, metallic grey, and gold for the particular
- 2.4 types of panel?
- 25 That's correct.

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- 1  $\ensuremath{\mathsf{Q}}.$  Is it right that the particular colours are valid, in
- 2 other words covered by the certificate, only if they are
- 3 on the stated core type, so grey/green only certified if
- it's on PE-cored Reynobond?
- 5 A. That's correct, yes.
- Q. Was it your understanding that particular colours are 6
- 7 only valid for particular coatings, so the certificate
- 8 would only cover metallic grey Duragloss finish when
- 9 applied to PE-cored Revnobond?
- 10 That's correct, yes.
- 11 Q. And is it right, therefore, that you intended that the
  - reader should understand that every other colour and
- 13 every other combination outside what we've discussed had
- 14 to be tested?

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- A. That's correct. 15
- 16 Q. What was the technical justification for that colour
- 17
- 18 A. From my conversation with Brian, the impression I got
- 19 was fire performance is very much a function of the
- 2.0 actual colour. It's very sensitive to the actual
- 2.1 colour. As to why that is, I wouldn't know. Possibly
  - something to do with the energy contained within the
- 23 paint coating, I don't know.
- 24 Q. Did the BBA --
- 2.5 A. Sorry.

1	Q.	Did you want to finish your answer?	1		You respond to him a little bit further up the
2	Α.	No, I'm okay.	2		screen, if we can, the same page, the same day, you say:
3	Q.	You were about to say something else and I started the	3		"Claude
4		next question.	4		"As requested, please find attached letter.
5		All right, I'll ask the next question.	5		"Hard copy to follow.
6		Did the BBA expect that that colour limitation would	6		"I hope it proves helpful."
7		be rigorously adhered to by customers?	7		You can see that the attachment is an approved
8	A.	The certificate covers that product, and that product	8		letter in pdf. We can see that on page 473
9		only, with that particular coating. As to what $$ how	9		$\{BBA00008042/473\},$ if we go two pages down, and it's
10		the certificate is used, that's really beyond our	10		a letter signed by Brian Haynes and addressed to
11		control, really.	11		Claude Wehrle at Arconic, dated 12 December 2007. It's
12	Q.	Did the BBA ever hear that this colour restriction in	12		entitled "Reynobond Architecture Wall Cladding Panels
13		the certificate was routinely ignored in the UK market?	13		with Duragloss 5000 or PVDF Coating", and he says:
14	A.	I cannot comment on that, I don't know.	14		"I am writing to confirm that all technical work
15	Q.	So you never heard any intelligence or rumours that UK	15		relating to the assessment of the above product has now
16		customers were ignoring this colour restriction?	16		been successfully completed.
17	A.	No, no.	17		"The Certificate is currently being finalised for
18	Q.	Did you ever hear that customers couldn't understand why	18		issue and will be forwarded to you in due course.
19		the difference in colour would make a difference?	19		"We hope this letter is helpful in the mean time."
20	Α.	Erm I can't comment on that. I mean, the it's	20		Do you know whether this letter was intended for
21		a fact that we were aware of. But as far as the	21		Claude Wehrle to use officially , perhaps to send out to
22		certificate is concerned, it covers this particular	22		clients?
23		product. If the client or the installer wants to put	23	Α.	No, as far as I know, they couldn't use this —— they
24		a different product in his cladding system, that would	24		shouldn't use this as proof of technical approval by the
25		be out of our control. It wouldn't be covered by the	25		BBA. They would have to wait until the certificate was
		·			•
		165			167
1		certificate . That's what we are saying, I think, in	1		formally issued.
2		here.	2	Q.	Now, we can see that $$
3	Q.	Can you explain why the certificate doesn't say on its	3	A.	Whether they had used this to $$ in a particular project
4		front page that it certifies Reynobond cladding wall	4		or not, I just wouldn't know. I don't think BBA
5		panels in these three colours in these three forms?	5		generally would know about these things. But all we are
6	A.	Yes.	6		saying here, bearing in mind the client is anxious to
7	Q.	And nothing else?	7		get his approval, this is a fairly standard sort of
8	Α.	That's it.	8		letter which Brian Haynes has signed obviously here,
9	Q.		9		just to reassure the client as to what stage the
10	•	This is just a standard format of the certificate . I'm	10		assessment is, just to keep him happy, really.
11		not sure why not. But specifically those statements are	11	Q.	We can see there is no mention of particular colours
12		relevant to the behaviour in relation to fire, so it	12	٦.	being certified here or of core types or finishes .
13		seems logical to me that it would be in the fire	13		My question is: if colours and core types were such
14		section.	14		an important scope limitation, why was that not spelt
15	0	I follow.	15		out by Mr Haynes in this letter?
16	ų.	Can we go to page 471 of the technical file	16	۸	I don't know. I wouldn't know. I mean as I say,
17		{BBA00008042/471}. At the bottom of the page we see	17	Α.	the certificate mentions in the appropriate section what
		, ,	18		
18		an email from Claude Wehrle to you on 12 December 2007, subject, "Reynobond certification":	19		is covered, especially with regard to fire. Otherwise
19 20		"Hello Hamo,	20		the title here would have been much longer than it is now.
				0	
21		"Sorry to disturb, but coming back to our call from	21	Ų.	Can we go back to the certificate, please, at page 3
22		yesterday	22		{BBA00000047/3}. I would like to look at section 1.1 or

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end of the line:

paragraph 1.1 with you again. We've read this a number

of times, but you can see in the middle it says, at the

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"Could I have an official document from the BBA that

certify that we have the BBA approval for Reynobond in

PVdF finish and in Duragloss 5000 finish?"

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"A Duragloss or PVDF coating available in various 2 colours protects the exposed face." 3 So you refer there to "various colours". Do you recall that in fact it was Claude Wehrle who 4 5 had proposed that wording and you had added it without any objection? We see that from the red and green email 6 7 run. Do vou remember that? A. Yes. I would guess this was how the CSTB document was 8 9 worded. 10 Q. But we see what Claude Wehrle intended by these words. 11 that you had agreed to add at his suggestion, as we saw 12 from the red and green email earlier. 13 Can we go to his witness statement at page 12 14  ${MET00053190/12}$ , paragraph 42. It's a long paragraph, 15 so we need to pick it up about halfway down. It's on 16 the screen in front of you about three-quarters of the 17 way down, and it says: 18 "If the certificate ... " 19 Do vou see? 20 A. "If the certificate states 'Coloris ..." 2.1 Q. Yes, exactly: 22 "If the certificate states 'Coloris: Divers' [that's 2.3 French, I think] ('Colour: Various'), the testing may

> colour is stated on the certificate, it will only relate 169

relate to all colours in the range, or if a specific

1 to that. If customers had any concerns, it would be 2 expected that they would contact the company, so that 3 the issue could be discussed."

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My question, Mr Gregorian, for you is: did you understand that Mr Wehrle wanted the certificate to relate to all the colours in the range or only to the colours specifically stated?

- A. He may have ideally wanted that, to cover all colours, but I don't think we would accept that, so that's why we have clearly stated in this certificate as to what colours were covered.
- 12 Q. Do you accept that the reader might understand from 13 section 1.1 that we have just been looking at on page 314 of the certificate {BBA00000047/3} that all colours in 15 the range were certified, were covered by the 16 certificate, either with a Duragloss or a PVDF coating?
- 17 A. Erm ... I'm not sure, I haven't got the statement in 18 front of me. Can we see it on the screen?
- 19 Q. Of course,  $\{BBA00000047/3\}$ . We can see it again then. 2.0 It says, as I've shown you, in the fourth line:

"A Duragloss or PVDF coating available in various colours protects the exposed face."

> My question is: do you accept that a reader of that might understand that all colours in the range are covered by the certificate?

> > 170

A. No, I think we have made that clear. I think obviously

that is true, they have these systems, these different

3 panels with different coatings and so on, but they

4 wouldn't be covered, because we have made that clear in

5 the appropriate section as to what is covered, and the

only ones we have covered -- obviously if -- again, we 6

say if a different colour is involved, obviously they

8 will have to go back to the certificate holder for

9 confirmation as regards fire performance.

Q. Do you accept that by adding what Mr Wehrle had asked 11 you to, namely the reference to various colours there,

12 you were introducing an ambiguity in the certificate, on

13 the one hand between saying that various colours were

14 covered, but on the other only the colours specifically

15 identified were covered?

16 A. The fact that there's a statement here as regards the 17 different products that were on offer by Alcoa doesn't 18 necessarily mean that it's covered, it merely states 19 what the manufacturer can provide. That's the best way

20

2.1 Q. Can we then look on and see how the draft was 2.2 circulated.

We've seen from Mr Havnes' evidence, and from discussions you and I have had earlier in the day, Mr Gregorian, that this was a leader certificate, which

171

1 meant that there was a review process.

> Can we go, please, to  $\{BBA00010784/5\}.$  This is Mr Haynes' witness statement, and I want to show you paragraph 21.

At paragraph 21, Mr Haynes says:

"Leaders were submitted for comment to other BBA staff and to external experts. The experts to whom the draft was circulated would depend on the nature of the product. I exhibit Document BH1 forming part of this statement which sets out those parties to whom the draft of this certificate was sent, both internal and external, as follows."

Then there is a long list of bullet points with names next to them, we can see that, the first of which is the client, and others down the list.

16 The BBA section head, the second bullet point on 17 that list, I think we established earlier was 18 Geoff Gurney; is that right?

19 A. That's correct.

2.0 Q. Would this document also have gone to John Albon?

2.1 A. John would most probably have looked at the durability 2.2 aspect, because that's how he would get involved in

23 things like this.

24 Q. Right.

2.5 A. Most probably he would have at some stage been consulted

- 1 with regard to durability.
- 2 Q. Right. Was he on the panel, if I can put it that way,
- 3 for review of leader certificates such as this?
- 4 A Yes
- Q. Which section was John Albon in at the time, do you 5
- 6 recall?
- 7 A. Erm ... I think durability was his main area of
- 8 activity . I can't remember the -- what the section was 9
  - called, to be honest. I think just durability.
- Q. Would I be right in thinking that Brian Haynes would 11 have had the ultimate sign-off --
- 12

- 13 Q. -- on the wording of the certificate?
- A. Yeah. 14
- Q. Yes, I see. 15
- 16 Now in this list here we can see who is there but
- 17 we can't see anybody in this list from BRE or from
- 18 Warrington who would have seen this draft in its final
- 19 form and signed—off statements about fire performance.
- 2.0 Is that because nobody from the BRE or Warrington or any
- 2.1 other fire expert external to BBA did so?
- 22 A. Yes, I'm not aware that -- I mean, this was obviously
- a standard list of different parties that would have 2.3
- 2.4 a look and the BRE wasn't in it, so I wouldn't know.
- 25 I wouldn't know about that.

173

- 1 Q. Can we go to the technical file again, please, and look
- at page 319 {BBA00008042/319}. This is a document which 2
- 3 has the word "Draft 1" at the top, and you can see this
- looks like the very first draft of the BBA certificate.
- 5 It hasn't even got a number on at that stage. But at
- 6 the very top, somebody has written in manuscript,
- 7 "Circulation". Does that tell us that this draft was
- 8 circulated for commentary within the BBA? 9
- A. Obviously there would be some circulation because the 10 section head would -- each individual section head would
- 11 have to look at this --
- 12 Q. I see.
- 13 A. — to assess the product from their own perspective.
- 14 Circulation, as it's written here, it could very well
- 15 mean circulation to the various parties which
- 16 Brian Haynes has actually drawn up.
- Q. How wide would the circulation of a draft 1 version of 17
- 18 a certificate like this be?
- 19 A. Sorry, how long?
- 2.0 Q. How wide would the circulation of draft 1 of
- 21 a certificate such as this be?
- 2.2 A. Normally a draft would go to various departments who
- 2.3 would look at this and then pass on to the -- you know,
- 2.4 between -- it would just go between the various
- 25 departments, various sections.

174

- 1 Q. Would the circulation be narrower than the final list of 2 people we saw in Brian Haynes' statement a minute ago?
- 3 A. I believe with confirmation certificates there was less
- 4 of a problem in this respect. But for normal
- 5 certification, it would definitely go into a loop,
- several times, many times sometimes, before it was 6 7
  - finalised .

13

2

- $\ensuremath{\mathsf{Q}}.$  Can we have this version side by side, please, with the 8 9 issued version. I want to compare the front pages of
- 10 each of them. If you keep draft 1 up on the screen,
- 11 please, and let's have the final version as issued which 12 is {BBA00000047}. There it is.
  - Let's just compare "Behaviour in relation to fire".
- 14 On the left-hand side, in draft 1, do you see where it 15
- 16 "In relation to the Building Regulations for
- 17 reaction to fire, the panels may be regarded as having 18 a Class 1 surface in England and Wales ..."
- 19 Then when you look across to the final version, it 20
- $^{\prime\prime}\ldots$  the panels may be regarded as having a Class 0 21 22 surface in England and Wales ..."
- 23 Now, the technical file doesn't contain any record 2.4 of any external commentator suggesting that change, or
- 2.5 indeed when it might have been made.

175

- 1 First of all, do you know when that change was made?
  - A. No, I can't comment on this. But bearing in mind the
- 3 certificate actually has stamped on it "For comment
- only", and there would be a lot of drafts, including
- 5 things that would have to be finalised, and, as I say,
- 6 after consultation with BRE, it was decided that class 0
- 7 was the appropriate one. But as to when this happened,
- 8 I just couldn't tell you.
- 9 Q. Do you know who decided to make that change?
- 10 Erm ... this must have been after discussion with
- 11 Brian Haynes.
- 12 Q. But was it his decision, did he decide to make that
- 13 change from class 1 to class 0?
- 14 A. I believe so, yes, I believe -- I certainly didn't make
- 15 the decision.
- 16 Q. Do you know on what basis, from your own knowledge, the
- 17 change was made from class 1 to class 0?
- 18 A. Based on the advice from BRE.
- 19 Q. Was the BRE asked to advise on what the classification
- 2.0 of the panels should be?
- 2.1 A. I think that the idea was to confirm that the panels
- 2.2 could be considered as class 0. For all I know, Brian
- 23 may have actually seen the class 1 classification and
- 2.4 changed it to class 0. I can't remember that.
- 25 Q. Do you know when that advice was given by the BRE to

1 change from class 1 to class 0? CSTB to conduct surveillance at Merxheim? 2 A. Sorry, what was the question again? Sorry, I can't 2 A. Yes, yes. As I say, within UEAtc rules, the original 3 3 certification body would -- well, they were supposed to 4 Q. Do you know when the BRE gave the advice to change the 4 carry out any surveillance and inform -- they were classification on the certificate from class 1 --5 5 expected to inform the BBA if there were any major A. Oh, no, I wouldn't know. No, I wouldn't know. non-conformances. 6 6 7 Q. Right. 7 Q. Can we --8 8 A. That was the accepted procedure within the UEAtc rules. I have one or two more topics to cover with you, 9 Mr Gregorian. The next one is surveillance. 9 Q. Can we then go, please, to page 123 of the technical 10 10 file  $\{BBA00008042/123\}$ . Your email, bottom of the page, Are you aware or were you familiar with the fact 11 that the BBA terms and conditions required the 11 17 May 2007 to Laurent Plagnol: 12 certificate holder to allow the BBA to conduct 12 "Dear Laurent 13 13 "We are currently assessing the above product with a view to issuing an Agrément Certificate." A. The accepted arrangement within the UEAtc was the 14 14 15 original certification body would conduct all 15 You set out the applicant's details, and then you 16 16 surveillance, and they would be expected to inform the 17 BBA if there were major non-conformances. 17 "As part of our assessment, we would normally carry 18 Having said that, I think something I've probably 18 out a factory inspection against a Quality Plan. 19 missed in my witness statement, every three years we 19 However, we understand that there is currently a scheme 2.0 would go through each certificate to make sure there 2.0 in operation by which regular surveillance by CSTB is 21 were -- if there were any problems, and one of the 21 carried out. In view of this, we should be grateful if 22 questions we would ask CSTB was whether there were any 22 you would kindly confirm that factory production control non-conformances, and I think that process is still 2.3 23 relating to the product has been satisfactorily 2.4 going on now. Every three years we would review 2.4 maintained and that once the Certificate is issued you 25 a certificate . 2.5 will inform the BBA if: 177 179 1 Q. Can we go to the technical file, please, 1 "a) any major non-compliances are identified. {BBA00008042/121}. This is a document headed "Request "b) the factory visits are discontinued. 2 2 3 for Surveillance Visit". At the bottom you can see that 3 "Your prompt response would be much appreciated." it's dated 21 April 2008. We can have that on the Above that, you can see that Laurent Plagnol 5 screen. There is a signature next to it, project 5 responds on 21 May: 6 manager. It looks like your signature. 6 "Dear Hamo. 7 7 A. Yes, it is, yes. "I confirm you [sic] that any major non-compliances 8 8 are identified Q. The other signature is head of approvals, 9 9 "The factory audits are continued (the next audit Brian Chamberlain; yes? 10 10 will be schedule the 14th of June 2007). 11 Q. In the table you can see details of locations to be 11 "Best regards. 12 visited, if we can just scroll back up, please, and 12 "Laurent PLAGNOL." 13 visit frequency. Location: Merxheim, visits per annum: 13 Is that, as we've seen from the emails there, the 14 agreement to set up regular audits by the CSTB? 14 15 15 At the bottom of that section, there is a note, and A. Yes, it's quite a standard way of asking CSTB if 16 it says: 16 everything is okay. 17 "1) Unless technically justified, each location Q. Was it your understanding or expectation, therefore, 17 18 should receive at least two visits per annum. 18 that the CSTB would conduct surveillance twice a year 19 "2) Please identify if the visit is to be combined 19 and report back to the BBA? 2.0 2.0 with an existing visit arrangement." A. Yes, that's within the UEAtc rules. We were perfectly 21 21 entitled to assume that CSTB would carry out Then at the very bottom of the table it says: 2.2 "If no surveillance required provide reason." 2.2 surveillance.

178

23

2.4

25

There was no audit, was there, and certainly no evidence

180

we've seen that there was -

A. No, no, that wasn't required.

Opus 2 Official Court Reporters

2.3

2.4

25

Somebody has put

"Surveillance by CSTB, France."

Does that mean that the BBA was going to rely on the

- 1 Q. So did the BBA have any quality plan with Arconic when
- 2 it was originally assessing the Reynobond 55 product and 3 issuing the certificate?
- 4 A. I can't remember, to be honest, no, I don't know.
- 5 Q. So when --
- A. Sorry, when the CSTB certificate is given to the BBA, 6
  - all quality issues were the responsibility of the
- 8 original issuing body, CSTB. So whether a quality plan
- 9 was not relevant here, I can't remember, but certainly 10 there was no direct control by the BBA over the
- 11 manufacture of the product.
- 12 Q. Is the effect of this that when it came to issuing the 13 certificate, you hadn't had any quality plan or
- 14 surveillance report from the CSTB?
- 15 A. No, I don't remember having any such thing, because it
- wasn't the normal thing to do. I mean, obviously 16 17
- there's nothing on file regarding a quality plan. But 18 something like this email would probably be sufficient
- 19 for our purposes.
- 20 Q. Was the arrangement, therefore, that the CSTB would 2.1 effectively report only major non-conformities and 2.2 nothing else?
- 2.3 A. That's right.
- 2.4 Q. Now, you were at the BBA for more than two years after January 2008, when the certificate for Reynobond 55 was

- 1 issued. In that time, I think it's right, isn't it,
- that the BBA did not receive any surveillance reports? 2
- 3 A. That's correct, yes
- Q. Did that surprise you?
- A. No. Whether they were expected to provide surveillance
- 6 reports or not, I don't know. But, as I say, after
- 7 three years, in 2011 I believe, there was a review, but
- 8  $I\,{}^{\prime}d\,$  left the BBA by then, and, as I say, during the
- 9 review things like quality control issues would have
- 10 been addressed.
- 11 Q. Yes, thank you.
- 12 I've just got one more short topic.
- Can we go, please, to  $\{\mbox{META00002052/55}\}.$  This is 13
- a letter from the BBA dated 15 January 2008 and sent to 14
- 15 Claude Wehrle, and if you go to page 2
- 16 {META00002052/56}, you can see that it's signed by
- 17 GG Lines, section head, technical writing and
- 18 publications.
- 19 We haven't heard anything about Mr Lines so far in
- 2.0 your evidence. What was his role at this time?
- 2.1 A. Geoff was the head of technical writing.
- 2.2 Q. Right.
- A. I worked very closely with him. 23
- 24 Q. Did he have any role to play in the technical drafting
- 25 of the BBA certificate itself?

182

- 1 A. No, the originator of the draft certificate would be me,
- 2 and then he would be in charge of circulating it to
- 3 various departments, getting comments and including
- 4 them, and eventually I would have a look at the draft
- 5 certificate, and he had no input into the technical
- aspects. He would basically be in charge of the -- just 6 7 producing the certificate.
- Q. If we go back to page 1 {META00002052/55}, we can see 8 9 the heading, you can see the certificate is referred to 10 there, and in the first paragraph he says:

"I am pleased to inform you that Agrément

12 Certificate No 08/4510 (First issue) has been awarded to 13 the above product and a copy of the Certificate, bearing

14 the number and our Chief Executive's signature, is 15

11

22

16 If we go to the next page  $\{META00002052/56\}$ , which 17 I've just had on the screen, you can see that it was 18 sent by Mr Lines.

19 Would you have been aware of this letter at the 20

2.1 A. This is a standard letter which I must have seen several

2.3 Q. I see.

times.

2.4 A. This is towards the end of the -- you know, once the 25

certificate is signed by the chief executive, that's the

183

- 1 letter that would go to the client.
- $\ensuremath{\mathsf{Q}}.$  Under "Conditions" there on that page, you can see that 2 3 the letter says:

"We must draw your attention to the Conditions of

5 Certification in the Certificate and point out that if 6 modifications are made to the specification or

7 conditions of use of the certificated product during the

8 period of validity of the Agrément Certificate, the BBA

9 must be informed without delay. Failure to do so could 10 invalidate the Certificate.'

11 Was that standard wording?

- 12 A. Yes. I believe so.
- Q. So was it the position of the BBA that the certificate 13
- holder would have to tell the BBA if there were any 14
- 15 modifications or if the conditions for use were
- 16 different?

19

- 17 A. That's correct, yes.
- 18 Q. Would you have expected that to have included changes to

or updates in the fire classification of Reynobond 55?

- 2.0
- A. I think it would apply to the certificate as a whole.
- 21 Any material change would have had to be conveyed to the 2.2
- 23 Q. If, for example, the European fire classification for PE
- 2.4 rivet had been downgraded to a class E or a class C,
- 25 would you have expected that fact to have been

1 communicated to the BBA? 1 any more questions for you. 2 A. That's what we are asking the client to do, and I'm not 2 Mr Millett? 3 sure if that sort of scenario has happened before, 3 MR MILLETT: Yes, thank you, Mr Chairman. 4 but ... it's -- that particular clause actually just 4 Mr Gregorian, I have two documents to put to you, if I may. The first one is  $\{BBA00010701/1\}$ . This is 5 confirms that any change from what we have assessed 5 would have to be conveyed to the BBA. I think that's an email which is sent by John Albon on 20 November 2007 6 6 a logical thing to do, isn't it? 7 to Brian Haynes, copied to you, and it follows on from 8 Q. Would you have expected Arconic to have told the BBA if 8 the discussions on that day about comparing the front 9 it became aware that any of its statements in the 9 side and the back side and whether it's safe to conclude 10 10 certificate were incorrect, misleading or required that the back side is class 0. That is the context. 11 updating? 11 If you look at the text of the email, it says: 12 12 A. Arconic would have had to do that, just to make sure "I would be amazed if the coating isn't Class 0, but 13 that the certificate is valid for their product. 13 can 't see what we are gaining by not asking them to MR MILLETT: Yes, thank you. 14 14 prove it. It also seems unfair to other Certificate 15 Mr Chairman, I've come to the end of my prepared 15 holders should have commissioned the necessary test. 16 16 auestions "Could we compromise by proceeding to issue, but SIR MARTIN MOORE-BICK: Right. 17 17 asking them to provide the confirmatory data 18 MR MILLETT: May I ask, therefore, that this be the time for 18 retrospectively?" 19 the appropriate break. I'm sorry that it's just 19 Now, in that email, first of all, did you understand 20 one minute before 4.30, but it would be convenient now 20 the "them" there to be a reference to Arconic? 21 to take the break, look at any further questions and 2.1 A. Yes. Yes, that's -- yeah, I suppose that's true, yes. 22 then release the witness, if possible. 22 Q. Do you know what happened to that question or proposal SIR MARTIN MOORE-BICK: Yes. 2.3 23 by John Albon, whether there was a request sent back to 2.4 Well, Mr Gregorian, we need to have a short break at 2.4 Arconic to ask them to provide the confirmatory data 25 this stage so that Mr Millett can check that he's asked 2.5 retrospectively? 185 187 1 you all the questions he needs to ask you, and also to 1 A. I can't remember ... I can't remember that at all, no. Q. Can we look at  $\{BBA00010711\}$ , please. This is an email 2 enable others who are following the proceedings to 2 3 consider whether they think there are other questions 3 the same day, which isn't part of the same email string, that need to be asked. 4 but you write to Brian Haynes, copied to John Albon, and So we will have a short break until 4.45, please, 5 5 say "Thanks Brian [in response to a different document]. and at that point we will see if there are any further 6 6 7 7 questions for you. "I'll get Alcoa to have the test done. THE WITNESS: Okay, thank you. 8 8 "One less thing to do for the coil coated sheet." 9 SIR MARTIN MOORE-BICK: As before, please, no talking to 9 Did you get Alcoa to have the test done, do you 10 anyone about your evidence or anything relating to it 10 11 while you're out of the room, so to speak. 11 A. I think in the correspondence we have seen before we did 12 THE WITNESS: Sure. 12 ask for additional tests, or test results, but in the SIR MARTIN MOORE-BICK: All right. See you later on then. 13 13 end, because that wasn't forthcoming, we decided to go 14 14 a different route with regard to assessment, mainly the Thank you very much. 15 15 (4.30 pm) extraction idea, which we used. 16 (A short break) 16 Q. Why not simply insist that Arconic do the test as you 17 17 had agreed that you would get them to do? 18 SIR MARTIN MOORE-BICK: Welcome back, everyone. We will see 18 A. I can't remember the exact context in which this was 19 now whether there are any further questions for 19 agreed, but I think it was considered acceptable to use 20 2.0 Mr Gregorian. an extrapolation of some kind. Bearing in mind Alcoa 21 Are you there, Mr Gregorian? Can you see me and 21 would want the certificate as soon as possible, we hear me all right? 2.2 2.2 agreed that was a sort of reasonable decision to make. THE WITNESS: Yes, I can 23 23 Q. Well, let me just pursue this a little bit more, if SIR MARTIN MOORE-BICK: Good, thank you very much. 2.4 2.4 I may. 25 Well, we will find out now whether Mr Millett has 25 You say, "I'll get Alcoa to have the test done".

