OPUS₂

Grenfell Tower Inquiry

Day 104

March 10, 2021

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1	Wednesday, 10 March 2021	1	SIR MARTIN MOORE—BICK: Thank you very much.
2	(10.00 am)	2	Before we go any further, there are one or two
3	SIR MARTIN MOORE—BICK: Good morning, everyone. Welcome to	3	matters that we need just to check on.
4	today's hearing. As usual, I'm joined by my fellow	4	First of all, can I ask you to confirm, please, that
5	panel members, Ms Istephan and Mr Akbor.	5	you're alone in the room from which you're giving
6	MS ISTEPHAN: Good morning.	6	evidence?
7	MR AKBOR: Good morning.	7	THE WITNESS: Yes, I am.
8	SIR MARTIN MOORE—BICK: Before we begin today's evidence,	8	SIR MARTIN MOORE—BICK: Thank you.
9	perhaps I should just say something briefly about what	9	Can you confirm that you have no documents or other
10	happened at the end of the afternoon yesterday.	10	materials with you?
11	I apologise for the fact that unfortunately we lost	11	THE WITNESS: Yes.
12	the live stream connectivity, right at the end of the	12	SIR MARTIN MOORE—BICK: And can you confirm that your mobile
13	afternoon. I understand from the technical support	13	phone is in another room and that you don't have any
14	people that their broadband connection was lost at that	14	other electronic device in the room with you which is
15	point somewhere outside their building. It was	15	capable of receiving messages?
16	therefore something over which neither they nor we	16	THE WITNESS: Yes.
17	obviously had any control.	17	SIR MARTIN MOORE—BICK: Very good, thank you very much.
18	A lot of efforts were made to re-establish the	18	Now, then, just for your information, you may like
19	connection, but unfortunately it couldn't be done within	19	to know that your legal representatives are with us in
20	a reasonable time. No other facilities were lost, and	20	the virtual hearing room, in the sense that they can see
21	therefore communications with the Inquiry's counsel were	21	and hear what is going on. It is possible for them to
22	maintained as normal.	22	intervene if they consider it essential to do so, but we
23	Because there was only one additional question which	23	have other arrangements for them to contact our counsel,
24	counsel needed to put to the witness, we decided that we	24	so I ask them to keep their microphones and cameras
25	would put the question and have his answer recorded in	25	switched off to avoid any technical difficulties .
			•
	1		3
1	the usual way, and that recording should be added to the	1	I hope we shan't have any technical difficulties
2	rest of the hearing record for yesterday. So nothing	2	today —— you can never be quite sure, but I hope we
3	has been lost. That's what we did, and as far as I'm	3	shan't —— but if we do, we'll take a short break while
4	aware, that is now available to anyone who wishes to	4	they're ironed out by the technical team.
5	view it .	5	We shall have a break during the morning round about
6	But I'm sorry about that. As you can tell, it was	6	11.15, but if you need any additional break at any time,
7	something completely outside our control or that of our	7	
8			
9			will you just indicate that and we'll do our best to
9	technical support team.	8	accommodate you. All right?
	Having explained that, we can now move to meet	8 9	accommodate you. All right? THE WITNESS: Okay.
10	Having explained that, we can now move to meet today's witness, who is Mr Christopher Ibbotson of	8 9 10	accommodate you. All right? THE WITNESS: Okay. SIR MARTIN MOORE—BICK: Is there anything that you would
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asking you in the course of the questions, then please $% \left(x_{0}\right) =x_{0}^{2}$

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 $({\sf Witness\ affirmed})$

do ask me to repeat the question or put it in
 a different way.
 If you feel you need a break at any time, then

please do let us know.

Can you try and keep your voice up so that the

transcribers who are recording your evidence can hear you, and also please don't just nod or shake your head as that doesn't get recorded on the transcript.

You have made a witness statement for the Inquiry.

I want to take you to that first. If we could please go to {PAN00000020}. This is your witness statement, and if we can go on and look at page 7, please —

13 A. Yes.

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14 Q. —— we can see it is dated 6 August 2019. Is that your 15 signature?

16 A. Yes.

17 Q. Have you read this statement recently?

18 A Yes

19~ Q. Can you confirm that the contents of this statement are \$20~ true?

21 A. Yes.

22 Q. You also gave a statement to the Metropolitan Police.

23 $\,$ $\,$ If we can go to that, please, at {MET00040321}. Looking

 $24\,$ on that first page we can see that it is dated 22 August

25 2017. Is that your electronic signature?

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 $1 \quad \text{A. I can't see any signature on there}. \\$

2 Q. In the box it says, "Signature: C M Ibbotson".

3 A. Right, yes.

4 Q. Have you read this statement recently?

5 A. No

6 Q. Right. Can you confirm that the contents of that 7 statement are true?

8 A. Yes.

9 Q. Have you discussed the contents of these statements or the evidence that you are going to give to the Inquiry with anyone before coming here today?

12 A. Other than counsel, no.

13 Q. Thank you.

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I'm going to start by asking you some questions about your background and experience and qualifications. I'm then going to ask you some questions about training of employees at Panel Systems and the way in which Panel Systems products were sold and marketed. Finally, I'm going to turn to some questions about the selection of products for use in the Grenfell Tower refurbishment.

Now, between 2015 and 2017, you were the managing director and owner of Panel Systems; is that correct?

23 A. Yes.

 $24\,$ $\,$ Q. It's correct that in 2015, Panel Systems was

a manufacturer and supplier of composite panels to

a range of industries, including the construction and off—site fabrication industry; is that right?

3 A. Yes

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Q. Can we please turn to {BLAS0000004/35}. This is the Phase 1 report of Dr Barbara Lane. It will be coming up in just a moment. I'm going to ask you some more detailed questions about the products that were used in the Grenfell Tower refurbishment later on, but I just want us to get our bearings first.

If we can look at that figure, figure 4.22, we can see from the figure title that this is a photograph of the refurbished Grenfell Tower. The window arrangement has been highlighted by Dr Lane and the components annotated

annotated.

Starting at the top of that photograph, we can see that Dr Lane has identified the kitchen window insert insulating core panels. Those are identified by a yellow outline and yellow hatching on each level.

These were the window infill panels that housed the

Those panels were manufactured and supplied by

22 Panel Systems; is that correct?

23 A. I can't -- I have never seen the drawing. I guess we 24 did supply them, but I can't specifically say where on

25 the building they went.

7

kitchen window extract fan and they are white in colour.

1 Q. I understand, thank you.

We can see that Dr Lane has identified the new window frames, which are outlined in blue, and the glazing, which is outlined in red with red hatching.

Dr Lane has then identified, in the line at the bottom of the photograph, insulating core panels, and she has identified those panels by pink outline and pink hatching. These infill panels were fitted between the glazed panels, and again identifiable by their white colour. Those panels were manufactured and supplied by

11 Panel Systems; is that correct?

12 A. Again, I can only confirm that we supplied the panels.
 13 I have no idea where they went on the building other
 14 than what I'm being told here, but I don't doubt that
 15 that is correct.

Q. Am I right that Panel Systems is able to manufacturecomposite panels with a range of materials?

18 A. Yes

Q. It offers, for example, metal, plastic, fibreglass andtimber facing options.

21 A. Ye

 $22\,$ $\,$ Q. And various core materials, such as phenolic foam,

23 mineral wool, extruded polystyrene, Styrofoam,

24 for example.

25 A. Yes

1	Q.	So that we have an idea, is it correct that typically	1		"c. I was taught about the terminology in panel
2		the core material is bonded to the facing material using	2		manufacture (eg, rebate, raked and u values).
3		a form of adhesive?	3		"d. I was given an overview of the three
4	Α.	Yes.	4		manufacturing Divisions."
5	Q.	In 2015, what did your role as owner and managing	5		Is that an accurate summary, to the best of your
6		director of the company involve?	6		knowledge, of the training a product manager would have
7	A.	The strategic direction of the business. I was actively	7		received in 2015?
8		involved in growing the business. I wasn't involved in	8	Α.	Yes, given somebody that had only been with the compan
9		day—to—day sales decisions, but it's my business and	9		one month, I think that would cover the training that
10		therefore it's my responsibility.	10		he's had in his first month of employment, yes.
11	Q.	Did you at the time have any training or education in	11	Q.	I see. Would there be subsequent training?
12		respect of the fire performance of materials?	12	A.	Yes.
13	A.	No.	13	Q.	What sort of training would that be?
14	Q.	How big was the company in 2015?	14	Α.	Well, he'd be working alongside the sales manager, he
15	Α.	Measured in what terms?	15		would go out on visits to site to customers with the
16	Q.	Number of employees, for example.	16		sales manager, he might visit manufacturers to get
17	Α.	72.	17		training there. It would evolve over a period of time.
18	Q.	And were they all operating from one central office?	18	Q.	Thank you.
19		No, it's spread across three sites.	19		If we can turn to {PAN0000028/5}, this is the
20		And where were those sites?	20		witness statement of Ms Harrison to the Inquiry, and she
21	A.	They were all within the Sheffield postal region.	21		was a sales co-ordinator at Panel Systems in 2015.
22		I see, thank you.	22	Α.	Yes.
23	•	In respect of your construction industry customers,	23	Q.	If we could have a look on page 2 {PAN00000028/2},
24		would you or any Panel Systems employees ever undertake	24		please. Looking in answer to question 3, she says:
25		site visits?	25		"Training was provided by my team leader and other
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1	Α.	Yes, if invited, yes.	1		sales staff."
2	Q.	In what sort of circumstances would you be invited?	2		She goes on to say:
3	A.	Could be various. Somebody wants us to look at a job,	3		"I have also attended training sessions on products,
4		somebody wants to query a delivery, somebody's following	4		and this would include some knowledge of fire
5		up on a delivery.	5		performance of materials but not fire safety."
6	Q.	I see.	6		Is it correct, then, that some technical training
7		In 2015, was Panel Systems registered with any	7		was provided to Panel Systems sales co-ordinators and
8		regulatory body?	8		product managers in 2015, in terms of the fire
9	Α.	We were ISO registered, Investors in People registered,	9		performance of the products manufactured and supplied by
10		FSC registered.	10		Panel Systems?
11	Q.	I see.	11	A.	Yes, and prior to 2015, fire training, fire performance
12		I'm going to ask you some questions now about the	12		and materials is something that people have learned over
13		training provided to Panel Systems employees in 2015.	13		the years that have worked for the company. It didn't
14		Can we please bring up document {PAN00000029}. This	14		kick in in 2015.
15		is the witness statement of Mr Roache, who was a product	15	Q.	No, you're saying they were trained prior to 2015?
16		manager at Panel Systems from August 2015.	16		Yes.
17		Looking on page 1, at the very bottom of the page,	17	Q.	For the avoidance of doubt, I'm just trying to
18		at question 3, he says —— and we will need to go over	18		understand the picture as it was in 2015.
19		the page:	19	A.	Yes. As Ms Harrison's put there, she would have had
20		"Having started in August 2015, I had received the	20		an understanding of the fire performance of specific
21		following training"	21		materials.
22		If you can go over the page {PAN0000029/2}:	22	Q.	Very good, thank you.
23		"a. The types of Products PSL manufacture.	23	•	Would these employees —— so sales co—ordinators an
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"b. A brief insight into the manufacturing

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capabilities of PSL.

product managers -- be trained in respect of which

products Panel Systems considered to be class 0 fire $\,$

- 1 rated?
- 2 A. They would be aware of what products were independently 3 tested to class 0, yes.
- 4 Q. Is it right that training was not provided in respect of 5 the compliance of Panel Systems' products with the 6 **Building Regulations?**
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- 8 Q. Or the practical guidance contained in Approved 9 Document B?
- A. We manufacture insulating panels. We don't manufacture 10 11 panels that in themselves are fire rated. They're not 12 independently tested.
- 13 Q. Indeed. I'm going to ask you some questions about that 14 in just a moment.