188

1		Did you go back to $Arconic/Alcoa$ $$	1	coming to the Inquiry to give your evidence, we are most
2		Yes.	2	grateful to you. So thank you very much indeed.
3		— to Mr Wehrle and say, "Do the test, please"?	3	THE WITNESS: Thank you. I hope I have been of some help.
4	Α.	Yes, I think there was a correspondence which spelt out	4	SIR MARTIN MOORE—BICK: You have indeed, Mr Gregorian, and
5		the requirement $$ our requirements. But in the end, as	5	it's right that I should thank you on behalf of the
6		I say, we decided that it was just adequate for us to do	6	panel for the time you have given us and for the
7		some sort of extrapolation.	7	evidence you have given us. We have found it very
8	Q.	Did Mr Wehrle refuse to do the test?	8	useful and we are very grateful to you for coming along
9	A.	Erm again, it looks like they were reluctant to do	9	to talk to us.
10		a test.	10	So I think that's everything we need to ask you, and
11	Q.	Why did you allow him to get away with expressing	11	you are now free to go.
12		reluctance to do a test? You'd told Mr Haynes that you	12	THE WITNESS: Thank you very much.
13		would get Alcoa to have the test done; why didn't you	13	SIR MARTIN MOORE-BICK: Thank you very much indeed.
14		insist ?	14	(The witness withdrew)
15	A.	As I say, after discussion with Brian, we decided	15	SIR MARTIN MOORE—BICK: That's the end of our proceedings
16		an easier option, a cheaper option for the client, it	16	for today. We will resume at 10 o'clock on Monday of
17		was just appropriate just to use some kind of	17	next week.
18		extrapolation, based on advice given by BRE.	18	Thank you.
19	Q.	Well, do you remember whether Alcoa actually told you	19	(4.55 pm)
20		that they were not going to do the test, despite your	20	(The hearing adjourned until 10 am
21		request?	21	on Monday, 15 March 2021)
22	Α.	No, I can't remember that. No.	22	•
23	Q.	Can you remember why you settled for an extrapolation	23	
24		rather than insisting that Alcoa do the test that you	24	
25		had told Mr Haynes you were going to get them to do?	25	
				101
		189		191
1	A.	I guess it must have been as a result of my discussion	1	INDEX
2		with Brian, whether we could go a different route.	2	PAGE
3	Q.	Which is why I asked the question: did Arconic refuse to	3	MR HAMO GREGORIAN (affirmed)1
4		do what you asked them?	4	
5	Α.	I suppose so. It's not so much that they refused, but	5	Questions from COUNSEL TO THE INQUIRY3
6		they had whatever test that was available, and, as	6	
7		I say, we decided that was probably adequate for us to	7	
8		make an assessment $$	8	
9	Q.	Why did you ——	9	
10	Α.	with BRE.	10	
11	Q.	Right.	11	
12		Did you settle for an extrapolation rather than	12	
13		insisting that Arconic produce a test you had asked for,	13	
14		for commercial reasons?	14	
15	A.	I think technically it was a sound decision and, as	15	
16		I say, I have very little knowledge of fire, as I've	16	
17		said before, but I think the impression I got, with	17	
18		talking to Brian and so on, was that it wasn't	18	
19		unreasonable to assess the product in this way. It	19	
20		wasn't just merely for commercial reasons, it was just	20	
21		to $$ just $\dots$ it's an easier and simpler method of	21	
22		doing this, and perfectly acceptable, as far as I know.	22	
23	MF	R MILLETT: Yes. Thank you very much indeed, Mr Gregorian.	23	
24		Well, I have come to the end of my questions now,	24	
25		and it remains only for me to thank you very much for	25	
		190		192

a1 (2) 156:11,16 aapm (1) 49:7 able (8) 69:10 106:25 151:13 158:14,24 160:21 161:21,24 above (20) 5:1 17:13 18:11 21 41:9 61:9 83:15 94:10 95:25 96:20 100:2 134:5 149:23 150:22 152:2 158:20 167:15 179:13 180:4 183:13 absence (1) 143:9 absolutely (1) 26:15 accept (16) 56:9 68:2 112:13 113:25 114:6 11 23 146:3.12.22.25 147:19 170:9,12,23 171:10 acceptable (15) 27:24,25 29:21 100:7.17.18.19 107:20 116:17 149:1 150:21 157:2 162:24 188:19 190:22 accepted (9) 34:15 54:4 80:25 123:4.5 161:16 162:5 177:14 179:8 accommodate (1) 3:9 accordance (12) 75:5 86:2 87:13,16,19,21 89:25 91:8,10 94:16,19 155:2 according (2) 49:2 123:24 accordingly (6) 19:16 26:8 64:16 66:3.12 130:23 accredited (1) 88:14 accurate (2) 35:19 68:10 accurately (1) 67:10 achieved (27) 87:12,15,20,22 88:6 91:9,11 94:15,18 98:5 102:13 109:25 110:4 112:11.14 114:13.16 115:7 116:21 136:8.13 142:22 149:9.20 150:9 152:1 163:16 achieving (2) 93:3 139:2 acm (7) 5:25 53:19 132:8 134:7,14 137:18 138:2 across (12) 15:14 47:19,21,24 76:23 86:19 91:24 124:7,21 134:2,9 175:19 action (2) 54:21.25 actions (1) 66:20 activity (1) 173:8 actual (15) 26:21 38:23,25 39:9 42:15 45:16,24 95:3 97:22 102:19 114:8 157:8 160:20 164:20.20 actually (24) 11:6 23:12 35:11 45:12 70:6 75:1 76:5,11 107:25,25 114:17 123:9 135:2,10 136:7 141:1 143:6 153:4 159:11 174:16 176:3,23 185:4 189:19 adb (2) 14:3 17:8 add (5) 119:5,12 120:9,16 169:11 added (2) 118:25 169:5 adding (1) 171:10 additional (3) 3:7 158:18 188:12 additionally (1) 145:13 address (2) 83:19 85:8 addressed (2) 167:10 182:10 adequate (2) 189:6 190:7 adhered (1) 165:7 adjourned (1) 191:20 adjournment (1) 106:1 admit (1) 131:7 adopted (3) 45:9 62:17 111:5 advice (25) 21:11 69:20 74:9,25 75:16 76:6 104:20 143:17 144:2,6,14 161:15.20.22.24.25

162:1,2,4,17,21 176:18,25 177:4 189:18 advise (2) 4:10 176:19 advised (8) 70:2 71:12 74:21 75:5 104:25 105:6 119:1.8 affirmation (2) 1:25 2:4 affirmed (2) 2:5 192:3 afraid (2) 89:21 132:24 after (22) 5:17 32:13 41:7 49:22 54:19 63:7,11 70:11,18,18,24 73:5 75:8 124:24 152:15 153:1 155:25 176:6.10 181:24 182:6 189:15 afternoon (4) 3:5,7 106:3 afterwards (1) 162:15 again (81) 6:15 10:21 12:4 13:3 16:9.19 18:5 19:3 20:10 22:18 23:3 24:19.23 26:5,25 28:7 32:19,22 52:25 53:1 56:2,19 58:3 65:7 67:11 80:2 84:23 90:11,16 91:4,6,16 93:11 94:9,10,12 98:18 100:13 101:1,13 102:17 103:13 109-16 110-6 111-4 113.5 16 114.19 116.5 119:7,9 125:17,18 126:11,23 127:11 129:14 130:19 131:6,17 134:20 136:10 137:10 138:13 140:4,15 141:1 142:17 146:6,14 148:11 151:6 157-4 17 162-13 168-23 170:19 171:6 174:1 177:2 against (4) 28:5 67:23 157:10 179:18 ago (11) 12:15 15:18 27:6 30:11 62:2 71:23 85:5 97:23 119:14 137:14 175:2 agree (7) 57:16,20 84:12,19 108:10 120:19 137:17 agreed (11) 50:20,21 51:2 55:12 131:7 152:23 163:2 169:11 188:17,19,22 agreeing (1) 58:12 agreement (4) 24:10,20 64:17 180:14 agreements (1) 24:11 agrees (2) 54:10 55:9 agrment (4) 1:12 179:14 183:11 184:8 ahead (2) 27:15 63:14 akbor (2) 1:6,8 alarm (1) 130:17 albon (9) 40:7 52:12,13,20 172:20 173:5 187:6,23 alcoa (22) 5:14.14.15.20 26:13 34:10 128:7.9.14 129:17 160:21 161:4,6,11 171:17 188:7,9,20,25 189:13,19,24 ali (1) 1:6 alien (1) 94:24 allow (2) 177:12 189:11 allowed (1) 17:12 alloy (1) 79:7 alone (1) 2:10 along (3) 126:17,21 191:8 already (5) 30:2 99:19 128:17 129:20 161:18 also (32) 4:8,10 11:16 13:25 21:7,11 24:4 41:21 53:10 55:3 79:17 85:16 88:4 93:9 100:5 104:7 108:10

159:9

189:9

188:4

138:7,21,22 139:1 145:20

152:12 154:14 155:3,6

158:12 159:3 160:10

172:20 186:1 187:14

54:17.22 56:10

178:8

60:13.15.22.23 61:3 62:3

146:9 147:2.20 149:12

185:5

away (4) 46:25 58:2 106:20

189:11

although (4) 33:6 54:2

122:11 142:21

alucobond (1) 53:19

aluminium (10) 34:7,10

78:12 79:7,21 89:12,16 approve (6) 34:20 39:9 48:15 96:9 145:8 156:10 55:21 59:3.5 aluminiumpolyethylene (4) approved (26) 14:11 33:25 64:8 77:15 78:11 15:13.16.19.16:4.6.12 always (7) 9:13 53:15 113:19 17:11.20 34:10 43:24 73:6 129:6 140:10 143:7 144:17 88:1 93:9 139:11 140:5,17 amazed (1) 187:12 143:2 145:17 146:10 149:1 ambiguity (1) 171:12 150:15,21 151:12 153:4 amended (3) 119:1,8 139:12 167:7 amongst (1) 63:4 approving (1) 62:15 amount (2) 92:5 103:17 april (1) 178:4 amounted (1) 93:3 arc00000536 (1) 123:21 amplification (1) 152:13 arc000005363 (1) 124:8 arc000005367 (1) 124:17 amplified (1) 112:6 analysis (4) 8:25,25 67:17,19 architectural (3) 79:13 analytical (1) 67:25 110:15 149:8 ancillary (1) 34:9 architecture (13) 31:1 64:4,5 andrew (1) 40:10 77:10.14.20 78:9 79:6 80:7 nnum (2) 178:13,18 86:1 128:11 161:8 167:12 another (7) 2:19 27:9 arconic (59) 5:16.18.19 63:8,12 95:7 123:18 163:9 14:2,25 26:13 31:14 32:19 answer (32) 9:25 12:9 13:13 33:2 34:15 39:18,21,25 24:20 27:16 46:1 40:9 42:1.8 43:9.11 48:1.6 83:11,15,25 84:1 85:11 49:7,11 52:23,25 59:25 91:25 92:11 93:11 99:3 61:17 63:7,11 80:14,15 107:11,22 111:22 121:7,7 97:8 108:12 121:19,23,24 122:10 128:12 129:16 122-4 7 12 25 123-18 130-7 135-17 141-8 142-25 125-7 128-23 130-8 146:21 149:17 160:25 134:6,17,25 135:4 151:21 161:9 165:1 155:12 160:21 167:11 swered (1) 85:4 181:1 185:8,12 187:20,24 answering (1) 3:13 188:16 190:3.13 answers (1) 45:1 arconicalcoa (1) 189:1 anxious (1) 168:6 arconics (4) 58:22 61:12 nybody (8) 5:10 15:6 92:21 132-11 134-13 110:2 131:23 132:1 133:10 area (11) 9:7 12:4 17:16.18 173:17 18:3 20:11 21:8 67:7 74:5 anyone (6) 51:14 105:18 150:11 173:7 128:9 153:15 161:6 186:10 areas (1) 21:1 anything (20) 3:12,14 12:2 arent (1) 104:4 13:14 18:6 36:2 45:16 arise (1) 26:10 around (3) 3:5 21:16 50:3 51:15 72:10,10 81:19,24 arrange (1) 99:15 105:18 108:4 126:14 arranged (1) 41:10 127:21 151:8.17 182:19 186:10 arrangement (4) 64:18 177:14 178:20 181:20 apologies (1) 29:16 apologise (2) 116:19 153:23 arrive (2) 10:19 11:20 apparent (1) 80:4 arrived (1) 64:18 appear (2) 119:16 121:3 ask (39) 2:3 3:12 4:5,8 appears (1) 113:8 9:3,11,15,21 21:13 34:22 applicants (1) 179:15 36:6 49:10 51:13 54:16 application (29) 31:15 59:22 60:12.21 72:2 94:1 32:3.20.21 36:9.11 37:16 101:23 108:3 121:1 125:20 38:6 54:15 56:11 61:11 127:4,6,21 128:9 129:5 63:8,12,21 96:21 99:20 151:21 152:16,17 161:6 165:5 177:22 185:18 186:1 107:9,12,14,16,19,22,23 187:24 188:12 191:10 108:1,12,20,23 116:6 asked (24) 12:15 37:1 38:24 applications (1) 61:18 69:25 100:10 120:11,20,23 121:19 127:19 128:8,14,21 applied (7) 55:25 93:14 101:18 114:25 146:12 129:17 144:11 157:11 157:6 164:9 161:5 171:10 176:19 apply (6) 12:5 84:14 94:7 185:25 186:4 190:3,4,13 asking (16) 5:24 6:23 101:25 115:1 184:20 appreciate (2) 97:23 127:6 17:19,23 23:5 44:19 60:6 82:25 120:18 122:8 129:23 appreciated (1) 180:3 approach (23) 12:21 34:20 147:12 180:15 185:2 35:5 36:22 38:10 39:7,8 187:13.17 44:4 45:9.17 46:25 48:2 asks (1) 117:15 50:10 55:19 57:24 58:25 aspect (4) 21:8 42:16 112:6 59:2,3 62:17,21,23 64:15 172:22 159:17 aspects (4) 23:13 51:1 69:1 appropriate (19) 57:23 69:6 183:6 70:4 72:9 76:23 80:20 sess (30) 11:6 21:2 29:12 86:25 93:1,7 120:9 141:4 36:23,24 38:24 40:25 147:14 152:13.24 168:17 45:10.19 48:3 62:23 63:1 171:5 176:7 185:19 189:17 66:12 67:2 68:13 69:1.8.10 approval (19) 28:1 32:8 98:19 100:21 105:2.11 53:20 54:14,15,23 59:23 131:8 137:5 142:4 61:10,11,13,13,18 147:10,14 160:21 174:13 117:16,21 152:10 162:15 166:24 167:24 168:7 essed (16) 27:18 30:5,8 pprovals (12) 27:21 41:10

assessing (21) 30:9 35:20 38:11 48:24 56:3 62:19 126:12 127:11 129:7 assessment (80) 5:25 64:25 65:3 66:7,9 67:1 69:5 72:11,13 74:16,19 114:7 115:9 121:21 158:19 163:3 167:15 168:10 179:17 188:14 assessments (8) 19:6 93-6 128-25 assessmenttest (1) 66:15 assessor (3) 6:6 128:15 129:18 assessors (1) 117:20 assigned (1) 21:3 assistance (3) 25:22 72:2,6 association (3) 12:23 22:2 70.2 assume (13) 19:15 73:18 97:8 110:7 114:8 115:1 127:15 130:11 131:19 145:25 157:16 158:5 180:21 assumed (8) 19:25 20:1 127:10,14,16 128:18 129:21 155:5 assuming (3) 72:4 108:23 130:9 assumption (7) 159:19 attached (7) 32:1 33:11 167:4 attachment (10) 33:12 34:12 78:16 120:1.2.2 156:15,19 160:6 167:7 attendance (2) 41:2,11 attended (3) 41:3,4 52:14 attending (2) 3:24 53:7 attention (5) 29:11 35:17 59:11 88:19 184:4 audit (2) 180:9,23 audits (2) 180:9.14 august (5) 33:2.16 63:19 65:8,14 authorities (1) 117:19 automatically (2) 19:13 150-18 available (15) 79:11,14,17 169:1 170:21 190:6 avis (28) 29:16 36:6,12,20 37:8,14,17 39:7 42:6,7 73:14,19 122:20 125:24 126:18 127:2,24 avistechnique (1) 99:18 awarded (1) 183:12 aware (19) 12:8 17:22 18:17 55:24 56:4,20 125:14 137:4 145:19 165:21 173:22 177:10 183:19 35:10 44:7 45:3 46:22 48:10.12 139:18 145:16 185:9

66:11 99:1 101:19 108:7 110:10 111:15 113:9.13 130:22 145:7 179:13 181:2 6:7,13,16 8:4 10:21 20:24 27:23 31:15 32:1 33:3,14 34:13,16,20,24 35:5,6,24 36:1.23 37:10.12 38:2.10 42:5 43:8.12 47:14 50:11 51:1 55:2 57:1.23 58:15.25 59:19 61:7 62:9,10,10,17 92:8 98:23 99:12 101:16 122:3.5 125:19 127:13.17 133:11.16 135:24 141:22 143:23 148:1,5,20 151:13 20:14,21 21:10 38:16,16 131:1,5,12,24 132:2 158:9 35:23 154:25 156:8 159:1 99:15 110:13.22.25 111:2 128:17 129:1.20 161:10 50:11 56:10 57:2 60:2,4 61:2.6 62:3.21 68:14.16 132:5,10 134:13,16 135:3

b (35) 14:12 15:13,19 16:6,13 17:11 41:13,15 52:18.20 83:21.23 88:1 108:4 109:2,12 115:7 123:7 137:19 138:3,7,22 139:11 145:18 146:11 148-8 149-2 150:9,15,18,21 151:16,16 152:1 180:2 b41 (1) 86:6 back (75) 6:5 9:2 12:15 23:21,24 26:24 30:19 37:20 43:5,15 46:10 47:14 51:23 52:6 57:25 59:20 60.9 78.5 81.11 83.3 85:3.23 91:3 97:10 99:3.5 100:4,24 102:2 105:16 106:4 109:22 110:11 111:12 112:8 118:15 119:21 125:22 130:19 139:16 141:23 142:8 145:9,22,25 152:14 153:13.23 154:11 156:2.4.7 157:3.21 158:2.5 160:22 161:13,16 162:5 163:1,5,12,13 166:21 168:21 171:8 178:12 180:19 183:8 186:18 187:9,10,23 189:1 background (2) 6:24 7:21 band (1) 78:7 bargain (1) 49:11 barriers (2) 78:24 88:16 base (1) 11:17 based (24) 28:14 57:2 74:8,21,25 75:15 76:5 77:1 82:22,23 109:18 121:18,21 122:5.14 145:15 146:8 148:6 160:19,20,22 162:21 176:18 189:18 basically (12) 26:21 27:10.17 28:8 38:10 42:5 68:25 73:6 113:11 148:3 151:12 183:6 basis (14) 41:19 42:3 117:1 121:4 123:6 131:5,11,15,16 137:3 152:7 157:2 163:7 176:16 bba (172) 5:12 6:1.8.10.13.16.25 7:3.5.23 8:2.15 10:14.15 11:3,4,5,10 13:1,9,9,19 14:1,25 17:25 20:17 21:3.17 22:1 23:6.9 24:2,4,10,10,16 25:3,17,21 27:4,22 29:1,5,7,21 30:3.15 31:10.15 32:17.20 33:1 35:5 40:3.6 41:8,10,17,22 42:1,12,21,22 43:21 44:5 45:9,11 48:2,9,14,19 49:7 53:5.15.25 54:4.10 55:9 57:5,8,12,20,24 58:12,15,18 59:1,18 60:5 62:2.8.10.10.12.19.74:2 75:21 76:19 80:25 83:5.8 86:1 91:4,15 97:11 98:25 104:10 107:20 108:3,22 109:10 111:5 116:17 117:13 121:24 123:4 125:3 128:8,9,18,21 129:21 130:9.10 131:23 132:1 133:10 135:10.12 137:2,11,17 143:3 149:16 154:11 161:5,6 163:21 164:24 165:6,12 166:23,24 167:25 168:4 172:6,16 173:21 174:4,8 177:11,12,17 178:25 179:5.25 180:19 181:1.6.10.24 182:2,8,14,25 184:8,13,14,22 185:1,6,8 bba00000047 (4) 6:4 30:20 77:6 175:12

bba000000471 (1) 139:16 bba000000472 (1) 85:24 bba000000473 (5) 78:6 110:11 168:22 170:14.19 bba000000475 (9) 87:2 91:4 97:11 102:3 109:23 112:9 137:11 142:8 154:12 bba00000475 (1) 163:14 bba00008042 (1) 6:21 bba000080421 (1) 63:15 bba00008042101 (1) 133:18 bba00008042104 (1) 132:23 bba0000804211 (1) 65:3 bba00008042121 (1) 178:2 bba00008042123 (1) 179:10 bba00008042129 (1) 14:7 bba00008042133 (1) 16:11 bba00008042139 (1) 156:18 bba00008042147 (2) 95:20 97:14 bba00008042149 (1) 96:3 bba00008042153 (3) 96:16 97:21 100:24 bba00008042155 (1) 115:15 bba00008042157 (1) 115:23 bba00008042161 (1) 116:4 bba00008042163 (1) 89:5 bba00008042165 (1) 89:8 bba00008042167 (1) 89:20 bba00008042169 (1) 90:3 bba00008042177 (1) 90:7 bba00008042179 (1) 90:10 bba00008042181 (1) 90:21 bba00008042183 (1) 90:24 bba0000804219 (1) 14:6 bba00008042319 (1) 174:2 bba00008042471 (1) 166:17 bba00008042473 (1) 167:9 bba00008042499 (1) 155:21 bba00008042505 (2) 144:25 158:10 bba00008042507 (2) 145:4 157:23 bba00008042535 (1) 154:19 bba00008042623 (1) 50:1 bba00008042627 (1) 31:18 bba0000804283 (1) 132:15 bba000107011 (1) 187:5 bba00010711 (1) 188:2 bba0001078411 (1) 128:3 bba0001078412 (1) 149:4 bba0001078413 (1) 149:18 bba000107845 (1) 172:2 bba000107846 (1) 148:14 bba00011096 (1) 4:17 bba000110962 (1) 7:9 bba000110963 (2) 9:4 23:25 bba000110964 (4) 73:23 83:3 85:5 161:2 bba000110965 (2) 83:21 85:12 bba000110966 (1) 107:4 bba000110967 (1) 161:19 bbas (2) 13:10 57:16 bearing (16) 22:19 26:13,22 30:7 56:2 67:8 68:8 93:11 108:19 141:23 142:2 159:19 168:6 176:2 183:13 188:20 bears (3) 63:19 65:7 124:9 became (1) 185:9 before (35) 2:9 3:13 4:1 5:10 8:2 10:1 15:14 19:4 39:22 45:21 46:6 48:4 49:18 52:8 53:2 60:5 75:9 91:5 92:7 106:16 107:6 108:6 122:9 124:6 130:19 134:4 152:17 157:25 160:5 175:6 185:3,20 186:9 188:11 190:17 begin (1) 132:14 beginning (1) 23:1 behalf (1) 191:5 behaves (1) 112:21 behaviour (12) 9:7.12 23:7

66:18,20,22 83:14 87:8

125:1 139:18 166:12 175:13 behind (2) 88:16 141:15 being (21) 7:14 30:5 35:10 46:22.25 47:16 50:10 53:20,22,23 70:7 99:11 103:18 108:4 134:20 136:22 142:25 157:6,11 167:17 168:12 belief (1) 132:6 believe (13) 6:12 12:20 21:16 102:20.23 137:6 143:5 151:11 175:3 176:14,14 182:7 184:12 bells (1) 130:17 below (6) 34:9 43:20 96:17 100:9 118:10 158:1 best (11) 24:9 47:20 60:14 73:15 87:4 125:4 153:1 161:10 162:22 171:19 180:11 better (10) 17:7 18:4 19:1 43:17 44:10 46:16 48:3,7 64:15 163:4 between (33) 6:25 12:10 18:23 19:24 22:12 24:13 29:25 34:6 46:3 48:21 50:2 70:9 16 82:10 89:21 96:9 103:4 104:16 105:4 110:16 123:10 126:25 127:8,23 130:24 131:13 141:25 152:23 156:4 162:14 171:13 174:24,24 beyond (4) 36:2 45:16 108:24 165:10 bh1 (1) 172:9 big (1) 60:18 bit (25) 23:22 24:15 37:22 45:1.6 51:18 63:25 64:2.25 70:14 73:1 80:4 81:3 96:20 99:5 100:2 112:7 120:6 124:10 134:5 144:23 153:17 158:20 167:1 188:23 bk (2) 41:7.10 blank (1) 89:20 block (6) 53:4 60:19 88:18 96:13 124:23 133:23 blue (5) 77:9 78:7 79:3 85:24 118:3 bmh (2) 67:4 68:19 board (1) 1:11 bob (6) 40:6 49:22 50:3,4 51:2 53:10 bodies (5) 27:22,24,25 body (7) 25:6 27:21 28:1 66:19 177:15 179:3 181:8 bold (5) 89:23 124:22 128:4 129:16 161:3 bonded (3) 79:10 96:8 145:8 both (24) 29:8 37:9 41:9 42:1 56:3,4 59:23 71:8 83:12,25 84:3,6,21,25 112:15 114:2,25 115:1 123-15 138-25 139-25 145:11 163:2 172:11 bottom (29) 16:15 19:11 31:3.19 49:1 50:3 54:25 83:16 89:21.23 90:21 95:23 96:12,19 117:16 118:5,7 119:18,19 124:14.15 132:25 144:25 149:5 166:17 178:3,15,21 179:10 **boundary (1)** 16:18 box (1) 17:4 brand (2) 95:25 124:11 bre (47) 9:10 10:13,18 11:3,6,13,15,18 12:16,18,24 13:2 22:2 23:22 24:1,11,17

97-4 104-19 25 105-8 break (20) 3:1.4.7 4:13.15 120:1 121:2.7.7.8 51:10.14.21 105:14.17 122:3.15.22 124:7 107:7 152:15 153:12,21 135:6,14 136:1,18,18 brian (92) 12:22 21:20,21,22 22:9.14 23:4.9.15 43:1 153:6 155:20 165:20 69:1.3.4.7.8.15.17.19.21 70:1,17,19 71:5,9,10,12 capable (1) 2:20 capitals (1) 89:23 capture (1) 35:21 76:5,9,25 86:22 101:14 care (3) 58:1 67:19 105:17 career (3) 7:4,6 8:1 carefully (3) 22:15 23:13 140:5.16.20 143:1.2.7.10 139:8 carried (1) 179:21 carry (8) 52:4 72:22 92:2 159:20,25 160:4 161:20 106:10 154:4 179:4,17 162:10,14,15,16,20,23,23 180:21 carrying (1) 141:22 176:11 22 178:9 187:7 188-4 6 189-15 190-2 18 brickwork (3) 57:25 81:20,25 57:18 58:8,14 59:6 62:6,11,19 79:12 80:11 british (5) 1:11 11:25 12:11 101:25 103:4 104:5.16 brochure (4) 132:15 135:19 112:2,15 114:2 115:8 bs (22) 87:20.22 89:7 90:1.9 124-11 125-9 16 25 91:2.9.11 94:4 122:6 136:8 126:9.19.20 127:3.8.24 130:3,25 cassettefix (10) 56:1 57:7 146:5,9,12,17,23 151:3 58:17 120:25 123:19 bs1 (7) 87:16 94:19 116:5,22 119:13 138:23 160:10 132:9 bs2 (15) 87:12 94:15 96:17 cassettefixing (1) 104:9 112:12.15 114:3.14.23 cassettes (3) 36:16.21 37:9 cast (1) 98:3 catch (1) 157:7 caveat (1) 18:19 building (29) 10:6 13:20 cavity (3) 78:24 88:16 16:4,16,17,18 19:25 27:12 145:21 28:10,15 41:20 42:19,23 cells (1) 36:15 54:22 67:24 74:7 75:23 certain (4) 45:24 84:23 108:22 151:12 139:12.20 145:18 148:23 certificate (237) 6:2.8 10:1 buildings (4) 8:23 77:17 22:11,14 25:3,7,14,17 bullet (3) 96:24 172:13,16 30:1,3,4,12,18,22 31:6 35:10 36:3,3 45:11,17 76:1,3,8,12,16,18 call (12) 4:9 5:18 6:19 22:1 40:25 58:5,23 63:2,3 69:4 82:21 83:18 called (8) 1:15 5:13 95:20 84:2.5.9.13.14.19 85:7.15.22.23 86:3.12 97:11,17 99:25 102:2 came (13) 10:3 19:7 20:14 103:5,21 104:2,4,10 47:19 65:21 80:12.18 99:7 107:10,13,24 108:3.10.17.22.24 109:1,4,5,10,11,19,22 cannot (7) 19:15,25 20:1,12 112:2.7 cant (108) 3:14 8:9 9:23,25 113:15.17.21.22.23.25 10:2,22 12:1 13:13 15:23

176:6.18.19.25 177:4

157:25 185:19.21.24

bres (2) 161:15 162:4

55:16 68:19.21

73:16 74:15,18,18

75:1,6,7,10,15,18,25

102:24 104:21 128:2

144:1,7,11,20 145:2

164:18 167:10 168:8

173:10 174:16 175:2

139:2 142:22 145:16

98:1,6 102:14 110:1

138:4.18 160:8

bsi (1) 136:12

bs3 (3) 17:6 18:3 19:1

86:5 88:1.3.17.20

149:1 155:3 175:16

c (3) 41:1 85:17 184:24

123:25 132:16 136:17

117:5 141:24 152:19

28:7 140:17 165:14

17:15 18:8,15 20:5,7 23:3

35:1 40:19 19 41:5 42:15

49:12,25 50:9,23 52:15,21

64:14.21 71:2 72:11 82:16

142:9 146:20 147:15

149:7.11.13.19.20.23

163:12,21,22 164:2,7

151:22 152:4.9.12

154:11.24 156:1

24:20 26:5 31:16 32:22

43:10 44:24.25 48:13

54:2 55:6 60:16,25

61:15,15,24 63:4,13

162:21 181:12

calculation (1) 67:16

159:7 166:21

141:16 173:9

calling (1) 5:16

78:13 145:19

buildup (1) 78:23

busy (1) 160:3

159:3 160:12

briefly (1) 29:24

150:3 151:2

136:3,22

148:12 152:10,21

130:22 131:7.10

186:5,16

189:18 190:10

breaching (1) 88:21

91:18 92:10.20.20 94:5.9 108:13.24 111:22 113:7 125:6,10,17 126:22 129:8 130:7 131:17 132:20 133:8 142:24,24 146:14 147:5 150:11 151:19,19 152:3,7 173:8.17 176:2.24 177:2 181:4.9 188:1.1.18 189:22 175:3 cassette (52) 35:23 36:1,24 37-23 38-8 39-13 44-13 170-15 45:22 46:6 7 48:21 56:7 81:6 82:4 83:10,24 84:4,15 105:4 110:4,14,17 111:20 125:12 127:20 130:16,17 cassettefixed (2) 99:2 113:4 14:1,25 17:25 19:6 21:6 26:14,18 27:2,7,8 28:4,20 29:5,7,9,11,15,17,19,25 48:23 49:24 54:2.4 57:8.12 58:18 59:14.21 60:5 63:15 185:25 64:23 65:1 66:9 70:4.12.25 71:17 74:8,11,24 75:2,9,15 77:1,5,12,13,24 78:9,17,22 80:2,19,24 81:4,6,13,15,17 88:15 91:4.15 93:1 95:2 117:18 174:8 111:1,4,7,9,13,18,20,25 116:15 117:15,17 120:3,15 133:7,11 134:17 135:7 137:3,10,11 139:15 141:6 78:1,10,19 79:6 80:21

165:8.10.13.22 166:1.3.10 167:17.25 168:17.21 169:18.20.22.25 170:5.10.14.16.25 171:8.12.25 172:11 173:13 174:4,18,21 176:3 177:5,12,20,25 179:14,24 181:3,6,13,25 182:25 183:1,5,7,9,12,13,25 184:5,8,10,13,20 185:10.13 187:14 188:21 certificated (1) 184:7 certificates (16) 22:17 23:6,10 24:18 27:4 28:25 75:21 76:20,24 80:17 83:9 133:21 135:9 136:16 173:3 certification (28) 5:25 27:22.24.25 28:3 29:22 42:13 43:21.22 53:15.25 54:10,13 55:10 57:5,21 59:8 119:12,25 123:6 128:8 156:13 161:5 166:19 175:5 177:15 179:3 184:5 certified (8) 6:1 34:18,25 55:3 107:10 164:3 168:12 certifies (1) 166:4 certify (5) 55:12 57:16 58:13,22 166:24 certifying (4) 48:19 59:9 77:21 110:18 certs (2) 41:22 42:1 cetera (1) 90:15 chain (2) 50:2 118:6 chairman (14) 3:14.22 4:14 51:4,7 52:5 105:12 106:15,23 152:16 153:9 154:10 185:15 187:3 challenge (1) 67:11 chamberlain (1) 178:9 chance (4) 122:19 140:25 152:21 153:1 change (16) 5:17 22:20 47:17.17 48:21 64:17 66:6 175:24 176:1,9,13,17 177:1,4 184:21 185:5 changed (5) 63:22 64:16 66:1,2 176:24 changes (2) 21:18 184:18 charge (2) 183:2,6 chartered (3) 7:13.14.16 chase (2) 123:3 126:13 chat (3) 159:7,11 160:4 cheaper (3) 57:22 61:17 check (18) 1:13 9:11,15,21 10:14 23:4,9,15 24:17 25:2,14 27:10 67:15 73:20 75:22 108:11 153:25 checked (10) 9:9 10:25 11:1 24:25 25:13 73:7 75:7 76:9 151:23 155:25 checking (1) 67:23 chief (2) 183:14.25 choose (2) 110:23,23 chose (2) 141:9,18 chosen (1) 77:20 chronological (1) 31:12 circulate (3) 22:12 77:4 circulated (3) 171:22 172:8 circulating (1) 183:2 circulation (7) 174:7.9.14.15.17.20 175:1 circumstances (1) 114:14 cladding (51) 6:1 8:19,20 15:23 27:14 31:1 34:1 35:14,19,24,25 36:24 39:10 45:13 48:25 55:22 56:17 57:10.14.24 58:20 59:3,5,12,17 64:8 65:6,25 66:12 77:10.14.20.25

81:4.10.22 83:13 86:2 88:17.21 113:12 145:3.10 165:24 166:4 167:12 claimed (2) 134:17 135:4 claiming (1) 135:4 claims (1) 132:11 clarification (2) 26:10,23 clarified (1) 25:24 clarifies (1) 106:23 class (115) 13:12 17:6,6,6,7 18:3.3.3.4.25.25 19:1.1.16 20:4.5 86:10.15 87:22.25 88:5 89:25 90:2 91:11 92:5,15,18,23 93:4 109:2,12 132:11 134:7,14,19 135:2,5 136:8,13 137:19 138:3,4,7,18,22,23 139:3.10.22.24 140:3.14.23 141:11,12,13,16,19,20 142:1,6,12,16,22 145:17.25 146:5.10 147:2,21 148:8,10,22 149:9,15,20,24 150:4,9,10,18,19 151-5 9 16 16 16 18 21 152-1 6 7 12 19 154-15 155:7 157:3 158:5 175:18,21 176:6,13,13,17,17,22,23,24 177:1.1.5 184:24.24 187:10,12 classed (1) 140:11 classification (99) 10:3.20 12:6 17:4 19:24 25:5 26:7 27:2 28:21 70:3 75:4,12,21,23 86:17 87:12.16 89:22 94:15.19 95:21,22 96:17,22 97:13,17,22,25,25 98:6,11,12,12 99:17,22 100:11,14,16 101:8.9.17.23 102:5.14 104:8 107:17 109:12 110:1,5 112:11,14 114:3,14,22 115:6,16 116:4,7,11,22 120:12,21 121:15 122:11,13,17,24 123:5,16 126:5 130:16 135:20 136:9.13.21 137:18 138:2.6.14.16.21 145:15.20 146:8 148:6,8,25 152:19 155:4 156:9 157:1 159:1 160:9 162:25 176:19,23 177:5 184:19,23 classifications (8) 19:13,14 20:8 69:9 95:4 121:18 150:23 151:13 classified (5) 90:2 124:2 149:22.24 156:11 classify (1) 148:24 claude (28) 31:20,22 32:24 41:1,25,25 49:19 100:6 117:14.23 118:3.9.16 119:21 120:7,11,20 125:11 126:17 154:20,23 166:18 167:3.11.21 169:4.10 182:15 clause (2) 145:21 185:4 clear (34) 5:22 25:11 30:11 31:6 33:6 35:11 36:4 39:11 45:12.20 58:3 59:17.18 65:18 66:5 73:13 75:13 81:7 86:21 93:12.17 104:10 106:17 107:15 108:9 112:3 113:23 127:23 141:12 142:21 147:7 149:20 171:1,4 clearly (7) 1:14 65:25 81:17 104:3 111:25 112:7 170:10 client (12) 9:16,20 59:25 129:6.24 165:23 168:6.9 172:15 184:1 185:2 189:16

close (1) 156:13 closely (2) 64:25 182:23 closer (1) 82:14 clue (1) 141:15 coat (1) 96:14 coated (5) 89:12,17 145:11 156:9 188:8 coating (29) 69:6 79:14 85:17,19 87:11 89:18 94:14 118:20.21.21 145:14.23 147:24.24.25 156:5.6 157:8.9 158:3 161:12.14 164:23 165:9 167:13 169:1 170:16,21 187:12 coatings (4) 25:25 147:11 164:7 171:3 coil (1) 188:8 colin (5) 33:2 40:1,10 49:20 53:8 colleagues (1) 53:25 coloris (2) 169:20,22 colors (1) 118:22 colour (22) 26:21 85:19 88:8 89:11 90:13 96:15 138:3,17,22 163:13,18 164-12 16 20 21 165:6 12 16 19 169:23 25 171:7 colours (23) 79:15 88:7 149:21 163:17,22 164:1,6 166:5 168:11.13 169:2,3,24 170:6,7,8,11,14,22,24 171:11.13.14 column (1) 68:12 columns (1) 66:25 colwell (36) 13:5,6 69:24 70:17 71:5,16 73:4,16 74:12,14,17 75:2,3,8,16 76:2 86:23 143:5,23 144:4,15 145:1 147:1,7,17 152:20 153:4.4 157:20 159:14.18.24 161:20 162:11.16.22 colwells (3) 74:20 76:6 152:14 combination (1) 164:13 combined (1) 178:19 combustibility (8) 17:12 18:10.12.22.24 150:22.24 151:1 combustible (1) 156:11 come (48) 5:13 9:2,18,19 10:6 11:15,16 15:14 25:5 27:9 28:21 30:19 43:5 46:10 47:21,24 59:20 68:9,16 72:25 74:16 75:2,3,24,24 76:1,7 78:5 80:13.15 86:22 92:25 97:7 99:3 105:15 106:21.25 114:5 124:7 139:16 143:25 147:16 152:9,11,14 153:13 185:15 190:24 comes (3) 67:16 76:25 119-21 coming (6) 5:10 53:21 144:14 166:21 191:1.8 comment (27) 22:13 28:7 35:1 61:15.17.24 64:21 86:9,24 94:9 108:21,24 113:7 122:22 131:17 142:24 150:11 151:19 152:3 153:6 158:8.15 165:14,20 172:6 176:2,3 commentary (1) 174:8 commentator (1) 175:24 comments (5) 117:20 118:4 119:21 124:22 183:3 commercial (5) 54:6 95:25 124:10 190:14,20

commissioned (1) 187:15

communicated (2) 143:6

communication (3) 121:9

common (2) 76:21,22

185:1

clients (1) 167:22

123:2 143:14 communications (1) 143:17 company (1) 170:2 compare (2) 175:9,13 comparing (1) 187:8 compile (1) 14:22 compiled (1) 32:13 complete (1) 158:16 completed (2) 32:14 167:16 completely (2) 151:3 157:1 completeness (1) 90:23 complexity (1) 29:13 compliance (10) 9:8 10:13,25,25 12:19 24:24 25:12 60:1 67:23 74:7 compliant (1) 75:23 complicated (2) 62:15 142:3 complied (1) 10:5 complies (1) 27:11 components (1) 9:1 composite (13) 33:25 34:5 35:14,18,25 47:2 64:8 77:15 78:11 89:12 96:7 142:2 145:7 comprise (1) 79:7 comprises (1) 90:16 comprising (3) 78:10 89:13 145-8 compromise (1) 187:16 concentrate (2) 13:3 47:2 concentrated (1) 58:18 concentrating (2) 38:23 42:16 concept (2) 18:24,25 concepts (2) 58:4,10 concern (2) 42:21.23 concerned (11) 15:24 41:19 42:18 58:18 84:2 98:23,25 102:18 115:9 126:3 165:22 concerns (1) 170:1 conclude (4) 93:22 114:10 123:2 187:9 conclusion (12) 49:2 92:25 114:4.6 131:8 141:24 142:5.6.20 152:9.11 162:20 conclusions (3) 10:4 142:17 162:25 concurred (1) 131:10 conditions (6) 116:12 177:11 184:2.4.7.15 conduct (5) 10:19 177:12,15 179:1 180:18 conducting (1) 43:13 configurations (1) 84:8 confirm (26) 2:10,14,18,22 4:1 5:6 27:17 30:10 31:25 42:2 50:7 52:19 55:2 63:20 67:17,20,25 69:5,7 74:7 98:10.13 167:14 176:21 179:22 180:7 confirmation (14) 26:14 27:7 28:16,20 29:9,17,19 77:13 157:17,19 159:21 163:11 171:9 175:3 confirmatory (2) 187:17,24 confirmed (4) 20:16 41:17 88:8 163:18 confirming (5) 27:10,12 28:5.13.13 confirms (3) 27:8 28:9 185:5 connection (4) 43:19 44:21 46:11.18 ence (4) 87:24 139:9 142:11.15 consider (8) 56:16 92:13 103:3 107:9.16.21.25 186:3 considerably (1) 132:25 consideration (4) 74:2 83:5,8,14 considerations (2) 61:21

25:2,14,21 26:1,4,11,16

143:7.11.14 144:7.10.13

163:11 173:17,20,24

69:20 70:2.20 71:24 72:2.5

considered (15) 73:14 80:20

108:7 109:17 110:9 115:10

83:12 84:7 107:12.23

82-9

178:25

132:22

104:2

182:24

173:1.7.9

47:15 48:9 64:18 70:23

150:14,16 160:9 169:12

150:6 168:18

essential (1) 88:18

77:6 125:23 142:25

171:24 172:17

early (2) 23:5 130:3

48:21.22 53:3 63:19.21

115:19 124:9.15

182:14

179:12 180:6

166:18 167:11

48:14 64:15 80:23 82:5

92:23 102:24 176:6,9

188:13 189:6.15 190:7

176:12,15 188:22 190:15

77:16 78:12

147:23 148:22

175:5

42:19.24

40:14,15 86:25

174:22.25 183:3

99:17 149:14

79:23 82:5.10.12

90:11 96:4 115:25 118:19

158:6

65:8,13 90:24 95:24 96:18

39:24 41:15 90:4 136:20

167:2 171:24 187:8 188:3

158:12 167:11 178:4

126:11 130:21 148:11 176:22 188:19 considering (4) 17:24 108:20 109:17 130:20 consistent (1) 81:14 consisting (1) 96:7 constant (1) 143:17 constantly (1) 143:14 constitutes (1) 150:24 construction (11) 7:22 8:2.5.22 14:12 15:25 34:14 78:18 81:1 132:6.7 constructively (1) 113:7 consult (18) 11:18 12:17,18,25 13:2,15 24:3 68:7,19,21 69:1,8,14,17 consultancy (1) 24:11 consultant (2) 143:6 144:18 consultation (1) 176:6 consulted (12) 9:13 12:1 24:7 42:25 69:20 70:18 105:10 134:21 135:23 151:7 157:15 172:25 consulting (3) 21:5 45:14 110:23 contact (4) 13:4 70:1 158:24 170.2 contacted (2) 72:2 160:4 contain (1) 175:23 contained (2) 101:9 164:22 content (4) 14:1 76:15 145:24 158:4 contents (3) 5:6 6:19 149:11 context (5) 102:18 104:13 114:7 187:10 188:18 continue (6) 27:16 51:24 91:23 106:4,16 153:24 continued (1) 180:9 contract (20) 24:13 31:23 32:5,8,12,17 33:20 35:2,7 43:8 63:12,15 64:16 65:15,20,21 66:1 82:22,23 121:23 contractual (2) 24:12.20 contribute (1) 86:3 contributed (1) 148:9 control (8) 48:16,17 62:22 165:11,25 179:22 181:10 182:9 convenient (4) 51:4 105:12 153:9 185:20 conversation (20) 69:24 70:5,16,24 71:1,8,12 73:3,5,10 104:19 126:16,21,22 143:22 162:8,9,10,14 164:18 conveyed (2) 184:21 185:6 coordinated (1) 6:7 copied (3) 145:2 187:7 188:4 copy (8) 76:23 117:14.21 154:24 159:4 160:14 167:5 183:13 copying (1) 86:19 core (26) 34:5 79:10 83:20 85:9 89:14 90:17 93:15.15 94:3,8,23 95:16,16 96:8 134:14 137:18 138:7.17 139:3 145:9 146:18.18.24 164:3 168:12.13 cores (1) 41:23 corner (4) 4:22 30:23 63:17 132:25 correct (38) 6:9 7:2,16,25 10:8 14:4 20:18,22,25 29:2 31:11 44:14 47:8.10 49:18.20 56:8 57:19 71:7 72:3 76:10 78:21.22 81:19 125:5 127:21 128:1 131:4 141:8 159:19 162:13

50:16.17.20 date (16) 5:1 31:4 40:5 couldnt (10) 56:21 71:23 100:15 101:16 122:22 159:15 162:11 165:18 dated (12) 4:21 6:2 33:2.16 167:23 176:8 counsel (2) 3:21 192:5 country (2) 28:10 39:8 couple (1) 2:8 course (11) 2:25 8:5 13:23 dates (3) 5:13 8:7 65:24 26:12,24 27:12 68:4 day (7) 100:5 118:7 120:6 103:11 129:4 167:18 170:19 deal (2) 61:3 132:3 cover (11) 43:25 57:5.8 dealings (1) 41:8 83:18 84:5 85:7,16 112:1 dealt (2) 5:15 8:24 164:8 170:8 177:8 dear (5) 31:22 145:6 154:23 coverage (1) 163:21 covered (35) 30:7 36:3 45:16 december (4) 124:9 155:23 78:21 79:1 80:2 81-6 8 9 12 84-3 9 24 decide (3) 68:5 76:17 176:12 85:14 88:15 101:24 111:25 decided (14) 15:9 34:19 113:20,22,24 114:3 137:16 149:21 164:2 165:25 168:18 170:11.15.25 171:4,5,6,14,15,18 decides (1) 76:23 covering (7) 41:23 45:18 decision (6) 63:1 104:21 47:1 73:22 103:6,25 155-16 decisions (1) 157:13 covers (2) 165:8.22 decorative (2) 89:16 90:15 created (3) 6:13,16 39:25 decorative protective (2) criteria (2) 92:23 109:20 cross (4) 43:19 44:20 define (4) 34:17,24 48:11 46:11.18 crossconnection (4) 44:16,22 defined (4) 47:15 88:2 46:19,21 crosspurposes (1) 58:4 definitely (3) 41:5 151:23 crystal (1) 86:21 cs (2) 41:7 49:19 definition (2) 35:20 107:20 cso (1) 54:19 definitions (1) 89:25 cstb (73) 27:22 28:22 36:22 definitively (1) 148:22 37:14 38:8 39:7 41:18 degree (1) 67:19 42:2,3,5 44:5 46:25 49:6 delay (2) 153:24 184:9 51:1 54:17 56:10 57:3 deleted (1) 64:9 59:24 60:13,15,22,23 61:4 demanding (3) 41:20 62:2.11.20 67:2.11 68:13.14.23 73:14 demonstrated (2) 146:1 80:13,16 83:9 96:19 98:18 102:1,22 103:1 105:1 density (1) 96:7 107:13,18,24 115:16 department (4) 21:4 116:16 121:15 122:6,19 departments (4) 21:12 123:5,16 124:16 125:24 126:2.5.14.18 127:2.4.24 169:8 177:22 178:24 depend (1) 172:8 179:1.20 180:14.15.18.21 depending (1) 82:11 depends (1) 29:13 181:6,8,14,20 cstbat (1) 54:23 depict (1) 78:2 cstbs (1) 107:19 dept (1) 40:13 ctsb (1) 43:22 described (4) 85:14 96:6 currently (5) 110:22 145:7 167:17 179:13,19 description (6) 79:4 89:9 customers (5) 13:10 165:7.16.18 170:1 design (8) 7:22 8:1.3 45:25 cutting (2) 86:19 102:7 D d (5) 14:8.9 16:16.17 83:4 d0 (22) 87:12.16 94:15.19 96:17 98:1,6 102:14 110:1 112:12,15 114:3,14,23 116:5,22 119:13 138:4,18,23 160:8,10 d2 (3) 17:6 18:3 19:1 dark (2) 77:8 78:7 data (66) 9:11.17.20 27:8.10 28:6,13,14,17,19,20,21

designations (2) 88:7 163:17 designed (1) 45:14 desired (1) 44:17 despite (2) 142:5 189:20 detail (15) 18:8 30:19 32:3 34:22 35:4 52:19 73:2 77:5.7 87:3 91:18 94:9 100:15 113:20 134:22 details (36) 12:3 14:19,20 17:14,16 18:16 19:3 34:14 41:6,19 42:2,3 49:12 54:16 60:12.21 67:8 73:10 78:18 80:16 81:1,1,21 94:24 97:5 29:20 43:12 49:6 51:1 57:3 104:11 109:18 113:16 121:8 134:20 136:18 67:2.11.22 68:3.13 69:9 142:24 144:21 146:14 71:17 72:9 73:13 74:22 178:11 179:15 92:13,22 99:14 100:10 detect (1) 49:10 101:14 103:1.18 105:1.11 determined (1) 88:13 116:16 121:18 20 25 device (1) 2:20 122:13.17.23.123:1.8 devoted (1) 67:5 127:19,20 128:10,19,23,25 diagram (6) 16:13 17:8 129:22 130:1,2,10,17 19:11 150:15 151:15 152:1 137:2,5 145:22 146:17,23 diagrams (4) 16:15,22 76:15 158:2.14 161:7 187:17.24