Just in terms of training alone, would these employees, sales co-ordinators and product managers, be trained about what class 0 or class 1 surface spread of flame actually means?

- 19 A. Yes, I think they would be aware of the tests that 20 applied to achieve class 1 and to the test that achieved 2.1 class 0, but it would be unfair to say that they, 22
- you know, would have a detailed knowledge of the BS 476 2.3
- 2.4 Q. Who provided that technical training?
- 25 A. The sales -- the senior salespeople, the sales manager

- 1 and occasionally manufacturers of the individual 2
- 3 Q. Would manufacturers ever be invited to come to 4 Panel Systems to provide technical training to --
- 5 A. Yes

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6 Q. I see

> Can we please turn to your witness statement at page 5, that's {PAN00000020/5}. Looking at the very top of page -- and you picked up on this earlier just now in your evidence -- you say:

"The fire performance of the panel is governed by the fire performance of the panel core. PSL would use the fire performance as stated by the panel core manufacturer."

Is it fair to say, then, that the technical training in respect of the fire performance of the materials manufactured and supplied by Panel Systems was directed at the passing of information about the fire rating of the products as identified by the manufacturer on to, for example, sales co-ordinators and product managers?

- 2.1 A. Yes, in simple terms, ves.
- 2.2 Q. Has the technical training provided by Panel Systems to 23 its employees changed since 2015?
- 2.4 A. Yes. I mean, I think as I say later in the statement, 25 we've undertaken action on our own testing of panels, as
 - 14

- 1 against using that fire performance as given by, 2
 - you know, the manufacturer of the core material.
- 3 Q. And are employees now trained in respect of that 4 testing?
- 5 A. I'm not sure what you mean by trained. They understand that a panel has passed a certain fire test, and clearly 6 7 the more experienced understand the finer detail of that fire test, but I wouldn't say that they all know 8
- precisely the full detail of individual fire tests, no. 10 Q. Thank you, I see.

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Can we turn to your next statement, please. That's at {MET00040321/2}. You say there, in the first substantive paragraph down, the second line:

14 "Our approach with a customer is driven by their 15 requirements and we will work closely with some on 16 projects and in other cases the relationship will be at 17 'arm's length'. Thus we can in some cases assist in the 18 design of a product/panel and others we will simply 19 respond to a pricing enquiry."

20 Can you see that there?

- 2.1 A. Yes.
- 2.2 Q. So when a customer approaches Panel Systems for the 23 manufacture and supply of a composite panel,
- 2.4 Panel Systems may be simply responding to a pricing
- 2.5 enquiry; is that right?

15

- 1 A Yes
- $\ensuremath{\mathsf{Q}}.$ Or it may provide some design advice in respect of the 2. 3 panels?
- A. Again, it depends who's asking the question.
- 5

6 If we could have a look at the very bottom of page 17 ${MET00040321/1}$, and we will need to look over the page, 8 at the very final sentence:

9 "The composite panel will combine properties of the 10 materials to produce a panel able to meet a combination 11 of performance criteria, e.g. insulation, strength, 12 aesthetic, fire and impact."

13 So by design of a product, then, do you mean that 14 Panel Systems might advise the customer on the 15 composition of the panel required to meet the customer's 16 performance criteria?

- 17 A. Yes.
- 18 Q. If asked?
- 19 A. If asked.
- 2.0 Q. Can I then take you back to your witness statement to
- 21 the Inquiry, that's at {PAN0000020/3}, at the bottom of
- 2.2 the page, at paragraph 5, paragraph 2.2 of
- 23 Panel Systems' position statement to the Inquiry is
- 2.4 quoted, and it is recorded:
- 25 "There are several basic queries in terms of

the fire performance of panels that may form part of designing the panel composition. These may include: a) Class 1 Surface Spread of Flame b) Class '0' to Building Regulations c) Non-Combustible Core."

So are you confirming here that some of the basic design queries in respect of fire performance would be whether the customer requires a class 1 or class 0 product or a product with a non-combustible core; is that correct?

10 A Yes

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Q. If we could turn to $\{PAN00000003\}$, this is marketing 11 12 literature produced by Panel Systems dated October 2014 13 in respect of its composite panels, and I appreciate 14 that this literature pre-dates Harley's first order, 15 which we will come to later.

> If we could please look on page 4 $\{PAN0000003/4\}$, there is a subheading, "Technical specifications".

If a customer contacted Panel Systems wanting advice in respect of the design of a panel, would a sales co-ordinator or a product manager be expected to look at these boxes to assist in the selection of the correct core material to meet a particular customer's performance requirements needs?

2.4 A. Possibly. Again, it depends very much on the type of 25 questions that are being asked.

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- 1 Q. Okay. So looking at that second box down, "Composite 2 panel insulation core selection data table" --
- A. Yes. 3
- $Q. \ --$ and the penultimate line, "Reaction to fire 5 (DIN 4102)", would a sales co-ordinator or a product 6 manager have sufficient knowledge and training to be 7 able to advise, for example, as to whether a particular 8 application required an A1 or B2 rated product?
- 9 A. Well, you've changed the question. You're now saying 10 whether the application requires that. What we're 11 talking about here is the panel itself . If asked, if 12 somebody wanted a panel that is class 0, then we would 13 advise. Whether the building needed class 0 is not a decision for my sales team. 14
- 15 Q. I see. So you mentioned class 0: in that final line. 16 "Class '0' to building regs?", we can see that all core 17 materials respond "no", save for the phenolic and 18 mineral fibre lamella core materials.

Given that it appears that both products are class $\boldsymbol{0}$ rated, if a customer telephoned and said, "Could we please have a class 0 rated product", would a sales co-ordinator or a product manager be able to advise as to which core material, ie either the phenolic or the

2.4 mineral fibre material, was suitable?

25 A. Yes

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1 Q. By virtue of what knowledge or training would they be 2 able to give that advice?

3 A. Well, the table's to a certain extent the training, but 4 as I said earlier, individuals will have been taught and

5 been explained what each of these different core 6

materials are.

Q. I see. So if a customer said, "We need a class 0 rated 7 8 product", would one of these employees be able to draw 9 the distinction between the A1 and B2 rated products and 10 give that advice?

11 A. Yes, and if they weren't able, there would be senior 12 people in the sales office that would work with them on 13

Q. Who would that be? 14

15 A. There's a senior salesperson, there's a product manager, 16 and there's a sales manager. They've all got different 17 knowledge, you know, with many years' experience.

18 Q. I see

19 In 2015, were sales co-ordinators trained to 20 volunteer any information regarding the fire performance 21 of any of Panel Systems' products?

22 A. What do you mean by volunteer?

2.3 Q. Well, for example, was there any sort of compliance 2.4 checklist process in place that a sales co-ordinator 2.5 would go through when responding to a pricing enquiry?

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1 A. Well, again, it depends very much on the pricing enquiry. If the enquiry has come through with what we 2 3 would call a bill of materials and performance criteria listed on there, the sales estimator would look at the 5 performance criteria and if they were able to answer the questions then they would answer them. If they were not 6 7 qualified or didn't know the answer, they would seek

9 Q. Yes. I see.

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10 Would they ask any questions about the intended 11 application of the products?

answers elsewhere within the company.

12 A. Possibly. It's very -- there isn't a straightforward 13 answer to every enquiry that comes into the company. 14 They're all very, very different.

15 Q. If we could turn to $\{PAN00000017/2\}$. This is 16 Panel Systems' position statement to the Inquiry. At 17 paragraph 2.4, it is recorded:

> "Where fire performance is not stated we would offer a panel with Styrofoam as the core."

2.0 Why was a panel with a Styrofoam core the default 21 offering in the absence of a customer's indication of 2.2 fire performance?

23 Because Styrofoam thermally is very efficient, it is 2.4 very good for a core material because it bonds very 25 well, its compression is very good, it's a closed cell

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1 foam, it has lots of attributes as a thermally "PSL do not manufacture a panel that has been 2 2 subjected to any independent fire testing. The fire insulating core. 3 Q. I see 3 performance of the panel will be based on the 4 Was it Panel Systems' practice to notify their 4 performance of the individual elements of the panel." customers of the fire performance of Styrofoam when If we could go to the bottom of the page at 5 5 6 offering it as a default core material? paragraph 6(a), again Panel Systems' position statement 6 7 7 is set out, wherein the Aluglaze product is referred to Q. And why was that? and described as an insulating composite panel designed 8 8 9 A. Well, Styrofoam has been around for 40 years. I have no 9 with a range of fire performances depending on the 10 10 reason to doubt that the market is not aware of the choice of panel core. 11 performance of Styrofoam, it's a polystyrene. There's 11 You can see there at paragraph 6(a), "What 'range of 12 nothing — you know, there's no — there's Styrofoam 12 fire performance' can these panels be designed with?" is asked, and over the page at page 5 {PAN00000020/5}, you 13 literature in the marketplace, it's a well known product 13 14 14 within the construction industry. provide your answer, that: 15 Q. Was it in 2015 Panel Systems' practice to notify their 15 "The fire performance of the panel is governed by customers that they should check the compliance of the 16 16 the fire performance of the panel core. PSL would use 17 Styrofoam with the Building Regulations in their chosen 17 the fire performance as stated by the panel core 18 application if it was offered as the default core 18 manufacturer " 19 19 You explain that the panels could be supplied with 20 A. I would expect them to do that as a matter of course. 2.0 a polyisocyanurate core with a class 0 rating or with 2.1 Q. I see, but it wasn't Panel Systems' practice to notify 21 a non-combustible core of lamella rock fibre. 22 22 their customers --My question is: in 2015, did Panel Systems market 23 2.3 A. No. an Aluglaze panel with a class 0 polyisocyanurate core? 2.4 Q. Thank you. 2.4 Yes, there would have been a polyisocyanurate core that 25 I'm now going to ask you some questions about how 2.5 in itself was rated according to the manufacturer of 1 Panel Systems' products were marketed. 1 that core as a class 0 material. If we could look at your witness statement to 2 2 Q. Again, at that time, did Panel Systems market 3 the Inquiry, please, at {PAN00000020/6}, you say at 3 an Aluglaze panel with a non-combustible lamella rock paragraph 8 -- and I'm summarising here -- that you were 4 5 5 not aware of the guidance given in Approved Document B A. Yes 6 in respect of the necessary fire performance of 6 Q. Looking further down on page 5 at paragraph 7(a), you 7 7 insulating products for buildings above 18 metres. explain the composition of the panels supplied by 8 8 Does that mean that, in 2015, Panel Systems' Panel Systems as part of the Grenfell Tower 9 9 marketing materials similarly made no claim in respect refurbishment. You explain that the majority of panels 10 to their suitability for buildings with a storey of 10 had a Styrofoam core and an aluminium skin, but there 11 above 18 metres? 11 was a smaller supply of other panels with 12 A. I don't think 18 metres figures in any of our 12 a polyisocyanurate core and one with a plywood core. 13 13 literature At paragraph 7(b) you say that the panel would be 14 14 Q. I see. described to have a class 1 surface spread of flame as 15 In 2015, did Panel Systems' marketing literature 15 a result of the aluminium skins. 16 advertise the fire rating of the various core materials 16 If we could turn over to page 6 {PAN00000020/6}, 17 offered by Panel Systems? 17 please, at paragraph (d), towards the top of the page, 18 A. No panel core was offered as being suitable for over 18 you confirm that the fire rating of the Styrofoam core 19 18 metres, because I think at the time we were not aware 19 of the Aluglaze panels supplied to Grenfell Tower had 20 2.0 of the 18-metre issue. a Euroclass reaction to fire classification of class E. 21 Q. I see, yes. 21 Is it correct, then, that Panel Systems marketed the

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Can we turn back to your witness statement at

page 4, please. The reference is {PAN0000020/4}.