80.12 didnt (32) 5:14 26:3 61:3 62:3 69:25 73:6 75:3,24 104:21 112:3 121:4.4 122:16 125:20 126:13.23 127:21 135:18,21 136:4,5 141:10 144:10 146:22 147:7 151:25 152:6 160:12,17,18 176:14 189-13 difference (11) 12:10,14 18:23 29:25 45:7 110:16 131:2.13 156:4 165:19.19 differences (1) 141:25 different (41) 4:6 10:23 19:2 20:4 36:22,23 37:11 38:7,11 39:8 44:5 47:23 50:10 58:25 77:4 88:10 118-22 126-2 131-1 12 132:12 134:23 136:25 141:7,23 142:19 151:3 156:1,18,23 157:2 165:24 171:2.3.7.17 173:23 184:16 188:6,14 190:2 differentiation (1) 53:21 differently (1) 34:20 difficult (3) 15:17 48:16 153-2 difficulties (1) 4:4 dimension (4) 17:1 82:7 110:24 114:18 ons (2) 82:5 119:5 direct (1) 181:10 directly (1) 79:20 discipline (1) 22:23 discontinued (1) 180:2 discover (1) 132:17 discuss (3) 104:15 105:17 125:11 discussed (15) 5:9 55:15 63:4 66:7 101:13 103:23 104:20 130:21 131:7 140:16 143:8 152:22 159:20 164:13 170:3 discussing (3) 14:1 64:19 140:20 discussion (9) 41:7 43:7 44:2,3 59:22 102:23 176:10 189:15 190:1 discussions (4) 39:17 143:11 171:24 187:8 distinction (7) 46:3 103:4 104:16 126:25 127:8.22 130:24 distinctly (1) 73:11 distinguishing (1) 105:4 disturb (1) 166:21 divers (1) 169:22 divert (1) 35:6 document (78) 6:3 14:12.14.21 15:3.6.13.16.19 16:6.13 17:11,20 31:7 32:23 33:9,15,17 36:18 37:4 39:21 40:2,22 42:20 43-5 15 46-10 48-4 50-1 52:23 53:1 55:7 60:9 63:22 65:9.13 66:8 88:1 92:25 95:7.12 97:2.11 98:18 99:7 100:7.17 115:22 117:5 119:24 122:19 123:21 124:4,6 125:4,6 132:18 133:1.6.12 134:6.22.24 136:6 139:11 145:18 146:11 149:2 150:15,21 151:12 166:23 169:8 172:9.20 174:2 178:2 188:6 documentary (1) 155:8 documentation (2) 122:4

documents (27) 2:14 16:4

98:9 125:3 132:13

37:15 42:8 54:23 68:14,23

72:9.9 73:1.14 80:13 97:24

134:3,10 135:7,13,20,24

136:1.3.11 159:1 187:4 does (12) 7:3 13:25 14:14 46:1 64:17 78:19 97:16 108:5,12 111:7 174:7 doesnt (15) 4:11 75:24 81:13 98:14 102:5,8,15 108:4,10,14 121:3 166:3,9 171:17 175:23 doing (7) 60:14 66:8 107:6 113:15 19 153:1 190:22 done (34) 8:25 10:15.22 11:3.9 12:3 15:5 42:5 62:11,20 80:21 81:3 83:1 89:6 90:19 91:1 93:6 98:24 99:16 122:1,2,21 125:8,12,16 127:2 131:10 151:23 159:17 160:13 188:7.9.25 189:13 dont (49) 2:14.19 6:3 10:21 11:5 12:3 14:19 18:16 19:3 20:9,10,20 25:18,18,20 35:2 38:21 44:18 53:12 61:22 65:23 93:5 95:4 113:5 120:23 121:8 125:13 129:6 131:17 132:10 133-17 136-14 24 139-14 141:15 16 146:20 151:19 153:6,7 162:13 164:23 165:14 168:4,16 170:9 181:4.15 182:6 door (1) 88:21 dossier (4) 6:14,16 14:23 down (37) 8:11 9:5 17:4 31:3 37:22 40:22 41:6.12 50:16 52:16 53:14 60:8,11,20 63:25 66:15 79:3,18 80:4,5 86:6.6 90:10 96:16 111:23 115:25 117:12 120:5 124:10 133:21 139:18 146:7 158:1 167:9 169:15,17 172:15 downgraded (1) 184:24 draft (28) 14:2 21:6 22:11 71:17 76:7 77:1 82:15 95:1,2 117:18 140:13 141:6,10 154:24 171:21 172:8,10 173:18 174:3,4,7,17,20,22 175:10.14 183:1.4 drafted (4) 76:5 82:20 86:13 drafting (3) 76:14 150:17 drafts (2) 141:7 176:4 drained (1) 145:9 draw (6) 32:7 35:17 59:10,11 162:25 184:4 drawing (5) 31:23 32:5,12 46:3 103:3 drawings (1) 59:10 drawn (2) 142:18 174:16 drew (1) 33:18 driving (1) 49:11 due (1) 167:18 durability (4) 172:21 duragloss (17) 79:14 85:18 87:11.14 94:14.17 96:14 116:21 118:20,21 145:13 164:8 166:25 167:13 169:1 170:16.21 during (10) 3:4,6 8:7 11:9 12:1 24:9 105:17 121:9 182:8 184:7 dwellings (1) 145:20 e (4) 16:17,19,25 184:24 earlier (16) 21:23 23:22 45:1

easier (2) 189:16 190:21 edged (3) 79:12,20 110:13 edit (1) 141:3 effect (2) 53:23 181:12 effectively (1) 181:21 eg (2) 9:10 10:13 eight (1) 136:23 either (14) 55:25 56:6 73:15 79:10,11 84:6 110:13 111:8 125:10 127:11 151:15 152:5 153:3 170:16 electronic (1) 2:20 elements (2) 68:6 78:23 else (12) 7:5 92:21 95:2 105:19 126:14 127:21 133:10 140:24 153:15 165:3 166:7 181:22 email (41) 31:20 32:10 50:2.4.16 72:20 99:10 100:9 117:12.12.22 118:2,6,16 119:19,20 120:5,10 144:18 145:1 146:17 147:13 152:15 154:19,21 155:23 156:16 157:20 158:11,25 160:5 166:18 169:6,12 179:10 181-18 187-6 11 19 188-2 3 emails (2) 117:12 180:13 emanated (1) 49:16 emphasise (3) 113:5 140:4 157:4 employment (1) 12:1 en (14) 12:12 87:13,17 94-16-20-98-8 123-25 125:8 145:15 146:8 148:7,24 149:22,24 enable (1) 186:2 enclosed (4) 41:21 99:25 119:24 183:15 encloses (1) 117:14 encountered (1) 15:12 end (16) 10:12 13:25 23:1 24:1 53:18 63:8 106:20 116:12 124:23 168:25 183:24 185:15 188:13 189:5 190:24 191:15 ended (1) 73:5 energy (3) 145:23 158:3 164:22 eng (1) 40:13 engineer (6) 7:13,14,16 45:14 82:6.10 engineering (3) 40:13,15 62:13 engineers (3) 7:15,18 110:23 england (4) 139:12,22 175:18,22 english (2) 10:6 54:22 enough (9) 27:13 61:25 67:18.20 69:23 70:6 73:19 100:13 131:18 ensure (1) 35:24 entire (1) 52:14 entirely (1) 125:19 entirety (3) 75:18 88:24 109:6 entitled (3) 16:14 167:12 180:21 entity (1) 5:13 entries (1) 133:23 epoxy (1) 89:17 equally (2) 84:14 149:1 equate (3) 19:14 20:7 150:18 equivalent (3) 19:14 104:8 120:24 er (6) 15:21 19:22 25:16 30:16 38:20 65:16 erm (15) 9:23 11:15 32:7 40:17 74:13 97:18 108:15 121:5 130:5 147:9 165:20 170:17 173:7 176:10 189:9 error (1) 65:23 especially (4) 43:3 111:15

165:12,18 191:1,7 184:23 160:14 165:6

establish (2) 148:22 150:3 established (2) 66:11 172:17 estimate (3) 67:9,10 68:11 et (1) 90:15 euroclass (2) 123:7 160:8 european (36) 12:5,12 13:12 17:7 18:4 19:1,14,15,24 20:4,7 27:21 28:3 108:4 109:2 120:12,21 123:15,24 125-8 132-7 137-18 138:1.6.16.21 148:7.15.15.25 150:2.5.17 151:2 160:7 184:23 even (6) 66:5 69:13 95:6 127:23 142:3 174:5 event (1) 3:5 eventually (5) 22:13 64:24 141-7 24 183-4 ever (21) 10:15 11:9 16:3 47:21.24 48:21 124:6 125:3,7,11 126:16,20 127:6 131:23 132:1 135:10.11 144:13 159:24 every (8) 25:2,14,17 133:12 164:12,13 177:19,24 everyone (5) 1:3 51:23 106:3 153-23 186-18 everything (4) 19:6 121:14 180:16 191:10 evidence (29) 1:9 2:11 3:25 5:9 51:14 61:23 97:7 105:18 106:4,21,25 107:15 125:2 128:14,15,21 120-17 18 135-9 18 153-15 155:8 159:23 171:23 180:23 182:20 186:10 exact (1) 188:18 exactly (8) 20:1,6,7 28:23 69:16 72:7,11 169:21 examination (2) 77:7 150:16 examine (1) 139:23 examining (2) 52:18 147:18 example (14) 10:5 11:24 24:1,2,16 26:11 28:5 86:18 110:21,21,25 111:1 134:18 exceptional (1) 47:18 exchanges (1) 13:17 exclamation (1) 124:2 exclude (1) 112:1 excluded (3) 37:6.10 82:2 excluding (1) 81:17 exclusion (2) 81:14 126:13 executive (1) 183:25 executives (1) 183:14 exhibit (6) 32:24 37:20,25 39:19 99:9 172:9 exhibits (1) 32:25 exist (1) 159:4 existed (1) 136:3 existing (1) 178:20 exists (3) 145:22 158:2 exova (1) 24:6 expand (1) 27:19 expanded (2) 132:24 133:22 expect (6) 84:13 128:20 129:24 144:18 156:19 expectation (1) 180:17 expected (9) 128:23 130:1 170:2 177:16 179:5 182:5 184:18,25 185:8 expecting (1) 160:18 experience (7) 8:3,18,22 11:21 68:8 92:11.17 expert (49) 9:9,11,14,15,19,21 10:3,7,16 11:2,2,3,5,6 13:15 18:13 19:7 20:14 22:1 24:2.25 25:2.14.22

163:25 164:5,10,15 172:19

correspondence (3) 161:10

corresponding (1) 17:5

cost (6) 41:18 43:8,12

182:3 184:17

188:11 189:4

26:1.4 74:6.9.14.16.25

75:5 83:15 91:17 92:24

103:24 104:15,20 134:21

133-21 134-21 135-23

137:5 139:19.21 141:2

143:8.23 144:3.14 145:3

147:12 148:2 150:6 151:7

157:5,7,7,15,18,19 159:2

162:4,5,25 163:4 164:19

166:12,13 168:18 171:9

173:19.21 175:13.17

184:19.23 190:16

fireretardant (1) 79:17

first (39) 1:10.13 2:10 4:18

12:21,25 15:12 18:20 30:5

31:14 47:21,24 48:5 52:10

53:17 70:16 77:8,19 86:13

147:19 160:7 172:14 174:4

176:1 183:10,12 187:5,19

97:2 99:13 117:17,22

124:5 133:25 137:17

138:1.15 140:1 146:3

five (3) 67:4 68:10 146:7

fixed (11) 78:11,20 83:10,23

114-20 115-4 131-21 21

44:13,13 45:21 46:6 48:20

102:21 104:12 113:3

fixing (47) 35:23 37:11

fitting (1) 79:22

fix (2) 30:19 109:2

152:10 155:2 156:9

160:22 161:4.15.16

135:23 142:25 143:3 151:7 152:10 157:18.19 161:15 162:4 173:21 expertise (13) 9:8 11:12.14 12:4 17:18 20:11 21:8.22 22:6 29:12 67:7 144:14 150:12 experts (11) 11:18 12:16 29:4 30:13 73:20 92:8 144:3.15 157:15 172:7.7 explain (10) 29:24 34:8 45:6 113:15 149:10 152:8 157:1 162:23 166:3 171:20 explanation (1) 163:2 exploratory (1) 40:25 explore (2) 70:14 73:1 exposed (12) 79:15 89:17 118:22 145:12.16.24 146:9 147:1.20 158:4 169:2 170:22 exposure (1) 118:23 expressing (2) 86:16 189:11 expression (1) 142:9 expressly (1) 163:22 extent (3) 35:7 99:2 137:5 exterior (1) 8:23 external (18) 14:12 15:25 16:14 17:3 24:2 25:2 21 26:4 74:6 77:16 78:13 86:7 144:3,14 172:7,12 173:21 extract (3) 14:11 16:12 37:3 extraction (1) 188:15 extrapolate (1) 157:11 extrapolation (8) 163:6,8,11 188:20 189:7.18.23 190:12 eye (1) 98:3

faade (2) 78:13,23 fabricate (1) 109:19 fabricated (38) 35:22 39:2,4,13 44:12 45:21,22,25 46:6,7 47:9 56:6,14,17,22 57:3.4.6.6.14 58:7,7,9,14,19 62:9 63:3 82:3,3 84:3,4,15,15 111:8.8.18.19.19 fabrication (7) 56:16 57:9 58:6 82:2 103:3 123:17 126:2 fabrications (1) 112:16 facade (1) 77:16 face (38) 26:24 34:23 79:15,16 83:10,23 89:16.17 118:22.23 124:4 141:23.24 145:12.16.22.24 146:1,9 147:1,20 156:2,7 157:9 158:2,4,6 160:22 161:12,13,16,17 162:5,7 163:1.5 169:2 170:22 facefixed (1) 84:6 faces (2) 142:1 145:11 facility (2) 10:19 114:19 facing (1) 145:21 factors (2) 139:17 149:11 factory (4) 179:18,22 180:2,9 failure (1) 184:9 fair (1) 61:25 fairly (3) 140:15,21 168:7 fall (1) 111:20 falls (1) 111:9 familiar (8) 17:8 27:19 91:16 97:2,9 123:22 134:20 177:10 familiarity (3) 11:24 14:16 26:25 far (33) 9:18 13:17 15:24 48:24 58:17 59:4 61:3 67:24 68:12 84:2 98:23.25 102:17 113:2 115:9

148:4 160:2 165:21 167:23 182-19 190-22 february (5) 52:23 53:1,4 63:9 64:19 fee (2) 33:6 64:1 feel (2) 4:13 126:23 fellow (1) 1:5 felt (2) 103:25 104:1 few (4) 13:18 67:15 99:3 106:20 field (11) 7:22 96:20 101:1 107:9,16,18,21 108:1.11.23 116:5 fields (2) 107:12,23 figra (1) 124:20 figure (13) 33:7 79:14,24 80:3,5,7,9,18,23 110:15,20 112:3 113:15 figures (1) 124:21 file (52) 6:14.17.19 14:5,7,15,17,21 15:4,7 16:12 17:24 26:19 31:18 32:11.13 50:2 56:10 62:1.2 63:15 65:2 68:15 89:4 90:7 95:19 97:6 100:25 115:15,19 117:6 125:23 128:14 129:17 132:14 16 133-7 134-12 19 25 144-24 154:18 155:22 156:17 157:22 159:23 166:16 174:1 175:23 178:1 179:10 film (1) 96:9 final (10) 30:22 34:17,25 63:1 116:3 141:6 173:18 175:1.11.19 finalised (3) 167:17 175:7 176:5 finalising (1) 65:21 finally (1) 2:18 find (6) 52:25 99:25 119:24 157:16 167:4 186:25 fine (4) 1:21 5:23 120:8,18 finish (10) 87:15,19 89:3 91:8 94:18 116:21 164:8 165:1 166:25,25 finished (4) 7:4 91:25 122:9 160:25 finishes (1) 168:12 finishing (1) 96:14 fire (239) 9:7.8.9.11.12.14.15.16.19.21 10:3.7.10.14.15 11:1,1,2,5,6,8,9,12,20,22 12:13,19,19,24 13:14,15,21,23,24 15:10 18:9,13 19:5,7,7 20:11,13,14 21:22 22:3,6,10,15 23:7,12,13,16 24:2,3,17,24,25 25:2.4.13.14.15.22 26:1.15.22.25 28:5.7.8 37:6,7,10,12 38:17,22 41:21 42:13,14,16 43:2,3 61:3,4 66:21,22 67:4.6.14.21.22 68:3.18

69:1,5,11 71:14,18 72:11

74:3.5.6.9.14.16.16.19.25

83:14,15,20 84:23 85:9

86:7 87:9,12,13,15,18,20

88:12,20 89:2,14 90:16

91:7.9.17 92:8.24 93:21

99:14,18,25 100:21

103:8.11.11.15.20.24

104:15,17,20,22 105:9

113:6,7 115:12 116:20

109:12 111:16 112:11,22

117:1 119:12 122:3,21,24

123:1.23 124:25 125:15

126:6.19.20 128:7.16.22

131:2,6,14,18 132:8

129:19 130:2

101:8.17 102:17

94:15,16,18 95:22 98:5,19

75:5.14 76:4.15.25

73:8,17,20

54:12 55:13 56:6,22 58:6,6,8 59:8,23 80:8 81:19.24 83:23 84:21,22,25 98:24 102:16,25 103:7,9 104-1 3 4 22 108-6 109-17 110:6.9 112:20 113:10.14 114:9 115:2 126:13 130:20 131:1,9,12 148:11 fixings (6) 34:11 36:2 45:16 81:8 83:10 114:25 flame (5) 13:11 87:23 91:12 102:19 151:4 flange (1) 79:23 flanged (3) 79:12,21 110:14 flat (1) 35:21 focus (1) 83:22 focused (1) 24:15 focusing (1) 24:23 follow (4) 12:8 69:13 166:15 167:5 followed (2) 66:7 108:17 follower (3) 29:12 30:1,3 followers (1) 29:1 following (5) 86:4 96:22 116:7,11 186:2 follows (4) 41:1 128:6 172:12 187:7 footnote (3) 79:25 81:12 111:24 forgive (3) 19:9 71:21 87:5 form (28) 30:22 32:3.20 36:9 56:14.21 63:8.12 72:5.19 82:2 84:3,4 86:21 103:2,19,22 107:14 108:5 109:19 110:3,4,8 112:25 115:7.8 137:2 173:19 formal (2) 24:10 158:19 formalised (1) 144:16 formally (1) 168:1 format (12) 33:19 75:21 76:8 86:16 90:12 95:3 108:17,22 111:3,5 117:18 166:10 forming (1) 172:9 forms (2) 84:21 166:5 formula (1) 95:6 formulated (1) 86:14 forthcoming (1) 188:13 forward (6) 27:11 32:16 52:22 63:6 86:24 100:8 forwarded (1) 167:18 found (2) 41:9 191:7 four (5) 60:8,10,19 99:13 133:23 fourth (3) 133:21 148:16 170:20

fr (41) 55:3 79:17 83:20 85:10.18.20 89:11 90:13 91:1 92:22 93:14 95:16 99:16.19 115:17.21 116:2 119:13.25 120:4 121:17 126:9 128:17 129:20 134:1.3 135:25 138:7.22 139:3 142:21 146:5,13,18,24 147:3,22,23 155:19 160:10.13 france (2) 28:22 178:24 frcored (3) 120:12.21.25 free (2) 159:8 191:11 french (6) 41:20 42:19,24 54:22 99:17 169:23 frequency (1) 178:13 front (21) 1:24 16:10 71:16 74:22 78:14 81:15 132:18 141:23 149:14 156:4.7 157:9 161:12,17 162:6 166:4,9 169:16 170:18 175:9 187:8 full (1) 42:1 fully (2) 16:24 80:6 function (2) 78:4 164:19 further (10) 4:15 52:22 63:25 99:12 117:21 161:21 167:1 185:21 186:6,19

gained (1) 22:3 gaining (1) 187:13 garston (2) 40:2 53:6 gave (4) 74:2 83:5.8 177:4 gb (2) 133:1,3 general (6) 33:21 41:7 78:7 132:5 144:1,17 generally (15) 9:18 10:18 12:17 13:22 22:9 26:5.6 34:23 53:24 54:3 67:7 103:22 140:5 143:20 168:5 generic (1) 76:19 geoff (7) 21:15,18 22:6,20 23:2 172:18 182:21 get (26) 26:12 61:1 69:25 71:23 76:2 95:12 105:15 109:9,9 129:6 140:6,10 141:7 142:3 144:10 159:15.17 168:7 172:22 188:7.9.17.25 189:11,13,25 getting (2) 70:20 183:3 gg (1) 182:17 gist (1) 44:2 give (12) 3:24 18:6 26:7.9 106:21,25 113:17 124:25 152:16 156:1 159:7 191:1 given (27) 16:3 18:19 19:4 23:22,25 29:19 30:2 67:13 74:9,25 89:25 103:1 109:18 114:22 143:18 144-3 151-16 156-19 161:22.24.25 162:21 176:25 181:6 189:18 191:6.7 gives (2) 128:12 149:17 giving (1) 2:11 gm2 (2) 156:6,7 goes (7) 27:2 34:8 43:20 76:17 90:6 128:5 149:23 going (34) 1:9,11,25 3:16 4:5 5:18.24 6:23 11:12 12:15 22:12.20 23:24 30:18 34:22 43:15 47:14 51:23 72:25 97:8 102:2 105:14 106:4 110:11.19

112:8 113:18 132:24 142:3

152:16 177:24 178:25

gold (3) 138:7,22 163:23

gone (2) 134:22 172:20

good (30) 1:3,7,8,16,18,22

2:3.6.17 3:11.15.22.23.23

goldcoloured (3) 87:14 94:17

189:20.25

116:21

27:13 52:3 67:18.20 99:11 106:3 9 12 122:19 140:25 152:21,25 153:17,19 154:3 grade (3) 79:17 128:17 grateful (4) 3:25 179:21 great (2) 115:5 132:3 green (8) 118:4,10,13 119:7.15.21 169:6.12 gregorian (42) 1:10,13,15,16 3:23 32:2.24 39:21 41:16 51:9,24,25 53:9 59:21 71:22 82:18 92:4 105:14 106:5,6 107:3 112:23 115:5 123:15 125:3 128:21 137:15 148:17 149:5 153-12 25 154-3 170-4 171:25 177:9 185:24 186:20,21 187:4 190:23 grey (9) 85:20 87:19 89:3,12 90:14 91:8 139:3 163:23 greygreen (9) 85:20 87:11 94-13 96-15 137-19 138-3 17 163-23 164-3 group (1) 28:3 guess (5) 51:2,3 60:1 169:8 guessing (13) 20:2 24:13,15 37:11 46:22 61:20,22 91:16 125:18,19 137:4 146:14 160:21 guidance (1) 143:3 gurney (6) 21:15,18 22:6,20