At the very top of the page, paragraph 2.1 of

Panel Systems' position statement is set out:

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Yes. Styrofoam, we -- the panel would be classed as

a panel with a core of class E.

products on the basis of the fire rating of the core

2.2

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- 1 Q. I see, and would it therefore be marketed in 2 Panel Systems' literature as a class E fire rated panel?
- 3 A. It would be marketed as a panel with a Styrofoam core 4 which is rated as class E.
- Q. I see

What role, if any, did the class 1 surface spread of 6 7 flame have in the way in which the Styrofoam-cored 8 product was marketed in the literature?

- 9 A. Very little
- Q. Can you explain what little relevance? 10
- 11 A. The aluminium in itself would have a class 1 surface 12 spread of flame
- 13 Q. I see. So would the marketing material make clear that the fire rating is dependent on the core material chosen 14 15 and not the facing material?
- A Yes 16
- Q. Right. 17

18 Did that marketing literature make clear that the 19 behaviour of the composite product in fire would differ 20 to the behaviour in fire of the core material?

- 2.1 A. No.
- 2.2 Q. Why was that?
- A. The core is the -- when it comes to insulation, that is 2.3 2.4 the main contributor to the insulation performance of
- 25 that panel.

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1 Q. I see.

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- Could we turn back to your witness statement, please, at page 7, that is {PAN00000020/7}. You touched on this earlier in your evidence. You say here at the very top of the page:
 - "We now add to all quotes relating to panels intended for use in Construction industry irrespective of building type or height where Styrofoam is included ...
 - Then you explain the class E rating, and that if the customer requires a panel core with improved fire performance, that they should contact the sales office for advice
 - So do you mean there that if a pricing enquiry is required for Styrofoam and a quotation is sent out by Panel Systems, that that wording would be added to the quotation?
- 17 18 A. Yes.
- 19 Q. I see
- 2.0 What about if a customer contacts Panel Systems for 21 design advice, as a result of which Styrofoam is 2.2 recommended: would the wording be added to the quotation 23
- 2.4 A. Any enquiry for a construction project where the quote 2.5
 - has Styrofoam -- where the panel has Styrofoam as the

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- 1 core, that phrase is added on to the quote.
- 2 Q. I see

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- 3 Is there a reason why you don't go further and say 4 that there might be restrictions imposed by the
- 5 Building Regulations as to how Styrofoam-cored products are used? 6
- 7 A. We're not architects. We have no input to the design.
- 8 I've no -- we wouldn't know all the details of the
 - construction project. We can only educate on a basis
- 10 of: we are quoting, in this case we've given you a price 11 for a Styrofoam panel, and we put that on. There isn't
- 12 much more that we could do. We're not architects.
- 13 We're not professional -- we're not designers of
- 14 a building. We manufacture panels.
- 15 Q. I appreciate that, but is there a reason why you don't
- 16 add wording to the quotation to say, "Please check the
- 17 Building Regulations as there might be restrictions as
- 18 to the use of Styrofoam"?
- A. Well, the architect must know that. That's not the role 19 20 of Panel Systems.
- 2.1 Q. I'm now going to take you through some documents in
- 2.2 respect of the supply of Panel Systems' products for use
- 23 in the Grenfell Tower refurbishment and confirm your 2.4 evidence on some of this.
- 2.5

It is right that there are two key periods of time:

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- 1 the first is January to June 2015, when products were
 - supplied for use within the refurbishment at the request
- 3 of Harley Curtain Wall Limited; the second is from
 - August to October 2015, when products were supplied for
- 5 use at the request of Harley Façades Ltd.
- 6 So I want to start with the first period of time,
- 7 January to June 2015.
- If we could please turn to $\{PAN00000012\}$, you will 8 9 see that this is a handwritten note dated
- 10 19 January 2015. About half of the way down the page, 11
- 12 "Mark @ Harley Curtain Wall - enquiry."
- 13 Is it your understanding that this is a handwritten
 - note of Natalie Harrison, a sales co-ordinator at
- 15 Panel Systems?
- 16 A. Yes

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- 17 Q. And that it records an enquiry made by Mark Stapley of
 - Harley regarding the manufacture and supply of products?
- 19 A. Yes.
- 2.0 Q. Now, to the best of your knowledge, was this the first
- 21 contact made by Harley regarding the manufacture and
- 2.2 supply of products in respect of this particular
- 23 project?
- 24 A. Yes
- 25 Q. Thank you.

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A. Yes

A. Yes

If we could please turn up $\{PAN00000006\}$, we will 2 see that this is an email from Mr Stapley of Harley to 3 the generic Panel Systems email address of one of your 4 divisions, and it is dated the same day, 19 January 2015. He says: 5 "Hi Natalie, 6 7 "Further to our earlier telephone conversation, 8 please find attached our schedule of panels required for 9 Grenfell Tower.' 10 And he then asks for pricing. 11 If we could go down to page 2 of that document 12 {PAN0000006/2}, we can see the handwritten schedule of 13 Mr Stapley there. We can see that he has requested 14 aluminium-faced spandrel panels with an overall 15 thickness of 28 millimetres. Do you see that there? 16 A. Yes. ves. 17 Q. The colour finish is set out, as well as the size of the 18 panels 19 Am I right that the core material sought is not specified, at least on this page that we can see of the 2.0 21 schedule? Is that right? 22 A. Yes, there is no core material mentioned there. 2.3 Q. Thank you. Mr Ibbotson. 2.4 I wonder if you could help me with this: we can see 25 under "Type 1" it reads:

"Colour finish $\,-\,$ white RAL 9010 matt, both 1 2 internally & externally."

3 Could you help us, please, what would you interpret that "internally & externally" to mean?

- 5 A. That's the inside face of the panel and the outside face 6 of the panel.
- 7 Q. Thank you, that's very helpful.
- 8 A. It would generally mean that the panel will be seen from 9 both sides, because somebody's paying for it to be 10 powder-coated, it will be visible externally and visible 11 internally
- 12 Q. I see, thank you.

If we could turn then, please, to {HAR00009866}. This is an email from Ms Harrison to Mr Stapley, also dated 19 January 2015, and she attaches the quotation.

If we could please turn to that quotation, at {HAR00009867}, we can see that the quotation is for 28-millimetre thick Aluglaze panels with an aluminium skin and 25-millimetre Styrofoam core. Can you see that there?

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2.2 Q. If we could now turn to Ms Harrison's witness statement, that's at $\{PAN00000028/4\}$, please, if we could please 23 2.4 look at the very top of the page at paragraph (a),

25 Ms Harrison sets out:

23 SIR MARTIN MOORE-BICK: Would you like to take a moment to 2.4 solve it, if you can.

2.5 A. Well, I'm pressing a button but ... if it's battery

16 "Please supply aluminium faced insulated spandrel 17 panels, as per attached schedule and in accordance with 18 [your] quote ..."

"I quoted for a standard PSL 28mm glazing panel

Now, is this an example of what you have described

which includes Styrofoam as the insulation. This was

in the position statement that we've looked at, that

where fire performance is not stated, Panel Systems

would offer a panel with Styrofoam as the core?

Q. Is that because Mr Stapley did not specify, as far as

Q. Can we now please turn to $\{MET00040296/15\}$. This is

following day, 20 January 2015, and it says under

a purchase order sent by Mr Stapley to Ms Harrison the

you can see, a core material in his enquiry?

fully detailed in my quote."

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20 Q. To the best of your knowledge, did Mr Stapley query the 21 selection of Styrofoam as the core panel prior to 22 sending this purchase order?

2.3 A. No.

2.4 And to the best of your knowledge, what about after the 2.5 purchase order was sent over?

1 A No

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Q. On 10 February 2015 an invoice was raised by 2 3 Panel Systems to Harley Curtain Wall for 62 panels with

an aluminium skin and Styrofoam core. We don't need to

5 go to that, but for the transcript it's at {MET00040281}.

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On the same day, 10 February 2015, Panel Systems generated a dispatch note for delivery of those panels to CEP Architectural Facades on behalf of Harley. Again, we don't need to turn to that, but for the transcript it is at {MET00040279}

Is it correct that a number of orders were placed in this same way between February and June 2015, all for aluminium skinned panels with a Styrofoam core?

15 A. Yes. They were scheduled deliveries, so they placed 16 batches of orders against that original quote and their original order.

18 MS DRAGE: I see. Thank you.

19 SIR MARTIN MOORE-BICK: I'm sorry to interrupt.

Mr Ibbotson, you seem to have a little bit of trouble with your light.

2.2 A. It keeps switching off.

1 driven, the battery's gone. 2 3 SIR MARTIN MOORE-BICK: All right now? We will see how we 4 go, anyway. A. Yes, okay. 5 SIR MARTIN MOORE-BICK: Yes, Ms Drage, carry on. 6 MS DRAGE: Thank you, Mr Chairman. 8 Can we please turn to your witness statement at 9 page 2, that's at $\{PAN00000020/2\}$. Looking at 10 paragraph (b), you were asked: 11 "Did Panel Systems provide any literature or 12 documentation on the products supplied? If so what 13 literature /documentation and when?' 14 You answered: 15 "No literature was requested. There was no 16 discussion over technical details over the telephone or 17 in writing. The quote detailed each element of the panel." 18 19 So is it right that Harley never asked to see any 20 marketing material or specification details when --21 A Correct 2.2 Q. — placing this order? I'm sorry, Mr Ibbotson? 2.3 A. Yes. correct. 2.4 Q. And there was never any discussion between anyone at 25 Harley and anyone at Panel Systems, to the best of your

- 1 knowledge, regarding the technical details of the panels? 2
- A. Correct. 3

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- Q. Is that before the order in January 2015?
- A. Before? Harley were not a regular customer. There was no discussion before or during the supply, up until the 6 7 summer months.
- $\ensuremath{\mathsf{Q}}.$ We will come to that period of time in just a moment. 8 9 Thank you for that. Mr Ibbotson.

At paragraph (c) on that same page, you were asked whether Panel Systems provided any information about the fabrication or installation of its products in respect of Harley's order, and your answer is that Harley did not ask for any information.

Is it correct, then, that Panel Systems, to the best of your knowledge, were not aware of any of the fabrication work that was intended?