186:24

129:20

191:2,8

191:4 192:3

164:8

190:1

head (14) 4:11 21:18

182:17.21

85:24

headed (1) 178:2

177:3 186:22

191:20

heart (1) 102:7

height (1) 16:19

helped (1) 49:4

hence (1) 158:24

hello (5) 99:24 117:25

119:23 155:24 166:20

help (11) 12:20 40:23 49:8

helpful (3) 107:2 167:6,19

here (19) 5:10 17:15 35:9

147:10 148:11 166:2

168:6,8,12,19 171:16

173:16 174:14 181:9

herself (1) 153:5

high (1) 82:13

highrise (1) 8:23

hindsight (1) 112:6

history (1) 6:5

himself (2) 74:19 143:2

71:22 74:20 92:10 97:20

172:16 174:10,10 178:8

header (4) 53:5 77:9 79:3

154-1 162-12 165-12 18

heard (2) 165:15 182:19

hold (1) 159:15 23:2 172:18 holder (7) 29:5 54:2 77:24 113:17 171:8 177:12 184:14 hadnt (2) 123:3 181:13 holders (1) 187:15 half (3) 116:19 154:21 homogeneous (1) 142:4 157:23 honest (13) 9:25 13:13 15:23 halfway (2) 158:1 169:15 24:21 40:19 44:25 61:15 hamo (12) 1:10,15 41:16 94:25 105:8 130:7 157:16 53:9 99:24 119:14,23 173:9 181:4 155:24 158:13 166:20 hope (6) 2:24 106:23 154:4 180:6 192:3 167:6,19 191:3 hand (4) 12:11 18:24 64:10 hours (11) 50:8,21 66:2 171:13 67:2,4,5,9,12,13 68:5,9 happen (1) 10:24 however (5) 145:22 148:23 happened (8) 22:22 49:25 155:7 158:2 179:19 128:24 129:2,3 176:7 hung (1) 79:21 185:3 187:22 happy (2) 158:17 168:10 hard (7) 49:3,8,11 66:19

129:12 143:1,2,7,10

144:1.7 145:2 148:12

152:10 21 159:25 161:20

162:10.16.23.23 167:10

168:8,15 171:23 172:3,5

173:10 174:16 175:2

176:11 187:7 188:4

159:4 160:14 167:5 id (1) 182:8 harmonisation (1) 148:19 idea (13) 26:9 44:6 45:2 harmonised (1) 148:25 46:25 48:10.11 73:11 hasnt (2) 63:22 174:5 124:25 129:5 137:7 141:17 havent (4) 120:17 134:22 176:21 188:15 170:17 182:19 deal (1) 129:3 having (35) 30:6 33:10 42:21 ideally (4) 128:24 129:2 58:22 87:25 88:5 89:13 155:15 170:8 100:13 120:23 123:7 ideas (1) 19:2 126:22 135:14 identical (1) 32:20 139:10.21.24 140:2.14.22 identified (6) 93:14 111:25 141:19 142:12,16 145:17 112:3 171:15 180:1,8 identify (1) 178:19 146:10 147:2,20 152:7,19 154:15 155:7,25 159:16 identifying (1) 104:17 ie (1) 34:20 175:17,21 177:18 181:15 haynes (66) 12:22 ignorance (1) 103:13 21:20.21.22 22:9 23:4.9.15 ignore (1) 104:16 43:1 55:16 68:19.21 ignored (1) 165:13 69:1,3,15,17,21 70:17 ignoring (3) 58:5,6 165:16 ii (4) 64:2 83:7,9 149:12 71:5,9 73:4,16 74:18 iii (1) 149:14 75:1,7,15,18 76:5,25 86:22 ill (15) 6:19 87:3 91:5 94:11 101:14 106:18,18,24 128:2

106:12,19 114:11 120:9

123:21 146:21 153:25

154-7 165-5 188-7 25

5:18,19,24 6:23 9:25

22:11,14,20 23:11,12

24:12.19.19 25:10.10

im (82) 1:5 3:16 4:5

17:19,23 20:1,5

27:15 30:18 32:9 34:22 22:18.21.22 23:2 32:8 68:7 35-9 37-11 44-19 24 46-22 heading (3) 53:13,14 183:9 hear (17) 1:9,11,14,19 4:2,9 52:1 71:8 106:6.8 122:15 hearing (4) 1:4 51:24 106:4 99:6 135:11 137:14 191:3 44.9 17 45.20 48.5 141.9 hes (4) 12:24 22:2,2 185:25 88:16

51:7.10 61:1.20 70:20 72:16 76:1 82:1.25 89:21 91:16.16.23 95:11 97:8 107:6 108:18,20,21,22 113:8 116:18 120:18 121:10 122:8 125:18,19 129:10,10 132:24 137:4,4 138:10.11.11 140:19 145-19 146-14 147:11.12.16 152:15 159:9 160:21.24 165:2 166:10 170:17 173:22 185:2,19 image (1) 77:18 images (1) 76:16 imagine (3) 80:16 157:5 162:20 immaterial (3) 58:17 98:24 101:21 immediately (1) 70:21 impact (1) 82:8 impacts (1) 66:19 important (6) 42:14 53:16 54:1,4 87:6 168:14 impression (7) 36:25 53:24 109:9 140:6.10 164:18 190.17 inaudible (1) 90:15 incident (1) 54:3 include (13) 14:18 24:5 25:6 26:8 28:20 57:24 80:16.20 81:1 93:1,6 120:12,20 included (17) 19:5 32:1 37:6 10 59:10 12 16 70:3 82:4 104:11 105:15 113:17,19 130:2 132:21 141:1 184:18 including (5) 39:3,12 149:11 176:4 183:3 inclusion (3) 48:25 55:22 113:12 incombustible (1) 140:18 incorporated (3) 39:10 45:13 incorporating (1) 88:13 incorporation (1) 83:13 incorrect (1) 185:10 independent (1) 55:4 index (3) 87:20 91:9 192:1 indicate (4) 3:8 14:15 77:20 149:8 indicated (3) 4:14 35:15 135:19

indication (1) 113:18 individual (3) 12:17 13:2 174:10 industry (4) 7:22 8:5 132:6,7 inform (5) 177:16 179:4,5,25 183:11 information (34) 14:8 23:23

26:13 37:1.3 42:10 50:12 68:16,23 71:20 72:5,12,15 73:19 74:3 99:12 102:1,22 120:15 121:21 122:6.20 125:17 126:24 127:4 16 128:7 129:5 148:3,5 156:2,13 161:4,11 informed (2) 10:1 184:9 inhouse (4) 10:15.15 11:4.9

initial (3) 5:24 65:14 141:9 initially (1) 54:18 initiated (1) 152:21 input (8) 19:8 20:23 21:6 22:9 41:21 69:3 143:1 183:5

inquiry (11) 3:21,24 5:17 32:25 106:22 107:5 128:4 149:6 161:2 191:1 192:5 inserted (1) 80:23 inserting (2) 110:19,20

inside (1) 95:12 insist (3) 144:17 188:16 189:14

insisted (1) 62:19 insisting (2) 189:24 190:13

Official Court Reporters

121:10,14 126:2 131:11,25

132:4 133:19 135:18

137:15 143:14.16 144:9

inspection (1) 179:18 install (1) 109:21 installation (1) 56:17 installer (1) 165:23 instance (7) 26:21 28:9 48:18 57:25 77:2 82:8,11 instead (7) 29:18 54:15 55:20 61:11,13 118:20 156:6 institution (3) 7:14.17.17 insulation (2) 78:24 81:8 intelligence (1) 165:15 intend (1) 94:21 intended (3) 164:11 167:20 169:10 intending (2) 35:21 112:1 intention (6) 35:17 59:15 61:5 77:24 147:10,25 intents (1) 29:20 interest (1) 23:11 interested (1) 100:14 internal (4) 39:21 52:25 74:6 172:11 internally (1) 11:5 interpret (1) 114:21 interrupted (1) 124:3 interrupting (1) 71:21 into (23) 14:19 17:16 18:8 20:23 21:6 35:22 45:21 56:6,22 58:6,9,14 65:23 84:15.16 91:18 114:25 152:5 175:5 183:5 introducing (1) 171:12 invalidate (1) 184:10 invariably (1) 25:1 invite (3) 3:16 106:12 154:7 involved (8) 24:12 26:6 49:15 75:22 150:5 157:13 171:7 172:22 involvement (1) 5:18 iron (1) 3:2 irrelevant (26) 81:21 82:1 98:24 99:2 101:21 102:18.21 103:5.9 104:1 108:7 109:18 110:9,17 111:21 114:9,20 115:10 126:23,25 127:9,23 130:21,25 131:9 148:11 irrespective (4) 102:24 113:20.21 141:25 isnt (12) 81:3.4 86:21 103:12 111:11 141:6 156:24 163:6 182:1 185:7 187:12 188:3 iso (1) 123:25 issued (13) 10:2 22:17 25:3,17 29:8 64:24 66:10 83:9 168:1 175:9,11 179:24 182:1 issues (15) 12:13,24 13:14,24 15:10.11 27:1 28:8 103:15 105:9 131:6.18 157:5 181:7 182:9 issuing (4) 179:14 181:3,8,12 istephan (2) 1:6,7 item (5) 40:24 63:25 66:14 86:6 139:18 items (3) 33:21 34:9 100:9 its (144) 4:21.24 6:20 12:4 15:10.17 20:6.6 27:13 28:3,13,13 30:8,20,22 31:4 32:25 33:3,6,15,16 34:12.16 35:9.19 37:3 38:12 39:24.25 45:10,17,19,21 46:6,14,21 47:19 48:15.25 51:9 56:13.21.57:21.21.22.23 59:4.18 60:18 62:2.8 64:1 67:4,9,22 68:10,11 74:15 76:23 78:16,21 81:3 82:12 84:3,4 86:24 87:4,6,8 90:4,8,11 91:18 95:22,24 96:5 98:23 99:1 101:20 105:1.3 108:19.21 109:5.16 110:21 111:5.14

120:18 123:9.11.20.23 124:4 129:11 131:9.18.20.21.21 132:12.16.20 134:12.17 137:13.13 138:3 140:6.7.7 141:1 142:2,3 150:11 153:2 158:11 163:3 164:4,20 165:20 166:3 167:9,11 169:14,15 171:18 173:18 174:14 178:4 180:15 182:1.16 185:4.9.19 187:9 190:5.21 191:5 itself (10) 34:21 35:22 45:24 47:2 56:13,21 59:21 85:23 114:22 182:25 ive (40) 8:3,24,25 17:9 18:5 19:3 26:6 47:21 64:23 88:24 91:5.13 92:7.13 94:11 100:11 102:4 105:8 108:6 115:6,13 116:18 118:1 120:10 122:17 123:14 130:2 134:12 140:4

141:17 142:10 150:20

152:15 157:4 170:20

177:18 182:12 183:17

185:15 190:16

january (13) 6:2 7:23 14:25 29:8 31:5 48:23 64:24 70:25 95:24 96:18 124:15 181:25 182:14 job (1) 37:2 john (8) 40:7 52:12 172:20,21 173:5 187:6,23 188:4 ioin (1) 8:15 joined (4) 1:5 8:15,18 13:19 joining (1) 8:2 judged (2) 86:10,14 july (3) 7:1,3,23 june (2) 31:20 180:10 jurisdictions (1) 88:10 iustification (1) 164:16 iustified (1) 178:17

k7 (1) 124:1

175:10

keep (4) 4:8 160:24 168:10

keeping (1) 115:23 lets (36) 12:9 20:4,15 27:4 key (3) 17:3 139:17 149:11 32:16,23 33:11 37:24 keyse (6) 40:6 49:22 50:3,4 40:22 45:14 50:1 55:7 51:2 53:10 63:14 66:14 77:5 81:11 kind (3) 133:14 188:20 85:16.22 87:2 94:10 99:5 189:17 101:22 117:5.11 118:16 124:8 133:18 138:13 kindly (1) 179:22 kinds (1) 126:2 139:17 142:8 143:21 knew (9) 5:13 17:11 18:20 144:23 148:12 157:24 175:11.13 22:4 104:2 126:1.5 150:20 163.7 letter (15) 16:17,25 33:1 know (99) 2:25 10:2,21 167:4,8,10,19,20 168:8,15 12:3.14 13:23 15:17 182:14 183:19.21 184:1.3 17:13.20 18:9.16 19:3 20:9 liberty (2) 35:4.6 32:16 48:24 52:19 60:4 light (3) 13:17 92:10 161:21 61:12,22 64:13,23 65:13 like (26) 3:12 4:5 8:13 21:13 67:24 69:9,21,21 71:16,19 26:1 27:22 47:19 51:10 73:11 75:11 78:4 92:6 55:20 83:3,7 99:3 107:5 93:5.5 94:1 97:6 107:2 129:14 154:12 156:8 108:14 109:1.15 110:2 158:16 163:12 168:22 111:4.4 113:5.6 117:10 172:23 174:4.18 178:6 121:8 123:17 130:20 181:18 182:9 189:9 131:17,25 132:4,10 135:23 likely (1) 53:2 limit (2) 137:7,8 136:14.15 141:15.16 142:18 143:9,15,16 144:9 limitation (3) 164:17 165:6 150:23,25 151:1,19 152:3 168:14 153:1,6,7 156:12 159:5 limited (12) 15:15 17:12 162:13 164:21.23 165:14 18:10.10.12.22.24 108:5 167:20.23 168:4.5.16.16 131:6 150:22 151:1 163:21 173:24,25 174:23 line (11) 44:9 53:6 60:16 176:1,9,16,22,25 177:4,6,6 61:9 110:12 115:25 133:21 181:4 182:6 183:24 187:22 148:16 160:7 168:25

wledge (34) 10:10 12:2.13 13:14.19 14:3 15:15 17:21 18:9 22:3 28:8 73:15 75:10 92:7 100:13 103:14.17 105:9 109:7.8 131:6 133:9 140:17 142:17 143:10 144:2 148:1 150:6,20 151:6 157:5 162:22 176:16 190:16 owledgeable (1) 12:24 known (1) 16:13 knows (1) 22:4

aboratory (2) 88:14 155:25

lack (2) 26:25 68:22

language (2) 75:14 76:5

last (6) 93:11 106:20,20

late (3) 8:12 40:18 92:11

later (8) 51:18 59:20 72:25

120:6 136:22,23 153:17

154:13 162:2.18

186:13

latest (1) 41:22

180:4,12

Idpe (1) 79:11

lead (1) 65:23

laurent (4) 179:11,12

leader (8) 29:9,11,25

106:19 151:5

160:5

142:14

107:6 182:8

115:23 175:14

lengthy (2) 8:1 149:6

lacking (1) 125:18

30:4,6,11 171:25 173:3 leaders (3) 28:25 29:3 172:6 leading (5) 13:11 26:18 42:5 least (6) 44:2 93:11 157:21 161:17 162:6 178:18 leave (4) 18:13 48:4 49:18 led (4) 65:1 69:2 112:14 left (5) 16:24 38:4 80:10 lefthand (5) 36:13 65:4 98:3 less (7) 16:18 145:23 157:9 158:3 163:3 175:3 188:8 let (16) 18:18 19:9 24:15 49:10 56:19 94:1 97:20 126:16 130:8 134:23 136:25 137:14 148:4 156:12 159:5 188:23 main (5) 21:3 23:11 59:12

lines (10) 21:14 60:8,10,20 69-4 173-7 126:17.21 146:7 182:17.19 mainly (6) 5:24 8:4,24,25 183:18 42:9 188:14 linked (2) 54:11 55:10 maintained (1) 179:24 list (10) 36:10 55:1 133:20 major (6) 26:22 177:17 172:13,15,17 173:16,17,23 179:5 180:1,7 181:21 175:1 makes (6) 35:11 36:4 45:12 listened (1) 162:11 104:10 149:20 155:9 literature (5) 54:24 132:21 making (3) 113:11 128:18 133:11.15 134:18 129-21 little (33) 13:23 14:2 17:20 manage (2) 20:23 21:4 18:9 23:22 24:15 28:8 manager (15) 6:6 7:24 8:16 37:22 45:1.6 63:25 64:2.25 12:22 14:22 15:1 20:16.19 70:14 79:25 80:4 95:25 21:20 32:7 93:9 143:13 96:20 99:5 100:2 103:14 161:15 162:5 178:6 105:9 113:6,6 120:5 mandy (4) 117:8,10,13,24 124:10,23 134:5 157:4 manufacture (1) 181:11 158:20 167:1 188:23 manufacturer (1) 171:19 190-16 manufacturers (1) 54:5 load (4) 67:18 82:8.11.13 manuscript (3) 64:6.10 174:6 many (8) 15:17 58:1 68:5 loading (1) 82:12 loads (2) 66:18 82:8 82:9 118:22 123:14 141:6 175:6 locate (1) 60:16 location (3) 40:2 178:13,17 march (4) 1:1 31:15 63:6 locations (1) 178:11 191:21 mark (1) 124:2 logic (1) 141:14 logical (4) 131:18 157:16 market (2) 49:7 165:13 166:13 185:7 marketing (4) 49:15,16 54:6 long (11) 4:24 22:2 51:5 70:1 55:16 martin (51) 1:3,9,16,19,22 71:12 97:23 111:5 137:13 169:14 172:13 174:19 2:3,6,13,17,23 longer (2) 22:7 168:19 3:4.11.15.19 51:5,9,13,17,23 52:3 71:21 longstanding (1) 12:23 look (100) 7:8,9,20 9:3 14:5 72:1,4,8,14,18,21 92:2 16:10 15 19:11 28:17 19 105:13:21:24:106:3:9:12 32:23 33:11.21 34:3 35:12 107:1 121:12 37:14,22 40:22,24 41:17 153:10,17,19,23 154:3,6 50:1 53:13 54:8,25 59:20 185:17,23 186:9,13,18,24 60:7 63:17.24 64:25 191:4.13.15 66:14,25 67:8 68:2 73:24 material (59) 35:24,25 77:7 80:4 83:16,17 43:18,21 44:10,12 46:8,17 85:17,22 87:3 88:23 47:2,4 48:8 55:21 56:2,15 89:7,19 90:5 91:4 94:10 57:9,13 58:16,19 69:6 70:3 95:19 99:21 100:2.8.15 71:14 75:11 77:25 78:11 80:21.22 81:4.9.22 82:10 107:5 109:23 110:11 111:23 115:11 117:5 84:5,7 85:1 88:2 92:14 118:16 120:1 123:20 103:7,25 108:8,19 124:4,8,17,22 126:17 109:16,16 110:10 111:15 128:2 132:11,23 133:18 112:21,23,24,25 114:8 137:11 139:7,7,17 141:3 137:13 140:8,12 141:14,17 142:8 144:11 147:13 142:2,4 147:11 150:22,24 148:12 149:3 150:14 184:21 154:12.13.16.20 157:24 materially (1) 32:20 158:17 160:6 163:13 materials (7) 2:15 17:12 168:22 171:21 173:24 18:10,22 21:9 43:23 174:1,11,23 175:19 183:4 131:20 185:21 187:11 188:2 matter (8) 67:22 69:17,19 looked (18) 17:14 21:7 114:12 127:18 129:4 22:14,15 23:12 38:6 52:10 146:3,22 91:17 92:22.24 97:4 134:4 matters (4) 12:18 24:3,12 140:5 143:1 150:15 157:23 76:4 maybe (5) 8:12 72:9 92:10 160:9 172:21 looking (37) 4:16 6:5 10:12 102:23 122:10 11:12 23:21 33:17 34:17 mean (49) 7:4 13:21,25 14:24 17:15 18:6,15,16 42:12,20 55:8 60:7 61:9 65:13 67:22 69:10 83:21 36:21 39:1.3.12 44:11 84:1 90:19 93:12 95:21 45:6,20,22 46:4,5,12 49:15 97:16 98:9 109:6 120:3 55:11 56:24 58:10 67:16 121:14 123:7 125:22.25 75:10 78:19 95:4 101:16 132:18 133:6 137:22 139:1 104:25 116:18 121:7 122:3 143:4 146:7 150:1 154:18 131:21 133:5 140:2 144:10 170:13 146:16 147:6,24 151:20 looks (5) 42:20 65:4 174:4 163:10 165:20 167:19 178:6 189:9 168:16 171:18 173:22 loop (2) 22:12 175:5 174:15 178:25 181:16 lot (7) 8:3 22:3 48:16 67:7 meaningful (1) 158:15 68:8 137:12 176:4 means (7) 42:2 46:23 54:14 low (7) 88:2 96:7 140:12.18 61:10 84:20 140:6.11 meant (10) 18:2 35:19 49:8 141:14,16 150:24 lowdensity (1) 79:10 67:9 68:10 93:18 108:23 lower (3) 49:5 80:4 124:10 110:21,24 172:1 lowrisk (1) 140:8 meantime (1) 153:14 lunch (2) 105:15 107:7 mechanical (2) 7:15,18 meet (4) 28:14 86:3.10.14 М

101:11 mimeche (1) 7:13 mind (19) 22:19 26:13 30:8 meeting (24) 40:16 41:13.15 47:25 56:2 67:8 68:8 88:25

50:22 52:6.14.18.20.22 53:11 55:5,6 63:7,11 64:18 70:9.10 86:4 member (3) 7:16.18 27:18 members (5) 1:5 3:22 27:22 107:19 123:10 memorialised (1) 144:16 memory (4) 30:16,20 126:11 144:8 mention (2) 110:6 168:11 mentioned (10) 19:3 21:23 27:6 54:12 62:1 70:19 91:15 92:7 105:8 108:6 mentioning (1) 59:7 mentions (1) 168:17 merely (2) 171:18 190:20 merxheim (2) 178:13 179:1 messages (1) 2:21 met (4) 28:9 92:14,23 109:21 met00053158p13173 (1) 36:8 met00053158p14100 (1) met00053158p14102 (1) 33:13 met00053158p14114 (2) 39-20 52-7 met00053158p14115 (2) 41:12 52:17 met00053158p14131 (2) 52:24 60:10 met00053158p1464 (1) 38:1 met00053158p148 (1) 37:21 met00053158p1590 (1) 99:8 met00053158p1596 (1) 100:3 met0005319012 (1) 169:14 met000558591 (2) 118:6 met000558592 (2) 117:11 118:15 meta0000205255 (2) 182:13 183:8 meta0000205256 (2) 182:16 183:16 metal (7) 78:19 81:15 82:11,13 116:1,13 157:7 metallic (12) 85:20 87:19 89:3,12 90:14 91:8 96:11.25 101:4 139:3 163:23 164:8 method (19) 67:25 83:23 103:7,9 104:1,22 108:6 109:17 110:6,9 112:20 113:10,14 114:9 130:21 131:9 144:17 148:11 190:21 methods (3) 84:25 102:25 104:3 metres (6) 16:19 17:13 18:11.21 150:22 152:2 micron (5) 89:17,18 96:8 145:11,13 microns (6) 156:5,6 157:10,10 161:13,14 middle (5) 46:14 65:7 115:20 156:20 168:24 might (16) 20:4 24:7 42:9 61:20 65:18 80:15 106:24 114:24 126:11 135:19 137:5 152:4 156:19 170:12.24 175:25 millett (30) 3:16,20,22 51:4,7 52:4,5 71:21 72:22.23 92:2.3 105:12.13 106:13.14.15 107:3 121:12.13 153:8 154:7.10 185:14,18,25 186:25 187:2,3 190:23 millimetres (3) 16:18,20

141:23 142:2 159:20 168:6 176-2 188-20 minute (2) 175:2 185:20 miscellaneous (2) 34:14 78:18 misleading (1) 185:10 misled (3) 114:16,24 152:5 missed (1) 177:19 mm (3) 34:6 79:7 116:9 mobile (1) 2:18 modifications (2) 184:6,15 moment (13) 9:2 12:15 18:15 27:6 30:10 43:6 51:4 62:2 71:23 87:6 105:12 143:25 153:9 moments (1) 99:4 monday (2) 191:16,21 month (3) 53:21 63:6 119:14 months (3) 29:18 106:19,21 moorebick (51) 1:3,9,16,19,22 2:3,6,13,17,23 3:4.11.15.19 51:5,9,13,17,23 52:3 71:21 72:1,4,8,14,18,21 92:2 105:13,21,24 106:3,9,12 107:1 121:12 153-10 17 19 23 154-3 6 185:17,23 186:9,13,18,24 191:4,13,15 more (42) 16:19,20 19:9 22:4.7 24:15 29:11 41:20 42:19,24 43:13 45:6 48:16 53:15,16 54:16 60:12,21 62:13 14 23 64:25 67:5 13 68:8 70:15 81:3 91:24 104:14 106:13 112:7 114:11 135:20 142:3 144:23 146:21 154:8 177:8 181:24 182:12 187:1 188:23 norning (11) 1:3,7,8,16,18 3:5,6,22,23,23 126:1 most (10) 43:25 55:16 72:20 75:22 76:7.10 101:13 172:21,25 191:1 move (2) 32:16 63:6 moving (1) 52:22 ms (2) 1:6,7 much (45) 1:22 2:6,23 3:15,19 18:16 22:4 40:23 45:17 48:3.15 51:17 52:3 57:21 61:6 62:14.23 72:21 95:4 105:21 106:9,15 107:1 113:5 132:12 145:23 148:18 153:8,11,19 154:6,10 157:9 158:3 164:19 168:19 180:3 186:14,24 190:5,23,25 191:2.12.13 must (62) 12:1 15:5.5 18:1.1 19:19.19 20:12 34:19 37:17 42:25 46:20 49:16,25,25 50:9,23,23 51:13 55:15 63:4 64:20 66:2 70:18 71:19 72:16 74:21 80:13 83:1 91:20 97:4 101:13 103:23.25 104:20.25 105:6.9.10 108:2 111:3 122:1.2 124:7 130:21 131:6,7,10,19 134:20 140:16 147:5,9,9 152:11,22 159:20 176:10 183:21 184:4.9 190:1 mutually (1) 27:24 myself (2) 20:11 69:8

N

name (6) 5:1,17 33:24 40:12 64:4 65:5 named (1) 149:14 namely (3) 14:12 130:4 171:11 names (2) 13:7 172:14 narrower (1) 175:1

114:20,20 116:23 117:23

93:11,13,17 95:12 108:19

42:15 48:21 49:2,3,12,22

national (13) 13:11 17:6 18:3.25 19:13 88:17 135:20 139:2 149:9,15,20 150:18 151:16 nature (5) 64:7 80:16 81:2 144:14 172:8 necessarily (3) 20:20 29:13 171:18 necessary (6) 72:10 148:4 151:8,17 158:18 187:15 need (31) 2:8 3:7 4:13 6:3 26:4.10 27:18 49:7 50:12 53:15 67:15 68:2 72:13 77:7 97:24 99:12,15 100:4 120:14 126:23 139:14 145:4 151:12 155:4,8 158:14 159:7 169:15 185:24 186:4 191:10 needed (4) 26:23 41:22 67:5 69:3 needs (2) 43:25 186:1 negotiation (1) 54:19 never (10) 2:25 14:19,19 17:15 24:12 31:16 121:19 127:19 150:5 165:15 next (17) 13:18 36:15 40:12 52:17 79:3 86:9 89:15 19 96:12 165:4 5 172:14 177:9 178:5 180:9 183:16 191:17 nhbcnbs (1) 43:25 nine (2) 4:24 29:18 nobody (1) 173:20 nod (1) 4:10 nodded (2) 104:5 137:19 non (1) 156:11 noncompliances (2) 180:1,7 nonconformances (3) 177:17.23 179:6 nonconformities (1) 181:21 none (1) 2:16 nonfr (1) 95:7 nor (1) 130:16 norm (3) 25:18,19,20 normal (14) 21:5 29:18.19 47:17 74:6 80:25 83:12 92:17 113:16 123:9,11 132:20 175:4 181:16 normally (17) 10:14,20,24 11:2,13 12:18 14:22 22:21 28:19 47:21 55:19 76:17 80:15 92:12 129:24 174:22 179:17 note (12) 19:12,12,17 34:2 44:3 49:2,18 52:6,8,11 99:17 178:15 notes (3) 143:10,16 144:2 nothing (9) 38:15 104:13 109:11 111:17 113:10,13 166:7 181:17.22 notice (12) 38:6 101:3.17 115:3 122:8.11.16.25 126:7 135:19 136:2,5 noticed (1) 19:17 nber (16) 39:18,24 40:5 48:22 50:5.22 52:7 117:9,14 118:2,8 133:5 145:2 157:21 158:12 187:6 number (13) 6:10.12 13:22 30:23 33:23 66:2 89:6 90:9 95:23 123:24 168:23 174:5 183:14 nutshell (1) 139:5

O (1) 156:9 object (1) 59:19 objection (2) 58:24 169:6 obligation (1) 35:3 obliged (1) 121:24 obtain (2) 72:6 143:2 obtained (1) 54:19 obviously (18) 37:1 42:14 49:15 57:22 64:14 65:25 71:19 82:13 144:10

152:9.22 168:8 171:1.6.7 173:22 174:9 181:16 occasion (2) 74:10 143:18 occasions (2) 25:21 143:11 oclock (3) 105:16.22 191:16 october (3) 4:21 115:20 154:20 offer (4) 21:11 34:15 65:19 171:17 offered (3) 32:17 35:2 36:15 offering (1) 33:19 office (2) 143:13 159:9 offices (1) 40:3 official (1) 166:23 officially (1) 167:21 often (1) 47:19 oh (4) 29:16 129:10,13 177:6 okay (15) 3:3,18 5:21 7:7 16:2 24:22 51:12 60:18 75:6 97:6 153:16 155:21 165:2 180:16 186:8 okayed (2) 73:7 140:19 old (1) 137:2 once (3) 146:21 179:24 183:24 ones (2) 62:6 171:6 onto (3) 27:13,13 79:22 openings (1) 88:22 operation (3) 8:11 83:12 179:20 opinion (2) 37:22 86:1 opinions (1) 38:7 opposed (11) 39:2 45:5 47:11 48:12,20 61:18 63:3 84:21 95:16 110:4 141:20 option (2) 189:16.16 order (4) 28:16 69:10 72:5 156:2 organisation (1) 27:9 organisational (2) 21:17 22:19 organisations (2) 11:16 24:5 organizations (1) 44:1 original (6) 6:7 41:17 63:21 177:15 179:2 181:8 originally (1) 181:2 originated (1) 48:13 originator (1) 183:1 osman (3) 117:8,13,24 others (3) 29:5 172:15 186:2 otherwise (1) 168:18 ought (1) 106:17 outside (15) 10:14 11:2 12:4 13:1 17:18 30:15 34:13 78:17 79:2 111:9,20 118:23 143:3 150:11 164:13 outsourced (1) 10:14 over (10) 17:1 48:16,17 77:16 78:13 83:21 85:6 145:4 149:17 181:10 overall (1) 89:13 overspoke (1) 27:16 own (14) 10:18 37:3,12 38:12 45:10,19 59:4 62:9 105:3 131:9 143:13 144:7 174:13 176:16

Р pages (4) 4:24 89:20 167:9 paid (2) 24:16 88:19 paint (4) 155:25 157:6 163:4 164:23 panel (99) 1:5 3:23 23:14 26:24 29:4 30:9,12 32:1 34:21 35:10.22 37:3 38:12,23,25 39:3,4,9,11,12 44:6,12 45:2.5.7.10.12.19.21.23.24 46:1.4.5.5.7.8.22 47:2.7.9 48:10.11.17.20.24.55:12 56:13,20 57:17 58:5,7,9,13,15,23 59:9,18 62:15 63:2 78:2,2 80:22 82:3 84:14.15 89:13 96:7

64:10 66:6.12 77:10.14.15.20.22 78:10 79:7.11.20.21 80:7 81:5 82:5 86:2,10,14 110:13,22 111:6 115:4 128:11,22 139:21,24 140:2 141:10,19,20 149:8.9.19.24 156:3 161:8.12.13.16 162:6 166:5 167:12 171:3 175:17,21 176:20,21 paper (1) 43:24 paragraph (62) 7:9,12,20 9:4,6 10:12,13 23:25 24:1,23 33:5 44:20 46:13,14 53:14,17,18 54:8 55:8 60:7 11 19 73:25 74:4 85:11 89:8 10 15 90:11 12 91:20 94:7 96:5 102:9 110:12 111:23 112:8 116:6.15 117:2 128:3.12 129:8.12 137:21 148:14.16 149:4,18 155:1,17 161:9,19 162:3,19 163:15 168-23 169-14 14 172-4 5 183:10 paragraphs (1) 99:13 parameters (2) 96:23 116:8 parlance (1) 29:1 part (24) 17:1,9 33:14 36:9 37:15,20 89:6 90:1,6,9,19 95:1,2 133:11,15 142:9 148:18 150:8,17 156:18 157:21 172:9 179:17 188:3 particular (48) 10:17 13:4 22:23 26:17 27:17 28:6,9 29:22 32:10 35:4 54:3 58:8 62:18 71:13 73:7 74:2 75:11 83:5,19 85:8 88:8,19 103:13 109:20 110:8 112:17.18 113:8 135:14.24 140:19 143:19.21 147:10.11.25 149:10 155:15 163:18,23 164:1,6,7 165:9,22 168:3,11 185:4 parties (5) 24:14 63:5 172:10 173:23 174:15 partly (1) 16:25 parts (3) 16:21 82:20 139:25 party (1) 70:5 pass (1) 174:23 passed (2) 106:20 142:22 past (2) 146:2 158:7 pasting (1) 86:19 pathways (1) 88:19 pause (14) 9:24 15:22 18:7 19:23 20:3 44:23 92:1 97:19 108:16 111:10 112:5 121:6 126:10 130:6 pausing (1) 40:12 pdf (1) 167:8 pe (53) 41:23 83:20 85:9.18.20 93:15 94:3.7.23 95:8,15 96:1 98:21 99:14 100:1.10 121:16 123:18 124:11.20 125:9 126:9 128:22 130:16.17 132:11 133:25 134:5,14,19 135:1,25 136:7,12,17 137:18 138:17 142:22 146:3,13,18,19,23 147:4,12 148:2,8 150:8 151:9,25 152:5 160:8 184:23 pecored (7) 98:14,21 134:7

99:15 103:6 105:2 11

112:18 113:11 114:8

126:12 128:16 129:19

163:24 173:2 191:6

panels (57) 6:1 18:11 25:25

31:2 34:5 35:18 59:1,11,12

130:20,23 131:8 141:24

145:7,11 147:10 155:5,14

110:8.10.18.24 111:9.14

108:8 109:16.20

135:4 138:2 164:4.9 people (10) 40:9 52:11 53:7 54:16 55:16 60:12.21 106:24 110:7 175:2 peoples (1) 20:23 per (6) 54:15 61:11,14 142:2 178:13,18 perceive (1) 132:1 perceived (1) 26:17 perfectly (3) 116:17 180:20 190.22 perform (4) 74:19 132:8 161:17 162:6 performance (39) 11:20 19:5 20:13 23:16 24:17 25:3,15 26:15,22 71:14 73:17 74:3 88:12 98:19 100:21 102:17 103:20 104:17.23 117:1 125:15 128:7.16 129:19 131:2.14 137:6 148:22.24 155:10,13 158:16 160:22 161:4 163:1,4 164:19 171:9 173:19 performances (2) 88:6 163:16 perhaps (10) 22:7 25:10 68:22 86:22 111:12 132:7 137-1 144-8 15 167-21 period (2) 7:6 184:8 permit (1) 163:7 person (2) 41:3 48:6 persons (1) 41:10 perspective (1) 174:13 perspectives (1) 132:17 pertains (2) 98:14.20 philosophy (1) 62:12 phone (2) 2:19 70:21 phrase (1) 140:23 phraseology (1) 153:3 phrases (2) 76:19,24 physical (1) 45:24 pick (1) 169:15 picking (1) 107:6 picture (2) 77:23 78:3 pintle (1) 79:22 place (1) 71:1 placed (1) 14:16 plagnol (3) 179:11 180:4,12 plain (3) 79:12,20 110:13 plan (5) 179:18 181:1,8,13,17 play (1) 182:24 played (1) 76:3 please (97) 2:4,10,18 4:7,8,14,16,25 7:8 9:4 14:5,6 16:11 30:21 31:25 32:23 33:13 35:12 36:8 37:25 38:1 39:19 41:13 51:11,13 52:6,9,16 53:13 60:9 65:2 72:8 73:23 78:6 82:17 83:2.19 85:5.8.23 87:2 89:2 91:3 95:19 96:3 97:14 99:8,16,25 100:2,24 102:2 105:16,17 107:4 109:22 110:11 112:8 117:11 118:10 119:17.24 123:20 128:3 132:14 144:24 146:6 148:13 149:3.10 153:14.14 154:11.19 156:12 158:8.21 159:5,7 161:1 163:12,14 167:4 168:21 172:2 174:1 175:8.11 178:1.12.19 179:9 182:13 186:5,9 188:2 189:3 pleased (1) 183:11 pm (7) 105:25 106:2 153:20.22 186:15.17 191:19 points (2) 114:17 172:13 policy (2) 48:14 137:1 polyester (4) 79:15 118:24 145:12 161:14 polyethylene (5) 34:5 79:11 96:8.9 145:8

port (1) 69:4

position (1) 184:13 positive (1) 49:3 possession (2) 136:6,11 possible (5) 54:12 59:7 61:6 185:22 188:21 possibly (5) 8:12 42:25 103:24 140:7 164:21 potential (3) 41:9 54:1 158:15 practice (3) 80:25 113:16 144:2 precise (5) 69:2 73:1 75:14 76:3 94:12 precoated (1) 96:9 preference (2) 13:10,12 prepainted (1) 34:6 prepare (1) 65:11 prepared (4) 49:6 65:14,19 185-15 preparing (3) 65:19 133:7 134:16 present (5) 40:6,9 52:11,13,20 presents (1) 67:11 presumably (2) 72:15 78:25 preventing (1) 88:20 previous (2) 8:19 85:5 previously (1) 122:21 price (1) 63:24 pricing (2) 65:15 66:1 primarily (1) 7:21 primer (5) 79:16 89:18 118:24 145:12 161:14 print (1) 133:2 printed (1) 5:1 prior (2) 128:8 161:5 probably (23) 3:5 12:25 45:17 47:20 55:16 60:4 62:13 68:7 72:20 73:20 75:22 76:7,11 87:4 101:14 123:14 124:5 142:3 172:21,25 177:18 181:18 190:7 problem (5) 26:1,3,17 51:16 175:4 problems (2) 2:24 177:21 procedure (5) 76:21,22 123:9,11 179:8 proceeding (3) 130:25 132:2 187:16 proceedings (2) 186:2 191:15 process (8) 31:23 32:12 64:7 148:18 156:14 163:6 172:1 177:23 produce (1) 190:13 produced (1) 95:13 producing (1) 183:7 product (145) 6:6 9:8 10:5 11:1,6 23:6 24:24 25:13 27:11.17 28:9.14 29:14 30:2.9.9 31:1 33:24.25 34:3,18,25 35:13,20,21,22 41:11 48:3,15,17 54:11 55:3,10,12 57:6 59:16 62:18.24 63:2 64:7 65:5 66:12 67:17,20 69:11 71:20 77:2,9,11,21 84:9.20.20.20.23 87:10.14.18 88:7.13 89:2,11 90:13,18 91:7 93:21 94:13,17 95:6,8,14 96:4.23 98:5 99:1.16.19 100:1.22 101:20 102:13,16 103:2,19,21 104:12 105:2.11 108:1 109:3.8.25 110:3 112:10.15 113:9.13.18 114:1.13.15 115:12,17,24 116:8,20 124:20 125:1 127:11 128:15,17 129:7,18,20 131:3,14 134:17 136:17 140:25 143:19.21.24 151:14 155:15 156:23 157:2 158:15 163:9.9.17

172:9 174:13 179:13.23 181:2.11 183:13 184:7 185:13 190:19 production (1) 179:22 products (25) 11:22 19:15 23:10 30:7 43:23 44:25 47:21 79:16 83:18 85:7,14 86:17 87:25 88:4 107:10 139:10 142:12,15 146:2 148:9 149:22 154:14 155:6 158:7 171:17 productsystem (1) 149:13 programme (2) 65:4 66:8 progress (1) 99:11 project (18) 6:6,10,12 7:24 8:16 10:17 13:4,5,6 14:22,24 15:1 20:16,19 32:7,13 168:3 178:5 rojectmanaged (1) 31:9 projects (5) 8:19 9:13 13:7 21:4 26:6 promotional (1) 132:21 prompt (2) 26:11 180:3 prompted (2) 15:18 26:19 pronouncing (1) 36:7 proof (1) 167:24 propagation (2) 87:20 91:9 properties (2) 45:25 84:24 proposal (5) 41:15,18 49:5 158:18 187:22 proposed (3) 117:15 154:24 169:5 proprietary (1) 64:4 prospective (1) 54:1 protected (2) 118:23 145:13 protects (5) 79:15.16 118:22 169:2 170:22 prove (1) 187:14 proves (1) 167:6 provide (21) 11:13 42:9 50:12 77:15 78:12 122:7 127:4 128:8,15,23 129:18,25 147:14 155:13 158:17 161:5 171:19 178:22 182:5 187:17.24 provided (11) 37:2 38:24 98:18 103:1 122:12 126:15 127:16 129:25 130:15 149:15 161:11 providing (3) 43:12 82:7 109:20 provisions (2) 16:14 86:3 public (1) 3:24 publications (1) 182:18 published (1) 148:18 purpose (6) 57:1,5,12,16 59:7 124:6 purposes (9) 6:20 29:21 61:6 100:19 101:15 127:9 151:9 159:6 181:19 pursue (3) 126:24 144:23 188:23 push (2) 44:6 45:2 pushing (1) 48:9 putting (1) 2:9 pvdf (16) 79:14 85:18 87:19 89:3,18 91:8 118:20,21 145:14 147:24 161:12 166:25 167:13 169:1 170:16.21 q (573) 4:4,21,24 5:4.6.9.12.16.22.24 6:10,13,16,19,23 7:3,7,19 8:1,7,14,18,21 9:2,15,20 10:4.9.11.23 11:7,12,19,21,24 12:5,8,15 13:1,6,9,17,22,25 14:5,11,21,24 15:3,6,12,17

16:2.6.8.24 17:17.19.23

18:2.6.14.18 19:9.21

20:15,19,23

22:6,9,16,24

165:8,8,23,24 167:15

21:1,13,19,21,25

23:1.4.9.14.18.20

26:2.9.17 27:3.15.20 28:2.4.11.16.19.24 29:3.7.11.15.23 30:10.15.18 31:1.9.12.17 32:5,11,15,23 33:9,11,21,23 34:22 35:8,12,21 36:5,15,20 37:5,8,13,18 38:13.15.19.21 39:1.4.11.16 40:5.9.12.16.18.21.41:6 42:7.11.17 43:2.4.11.15 44:9,15,19 45:1,15,19 46:2,9,14,24 47:3,9,11,13,24 48:4,19 49:1,14,17 50:1,7,13,19,25 52:16.22 53:13 54:6.8 55:7.18.23 56:4.9.13.19.25 57:4.11.15.20 58:3.12.21 59:2,7,14,20,25 60:3,7,18 61:1,8,16,22,25 62:5,8,16,19,25 63:6,11,14,19,24 64:13,17,22 65:11,13,17,23 66:4,13,25 67:4.13.19 68-2 5 12 18 21 24 69:2,9,13,17,21 70:5,9,13,23 71:3,8,11,15 72:25 73:9,13,21 74:14.18.24 75:7.13.19 76:1,13,19,22 77:5 78:5,23 79:2 80:14,18,23 81-3 11 17 24 82:15.17.23.25 83:2 84:9,12,18 85:2 86:9,18,21 87:1 91:21,23 92:9,17,21 93:2.8.11.17.20.24 94:1,6,10 95:1,5,11,18 96:3 97:6,20 98:3,8,14,17,20 99:3 100:17,20,23 101:6.8.17.22 102:2.10.12 103:1.10.16 104:2.7.15.24 105:4,6 107:21 108:3,9,14 109:1,11,15,22 110:11 111:1,7,17,23 112:8,23,25 113:13,25 114:6,11,22 115:5,11,19 116:18 117:1.4.11 118:13.15 119:4.11 120:16.23 121:3.10.23 122:2.8.16.23 123:4,11,13 124:8,14 125:7,11,14,21 126:5,16,25 127:6,14,18,22 128:2 129:2,10,14,16 130:1,8,13,15,24 131:5.11.16.23 132:1.5.11.23 133:5.9.14.18.25 134:9,16,23 135:7,16,25 136:6,11,15,19,25 137:9,22,24 138:6.9.11.20.25 139:5 140:9.13,21 141:5,9,18 142:8.21.25 143:10.16.21.25 144:6.12.23 146:7.16.21 147:1,7,16 148:6,12 150:8,13 151:1,8,15,21,25 152:4.14.25 155:17.21 156:23 157:1.11.14.19 159:14.16.22 160:5.12.15.17.24 161:24 162:2.10.16.22 163:6.12 164:1.6.11.16.24 165:1,3,12,15,18 166:3,7,9,15 168:2,11,21 169:10,21 170:12,19 171:10,21 172:20,24 173:2.5.10.13.15 174:1.12.17.20 175:1.8 176:9.12.16.19.25 177:4.7 178:1,8,11 179:7,9

24:9.15.22 25:8.10.17.20

180:17.23 181:1.5.12.20.24 182:4.11.22.24 183:8.23 184:2.13.18.23 185:8 187:22 188:2.16.23 189:3,8,11,19,23 190:3,9,11 qualifications (1) 7:10 qualified (1) 82:6 qualify (1) 156:2 quality (9) 48:17 62:22 179:18 181:1,7,8,13,17 182:9 queries (1) 26:10 query (2) 25:23 69:2 question (68) 4:6,7 6:15 10:23,23 12:15 18:7,12 19:9 23:8.21 25:10 44:18 46:1 47:14 49:10 56:19 58:12 69:2.14 74:1 77:19 83:4,4,8,17 85:4,6 97:2 98:20 102:7,15 107:5.8.21.24 109:15 111:21 121:3 122:9,15 128:4,5,20 129:16 130:7 131:11 134:15 135:3 136:2.10.24 140:1 146.6 21 148.20 149.5 6 152:17 161:2 165:4,5 168:13 170:4,23 177:2 187:22 190:3 questions (23) 2:9 3:13,17,21 4:5 6:23 13:18 18:18 21:13 106:13,16,24 154-8 177-22 185-16 21 186:1.3.7.19 187:1 190:24 192:5 quickly (3) 13:18 16:10 91:14 quite (27) 2:25 12:24 13:18 16:9 22:15 23:13 35:9 47:22 51:7 56:19 60:16

ra050005a (1) 95:23 ra050005b (1) 123:24 ra070182 (2) 156:9,16 rails (4) 34:10 78:19 82:11.13 rainscreen (3) 78:13 145:3,9 raise (2) 3:12 47:25

67:15 75:20 80:25 91:14

94:24 98:24 113:9 117:6

137:12,13 141:12 157:16

R

122:15 123:9 132:20

180:15

quotation (1) 54:18

ral (2) 89:12 90:14 range (5) 34:3 169:24 170:6,15,24 rather (20) 34:21 38:11,25 43:12,18 44:11,12 46:17

47:4.9 48:8 51:5 62:24 67:6,14 68:25 73:7 144:19 189:24 190:12

rating (3) 134:7 145:25 158:5

rationale (2) 58:22 61:12 raw (12) 45:21 47:6 48:20 56:13,21 58:5,13,15,22 59:9 63:2 110:18

rb (10) 43:18,22.23 44:10 46:17 47:4 48:8 49:5 55:25 136:17

rb55 (2) 41:15 43:21 re (1) 41:9

reaction (19) 87:12,15 94:14,18 95:22 98:5 99:14,25 103:11 112:11 123:23 128:15.22 129:18 139:21 145:3 155:2 156:8 175:17

read (27) 5:4 17:24 18:1 19:19,19 20:12 32:3,11 38:13 54:8 55:8 79:19 85:6 87:3.5 88:24 91:5 94:11.11

102-4 109-6 114-19 115-13 129:14 134:25 140:8 168:23

reader (16) 81:5 84:12 108:11 109:1.15 111:1,7,18 112:13 113:25 114:12,16,24 164:12 170:12,23

reading (10) 2:4 110:2 112:20 114:4,10 115:3 129:8 138:10.11 152:4 ready (5) 52:4 106:10,14 153:24 154:4 real (1) 53:20

realise (6) 56:13,20 104:7 114:24 121:23 150:16 really (16) 12:13 17:18 18:8 20:9 29:14 35:1 46:2 61:1 91:18 111:4 120:18 131:11 153:6 165:10.11 168:10 reason (6) 17:19 40:25 50:10

108:3 141:18 178:22 reasonable (2) 163:3 188:22 reasons (4) 54:6,6 190:14,20 reassure (1) 168:9 recall (9) 43:7 44:2,22 52:13 80:18 117:8 132:19 169:4 173.6

receive (3) 160:19 178:18 182:2 received (5) 116:16 119:16 120:23 125:3 127:19

receiving (2) 2:21 100:8 recently (1) 5:4 recognise (4) 31:7 32:9 33:9 65:9

recognised (1) 148:20 recognized (1) 99:18 recollection (10) 24:9 47:5,20 55:5 58:24 60:15 70:22 99:6 125:4 161:11 record (6) 14:18,20 49:21 97:17 143:17 175:23 recorded (1) 144:7 records (3) 6:20 26:18 144:9 red (4) 118:3,3 169:6,12 reduce (3) 41:18 43:11 49:23

reduced (2) 50:8,17 reducing (1) 43:8 reduction (3) 50:20,20,25 redundant (1) 8:10 refer (7) 7:12 102:5.20 142:25 155:17 159:12

169:3 reference (20) 6:20 7:13 33:16 42:7,21 61:2,4 63:16 70:25 89:11 90:13 98:10,11 111:11 112:19 113:3 149:10 155:10 171:11 187:20

referred (11) 44:17 46:20 69:19 80:3 94:22 116:14 134:11 135:7 136:22 138:25 183:9 referring (10) 5:20 44:4

60:16 68:14 95:7,15 139:6 148:15 160:15 162:8 refers (3) 114:17 124:10 152:12

reflect (1) 64:17 reflected (1) 162:18 refuse (2) 189:8 190:3 refused (1) 190:5 regard (31) 10:17 13:4,21,24

17:11,14 19:4 22:3 25:24 26:23.24 29:22 36:22 37:3.7 38:22 69:5 71:20 103:7 104:19.22 111:15 143:8,19,23 150:6 155:2 163:4 168:18 173:1 188:14 regarded (22) 87:25 88:4 139:10,21,24 140:2,7,14,22 141:14,19

142:1.6.12.15 152:6.12.19 154:15 155:7 175:17.21 regarding (4) 68:22 157:13

159:20 181:17 regardless (4) 55:13 58:13 103:17 126:7

regards (8) 26:15 74:22 84:25 91:18 150:23 171:9,16 180:11 regime (3) 12:6,10,12 regs (4) 41:20,20 42:19,19 regular (2) 179:20 180:14 regulation (2) 21:23 41:21 regulations (30) 9:9 10:6 11:1.8 13:20 16:4 19:25