- 18 A. No. We knew nothing in terms of what subsequent work 19 was undertaken on the panels.
- Q. At paragraph (d), if we can just look a little further 2.0 21 down that page, you are asked what information 2.2 Panel Systems had about the proposed refurbishment of 23 Grenfell Tower, and your answer is:

2.4 "Panel Systems were not aware of any of the proposed 25 plans, designs or specification relating to

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1 Grenfell Tower. There was no knowledge of the proposed

2 work or that it involved re-cladding the building." 3

Is that right?

4 A Yes

- 5 Q. You say at paragraph (e) that the only information Harley provided was what was detailed in their enquiry; 6
- 7 is that right?
- 8 A. Yes
- 9 Q. And you were not informed of the height of the building?
- 10 A No
- 11 Q. Or the proposed use of the panels?
- 12 A. No.
- 13 And Harley never volunteered any information about the
- 14 nature of the project?
- 15 A. No
- Q. You were asked at paragraph (h), if we could go a little 16
- 17 further down the page {PAN0000020/3}, please, whether
- 18 Harley specified any fire performance criteria when
- 19 placing its order, and your answer is no; is that right?
- 20 A. Yes
- 2.1 Q. Is it right that there was never any discussion about
- 22 the required fire performance of the panels between
- 2.3 Panel Systems and Harley?
- 2.4 Α Correct
- 25 To the best of your knowledge, did Harley ever ask for

35

- 1 any advice on the required fire performance of these
- Styrofoam panels? 2.
- 3 A. No.

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- Q. If we could then turn back to {HAR00009867}, this is the
- 5 quotation sent by Ms Harrison to Mr Stapley which we've
- 6 looked at previously. I just want to have a look in
- 7 a bit more detail.
 - You see there that the total net price is £38,132,
- 9 and the quantity of products totals 532 panels.
- 10 Would you have expected, given the volume of the 11 order, any further enquiries to have been made by your 12 sales team at this point as to the size of the building?
- 13 A. No. It's not a large order.
- 14 Q. So was this a typical order for Panel Systems at the
- 15 time in terms of volume?
- 16 A. Yes
- 17 Q. And in terms of the core material requested?
- 18 A. Yes.
- 19 Q. What about the reference here to Grenfell Tower? Would
- 2.0 you have expected the reference to a tower to cause the
- 21 sales team to appreciate that these panels might be
- 2.2 intended for use in a high-rise building?
- 23 I don't think we would conclude that because it says
 - "Grenfell Tower" that it is itself -- that it is
- 2.5 a tower. There are lots of jobs that we've done --

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2.4

1 well, we have done jobs in the past where the project 1 Harley Façades Ltd for those P2 to P5 panels. So that 2 has included the word "tower" that haven't been 2 takes us to 8 October 2015. 3 18 metres. I don't think we would look at that and 3 Finally, if we can turn to $\{MET00040302\}$, we can see 4 interpret it in any other way than that's just the name 4 the dispatch note for the order to Harley Façades Ltd of a building. dated 8 October 2015. So this is 8 October 2015. 5 5 Q. I see. If we could also look at {MET00040286}, this is 6 6 7 I'm now going to move on to discuss that second 7 a dispatch note generated by Panel Systems for delivery 8 period of time that I referred to earlier, between 8 of products to Harley Façades Ltd dated 21 October 2015, 9 August and October 2015. 9 and we can see there again it's for delivery of 10 Can we turn to $\{HAR00020331\}$. This is an email from 10 aluminium-skinned panels with a core of PIR. 11 Mr Ben Bailey of Harley again to the generic 11 So is it correct that we have larger orders between 12 Panel Systems email address dated 24 August 2015, and he 12 January and June 2015 for the Styrofoam—cored products? 13 13 14 "Please see schedule attached for pricing." 14 A. Yes 15 If we could have a look at that schedule, please, at 15 Q. And then we have two smaller orders between September $\{HAR00020332\},$ we can see here that Mr Bailey is 16 16 and October 2015 for composite panels with a PIR core? 17 requesting pricing for an aluminium-skinned panel with 17 18 a material core of Kingspan TP10 rigid insulation. 18 Q. Could we please look at your witness statement at page 5. That's $\{PAN00000020/5\}$, and looking at the top 19 As far as you are aware, is this the first time that 19 20 Harley has requested a panel with a TP10 core? 20 of the page, three lines down, you say: 2.1 A. Yes. 21 "There are a small [number] of panels supplied with 2.2 Q. Thank you. 22 a polyisocyanurate core with a Class '0' rating as We don't need to turn to it, but there was a request 2.3 23 requested by Harley ... 2.4 made by Mr Roache of Mr Bailey to resize the panels in 2.4 Are you referring here to Harley's order for panels 25 the schedule and send a revised schedule over, which he 2.5 that we've looked at with a Kingspan TP10 rigid 37 39 1 hih 1 insulation core? 2 If we can turn to that revised schedule at 2. A. Yes 3 {HAR00020332}, we can see that for each of the P2, P3 3 Q. If we could then turn, please, to {KIN00011603}, we will and P4 panel specs, an aluminium-skinned panel with see that this is the product specification for Kingspan a Kingspan TP10 rigid insulation core has been 5 5 Thermapitch TP10. Towards the bottom of the page, under 6 requested, and at panel spec P5 it is a ply core with 6 the subheading "Fire", it records: 7 TP10 7 "Kingspan Thermapitch TP10 and its rigid thermoset Looking at now {HAR00018872}, we can see that on 8 8 insulation core, are Class 1, as defined by the 9 9 27 August 2015 a quotation was provided in response to Building Regulations." 10 the pricing enquiry for those P2 to P5 panels. If we 10 Were you aware at the time that TP10 was a class 111 could just scroll down the page a little, the reference 11 rather than class 0 rated product? 12 there is to PIR. Can you see that there? 12 A. Well, class 1 is a surface spread of flame rather 13 A. Yes. ves. 13 than -- you know, the class 0 rating is different. TP10 14 Q. Was this the Kingspan TP10 product? 14 and PIR, we've -- I would have thought we would feel 15 15 that they are a class 0 core material. But TP10, we A. I missed that, say that again. 16 Q. The reference there to PIR --16 can't bond to TP10, and that was replaced by a PIR-cored 17 A. Yes. 17 material from Kingspan. I think it's probably us that's

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rated

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Q. -- was this Kingspan TP10 rigid insulation product?

Unfortunately you can't bond to that reliably, so we

would buy the PIR material as the core and bond to that

If we can then turn to $\{MET00040312\}$, this is

an invoice raised on 8 October by Panel Systems to

A. TP10 is a PIR with a very thin aluminium foil.

the 1.5-mil aluminium.

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A. No, they've merely asked us to bond to TP10, and we have

an aluminium foil, and we've replaced that with a PIR

assumed it's a class 0. They haven't asked for

Q. I see. So Harley didn't actually request a class 0

replaced the -- TP10 is a polyisocyanurate with

with a rigid 1.5-mil or 2-mil aluminium skin.

a class 0, they've asked for TP10.

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- 1 Q. Do you remember what that product was, the brand of that 2 product? Was it a Kingspan -
- 3 A. It was probably a Kingspan PIR material.
- Q. I see, but not TP10? 4
- A. Not $--\,$ TP10, as I say, is just PIR with a foil. 5
- Q. I see. And was it your understanding at the time that 6
- class 0 was not a rating for a surface spread of flame? A. Yes, class 0 — if a product is class 0, it would by 8
- 9 definition also have a class 1 surface spread of flame.
- 10 Q. Right.
- 11 I wonder if you could help the Inquiry with the 12 following: could we please look at {HAR00003866}. This 13 is a material specification produced by Harley and it is dated 15 January 2015. Have you seen this document 14 before? 15
- A No 16
- 17 Q. I appreciate that, and I'm showing it to you now for 18 context and background only.
- 19 Ignoring the annotations in red ink for the moment, 20 in the left -hand column, in the fifth paragraph down, in 2.1 respect of glazing P1 panels, an aluminium-skinned panel 22 with a core of TP10 rigid insulation is specified. Do
- 2.3 you see that there?
- 2.4 A. Yes. Yes.
- 25 Q. Purely for your information, the P1 panel was the window

- 1 infill panel between the glazed panels.
- 2 In the paragraph underneath, beneath that, glazing 3 P2 panels, an aluminium-skinned panel with a TP10 rigid insulation core is also specified. Do you see that
- 5 there?
- 6 A. Yes. Yes.
- 7 Q. And purely again for your information, P2 was the panel 8 that housed the kitchen extract fan.
- 9 Looking then again at the fifth paragraph down and 10 the annotation in red ink in respect of the P1 panel, it 11 has been written, "25mm Styrofoam". Do you see that 12
- 13
- Q. In the paragraph below in respect of the P2 panels, the 14 15 annotation is, "As above"; do you see that there?
- 16
- 17 Q. If we could then look at the document {HAR00003869},
- 18 this is a later version of the same Harley materials
- 19 specification document, and again, I appreciate that you
- 2.0 won't have seen this and I'm showing it to you only for 21 background and context.
- 2.2 This has been stamped by Studio E on
- 2.3 26 January 2015, and we can see that in respect of the
- 2.4 glazing P1 panels, the specification has been updated to
- 25 Styrofoam. Can you see that there?

- 1
- 2 Q. But in respect of the P2 panels, the specification has
- 3 been left as TP10 rigid insulation.
- 4 A Yes
- Q. If we could briefly look back at {HAR00020332}, we have 5
- looked at this before but it's the pricing schedule 6
- 7 which accompanied Ben Bailey's email of 24 August 2015
- to Panel Systems. We can see there that for all of the 8
- 9 panels, P2 to P5, the TP10 product has been requested,
- 10 albeit that the P5 also includes timber.
- 11
- 12 Q. Can we then please turn to {BLAS0000008/63}. This is
- 13 Dr Lane's Phase 1 report. I'm looking for figure 8.73.
- 14 Looking at figure 8.73 --
- 15
- $\mathsf{Q}.\ --$ it is "Window insert insulating core panel removed 16
- from glazing system". This is the P2 panel that housed 17
- 18 the kitchen extract fan, and we can see the ventilation
- 19
- 20 A. Yes
- 2.1 Q. Dr Lane found, following her site inspections, that the
- 22 panels at P2 to house this extract fan had a Styrofoam
- 23 core rather than a PIR core.
- 2.4 Do you recognise this as an Aluglaze product from 25 the photograph?

- 1 A. Yes, although we have not put the cut-out in the panel.
- 2 Q. Yes, thank you.
- 3 Can you confirm, perhaps you can help us, that this
 - is a Styrofoam core rather than a PIR core?
- 5 A. Well, it is difficult from the photograph, but given the
- 6 evidence that you've presented earlier, I would see it
- 7 as a Styrofoam panel.
- 8 Q. Right. But you can't say from looking at the photograph
- 9 itself?
- 10 A. Well, I would expect it to be blue in colour, but
- 11 I think it's the quality of the photograph.
- 12 Q. Right, I see.