24:24 25:13 27:12 28:10,15 42:24,24 67:24 74:7 75:23 85:25 86:5 88:2,3,18 139:12,20 145:18,20 148:23 149:1 155:3 175:16

regulatory (1) 117:19 relate (6) 103:21 133:25.25 169:24,25 170:6 related (4) 103:19 123:17

136:16 146:18 relates (8) 77:13 78:9 80:1 81:13 109:12 115:21 149:13 156:20

relating (14) 8:4 13:15 19:6 47.6 51.15 71.17 73.8 105:18 111:24 146:23 161:11 167:15 179:23 186:10

relation (32) 9:7,12 12:5 18:21 22:10 23:7,14 24:3 25:4 37:12 43:2 73:16 74-11 75-19 76-4 83-14 87:8 88:1 99:11 103:10 115:16 122:23 130:3 139:11,18,20 145:17 146:10 148:24 166:12 175:13,16

relationship (2) 12:23 19:24 release (1) 185:22 relevant (26) 15:8,9,19,24 16:1 20:21 59:14 77:3 86:4 93:21 104:22 108:21 109:2 121:24 125:19 126:8 128:10,19,23 129:22

130:1,9 135:20 161:7 166:12 181:9 reluctance (1) 189:12 reluctant (1) 189:9 rely (2) 92:8 178:25

remains (1) 190:25 remarks (1) 118:1 remember (135) 6:11 9:13,19 10:2,22 11:11 12:2 13:7,9 15:17 17:15 19:21 23:3,4 24:16 26:5 31:14,16 32:19,22 33:10 35:16 37:14 38:14,19 40:16.19.20 41:3.5

42:15.22 43:10.11.13 44:24,25 46:12 48:10,13 49:12,22,25 50:8,9,14,23 52:15,19,21 53:11,22 54:2 55:6.11.24 59:4.22 60:23,25 61:12 62:5 63:4.7.9.11.13.64:14 69:23.23 70:7.11 71:2.24 72:18 73:12 75:7 80:12 82:20 86:13 92:20,20,21 94:5 97:5 104:19,25

108:13 111:13 113:2

121:2.8 122:22 124:7

125:6,7,10,17,25 126:22

131:12 132:20 133:6,8

136:18.18 142:24 143:22

134:21 135:6.13.14

151:20 152:18 153:2

155:20 157:10 159:11

181:4,9,15 188:1,1,18

repeat (4) 4:6 18:5 63:10

189:19.22.23

122:15

160:2 169:7 173:8 176:24

87:13,18 89:2,14 90:17 91:7 93:21 94:16 115:12 retired (4) 7:3,4,6,6 reverse (3) 155:4,10,14 review (11) 29:4 30:13 133:10.12.14 158:16 172:1 144:21 146:14 147:5 148:4

> 29:8 31:1 33:3,24 37:23 43:24 53:13 56:5 60:18 64:4 65:6 71:18 73:17 74:20 77:10.14.19 78:9 79:6 80:7 84:3 86:1 89:11 90:13 93:14,15 94:3,7,22

repeating (1) 20:10 report (51) 11:15,17 21:15,19 25:5,8,8 26:7

39:25 52:25 73:4 89:6.7.19 90:4.8 92:12.16.18 95:1.22 97:25 98:12 99:22 100:11 101:9,17,24 104:8 115:16 116:3 119:14,16 120:8,17,24 123:20,23

130:16 135:8,15,22 138:2 150:17 155:9.18.18 156:9 180:19 181:14.21 reported (3) 21:20.21 162:16

reporting (1) 21:14 reports (29) 25:9 36:10 72:15,17 92:4,22 99:19 121:15,15 122:12,14,17,24 123:5,16 125:24 126:18 127:2.7.12.24 134:4 136:4

138:14.15 159:1.4 182:2.6 represented (1) 9:21 request (7) 101:10 128:18 129:21 160:1 178:2 187:23

189:21 requested (2) 117:8 167:4 require (3) 29:11 122:3

145:20 required (12) 12:20 13:16 21:12 67:20 68:5 88:17 144:16 156:13 177:11

178:22 180:25 185:10 requirement (2) 151:11 189:5

requirements (11) 14:3 27:11 79:13.24 86:4.11.15 92:14 110:15 155:3 189:5 research (1) 41:23

resend (1) 119:17 resistance (6) 66:19 82:7 84:23 88:12 103:8,10 respect (12) 22:23 44:5

69:14 115:5 128:10 144:22 147:3,4,21,22 161:7 175:4 respectively (1) 127:25 respond (1) 167:1 responded (2) 118:17 159:24

responds (1) 180:5 response (23) 69:25 70:20 71:23 73:25 74:4 100:4,8 117:23 118:10 119:7,20 144:10.20 152:14 155:22 158:11.20 159:25

160:3.18.19 180:3 188:6 responsibility (1) 181:7 responsible (3) 22:16 41:11

76:14 rest (5) 44:7 45:3 145:5 157:24 159:10 restriction (5) 17:22

18:17,21 165:12,16 result (11) 22:17 50:21 64:20 92:5.18 93:4 101:8 102:23 108:4 144:19 190:1

results (17) 38:24 89:22 90:20,22 93:3,13 119:12 120:16 124:18.19.25 134:5 139:1 150:2 157:12 163:8 188:12

resume (2) 153:13 191:16 safe (2) 73:18 187:9 retardant (15) 83:20 85:9 safely (1) 104:16 safer (3) 45:17 48:15 57:21 safety (18) 11:22 12:19 116:20 147:12 148:2 159:2 retrospectively (2) 187:18,25

76:4,25 same (31) 12:5 16:19 20:1,1 35:12 37:24,24,25 52:23 173:3 177:24 182:7,9 62:11,20 65:19 67:19 71:4 reynobond (85) 5:25 23:14 80:4 90:12.15.18 97:12.15

100:5 115:14 118:7 120:6 132:12 149:3 155:22 167:2,2 188:3,3 sample (25) 87:10,14,18 89:2 91:7 93:21 94:13.17.22 95:6.14 98:4

102:13.16 109:25 110:3 112-10 113-2 114:1,13,17,18,18 115:12 116:20

96:1 98:15.21.21 100:1

101:10 109:13 115:21

119:13.24 120:13.21.25

123:6.16.18 124:11.20

134:14,19 135:1,5

136:7.12.17.17

125:9.12.15 128:10 132:16

146:4,13,24 149:7 151:10

156:3,10,23 157:3,12

160:7.10 161:7 163:1

164:4.9 166:4.19.24

157:12 162:24

rich (2) 40:10 53:8

ring (1) 130:17

righthand (10) 4:22 17:2

30:23 38:3 40:1 41:24

rigorously (2) 131:23 165:7

risk (7) 20:10 88:2 132:3

140:12,18 141:14,16

57:17 58:8,14 59:4

101:18 24 102:6 16

108:5 109:2 110:3,8

115:7 116:2 120:3

121:16.17 125:24

rivet (54) 37:9 39:13 44:13

45:22 46:6,7 48:20 56:6

62:6,10,20 82:3 84:3,16

103-4 19 21 104-16 105-4

111:19 112:15,25 114:2

126:6,18,19 127:3,8,25

151-17 152-1 184-24

riveted (32) 36:1.17.21.24

81:5 83:10,23 84:6

96:1,11,25 98:17,17,21

99:1 101:4,11,20 102:22

103:2 110:14,16 112:2

114:15 116:1,13

rivetfix (14) 35:23 55:25

123:17 127:20 132:8

137:18 138:2,7,16,22

role (6) 20:15 21:3 32:5 76:2

room (5) 2:11,19 70:7 71:4

routinely (3) 9:11,15 165:13

route (2) 188:14 190:2

rivetfixed (1) 113:4

rlx (1) 43:23

182:20,24

186:11

round (1) 3:6

rows (1) 36:12

rubric (2) 17:3 87:8

rumours (1) 165:15

runup (1) 31:12

63:19

sadly (1) 106:20

rules (3) 179:2,8 180:20

run (7) 37:25 39:19 51:5

s341014 (3) 6:10 33:16

13:24 14:8 15:10.10 24:3

28:5 38:17 42:13 66:15

68:6 69:11 74:5,19 75:14

52:24 120:10 154:21 169:7

57:6 58:16 109:13 114:23

130:24 138:10 148:8 150:9

38:4,9 59:5 79:12,20 80:10

63:17 77:18 116:24 132:25

167:12 181:2.25 184:19

reynolux (5) 43:24 156:16,20

sandwiched (1) 34:6 sarah (56) 13:5,6 69:24,25 70:8,17,21 71:5,16 72:12 73:4.12.16 74:12.14.17.17.20.21.22 75:2.3.8.16 76:2.6 86:23 147:1,7,17 148:4

161:20 satisfactorily (1) 179:23 satisfactory (1) 41:8 satisfied (1) 152:1 satisfies (1) 82:7

saw (11) 18:6 26:19 37:5,8 47:15 62:1 68:15 78:14 151:15 169:11 175:2

84-24 92-18 108-21 112-19 134:6 136:3 138:3 141:13 162:12 166:1 168:6 171:13 scenario (1) 185:3 schedule (2) 160:3 180:10 scheidecker (1) 53:8

schmidt (2) 41:25 49:19 scientific (1) 131:16 scope (9) 34:13,17,25 47:16 77:11 78:17 111:9,20 168:14

35:13 37:24 38:3 46:14 65:5 66:15 80:6 82:18 97:12 98:3 99:21 115:14,24 116:24 128:5

169:16 170:18 175:10 178:5 183:17 scroll (8) 9:5 41:12 80:5

178:12

50:15 53:14 54:8 55:8 90:4,12 96:24 110:12 116:18 117:2,12 119:19 120:5 133:25 152:16 154:21 158:11 172:16 secondly (1) 138:6 seconds (1) 124:24

section (49) 14:8,12 15:19 21:18 22:18,21,22 23:2 32:8 34:3 68:7 82:15,15 87:3 88:24 89:1 91:5.15 93:12,13 94:10 97:10,17 155:5 163:13 166:14 168:17,22 170:13 171:5

178:15 182:17 139:9 141:3 142:11.14 174:25

see (241) 1:14,19 19:11 26:2 28:2.11.24 30:23 31:4.19 32:15 33:1.3.5.7.15.23.35:13

samples (3) 85:14 104:17 142:19

143:5.23 144:4.15 145:1.6 152:14,20 153:4,4 157:20 158:23 159:13,14,18,21,24

162:9,11,13,14,16,21,22 save (1) 18:21

saying (16) 20:5,6 57:4 71:24

scheme (2) 93:12 179:19

scotland (1) 88:3 screen (38) 1:24 2:4 4:19,22 7:11 16:16 17:2 30:24 31:3 49:1 50:4 52:10 60:9 64:2 129:9,11 154:21 167:2

82:17 118:5 119:18 158:21

second (27) 17:4 33:5 44:19 60:18,19 85:4 86:6 89:7,10

98:10 102:2 104:18 109:23 110:2 112:17 120:9 137:12 149:12.15 152:13 154:12

172:16 173:5,8 174:10,10 sections (13) 21:5 22:10,12 77:4 85:15 86:11 87:3,24

4:2,19,21,25 6:3 7:11,19 10:4,9 11:7,19 12:9 13:6 14:9,11 16:13,16,21 17:3 36:10,12,12,15,18

37:21.23 38:1 39:24 40:1.5.7.22.24 41:13 44:9,15 47:3,13 48:5 49:17 50:3.15.16.51:17.25.25 52:17 53:3.5.6 55:7 60:3,8,10 61:4,16 63:16,24 64:3,11,17 65:5,7 66:4,23 67:1,2 68:9,12,18 69:13,17 70:14 71:11 73:9 75:13 77:8.11 78:7.8 79:4.13.24.25 80:6.9 81:12 82:16 83:15 85:12.25 86:7.7.11 87:1.6 89:6.8.22 90:5,8,11,22,24 95:24 96:1,4,5,17,18,21 97:20,24,24 98:4 99:5,7,21 100:23 101:14 102:3,4 103:18 105:21 106:7.8 107:8 110:15 111:23 114:22 115:19.20.24 116:4 117:5,13,23 118:6,10,11,18 119:20 120:1.23 123:13.21.23 124:9,11,14 128:4 129:9,11,16 133:1,2,2,19,20,22,23 134-2 6 9 24 136-1 21 145-1 5 147-25 148-12 17 149:6 152:4 153:17 154:1,16 155:22 156:8,15,20 157:14 158:10.14 159:19 160:5 161:2,9 162:2,10 166:17 167:7,8 168:2,11,24 169-6 10 19 170-18 19 171:21 172:14 173:15,16,17 174:3,12 175:14 178:3,11 180:4 182:16 183:8.9.17.23 184:2 186:6,13,18,21 187:13

seeing (3) 114:1 125:6 135:13

seeking (1) 159:21 seem (4) 9:13 111:13 143:22 157:10

seems (5) 93:16 95:9,11

166:13 187:14 seen (35) 33:10 37:17 39:22,23 53:2 56:9 68:18 83:7 92:4 107:17 121:16.16.17 122:24

123:15 124:6 125:2 135:9,14 138:14,15,21 146:16 148:9 155:19 157:20 159:24 161:18 171:23 173:18 176:23 180:13,24 183:21 188:11

selecting (1) 76:15 send (6) 42:1 119:14 121:24 160:12.17 167:21 sending (1) 101:18

sends (4) 99:22,23 120:17,24 sense (2) 62:8 78:3 sensible (3) 62:13,23 67:12 sensitive (1) 164:20 sent (28) 32:19 33:1 36:9 54:22,23,24 63:8,12 72:5.19.19 97:7 100:11.12 101:10.24 103:18 117:20 122:25 135:10,12 138:1

183:18 187:6.23 sentence (8) 44:19 110:19 112:13 117:2 147:17 154:13 162:2.18

160:6 172:11 182:14

separate (8) 58:10 62:6 83:9 127:1.7.24 138:14 155:13 separately (3) 44:7 45:3

62:20 september (3) 90:5,25 139:2 seriously (1) 106:19 service (1) 22:8 set (15) 7:10 66:8 90:22

99:12 107:13.16 108:1 124:19,21 139:1 149:6

163:19.22 179:15 180:14 sets (3) 88:9 136:19 172:10 settle (1) 190:12 settled (1) 189:23 seven (1) 136:22 several (3) 63:5 175:6 183:21 shaded (5) 16:22,24,25 17:1 shading (1) 17:5 shake (1) 4:10 shall (2) 3:4 117:18 shant (1) 2:24 shed (1) 161:21 sheet (5) 31:1 65:4 77:9 89:16 188:8 sheets (4) 34:7 79:8 96:10 145:8 short (11) 3:1 4:15 51:21 106:1 153:12.21 162:14 182:12 185:24 186:5.16 shorter (2) 29:18,20 shortly (5) 5:13 76:1 78:5 117:7 136:15 should (20) 1:24 45:25 80:23 88:8,16,18,19 104:7 108:11 109:7 128:24 129-2 3 163-18 164-12 176:20 178:18 179:21 187:15 191:5 shouldnt (1) 167:24 show (11) 29:15 30:18 37:19 80:21 81:9.22 91:6 101:1 104:12 123:21 172:3 showed (10) 52:8,10 62:5 77:6.9 85:4 97:21 100:25 136:7.12 showing (6) 81:3 137:19 138:17 155:8,13 157:25 shown (14) 17:9,15 64:23 92:13 100:11 115:6 120:10 122:18 123:14 130:2 134:12 142:10 152:15 170:20 shows (1) 103:13 sic (1) 180:7 side (31) 17:2 36:13 38:3 40:1,9 41:24 53:9 65:4 71:9 77:18 79:10 88:4 97:16,16 98:3 115:23 116:24 154:14 155:4.6.11.14 156:4.7 157:3 175:8.8.14 187:9.9.10 sides (1) 71:8 sign (3) 22:18,22 75:6 signature (6) 5:1,2 178:5,6,8 183:14 signatures (1) 96:19 signed (9) 70:11,24 75:9 76:11 124:15 167:10 168:8 182:16 183:25 signedoff (1) 173:19 signified (1) 18:2 signoff (2) 22:16 173:11 similar (9) 26:4 30:2,7 34:10 76:7 77:1 140:25 146:2 158:7 simpler (2) 57:22 190:21 single (1) 133:12 sir (51) 1:3.9.16.19.22 2:3,6,13,17,23 3:4,11,15,19 51:5.9.13.17.23 52:3 71:21 72:1.4.8.14.18.21 92:2 105:13,21,24 106:3,9,12 107:1 121:12 153:10.17.19.23 154:3.6 185:17.23 186:9.13.18.24 191:4,13,15 sitting (1) 130:8 situation (2) 41:1 49:4 situations (2) 84:10 149:25 size (2) 109:20 110:24 sizes (1) 34:8 skills (2) 20:20 21:1

skip (4) 63:14 79:18 89:15 start (13) 2:9 3:13 4:1.16 6:23 21:7 31:13 39:18 87:4 89:1 138:13 143:21 154:18 started (4) 8:11 14:1 122:8 165:3 starting (1) 39:18 stated (10) 25:4 35:9 109:12 142:20 149:23 155:5 164:3 169:25 170:7,10 statement (66) 4:17,18 5:4.6.9 7:8 9:3 11:17 19:4 23:24 25:12 26:8 32:25 70:4 73:7.23.25 74:8.24 64:5,10 92:21 95:2 101:13 75:12,18 76:10 83:2 103:23 105:1,6,10 152:4 85:3,21 89:1 91:20 93:7,10,16,22 95:9 99:9 something (18) 8:13 19:17 107:4,22 108:13 113:8 25:24 30:10 47:19 61:16 114:10.17 120:9 128:2 73:24 86:24 91:24 106:17 129-12 130-19 139-23 140:13.15.17.20.22 147:14,17 148:13 149:4 151:24 152:24 154:17 161:1.18 163:20 169:13 somewhere (6) 7:5 21:16 170:17 171:16 172:3,10 175:2 177:19 statements (19) 9:16.18.20.22 20:13 23:4 9 15 24:17 75:1 20 76:19 85:22 88:24 91:19 26:9,9 33:19 35:3 67:12 94:6 166:11 173:19 185:9 131:10 133:10 140:15,21 states (4) 149:21 169:20,22 141:7 162:15 168:7 185:3 171:18 stating (1) 92:4 sought (2) 161:20 163:11 stay (1) 46:25 steel (1) 8:24 southgate (5) 33:2 40:1.10 steer (1) 58:2 steps (2) 68:10,12 stick (2) 35:3 85:3 still (11) 16:11 42:12 63:19 speaking (2) 10:18 34:23 65:7 66:7 129:11 136:21 142:1 155:8 158:21 177:23 stock (1) 76:19 specific (9) 54:11,17 55:11 60:13,15,22,23 155:10 stood (1) 49:19 stop (2) 41:8 51:11 specifically (18) 16:3,6 17:9 stopped (2) 36:2 124:24 22:10 23:1,5,14 39:1 43:2 straightforward (1) 47:22 strangely (2) 69:23 70:6 strength (6) 21:9 66:17 122:23 153:3 166:11 170:7 67:1,6,13 68:13 stress (1) 8:25 34:16.24 47:15 55:2 79:4.9 string (1) 188:3 structural (9) 21:4.8 36:16.16.20 37:5.8 82:9.9 structures (7) 8:4,24,24 9:1 21:9,9 22:25 study (2) 100:12,15 spelt (3) 104:4 168:14 189:4 subframe (17) 31:25 78:12,16 79:21,22,23 80:1 spread (7) 13:11 86:7 87:22 81:14,15,18,20,20,24,25 88:20 91:11 102:19 151:4 84:22 111:24 112:4 stability (5) 66:17 67:1,6,13 subframing (1) 34:12 subject (7) 31:24 32:6 64:3 103:14 114:7 145:2 166:19 stage (16) 18:8 20:12 32:3 submitted (4) 29:3 30:12 34:19 42:25 56:24 64:15 99:19 172:6 91-17 97-4 130-22 131-20 ubordinate (1) 88:10 137:16 168:9 172:25 174:5 subsection (2) 79:18 103:5 substrate (3) 34:12 78:16 157:6 substructure (16) standard (46) 11:25 12:11 39:3,5,6,12,14 81:7,21,25 33:19 75:20 76:8 85:9 96:11 97:1 101:4 104:12 114:20 115:4 116:1.13 successfully (1) 167:16 102:13,15 104:17 109:25 sufficient (4) 101:15 127:17

139-15

skipped (1) 85:6

slight (1) 153:24

129:10 132:12

slimming (1) 8:11

slotted (1) 76:20

smogra (1) 124:21

socalled (1) 44:16

solution (2) 41:9 159:16

111:14 131:22 141:2

146:19 164:22 165:3

109:4 111:12 140:23

soon (6) 66:11 70:11,24

110.6 162.15 188.21

sort (18) 2:8 23:11 25:6

188:22 189:7

49:20 53:8

span (1) 82:10

speak (1) 186:11

specialist (1) 74:5

52:16 61:1 120:11,20

specification (9) 33:14

160:20 184:6

124:18,19

68:13

185:25

stages (1) 101:22

stamped (1) 176:3

86:16 87:10 94:13.22

95:6.8.14 98:4 99:14

110:3 111:3 112:10

114:1.13.16 128:16 129:19

135:1 140:15.21 146:4

147:4,23 148:7,25 150:3

151:9,25 152:5 159:2

166:10 168:7 173:23

180:15 183:21 184:11

standards (7) 13:11,12 28:15

123:24 148:16.19 150:5

standpoint (1) 62:13

stands (1) 49:20

159:5 181:18

95:10.11 103:8

175:24

suggested (7) 43:17 44:3

suggesting (3) 65:23 82:1

suggestion (2) 47:6 169:11

suit (3) 79:13,23 110:14

suitability (5) 48:25 57:8

58:19 62:15 71:13

46:16 48:6,7 86:22 153:3

t (1) 187:13

table (2) 178:11,21

tactics (2) 49:3,9

staff (1) 172:7

specimen (3) 91:14

specimens (2) 89:9 90:1

speculating (1) 152:25

spoke (2) 70:21 91:23

169:24

171:14

sound (2) 2:24 190:15

177:18 181:18

151:21

sometimes (1) 175:6

somebody (13) 48:14

174:6 178:23

soft (1) 66:19

slightly (4) 10:23 47:22

suitable (18) 39:9 45:10 55:21 56:3.4.15 57:13 58:16 59:16.16 69:6 83:13 84:7.25 102:24 113:11 114:18 149:24 suitably (2) 82:6 88:14 suite (2) 11:25 12:11 summarise (1) 120:19 summarising (3) 137:14,24 138-11 ımmary (6) 77:11 92:4.12.16.18 135:8 supplied (11) 71:20 77:23 101:14 105:2 121:22 128:19 129:22 130:10.11 133:13 160:20 supplier (1) 53:19 supply (1) 122:4 support (4) 3:1 21:11 34:10 134:9 supported (3) 36:11 122:17 154:16 suppose (11) 38:18,19 50:18 60:5 64:20 65:22 120:22 123:2 124:7 187:21 190:5 supposed (1) 179:3 sure (43) 9:25 22:11.14.20 23:11 12 24:19 25:10 26:15,16 27:1 35:9 43:1 44:24 51:10 56:16 57:2,13 58:3.15 59:15 68:25 72:16 77:2.3.25 93:9 108:18.20 113:9,11 138:10 140:19 145:19 147:11 153:14 163:10 166:11 170:17 177:20 185:3.12 186:12 surface (32) 13:11 17:3 87:22,25 88:5 91:11 102:19 139:10.22.24 141:11,16,19,21 142:1,7,13,16 145:17,21 146:10 147:2.21 151:4 154:15 155:7 157:12 175:18.22 surfaces (1) 16:14 surprise (1) 182:4 surprised (2) 129:10 136:21 surveillance (14) 177:9,13,16 178:3,22,24 179:1,4,20 180:18.22 181:14 182:2.5 suspicions (1) 47:25 system (123) 27:14 30:2.8 34:1,2,21 35:14,14,15,19,23 36:1,16,17,20,24,25 37:5,9,23 38:5,8,9,11,25 39:1,10 40:13,13,15 43:18 44:8.9.11.13.13 45:4.5.8.11.13.18.22 46:4.5.17 47:1.5.16 48:3.8.12.15.16.20.25 54:11,12,15 55:11,13,20,22 56:6,18 57:10,14,17,18,25 58:9,20 59:3 5 5 13 17 61:11 14 62:9,14,24 64:9 65:6,25 66:6 78:1 79:12.13 80:10.11 81:10.23 83:13 84:21 88:21 96:1.11.25 98:17,17,22 101:3,25,25 102:6 104:9 110:14,14,16,17 112:2,2 113:12 116:1.13 124:1.11 126:13 151:2,2,3 165:24 systems (16) 23:7 37:11 suggest (6) 61:16 92:2 93:16 43:22 46:20 47:22 56:3.23 59:8 80:8.9 111:8.19 131:1,13 145:10 171:2

taking (1) 136:19 talk (3) 51:14 153:14 191:9 talked (3) 70:18,19 144:20 talking (7) 53:25 70:7,10 73:12 148:14 186:9 190:18 task (2) 1:13 15:20 taylor (3) 8:6,8,10 team (1) 3:2 tech (2) 29:16 39:7 technical (79) 3:1 6:14.14.16.17.19 12:22 14:5.6.15.17.21.22 15:3.7 16:12 17:23 20:20 21:1,11,20 22:9,16 26:19 27:21 31:18 32:11,13 37:21 38:2,7,16 49:23 50:2,7,21 54:24 63:14 65:2 68:15 76:14 79:4 84:13 89-4 90-7 93-9 95-19 97-6 100:25 109:7 115:14 117:6,19 132:14,16,21 133:7 137:13 143:13 144:24 154:18 155:22 156:17 157:22 161:15 162:4 163:7 164:16 166:16 167:14,24 174:1 175:23 178:1 179:9 182:17.21.24 183.5 technically (3) 162:24 178:17 190:15 technique (25) 36:12,20 37:8.15.17 42:6.7 50:12 56:10 57:2 60:2,5 61:2,6 62:3,21 68:14,17 73:14,19 122:20 125:24 126:18 127:2.24 techniques (1) 36:6 telephone (4) 41:4 70:10 158:24 162:9 telephoned (1) 71:5 telling (2) 81:5 111:1 tells (3) 109:11 111:18 116:6 terms (5) 31:13 70:23 132:5 144:1 177:11 test (102) 10:22 12:3 25:9 26:7 28:20 38:24 67:22 68:3 69:9 71:17 72:9,15,16 74:22 89:5,9,16,22 90:6,6,8,18,20,22 92:13,22 95:21 97:13 99:14,18 100:10 103:1,18 104:8 114:19.22 116:14.23 119:14 120:25 121:16,17,18,20,25 122:6,13,16,21,23 123:1,8,18,20,23,25 124:3,9 125:8 127:19,20 128:10 130:2,4,9,9,11,17 131:21 136:13 137:2,4 138:15.15 145:22 146:17.23 150:2 155:9.17.18 158:2.14 160:8,10 161:7 163:8 187:15 188:7,9,12,16,25 189:3,8,10,12,13,20,24 190:6,13 tested (24) 19:16 87:11.15.19.21 90:1 91:8.10 94:3.14.18 96:11 98:5 112:10.18.24.25 113:3 116:1 136:7 142:19 146:4 149:22 164:14 testing (10) 11:9,22 12:10.12 131:20 145:15 146:8 148:6 159:3 169:23 tests (37) 10:19 11:25 12:5.11 24:7 43:13 61:4 88:9.14 91:1.13.14 92:5.19 99:16 124:24 125:11,15 126:19,20 132:8 136:19 142:5,22 146:1 148:15 149:15 151:1,3,4,4 158:6 159:17 160:7,12 163:19 188:12 taken (4) 32:17 91:13 116:18 text (9) 60:19 96:13 118:2,13 119:1,8