2.0

- To the best of your knowledge, were the PIR panels 13
- 14 ordered by Harley actually delivered to site?
- 15 A. The last seven or eight panels were all delivered to
- 16 site, yes.
- Q. Can I then take you to the transcript, please, at Day 8, 17
- 18 page 168, line 16. This is the evidence of
- 19 Mr Ben Bailey of Harley to the Inquiry, and he is being
 - asked questions about the composition of this panel P2
- 21 that housed the kitchen extract fan.
- 2.2 I think I have to just double check my transcript
- 23 reference on that. I shall come back to that very 2.4 shortly
- 25 I just want to ask you now about a separate enquiry

42

1 that was made. worth of questions, you might prefer to deal with them 2 If we could please turn up {HAR00002852}. Looking 2 straightaway, mightn't you? 3 at the second email in the chain, this is an email from 3 THE WITNESS: Yes, please Mr Roache of Panel Systems to Ben Bailey of Harley dated 4 4 SIR MARTIN MOORE-BICK: Yes. So we will press on, please, 4 September 2015, and Mr Roache says: Ms Drage. 5 5 "Please find attached our quotation as per your MS DRAGE: Thank you, Mr Chairman. 6 6 7 specification provided, along with a datasheet for the 7 If we could turn to the transcript at $\{Day39/168\}$. 8 8 core material proposed." You will recall that I was asking you some questions 9 If we could turn to the quotation, please, at 9 about the P2 panel that housed the kitchen extract fan 10 {HAR00002852}. 10 and its composition, whether it was a Styrofoam core or 11 11 a PIR core, and this is Mr Ben Bailey's evidence to (Pause) 12 The reference was {HAR00002852}. 12 the Inquiry SIR MARTIN MOORE-BICK: That's what we got. 13 13 At line 16 he is asked by Counsel to the Inquiry: 14 14 MS DRAGE: Yes 'Question: Can you account for how it comes about 15 Let's try {HAR00018876}. This is a datasheet 15 that the P2 panel contained a 25-millimetre layer of 16 16 styrofoam as opposed to the TP10 Kingspan as stipulated attached to Mr Roache's email for the product 17 Euroform Products Ltd Versafire, and the product is 17 or specified? 18 described as an A1 non-combustible board. 18 "Answer: I don't remember having any conversations On page 2 {HAR00018876/2}, we can see in the bottom 19 19 with Panel Systems about them changing it, so beyond 2.0 section of that yellow box that the product has been 2.0 that, it would be guessing that they have changed it 21 tested to BS 476-4 and rated non-combustible and tested 21 themselves." in accordance with BS EN ISO 1716:2002 and 1182:2002. 22 22 Then can we have a look at {Day39/173:3}. This is On page 3 $\{HAR00018876/3\}$, we can see that on the on the same topic. Mr Bailey says: 2.3 23 2.4 right-hand side of the page, under the heading "Timber 2.4 "Answer: I think -- well, I think from what we've Frame Partition Construction, Cavity Fill", that the 2.5 seen, I think the reality is that they were supplied as 47 1 panel core is a 70-millimetre thick mineral wool. Can 1 a styrofoam core, as Dr Lane has suggested." 2 you see that there? 2 Now, I just want to ask you: to the best of your 3 A. Yes 3 knowledge and recollection, was the order for PIR-cored Q. If we could look back at your witness statement on 4 panels at location P2 ever substituted by Panel Systems page 5, that's {PAN0000020/5}, you set out at 5 5 to a product with a Styrofoam core? paragraph 7(a) that the panels supplied to 6 A. No. 6 7 7 Q. So, to the best of your knowledge, PIR-cored panels were Grenfell Tower were 538 Styrofoam-cored panels, 8 19 polyisocyanurate-cored panels with two variations of 8 manufactured and supplied to Harley? 9 skin thickness, and one plywood—cored panel. 9 No, that wasn't the question. We did not substitute 10 10 Styrofoam. If you go back to the enquiry from Harley, 11 Q. Are you able to confirm, then, that whilst Harley was 11 it references P1 and P2; it does not identify any 12 offered an A1 rated mineral wool product, they did not 12 difference between those two specifications. And 13 13 in fact order any such product? in fact, the drawing that you put on also, with the red 14 A. That enquiry, the product put forward is 14 annotation, showed that it had already been changed to 15 15 non-combustible, but it provides no thermal properties. Styrofoam before it came to Panel Systems. 16 In fact, that product was not ordered. We were quoted 16 Q. In respect of the P2 panel, the specification $\,--\,$ I can 17 17 it was a small number of panels and it went no further. take you back to it if it helps -- remained as TP10 18 Harley did not pursue that enquiry. 18 rigid insulation, and so my question is simply: was that 19 MS DRAGE: Right. Thank you. 19 order for TP10 ever substituted by Panel Systems to 2.0 2.0 Mr Chairman, I have only probably five minutes' a Styrofoam core? 21 worth of questions left for Mr Ibbotson. Perhaps I may 2.1 A. No. We would never change a panel core that a customer 2.2 continue before we break? 2.2 has asked for. 23 SIR MARTIN MOORE-BICK: Yes. SIR MARTIN MOORE-BICK: Can I just ask you, Mr Ibbotson: 23

2.4

2.5

you've explained that you couldn't use TP10 as a product

48

because of the foil facing --

2.4

25

Well, Mr Ibbotson, we would normally have a break

about now, but I think if there are only five minutes'

1	A. Yes.	1	Mr Ibbotson.
2	SIR MARTIN MOORE-BICK: but you could and did obtain the	2	I'll just check that Mr Ibbotson can hear and see us
3	actual insulation material.	3	all?
4	A. The foam plastic, the PIR, yes.	4	THE WITNESS: Yes, very clear.
5	SIR MARTIN MOORE-BICK: Yes. Was there ever any difficulty	5	SIR MARTIN MOORE—BICK: Very good, thank you very much.
6	getting hold of the PIR itself?	6	Well, we will see if counsel has any more questions
7	A. No.	7	for you.
8	SIR MARTIN MOORE-BICK: I imagine it's a fairly easy product	8	Yes, Ms Drage?
9	to obtain, isn't it?	9	MS DRAGE: Thank you, Mr Chairman. I don't have any other
10	A. Yes. And we use it on a regular basis.	10	questions for this witness.
11	SIR MARTIN MOORE-BICK: Yes, all right, thank you very much.	11	SIR MARTIN MOORE-BICK: Right. Well, thank you very much
12	Yes, Ms Drage.	12	well done.
13	MS DRAGE: Thank you, Mr Chairman.	13	Well, Mr Ibbotson, no more questions for you, which
14	In that period of time, so August to October 2015,	14	will no doubt come as a good thing, so it only remains
15	do you yourself recall seeing any order for	15	for me to thank you very much for making yourself
16	Styrofoam—cored panels?	16	available . I'm sorry if you were inconvenienced
17	A. No.	17	yesterday, because I think at one stage we were hoping
18	Q. Finally, are you able to help us with what these panels	18	to see you yesterday, but we couldn't manage that. I'm
19	with the PIR core were actually used for at	19	sorry if that caused you difficulties . Anyway, we have
20	Grenfell Tower?	20	now seen you, we have had the benefit of hearing your
21	A. No.	21	evidence, for which we're very grateful, so thank you
22	MS DRAGE: Thank you, Mr Ibbotson. I have now come to the	22	very much, and that's the lot, you're free to go about
23	end of my questions for you.	23	your business.
24	I will hand back to the Chairman as it will be	24	THE WITNESS: Thank you very much.
25	necessary for us to have a short break to see if there	25	SIR MARTIN MOORE—BICK: Thank you very much, goodbye.
23	necessary for as to have a short break to see it allow	23	on the many goods,
	49		51
1	are any further questions from elsewhere.	1	THE WITNESS: Bye.
1 2	are any further questions from elsewhere. SIR MARTIN MOORE—BICK: Right, Mr Ibbotson. Well, that's	1 2	THE WITNESS: Bye. (The witness withdrew)
			•
2	SIR MARTIN MOORE—BICK: Right, Mr Ibbotson. Well, that's	2	(The witness withdrew)
2	SIR MARTIN MOORE—BICK: Right, Mr Ibbotson. Well, that's the end of the questions that counsel thinks she needs	2	(The witness withdrew) SIR MARTIN MOORE—BICK: At that point, we will have a short
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in France, known in his evidence at AAP—SAS.

As the panel knows from my submissions at the start of Arconic's evidence, we had invited other Arconic witnesses who are located in France and Germany to come to the Inquiry to give oral evidence. Those witnesses were Claude Wehrle, head of technical sales support, Peter Froehlich, the product manager for the Reynobond

range at material times, and Gwenaelle Derrendinger, who

also heard evidence from Mr Claude Schmidt. He was the

general manager of the Arconic company based in Merxheim

was at material times a sales assistant for Arconic in relation to products, and she was based at Merxheim and part of the inside sales team. As you know, those witnesses declined to attend to give evidence on the basis of a perceived risk of prosecution by the French

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authorities under the French Blocking Statute of 1968.

The aim of this presentation is to place the
remaining Arconic documents which will need to form part
of the record into the public domain, and to show
further key documents to you that we would have looked
at with those witnesses so that you can see and
understand them in a coherent order. It is also to set

some of the documents that you have already seen into their wider context.

It will on occasions be necessary to explain to you

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and to the public at large how documents relate to the Inquiry's lines of investigation . That in turn will involve identifying the further lines of inquiry arising from the documents and at times what those witnesses say

I'm not going to show you every single document that we would necessarily have put to Mr Wehrle or to Mr Froehlich or to Ms Derrendinger. This is not a mock examination in the absence of the witness. Nor do I propose to make submissions on what you should make of the documents or about what, if any, inferences you should draw from the documents, or from the fact that the relevant witnesses have chosen not to give oral evidence. All core participants will of course have the opportunity to address the panel on the documents and any inferences to be drawn from them when they come to make their closing statements. That of course includes Arconic.

With that introduction, I turn to the first of the set of documents that we need to look at. This takes us back to 1997, and the tests conducted in that year on a product called Reynobond PE 160. We heard from the Arconic witnesses about a number of documents that may or may not show that Reynobond PE 55 could claim to be class 0 under the British Standards.

If we look first at the 1997 Warringtonfire tests, you will remember that we heard that the product called Reynobond PE 160 was tested by Warringtonfire in 1997. Claude Wehrle refers to those tests at page 14 of his witness statement at paragraph 47. If we could have that up, please, that's {MET00053190/14}. At paragraph 47 he says:

"I also had no reason to suppose that there was a material difference in fire performance between the PE panels manufactured in the US, which were tested at Warrington in 1997 (panels which were then known as RB160 PE), and those which were subsequently marketed as RB55 PE."

That's what he says.

Can we look at {BSI00001757}. This is
British Standard 476, part 10, and this is the 2009
edition. It sets out the principles of fire testing
under BS 476.

Can we go to page 20 {BSI00001757/2}, please. On page 20, if you look at paragraph 5.3 at the bottom of that page, "Field of application", you will see that it says:

"Within the field of reaction to fire, direct field of application is the application of the test results for a material or product in accordance with the details

of how they were tested. Specifically, this means that the mounting and fixing arrangement used in the test method is applied directly to the use of the material or product in real end use conditions. Any variation in the physical properties or thickness of material or product in the end use application, or variations in the mounting and fixing arrangements, should be either quantitatively determined through a carefully designed test programme or, in some cases, be the subject of an assessment or expert judgement by an expert."

I can pause there.

I would also ask you to look, please, next at ADB, which we have at {CLG00000224/122}. This is a part of ADB that we have looked at with some of the witnesses in Module 1, but it's worth just reminding ourselves about it.

At paragraph 16, on the bottom left—hand side of the screen, you can see that it says:

"Results of tests on proprietary materials are frequently given in literature available from manufacturers and trade associations.

"Any reference used to substantiate the surface spread of flame rating of a material or product should be carefully checked to ensure that it is suitable, adequate and applicable to the construction to be used.

1	Small differences in detail, such as thickness,	1	certification ". You can also see that it goes to
2	substrate, colour, form, fixings, adhesive etc, may	2	others, including Guy Scheidecker and Claude Wehrle.
3	significantly affect the rating."	3	It's worth reading the email in full, and forgive me
4	That's relevant to the question of whether the	4	for doing so:
5	results of a test on one product can be applied to	5	"Gerard — Re telecon yesterday evening.
6	another product, however closely similar, and also the	6	"This is a subject that I have discussed with all
7	extent to which Arconic was or was not aware of those	7	concerned many times over the past $2/3$ years but no
8	principles .	8	action has been taken as far as the UK market is
9	Can we then go back, against that background, to	9	concerned — Surprise Surprise!!
10	Mr Wehrle's witness statement at paragraph 74 on page 23	10	"Now we could have a major problem that could cost
11	$\{MET00053190/23\}$. If you look at paragraph 74, he says:	11	AAP-M a lot of money in potential claims and legal
12	"To my knowledge, there have been no substantive	12	costs.
13	changes to the composition of Reynobond PE since 2005,	13	"Let me try to explain the situation and why I think
14	save for a change to the colour of the core which	14	we could be in trouble.
15	occurred on 4 May 2015."	15	"Original fire testing based on RB $-55/PVdF$ paint
16	He goes on to explain what that was.	16	finish — completed in March 1997.
17	Can we next look at $\{META00002926\}$. This is	17	"Certification created under Certs —
18	a monthly report, apparently by Claude Wehrle, and we	18	"WARNES 70707 — Spread of Flame — Class 1.
19	can see the date at the top: it refers to October 2005.	19	"WARNES 70708 — Fire propagation — Class 0.
20	Can we please look at item 3, towards the bottom of	20	"This certification [underlined and bold] should
21	the screen. It says, under	21	have been reviewed and re assessed every 5/6 years so in
22	"Tests/calculations/optimisations/drawings/studies",	22	2002/03 a review should have taken place. The life span
23	under "Poland":	23	of the certification is 10years max and our current
24	"We failed the fire tests 2 months ago with our	24	certs expire and will be invalid in March 2007. This
25	standard core at 64% of ATH. Now we want to do new	25	certification covers only RB-55 and does not cover RB-55
	57		59
	57		59
1	57 tests with 65% of ATH (coming from Eastmann) and with	1	59 or RB—33 in Poly or DG paint coatings!! [again in bold]
1 2		1 2	
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	tests with 65% of ATH (coming from Eastmann) and with 68.6% of ATH produced as 'prototype' in Merxheim. These new tests will take place as soon as the US material is coming in." Now, we have reason to think that ATH stands for alumina trihydrate, which is a fire retardant. When Mr Wehrle refers to "standard core", the question is whether he was referring to PE core there. This document invites investigation of a number of things: first, whether it indicates that there was a change in the recipe, the chemical make—up, for the standard PE core at this time, October 2005; second, what those changes were, if there were any, and whether they in fact occurred and to what extent; third, if there were any other changes in the Merxheim product before 2005; and, fourthly, whether Mr Wehrle was aware of any additives in the core of Reynobond PE 160 which had been tested back in 1997. Next we go to Mr Southgate and his warnings about UK	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	or RB—33 in Poly or DG paint coatings!! [again in bold] So from March 2007 Warrington Fire will not stand by our WARNES approval and not support in any claim situation!!! "AAP—M have used for the past 6 years WARNES 70707 & WARNES 70708 covering all RB product range covering Architectural, CID & S&D. These approvals are shown in all of our current RB product brochures!! "Our certifications WARNES 132317 & 132616 approval Sept 2003 cannot be used as updated approvals covering 70707 & 70708. This is due to the RB product having an FR core." Just pausing there, we will go later to see those test reports. "So for UK & Ireland we have the following fire approvals." Then he sets them all out underneath, and you can see there that the first one: "RB—55 Architectural/PvdF finish × 4mm: OK approval
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	tests with 65% of ATH (coming from Eastmann) and with 68.6% of ATH produced as 'prototype' in Merxheim. These new tests will take place as soon as the US material is coming in." Now, we have reason to think that ATH stands for alumina trihydrate, which is a fire retardant. When Mr Wehrle refers to "standard core", the question is whether he was referring to PE core there. This document invites investigation of a number of things: first, whether it indicates that there was a change in the recipe, the chemical make—up, for the standard PE core at this time, October 2005; second, what those changes were, if there were any, and whether they in fact occurred and to what extent; third, if there were any other changes in the Merxheim product before 2005; and, fourthly, whether Mr Wehrle was aware of any additives in the core of Reynobond PE 160 which had been tested back in 1997. Next we go to Mr Southgate and his warnings about UK testing in 2006.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	or RB—33 in Poly or DG paint coatings!! [again in bold] So from March 2007 Warrington Fire will not stand by our WARNES approval and not support in any claim situation!!! "AAP—M have used for the past 6 years WARNES 70707 & WARNES 70708 covering all RB product range covering Architectural, CID & S&D. These approvals are shown in all of our current RB product brochures!! "Our certifications WARNES 132317 & 132616 approval Sept 2003 cannot be used as updated approvals covering 70707 & 70708. This is due to the RB product having an FR core." Just pausing there, we will go later to see those test reports. "So for UK & Ireland we have the following fire approvals." Then he sets them all out underneath, and you can see there that the first one: "RB—55 Architectural/PvdF finish × 4mm: OK approval until March 2007.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	tests with 65% of ATH (coming from Eastmann) and with 68.6% of ATH produced as 'prototype' in Merxheim. These new tests will take place as soon as the US material is coming in." Now, we have reason to think that ATH stands for alumina trihydrate, which is a fire retardant. When Mr Wehrle refers to "standard core", the question is whether he was referring to PE core there. This document invites investigation of a number of things: first, whether it indicates that there was a change in the recipe, the chemical make—up, for the standard PE core at this time, October 2005; second, what those changes were, if there were any, and whether they in fact occurred and to what extent; third, if there were any other changes in the Merxheim product before 2005; and, fourthly, whether Mr Wehrle was aware of any additives in the core of Reynobond PE 160 which had been tested back in 1997. Next we go to Mr Southgate and his warnings about UK testing in 2006. Can we go to {MET00064988/19}, please. This is	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	or RB—33 in Poly or DG paint coatings!! [again in bold] So from March 2007 Warrington Fire will not stand by our WARNES approval and not support in any claim situation!!! "AAP—M have used for the past 6 years WARNES 70707 & WARNES 70708 covering all RB product range covering Architectural, CID & S&D. These approvals are shown in all of our current RB product brochures!! "Our certifications WARNES 132317 & 132616 approval Sept 2003 cannot be used as updated approvals covering 70707 & 70708. This is due to the RB product having an FR core." Just pausing there, we will go later to see those test reports. "So for UK & Ireland we have the following fire approvals." Then he sets them all out underneath, and you can see there that the first one: "RB—55 Architectural/PvdF finish × 4mm: OK approval until March 2007. "RB—55 (FR) Architectural/PvdF finish × 3mm: OK

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Deborah French's predecessor in UK sales. This is dated

 $26\ \mathsf{July}\ 2006,\ \mathsf{and}\ \mathsf{its}\ \mathsf{subject}\ \mathsf{is}\ \mathsf{``Reynobond}\ \mathsf{Fire}$

 $^{\prime\prime}\text{RB}{-}55$ Architectural/DG5000 finish x 4mm: None.

"RB-55 Architectural/CID DG3000 finish \times 4mm: None.