124:22.23 187:11 thank (47) 1:22 2:6,13,23 3:10,15,18,19,24 31:9 51:12.17.18.19.52:3.5 72:21.22.24 84:18 100:7 105:21,24 106:9,15 107:1 153:8,10,16,19 154:6,9,10 182:11 185:14 186:8,14,24 187:3 190:23,25 191:2.3.5.12.13.18 thanks (1) 188:6 thats (136) 5:23 6:9 7:2.16.25 10:8 12:21 14:4 17:1,13 20:18,22,25 22:21 29:2,21 31:6,9,11 36:7,25 37:1,2 38:23 39:6 41:25 42:7,20,22 44:14,17 46:22 47:8.10 48:6 50:1.9 52:23 53:17 55:15 56:8 57:19 59:19 60:1.1.2.4.6 61:4 64:9 67:7 70:21 71:7 72:3 73:19 78:21,22 80:3 81:14.19 85:21 89:4 93:16,17,22,25 95:9,9 97:14 102:24 105:5 109:9 110:21 112:19,19 113:14 114-4 9 21 115-9 119-9 120-22 123-9 127:10,14,21,22 128:1,3,24 129:2,24 131:4 137:20 138:22 139:5 140:8.10 144:17.20.21.25 147:15 150:23 156:17,23 157:15,22 160:4,15 162-10 13 163-6 25 164:5.10.15 165:10 166:1,8 169:22 170:9 171:19 172:19,22 180:20 181:23 182:3 183:25 184:17 185:2,6 187:21,21 191:10,15 themselves (2) 37:15 152:23 therefore (10) 19:15 103:19 104:7 130:1 145:23 158:3 164:11 180:17 181:20 185:18 therein (1) 74:3 theres (25) 52:18 58:1 67:7,9,15,24,25 76:8 77:18 78:1 92:16 96:18 110:22 111:13.17.23 112:19 129:5 140:25 152:21.25 163:3.4 171:16 181:17 thermal (1) 66:20 thermally (1) 96:8 theyd (3) 32:21 125:8 127:16 theyre (4) 78:24 79:1 104:3 113:20 theyve (1) 142:18 thick (11) 34:6 43:21 79:7 89:14.17.18 90:16 96:9 101:11 145:12.13 thicker (1) 157:12 thickness (4) 89:13 116:9 156:5 161:13 thicknesses (1) 34:7 thing (9) 30:5 49:19 87:5,7 137:4 181:15,16 185:7 188:8 thinking (9) 29:7 73:13 74:10 114:25 116:23 150:8 152:5 160:24 173:10 thinner (2) 145:23 158:3 third (4) 66:14 115:25 139:18 155:1 thoroughly (1) 32:11 though (2) 66:5 127:23 thought (7) 62:22 101:20 105:10 108:2 127:22 131:19,19 thoughts (1) 58:21 thouria (1) 1:6 thr (1) 124:21 threat (1) 41:7

191:6 191:16 182:12 187:21 147:16 163:12 164:3 types (9) 27:4 36:23 47:1 59:23 83:12 115:2 163:24

166:5.5 177:19.24 182:7 threequarters (1) 169:16 through (10) 32:9 38:21 74:15.18 88:21 91:14 117:12 137:12.25 177:20 throughout (1) 52:14 thumb (1) 137:1 thursday (1) 1:1 time (76) 3:8 4:13 11:9 13:9 14:16 15:12 16:20 18:17.23 19:18 21:14.16 23:6 24:9 29:19 30:5 34:16 36:11.21.37:4.24.38:13 39:23 40:3 42:23 43:7 49:23 50:3.7 51:9 52:22 53:20 55:18,24 58:21 65:19 90:9 92:11,18 93:2.13 94:1.2.6.21 95:12 97-12 15 23 104-2 111-5 114:11 115:14 132:1.5 134:13,16 135:3 137:7,7,13 140:9 142:21 144:13.13 146:16 147:8 148:19 150:1 167:19 173:5 182:1,20 183:20 185:18 times (5) 123:15 168:24 175:6.6 183:22 timespan (1) 29:17 timing (1) 70:23 title (6) 33:3 53:3 60:18 77:19 156:19 168:19 today (4) 1:9 5:10 156:1 todays (1) 1:4 together (9) 7:10 43:19 44:21 46:11,18 93:3 97:13 98:9 99:6 told (15) 26:2 49:23 73:4 100:17 108:9 114:12 125:7 147:1 150:14 159:16 162:17 185:8 189:12,19,25 too (5) 58:1 82:13 123:14 146:1 158:6 took (3) 71:1 72:1 140:23 topic (3) 59:20 132:12 topics (1) 177:8 totality (1) 162:17 totally (1) 156:23 touch (2) 143:7,12 towards (1) 183:24 trace (1) 117:11 track (2) 134:2,9 training (3) 6:24 11:8 16:3 transcriber (1) 4:9 transcript (1) 4:11 treated (1) 150:9 triangle (1) 124:2 tried (1) 58:2 trouble (1) 110:19 true (9) 5:7 103:10 115:9 147:2,3,21,22 171:2 try (18) 3:8 18:18 19:9 41:18 45:9.19 56:19 61:5 77:3 109:9 114:11 126:16 130:8 131:24 134:23 136:25 137:14 146:21 trying (8) 44:6 45:2 48:1 61:1 65:24 76:2 95:11 tslots (1) 79:22 turn (8) 20:15 27:4 39:17 64:2 65:2 77:5 137:10 twice (2) 102:4 180:18 type (9) 29:22 33:25 35:13 85:9,17 117:17 147:12,12 typed (1) 64:9

skins (1) 156:10

typestandard (1) 83:20

typical (2) 80:8 133:9

168:12.13

three (11) 34:7 58:4.10

137:16 138:14 142:19

veve (41) 13:17 40:6 51:5

52:18 66:6 68:18 92:4

95:20 104:11 107:17

122:24 123:15 125:2

126:18,19 133:5 135:7,9

137:15,16 138:11,14,15,21

139:1 148:8 155:19 157:20

159:23,23 161:18 164:13

168:23 171:23 180:13.24

whatever (12) 91:19 121:21

127:5.16 128:25 129:25

122:6 125:17 126:14

131:21 140:18 190:6

whats (2) 33:11 102:3

whatsoever (1) 2:16

whenever (1) 25:25

whoever (1) 109:6

whole (16) 34:21 36:25

43:18 44:9.11 45:18 46:17

47:5 48:8 57:1,12 59:5

87:5,6 109:5 184:20

whom (2) 172:7,10

wide (2) 174:17,20

widely (1) 148:20

whose (1) 48:11

108:17 120:3 121:16.16.17

typically (2) 19:15 133:14

ueatc (10) 27:18,19,21 28:21 107:19 123:10 177:14 179:2.8 180:20 uk (23) 12:10 13:10 20:5,8 27:12 40:3 41:20 42:18,23 49:7 67:18.21 74:7 99:18 132-6 133-23 135-20 139-2 148:21,23 155:3 165:13,15 ultimate (1) 173:11 ultimately (2) 66:9 74:11 unable (1) 106:21 undergoing (1) 21:17 undergone (1) 136:12 underlay (1) 37:15 underlying (8) 28:6 121:17,20 122:13,16,23,25 123:7 underneath (10) 43:15 53:6 64:6 77:11 78:8 79:5 80:1 96:12 116:5,10 understand (33) 5:19 17:19 18:2,18,22 19:21 20:19 26:21 27:7 44:18 46:4 58:10 60:14 73:3 85:2 94:6,21 95:5,15 106:18 136:24 140:9 147:16 150:2 152:8 163:20 164:12 165:18 170:5,12,24 179:19 187:19 understanding (9) 4:4 47:5 48:19 76:2 94:2 132:6 150:1 164:6 180:17 understood (4) 75:16 76:6 93:2 155:12 undertaken (1) 159:3 unexposed (6) 79:16 88:4 118:23 154:14 155:4,6 unfair (1) 187:14 unknowns (1) 58:1 unless (6) 19:16 41:8 56:14.21 78:3 178:17 unlikely (1) 39:22 unreasonable (3) 145:25 158:5 190:19 until (5) 51:11 159:10 167:25 186:5 191:20 unusable (1) 56:14 unusual (2) 144:19.22 updated (1) 65:20 updates (1) 184:19 updating (1) 185:11 usable (1) 124:25 used (35) 17:13 18:11 35:18.25 45:25 55:13 56:5,21 57:9,17 76:20 77:15.25 81:10.22 84:6.8 86:2 103:2.9 104:13.13 105:2 109:8 126:14 127:12 137:5 141:9 148:21,23 150:3 156:10 165:10 168:3 188-15 useful (2) 137:6 191:8 users (1) 148:21 uses (1) 84:20 using (5) 13:10 29:1 79:22 96:8 141:20 usual (1) 1:5

v (1) 63:25 vaguely (2) 38:14 134:21 valid (7) 96:22 101:10 116:7,11 164:1,7 185:13 validate (4) 43:18 44:10 46:17 48:7 validating (1) 44:11 validation (2) 41:19 42:4 validity (3) 151:24 158:8 184:8 validly (1) 101:25 variables (1) 62:14 variant (2) 101:12 125:9

variants (2) 83:19 85:8 variety (2) 9:1,1 various (18) 21:5 22:12 24:13 79:15 88:9,9 142:5 169:1.3.23 170:21 171:11,13 174:15,22,24,25 183:3 vary (1) 79:23 vat (1) 64:1 ventilated (1) 145:9 ventilation (1) 88:18 verify (1) 131:23 version (18) 63:3 95:8 114:15 130:3 133:3 146:13,13,19,24 147:23 148:2,2 151:9 174:17 175:8,9,11,19 versions (2) 114:2 159:2 vertical (1) 133:2 visible (1) 82:18 vision (1) 2:25 visit (11) 39:25 40:5,25 41:6 52:25 53:3,5 178:3,13,19,20 visited (1) 178:12 visits (3) 178:13,18 180:2 voice (1) 4:8 wait (1) 167:25 wales (4) 139:13,22 175:18,22 wall (22) 17:3 31:1 33:25 34:13 35:14.18 55:14 64:8 65:6 77:10,14,20 78:10,17 79:6 86:2 88:13 128:11 149:8 161:8 166:4 167:12 walls (5) 14:13 15:25 16:14

wider (1) 148:18 widths (1) 79:23 wind (6) 66:18 67:18 82:8,11,12,12 window (1) 88:21 witch (1) 156:5 withdrew (1) 191:14 witness (45) 1:18,21 2.2 5 12 16 22 3:3.10.14.18 4:16.18 5:4 7:8 9:3 32:25 51:12,16,19 52:2 73:23 105:20,23 106:8.11 107:3 128:2 148:13 153:16,18 77:16 78:13 154:2,5,9 163:20 169:13 wanting (1) 61:13 172:3 177:19 185:22 wants (2) 120:16 165:23 186:8,12,23 191:3,12,14 warrington (13) 24:7.11 witnesses (1) 1:11 41:22 122:21 135:13,22,25 wonder (2) 127:1.7 155:9,17,18 159:16 woodrow (3) 8:6,8,10 173:18,20 worded (1) 169:9 warringtonfire (6) 24:5 89:5 wording (16) 90:8 134:2,10 160:13 75:2,3,4,7,15,24 76:3 wasnt (20) 17:16 32:17 94:22 140:5,22 143:2,3 50:17 56:19 68:25 70:10

132:10 147:3 157:13

163:10 173:24 180:25

94:1 113:19 114:19 121:14

126:16 130:8 134:23

136:25 148:9 150:11

169:17 171:19 173:2

week (2) 159:10 191:17

wehrle (29) 31:20 36:9

41:1,3 99:10 101:9,24

117:14.23 118:16 119:4.21

120:11.20 125:11 126:17

166:18 167:11,21 169:4,10

127:19 130:15 154:20

170:5 171:10 182:15

wehrles (4) 32:24 37:20 99:9

welcome (5) 1:3 51:23 106:3

180:15 190:19

ways (1) 129:7

weh (1) 41:1

189:3.8

118:3

wehrlecs (1) 41:25

eight (1) 156:7

153:23 186:18

went (6) 7:5 13:1 14:19

17:15 73:10 121:8

welsh (1) 10:6

vatching (1) 106:17

64:18

152:18 169:5 173:13 71:12 75:18 112:25 126:8 184:11 work (13) 8:19.25.25 15:7 22:10,17 27:23 49:6 65:24 181:16 188:13 190:18,20 66:16 158:18 160:3 167:14 worked (6) 7:23 8:5,7,9 watford (4) 40:2 52:7 53:6 117:10 182:23 vorking (3) 5:12 7:5,21 way (33) 4:6 17:18 35:5 36:7 worse (1) 132:8 43:19.23 44:20 46:11.18 wouldnt (30) 12:13 22:1 49:10 57:21 62:11,20 66:14 67:10,25 69:7 78:1 26:3 28:17 35:1 62:8 71:19

78:2.4 93:5 111:4 115:2.3 133:12 141:15 143:9 144:5,8 150:25 152:3 157:7 164:21 165:25 168:4.16 171:4 173:24.25 177:6,6 write (4) 118:21 140:13

144:18 188:4 writes (2) 117:13 119:4 writing (6) 69:25 95:5 144:16 167:14 182:17,21 written (9) 39:25 64:5,10 117:15 144:9,17 160:19 174:6,14 wrong (3) 114:6 115:2,6

wrote (4) 64:13,14 95:14 146:16

x (3) 43:21 119:5,6

veah (25) 2:2 4:23 5:23 14:10 27:17 30:25 40:11

50:6 62:7.17 63:18 75:20 98:16 102:11 106:11 134:8 137:23 138:5.19.24 139:4 160:11 162:8 173:14 187:21 year (2) 106:20 180:18 years (10) 8:6,9 15:18 136:22,23 153:2 177:19,24 181:24 182:7 yesterday (1) 166:22 youd (4) 47:24 51:10 85:4 189:12 voure (19) 1:25 2:10.11 20:6 24:15 27:19 46:3 51:7 52:4 61:22 106:14 123:22 131:20 138:10 152:25 154:3 157:11 160:15 186:11 yours (1) 118:13 yourself (9) 11:21 15:7 20:21 21:2 69:9 72:2 101:23 127:6 150:2 youve (8) 16:17 18:19 23:22 26:2 53:7 80:10 97:22 124:6

zero (1) 178:14

0 (79) 13:12 17:6 18:3.25 20:5 86:10.15 87:21.25 88:5 91:10 92:5,15,18,23 93:4 132:11 134:7,14,19 135:2.5 136:8.13 139:3,10,22,24 140:3,14,23 141:11.12.13.16.19.20 142:1.6.12.16.22 145:17.25 146:5.10 147:2,21 148:10,22 149:9,15,20,24 150:4.10.19 151:5,9,16,18,21 152:6,7,12,19 154:15 155:7 157:3 158:5 175:21 176:6 13 17 22 24 177:1 187:10,12 05 (2) 34:6 79:7 084510 (8) 6:2 30:24 83:18 107:10 128:9 149:8 161:6

77:9 79:14.24 80:3,5,7,9,18,23 81:12 87:22 90:2 91:11 110:15,20 112:3 113:15 118-5 19 119-18 120-5 124:18 139:15 149:12 156:4 174:3.17.20 175:10.14.18 176:13.17.23 177:1.5 178:17 183:8 192:3 10 (8) 9:4,6 10:13 23:25 24:1,23 191:16,20 100 (1) 105:25 1000 (3) 1:2 16:18,20 101 (1) 133:18 102 (1) 33:13 104 (1) 132:23 1081 (2) 38:2,4 **1083 (1)** 38:3 11 (12) 1:1 33:23 65:3 79:6 82:15,16,17 110:12 128:5 168:22.23 170:13 1105 (2) 133:1.3 1115 (1) 3:6 1121 (1) 51:20 1135 (1) 51:11 1137 (1) 51:22 **114 (1)** 39:19

1 (47) 19:12 20:4 31:1,20

40:24 54:14 61:10 63:14

115 (2) 41:12 52:16 119252 (1) 123:25 12 (11) 8:6,9 14:12 15:19 35:12 90:5.25 149:3 166:18 167:11 169:13 **120 (1)** 50:8 **1200 (1)** 159:10 123 (1) 179:9 129 (3) 14:7,11 145:21 **13 (3)** 119:4 149:17 153:2 **131 (2)** 52:24 149:12 132316 (2) 89:6 134:3 132317 (2) 90:9 134:3 133 (1) 16:11 13501 (4) 12:12 98:8 125:8 148:7 **135011 (5)** 95:23 145:15 146:8 148:24 149:22 1350112002 (2) 87:13 94:16 135012002 (2) 87:17 94:20 13823 (1) 123:25 139 (1) 156:18 **14 (9)** 31:5 37:20 79:18 81:11 82:15,17 107:5,8 111:23 142 (1) 156:6 147 (1) 95:20 149 (1) 96:3 14th (1) 180:10 **15 (3)** 99:10 182:14 191:21 **153 (3)** 96:16 97:21 100:24

**155 (1)** 115:15 **157 (1)** 115:22 **16 (1)** 149:5 160 (1) 136:17 161 (1) 116:3 163 (1) 89:4 165 (1) 89:8 **16500 (1)** 54:20 **16527 (1)** 64:1 **167 (2)** 89:20,21 **169 (1)** 90:3 **17 (1)** 179:11 177 (1) 90:7 179 (1) 90:10 **18 (6)** 16:19 17:13 18:11,21

150:22 152:2 18015 (1) 50:16 **181 (1)** 90:20 **183 (1)** 90:23 18m (1) 17:1 18metre (2) 17:21 18:17 19 (3) 8:12.12 115:20 1988 (1) 8:12 1997 (2) 90:1 136:20

2 (19) 7:9 39:24 40:5 41:6 43:23 50:5.22 52:7 96:5 100:9 105:16,22 118:13,15 119:5 124:9 156:8 178:19 182:15 20 (3) 74:4 89:18 187:6 200 (1) 106:2 2000 (4) 8:13 119:5,6 139:12 2003 (7) 90:5,25 91:1 134:4 139:2 155:18 160:12 2004 (7) 7:1,23 31:13,15,20 32:21 124:9 2005 (6) 95:25 96:18 124:15 130:3 133:5 138:16 **2006 (26)** 32:16,19 33:2,16 36:10.18 39:18.24 40:5.18 48:22 50:22 52:7 56:11 62:1 63:19,21 65:8,14,20

115:20 120:3 121:17 125:23 138:7 160:10 2007 (29) 6:8 11:21 13:25 17:25 21:15 23:1,5 52:23 53:1.4 63:6.9 64:19 65:21 92-12 97-8 99-10 22 117:9.14 118:8 145:2 155:23 157:21 166:18 167:11 179:11 180:10 187:6 20072008 (1) 23:18

2008 (13) 6:2 14:25 23:1.5 29-8 31-5 48-23 64-24 70:25 149:7 178:4 181:25 182:14 **2010 (3)** 7:1,3,23 2011 (1) 182:7 2020 (1) 4:21 **2021 (2)** 1:1 191:21 2041083 (2) 37:22 38:2 20495 (1) 33:7 21 (5) 34:3 172:4.5 178:4

180:5 22 (8) 33:16 63:19 65:8 117:14 154:20 161:9 162:3,19 23 (4) 33:2 85:11 118:2,8 23806 (1) 41:15 **24000 (1)** 54:18 25 (4) 67:2.12 99:22 100:5 28 (1) 148:14

29 (4) 4:21 145:2 157:21

158:12

3 (11) 9:4 23:24 78:6 89:8 90:11 100:9 110:11 124:8 168:21 170:13 192:5 30 (1) 145:13 3000 (1) 119:5 **315 (1)** 3:6 **319 (1)** 174:2 320 (1) 153:20 **33 (1)** 107:11 335 (1) 153:13 **340 (1)** 153:22 35 (3) 156:6 157:10 161:13 39 (1) 161:19 3millimetres (1) 90:16 3mm (1) 89:14

101:11 116:9 161:1 40 (6) 16:13 17:8 19:11 150:15 151:15 152:1 4000 (1) 119:6 41 (1) 66:14 42 (1) 169:14 **43 (1)** 116:6 **430 (2)** 185:20 186:15 **445 (2)** 186:5,17 **45 (3)** 128:3,12 129:12 **455 (1)** 191:19 46 (1) 129:12 471 (1) 166:16 **472 (1)** 156:7 **473 (1)** 167:8 **476 (9)** 11:25 12:11 89:7 90:1.9 136:13 139:2 142-22 146-5

4 (7) 7:9 73:23 83:2 100:9

4766 (10) 91:2 94:4 136:8 145:16 146:9.12.17.23 159:3 160:12 **47661989 (2)** 87:20 91:9 **47667 (1)** 122:6 47671997 (2) 87:22 91:11 **499 (1)** 155:21 4c (1) 7:12 4mm (2) 43:21 89:13

5 (8) 7:20 85:12 87:2 89:17 91:3 112:8 142:8 155:23 **5000 (5)** 87:11 94:14 96:14 166:25 167:13 505 (3) 144:24 158:10,21 **507 (2)** 145:4 157:22 **53 (2)** 149:4,18 **535 (1)** 154:19 55 (37) 23:14 33:3.24 55:25 56:5 65:6 71:18 73:17 74:20 89:11 90:13 94:3,7 96:1 109:13 120:25 123:6.16 124:11.20

134:14.19 135:1.5 136:7.12.17 146:4.13.24 151:10 156:23 157:3 160:7 181:2.25 184:19 5a (14) 95:21.21 97:13,13,17,25 99:22 100:11 101:9 102:5 107:17 121:16 138:15 160:9 **5b (4)** 123:25 130:4,9,11 5d (1) 73:25

5di (1) 83:15

6 (13) 87:3 88:24 90:6,9,19 93:12 107:4 145:11 148:13 156:5 157:10 161:2.14

61 (26) 85:15 86:11 87:4,10,24 94:10 97:10,17 98:4,10 102:2,10,11 104:18 109:23 112:8 116:19 117:2 119:11 120:9 137:22 138:25 139:5.9 142:11.14

62 (19) 85:15 87:18,24 89:1 91:5.15.20 93:13 94:7 115:11 116:15.18 137:22 139:1,5,9 142:11,14 149:15

**63 (10)** 87:4,24 137:12 139:7,8 142:10,20 154:12,13 155:5

64 (4) 37:25 88:6 163:13,15 **65 (2)** 88:11.12 66 (2) 86:11 88:16

7 (20) 52:23 53:1,4 83:17

89:6 90:1 91:2 94:4 95:24 96:18 124:15,17 136:8 145:16 146:9.12.17.23 159:3 160:12 70 (1) 96:8 70707 (5) 134:10 135:7 136-1 16 19 70708 (5) 134:10 135:8 136:1,16,20

8 (1) 149:12 **83 (1)** 132:15 **850 (1)** 124:24

7a (1) 85:6

9 (2) 4:25 136:20 9006 (2) 89:12 90:14 96 (1) 100:3