1	"RB-33 Sign & Display None."	1	{MET00064988/20}. He says:
2	Then he goes on:	2	"Dear Colin,
3	"During the past $6/9$ months Amari branches have	3	"We just finish [ed] with Claude our meeting
4	supplied RB-33 for use in European Airports. This have	4	concerning the update of the situation.
5	been for major Advertising Displays. Amari clients have	5	"We had some month ago the request for a Sign
6	asked for copies of Fire certification covering RB S&D	6	project in Rb33, the Reynobond certification we sent was
7	as shown in our literature . 3 projects in Heathrow,	7	a copy of the Reynobond certification we sent was a copy
8	Gatwick, Paris and I think Dubai are all asking for	8	of the Reynobond Architecture [Warrington] certificate
9	[accredited] fire certification .	9	to the Amari branch and we get no remarks from them.
10	"Amari WL customer has paid over £750 to get RB-33	10	[Then], we decided to not organize the tests just for
11	approved by Warnes so they can obtain payment for their	11	this project (around 7971 per [thickness] \times 3 [and he
12	work. This problem is now closed and Gatwick accepted	12	gives measurements] of course the situation since
13	this approval.	13	middle June is very different .
14	"Amari EL customers are wanting our approvals.	14	"Claude asked to Mr Moore from the Warrington fire
15	Merxheim has sent copies of certs 132317 & 132616 which	15	on July 6th all conditions to organize the tests, he get
16	do not cover RB -33 Pe core. Today I have sent copies of	16	the offer from them dated July 7th (The same offer that
17	70707 & 70708 to see if this will keep their clients	17	Mr Ian Moore send back this morning).
18	happy, if Amari cannot keep them happy then they are	18	"The question was to wait the new formulation of the
19	concerned that the displays will be taken down and	19	Rb55 FR (COA3) and to organize all test together with
20	remade and fitted at Amari's cost. If this happens it	20	the Rb33."
21	could be bigger than the brushed claim.	21	Then there is something about the time schedule.
22	"Anne-Laure has lived with this Fire Certs problem	22	Now, we see here talk of the tests for RB33, that's
23	without really being able to help for many months. I am	23	the signage product, and FR-cored RB 55, the
24	sure $A-L$ has reported it to you. I understand we do	24	architectural panels, and you heard some evidence that
25	have a certification in France covering RB-33??	25	there were indeed BS 476 tests at this time in 2006 on
	61		63
1			
	"My final worry is misrepresentation to the market	1	FR—cored RB 55, and we have those, and you heard that
2	by our Distributor as AAP-M cannot supply	2	from Mr Schmidt on $\{ \text{Day}91/45:11 \}$ to $\{ \text{Day}91/46:11 \}.$
2		2	-
2 3 4	by our Distributor as AAP $-$ M cannot supply a true/ official Fire certification covering RB $-$ 33 & some RB $-$ 55 products even though they are selling the feature	2 3 4	from Mr Schmidt on $\{Day91/45:11\}$ to $\{Day91/46:11\}$. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at
2 3 4 5	by our Distributor as AAP $-M$ cannot supply a true/ official Fire certification covering RB -33 & some RB -55 products even though they are selling the feature as a benefit via our Advertising.	2 3 4 5	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at ${Day91/44:5-25}$, and we know from the documents that
2 3 4 5 6	by our Distributor as AAP $-$ M cannot supply a true/ official Fire certification covering RB $-$ 33 & some RB $-$ 55 products even though they are selling the feature	2 3 4 5 6	from Mr Schmidt on $\{Day91/45:11\}$ to $\{Day91/46:11\}$. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at
2 3 4 5 6 7	by our Distributor as AAP $-M$ cannot supply a true/ official Fire certification covering RB -33 & some RB -55 products even though they are selling the feature as a benefit via our Advertising.	2 3 4 5 6 7	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at ${Day91/44:5-25}$, and we know from the documents that
2 3 4 5 6 7 8	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested."	2 3 4 5 6 7 8	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5–25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three
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2 3 4 5 6 7 8	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one	2 3 4 5 6 7 8	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5–25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006.
2 3 4 5 6 7 8 9 10	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of	2 3 4 5 6 7 8	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and {EX000001960}, and there is a class 0 summary report at
2 3 4 5 6 7 8 9 10 11 12	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one	2 3 4 5 6 7 8 9 10 11	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and
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2 3 4 5 6 7 8 9 10 11 12 13	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one product in support of sales of another product. If that's right, was he aware that there was any technical justification for doing that?	2 3 4 5 6 7 8 9 10 11 12	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and {EX000001960}, and there is a class 0 summary report at {EX000001956}; there is a Reynobond RB 33 3-millimetre test report under BS 476-6 and 7, they are at
2 3 4 5 6 7 8 9 10 11 12 13 14	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one product in support of sales of another product. If that's right, was he aware that there was any technical justification for doing that? You can also see, as I've identified, that	2 3 4 5 6 7 8 9 10 11 12 13	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and {EX000001960}, and there is a class 0 summary report at {EX000001956}; there is a Reynobond RB 33 3-millimetre test report under BS 476-6 and 7, they are at {EX000001951} and {EX000001943}, with the class summary
2 3 4 5 6 7 8 9 10 11 12 13 14 15	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one product in support of sales of another product. If that's right, was he aware that there was any technical justification for doing that? You can also see, as I've identified, that Mr Southgate's opinion, as reflected in this document,	2 3 4 5 6 7 8 9 10 11 12 13 14	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and {EXO00001960}, and there is a class 0 summary report at {EXO00001956}; there is a Reynobond RB 33 3-millimetre test report under BS 476-6 and 7, they are at {EXO00001951} and {EXO00001943}, with the class summary or report at {ARC00000362}; and the 4-millimetre
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one product in support of sales of another product. If that's right, was he aware that there was any technical justification for doing that? You can also see, as I've identified, that Mr Southgate's opinion, as reflected in this document, is first that there should have been a review of the	2 3 4 5 6 7 8 9 10 11 12 13 14 15	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and {EXO00001960}, and there is a class 0 summary report at {EXO00001956}; there is a Reynobond RB 33 3-millimetre test report under BS 476-6 and 7, they are at {EXO00001951} and {EXO00001943}, with the class summary or report at {ARC00000362}; and the 4-millimetre Reynobond 33 test reports to BS 476-6 and 7 are at
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one product in support of sales of another product. If that's right, was he aware that there was any technical justification for doing that? You can also see, as I've identified, that Mr Southgate's opinion, as reflected in this document, is first that there should have been a review of the Reynobond 1997 certificates for PE in five to six years from the issue, and that the certificate would expire within ten years or in ten years. There is no expiry	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and {EXO00001960}, and there is a class 0 summary report at {EXO00001956}; there is a Reynobond RB 33 3-millimetre test report under BS 476-6 and 7, they are at {EXO0001951} and {EXO00001943}, with the class summary or report at {ARC00000362}; and the 4-millimetre Reynobond 33 test reports to BS 476-6 and 7 are at {ARC00000365}, {ARC00000367}, and the class 0 summary report can be found at {ARC00000363}. But there was no testing at this time that we have
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	by our Distributor as AAP—M cannot supply a true/ official Fire certification covering RB—33 & some RB—55 products even though they are selling the feature as a benefit via our Advertising. "Your urgent response is requested." You can see that Mr Wehrle is copied, as I say. Now, this document raises a number of questions, but most important is whether Mr Wehrle himself was aware of a practice of sending out test certificates for one product in support of sales of another product. If that's right, was he aware that there was any technical justification for doing that? You can also see, as I've identified, that Mr Southgate's opinion, as reflected in this document, is first that there should have been a review of the Reynobond 1997 certificates for PE in five to six years from the issue, and that the certificate would expire	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	from Mr Schmidt on {Day91/45:11} to {Day91/46:11}. We also heard that there were a number of tests done on RB 33 at that time as well, and he said that at {Day91/44:5-25}, and we know from the documents that there was indeed BS 476 testing on RB 33 in three diameters or measurements, 2 millimetres, 3 millimetres and 4 millimetres, in September of that year, 2006. I'll just read those into the record: the Reynobond 33 2-millimetre tests are at {ARC00000366} and {EXO00001960}, and there is a class 0 summary report at {EXO00001956}; there is a Reynobond RB 33 3-millimetre test report under BS 476-6 and 7, they are at {EXO0001951} and {EXO00001943}, with the class summary or report at {ARC00000362}; and the 4-millimetre Reynobond 33 test reports to BS 476-6 and 7 are at {ARC00000365}, {ARC00000367}, and the class 0 summary report can be found at {ARC00000363}.
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email, lines of inquiry arise about whether there was

a gap in the certification $% \left(1\right) =\left(1\right) \left(1\right) =\left(1\right) \left(1\right) \left(1\right)$ for the UK; if so, why that

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Can we then go to the response to $\ensuremath{\mathsf{Mr}}$ Southgate from

Gérard Sonntag the next day, 27 July 2006. This is at

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1 gap was allowed to open up; why it wasn't closed with 2 new tests done under BS 476-6 and 7, either at that 3 stage or thereafter; what was it about the UK market 4 that meant that these tests were not regarded as so 5 important that they needed to been kept current: what was the position with these products being sold in 6 7 Europe? We next turn to the claimed relevance of the 1997 8 9 PE 160 tests and the RB 33 tests. 10

Mr Wehrle says that the 1997 tests on 160 PE and the 2006 RB 33 tests are relevant to the statement that RB 55 PE was class 0.

Can we go to his witness statement at page 9 ${\mathsf {MET00053190/9}}$, paragraph 34. At paragraph 34, if you look at the second sentence, three lines down, he says:

"Moreover, I had arranged in 2006 for other RB PE products to be subjected to BS476 parts 6 and 7 testing. including in particular RB334, which has the same PE core but greater PE thickness (3.4mm compared to 3mm) when compared with RB55 and has thinner aluminium on each side of the core (a total of 0.6 mm as opposed to a total of 1 mm on RB55)."

He goes on to say:

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"It hence has proportionately more PE and a thinner protective skin.'

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Now, this raises questions about whether in fact at the time there was any exercise done by Arconic to analyse the data from the RB 33 tests and extrapolate that data or from that data to apply it to RB 55 PE core then being manufactured.

If there was such an exercise, the next question is the basis on which that exercise was conducted, what methodology was used, and it also raises the question whether Mr Wehrle himself had any data in his own hands at the time to support the extrapolation, and if not what the basis of the view set out in this paragraph

We then turn to the tests supplied to the US.

I should draw your attention to something we have not seen at all, which assists us in understanding whether anything could in fact be learnt about RB 55's fire performance from the RB 33 tests.

Could we go to {META00001104}, please. This is an email, as you can see, from Claude Wehrle to Diana Perreiah and Thomas Rogers on 30 June 2017. It postdates the Grenfell Tower fire.

Mr Wehrle writes:

"I send you as attached document a list of all the relevant certifications we have for our products in Meryheim

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"Please note the 3 categories:

- " Product certificate with Audit done by the notified body.
- " ullet Technical approval Based on system qualification for product installation.
 - " Reaction to fire .'

The table that's attached -- and you can see that there is an attachment, in fact I think two attachments to this email. The one we need to look at in native format is at {META00001106}, please. This lists the tests for numerous countries, as you can see from the country list under row 7, "Pays", if you can see that, it starts at Singapore and runs down through Switzerland and the UK. Listed are the EN 13501 European classification scheme tests at lines 68 to 82, you can see those there, under "Europe", and those are for RB 55. So those are the European tests.

You can see the UK BS 476 tests at rows 121 to 127, if we just scroll down to those, in the light green block. What you get from that is that this list lists the tests only on FR core in 2012 and 2016. There is no reference in this list to any BS 476 testing for the UK or in the UK for any PE product. That includes the Reynobond 33 product or the 1997 PE 160 tests.

The question is: why not, if they were relevant?

Next we turn to the FR tests which were done to achieve class 0 in 2003. I mentioned these in passing a little earlier on.

In September 2003 there were BS 476-6 and 7 tests done on Reynobond 55 FR core. Those tests did not have a summary report issued which stated that those results would meet class 0, but we can say from those test results that we have that the part 6 test indicated an I index of 0, and the part 7 indicated a class 1 performance. That would appear to be within the parameters of a class 0 definition.

For reference purposes, the BS 476-6 test, which is numbered 132317, is at $\{BBA00000053\}$, and the BS 476-7 test, which is numbered 132316, is at $\{BBA00000050\}.$

So those are, in a nutshell, the September 2003 FR tests which achieved class 0, even though not formally classified as such.

We then look at the European testing, and this will be very familiar to you, the two tests, 5A and 5B, done in late 2004. We've seen that from the Arconic witnesses who gave evidence.

Because of the way that the single burning item test, namely EN 13823, is configured, it requires the specimen to be fabricated as either rivet or cassette. You have to have a fixation system in order to be able

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1 to set the test up under the European regime. 1 for each parameter." 2 We saw the results in the classification reports 2 Now, this section of the EN 13501 standard says, at 3 dated 4 January 2005, and just to remind you, the 3 the end of the SBI three tests, if the mean result is 4 Reynobond 55 PE in rivet, which was test 5 -- or, to 4 not what the sponsor envisaged, then they can do two give it its full nomenclature, RA05-005A -- achieved further tests and exclude the highest and lowest 5 5 classification B-s2, d0. The Reynobond 55 PE in datasets. In lay terms, that means that if the first 6 6 cassette, which was test 5B -- or, to give it its full 7 specimen performed unexpectedly, a client, a test title , RA05-005B -- was stopped after 850 seconds as the 8 8 sponsor such as Arconic, could have carried on with 9 heat release rate exceeded 400 kilowatts. 9 another four tests, removed and best and worst results 10 10 Now, the document references for the record again -and gained a classification, and in that way, any 11 and you will have these, but just to remind you of 11 apparently rogue result could have been excluded 12 12 them -- for test 5A, that is at {ARC00000535}, its Now. I'd invite you to bear in mind that this is 13 accompanying classification report is at {ARC00000358}; 13 an option open to a test sponsor if they don't get the 14 14 for test 5B, the test report -- and you will recall we result they expect or envisage, and that's written into 15 only have a test report -- is at {ARC00000536}. 15 the standard. The question, looking at this standard in 16 16 I would like to pick up on one point. You've seen a little detail, which arises is why Arconic didn't use 17 17 test report 5B, and you'll have seen from the this provision in the standard, carrying on testing the 18 examination on it that it was a single specimen test 18 cassette-fix variant, in order to seek the 19 which was terminated early and no further specimens were 19 classification required if possible 2.0 2.0 We next move on in time by a year to 2006 to pick up 21 Can we look at {BSI00000620}. This is the standard, 21 something I mentioned not only earlier but also with the the British Standard, EN 13501 of 2002, which was witnesses, which is the 2006 Reynobond FR test in rivet. 22 22 2.3 applicable at the time of test 5B. In other words, it's 23 There was a test in October 2006 where Revnobond FR 2.4 the British Standardisation of the European Standard. 2.4 achieved European classification B-s1, d0 under the 25 If we go to page 15 {BSI00000620/15}, we can see it 2.5 European regime EN 13501. The reference to that is at 71 says, "Number of tests for classification" under 1 1 {BBA00008288} 2 section 7. If you scroll down and look at 2 This was the FR product in rivet-fix only. We have 3 section 7.3(a), the procedure or part of the procedure 3 been unable to find any test results for the FR product that is required is to: in cassette form at this time. That raises the 5 "Calculate the mean value (m') of the set of results 5 question: why not? Why not particularly if the result for this parameter using the minimum number of tests." 6 of test B on PE non-FR form done at the end of 2004 was 6 7 7 If you pause there, take it from me that the single thought within Arconic to be a rogue? 8 8 burning item or SBI test, EN 13823, requires a minimum We then turn to the initial assessment of Reynobond 9 9 by the BBA. This starts in 2004 and is picked up again of three specimens. 10 If you go on under letter (b) it says: 10 in 2006, before the eventual classification process 11 "If m' lies within the limits for an envisaged 11 during 2007 leading to the classification certificate in 12 class, the value m used for classification is m'." 12 January 2008. 13 13 Then (c): The documents show that in 2004, going back to the 14 14 "If m' does not lie within the limits for an beginning of the story. Mr Wehrle made an application 15 15 for a BBA certificate for Reynobond 55. We have envisaged class, two additional tests may be carried 16 out." 16 an application form dated 9 March 2004 which has some 17 That's important. I would emphasise that. 17 handwritten amendments on it, and the reference for that

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record.

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"If two additional tests are carried out, the

results for each parameter in these two tests shall be

added to the set of results obtained in the minimum

number of tests. Next, the two extremes (highest and

excluded. The value m, used for classification, shall

then be calculated using the remaining set of results

lowest) for each parameter individually shall be

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contract offer was at {MET00053158_P13/137}, and look

also at $\{MET00053158_P13/146\}$ to $\{MET00053158_P13/148\}$,

is $\{MET00053158_P13/122\}$, and the date is on page 127.

There is no need to turn it up, but that is in the

story short, it wasn't taken up at that time. The

One can tell that the BBA then offered Arconic

a contract to assess Reynobond 55 but, to cut a longish

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Then (d):

1 and terms and conditions sent at page 148. "Issuing Organisation: Warrington FIRE research. 2 The effort was then renewed in 2006 by Arconic. In 2 "Report or Identification Number: 132316 and 3 the August of that year, Mr Wehrle sent an application 3 132317. 4 form that was very similar to the application form which 4 You will remember that those are the test report he did in 2004, and indeed didn't in fact even update 5 5 numbers for the tests done on Revnobond FR-cored product the date. The reference to that is in 2003, and we saw those, or at least mention of them, 6 6 7 ${MET00053158_P13/166}$. So it is for that reason that we 7 earlier: the part 7 test, 132316 at $\{BBA00000050\}$ and the part 6 test, 132317 at {BBA00000053}. 8 have two slightly different application forms, both 8 9 carrying the date of 9 March 2004. 9 What we don't see here is any reference to the 10 1.0 There is then a third application form dated January 2005 European tests, test 5A for rivet or 11 February 2007, to which we will return later. 11 test 5B for cassette. The question or line of 12 12 Before we do, can we look at the documents used by investigation raised by this document is: why not? 13 Arconic to support their application. 13 We then turn, against this background, to a meeting 14 held in Luton in March 2006. This is before this 14 I would like to begin with those used to support the 15 application form submitted in 2006. For that we need to 15 application. 16 go to {MET00053158_P13/167}. This is the first page of 16 There was an internal meeting where 17 the application form, "Application for BBA Assessment", 17 Didier Scheidecker, who was the sales manager for 18 that's where it begins. If we can go in this, please, 18 Arconic, visited Colin Southgate, who was the UK sales on to page 173 $\{MET00053158_P13/173\}$, we can see that 19 19 representative at the time, and they appear to be 2.0 2.0 this is the part of the form which sets out the discussing UK strategy. 21 available assessment calculation and test data. 21 Can we go, please, to $\{MET00053158_P13/162\}$, so it's 22 Under section 3.1 on the left -hand side of the 22 a little bit earlier on in this exhibit. It's a document which is entitled "Visit report - UK 2.3 23 screen, it says this: 2.4 "If suitable data is available, it may significantly 2.4 meeting", written by Didier Scheidecker, as you can see reduce the cost and duration of the Contract. Please 2.5 from the top right-hand corner, date of visit: 73 75 1 identify all data relevant to the Product and its Use 1 21 March 2006, and you can see that the visit report being assessed. The data should contain an accurate and 2 2 appears to have been copied to GSC, who is 3 detailed description was samples used and should have 3 Guy Scheidecker, and Claude Wehrle, CWE. been produced within the last three years." If you scroll down, please, to page 164 5 Then you see a list of reports below that, and that 5 ${MET00053158_P13/164}$, we can look at item 5 together, 6 includes two types of data called Avis Technique. Those 6 "Technical tools". Under that heading, there is a third 7 7 cover, under the heading in the column "Characteristic bullet point, "BBA Approval", and it says there: 8 8 covered", "eg Fire, Thermal, Acoustic, Structural, "We have always more and more projects coming in the 9 Durability". It says, "Structural and system for 9 'Public housing & private development' segment. We have 10 cassettes", and then below that, "Structural and system 10 here project of several 10.000 sqm in discussion. It 11 for riveted". The issuing organisation there is "CSTB -11 could represent in 2006; 50% of the market; means 12 FRANCE Paris", and there are numbers set out, or at 12 70-80.000sqm! In the segment, we have always to show 13 13 least for the cassette version, and the dates of issue. the official certification from the BBA. Action: $^{\prime\prime}-$ Can we organize to have the BBA certification, 14 14 You can see those. 15 15 We understand that there were, at least from the based on our cassette approval by the CSTB? How guick? 16 first reference there, Avis Technique documents relating 16 Which costs? Which condition? 17 17 to structural and system for cassette. It is our view "- The KH35 is a key system on the market, a real 18 on the documents at the moment that these documents were 18 trend. What are the conditions to have it BBA 19 put forward as data to the BBA for the technical aspects 19 approved?" of these two systems of fixing RB 55 structural but not 2.0 2.0 Now, just pausing there, the question that this 21 21 document presents is: what did. "based on our cassette for fire performance. 2.2 If you go four rows down in this document, you can 2.2 approval by the CSTB" mean? If one goes back to the 2.3 23 see it says "Test for Fire Propagation", and there the previous page, you can see the phrase used there in that

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first bullet point: "based on our cassette approval by

the CSTB". What did that mean? Did it refer to the

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characteristic covered is:

"Fire BS 476 part 6 [and] part 7.

1 Avis Technique opinions or something else? If it was technical manager, and Hamo Gregorian, engineering 2 something else, what was it? 2 system department. 3 Further questions arise on this document: was there 3 Now, it's not clear from the right-hand side whether 4 a strategy to target the UK public housing and private 4 Mr Wehrle attended, but he may have attended by development sector in the UK? Did Mr Wehrle think that telephone, and we would need to clarify that with him. 5 5 that required BBA certification or would benefit from If you go down to the second of the discussed 6 6 7 such certification? And was the driver for Arconic to 7 points, it says: re-open its plan to obtain BBA approval that marketing 8 8 "Details of visit: 9 initiative or desire? 9 "After a general discussion with BK and CS threat to 10 10 You will also just have seen there, at the bottom of stop all dealings with BBA unless a satisfactory 11 that page, in the second bullet point, a reference to 11 solution was found re both the above potential 12 12 something called KH 35, and it's described as "a key approvals. BK had arranged for the BBA persons 13 system on the market, a real trend". The question there 13 responsible for each product to be in attendance. (This 14 is: what is that? Is that a reference to a cassette 14 was excellent speaking with the approval technicians 15 system offered by Arconic? Does it follow, therefore, 15 rather than just Sales!)." 16 16 that the original plan was for the BBA certificate to Then if we go down to page 115 17 17 ${MET00053158_P14/115}$, you can see that there is: cover the cassette form specifically? 18 There is a later meeting in 2006 in Watford on 18 "Meeting B - RB-55 proposal dated 23.08.06 with 19 2 November. Can we go to {MET00053158_P14/114}, 19 2.0 a different exhibit of Mr Wehrle's. Again, you can see 20 "BBA confirmed that they would look at the original 21 that it's in the format of an Alcoa/Arconic visit 21 proposal and try to reduce the cost. They will use CSTB 22 report. The company visited, as you can see from the 22 details as a Basis of Validation, but are concerned that UK building Regs are more demanding than French regs!! 2.3 left - hand side, is BBA, British Board of Agrément. It's 23 2.4 written by Colin Southgate at Watford, and the date of 2.4 Also enclosed was fire regulation input — This will not the visit is 2 November 2006. From "Copy", you can see 2.5 be needed if BBA have latest certs from 77 79 1 that it's sent to both Guy and Didier Scheidecker, 1 Warrington research covering PE cores." "S Wah", who we think is Serge Wahler, Claude Wehrle and Then on the right-hand side, you will see in bold 2 2 others 3 3 Claude Wehrle, possibly Claude Schmidt, to send full If we go down to page 115 {MET00053158_P14/115}, 4 certs to BBA. 5 5 please, we can see at the bottom of that page that this Now, the BBA appear to have sought the latest certs 6 report was written by Mr Southgate on 6 November 2006, 6 from Warrington Research covering PE cores, as you can 7 7 so just a few days after the meeting at Watford. You see there. Now, those can only have been fire 8 8 can see the date in the bottom right-hand corner there. certificates, and the question or at least one question 9 9 If you go back, please, to page 113 is: what exactly was Arconic offering to send by way of 10 ${MET00053158_P14/113}$, here is an email from 10 certs, certificates, to the BBA? 11 colin Southgate on 6 November 2006 to people at Arconic, 11 Now, remember that at this point, November 2006, 12 including Guy Scheidecker and Claude Wehrle, in which he 12 Arconic had the following fire performance reports from 13 attaches a report, and that is this document. 13 Warrington: we have the Reynobond 160 PE class 0 summary 14 Can we then go back to the report, please, to 14 from 1997, {ARC00000357}; the test reports from 2003 for 15 page 114 {MET00053158_P14/114}, and you can see under 15 RB 55 FR core panel, which would achieve a class 0 16 the first block there that it's a record of a meeting, 16 result; the class 0 reports for the three thicknesses of 17 as it explains, and the reason for the visit is: 17 RB 33, the signage product, from 14 September 2006; the 18 "Exploratory call to access situation as follows 18 class 0 report for Reynobond 55 FR-cored panel, also 19 with [Claude Wehrle] in attendance." 19 from 14 September 2006; and, of course, Arconic also had the results from the 2005 tests, tests 5A and 5B, from 2.0 2.0 The second item there is: 21 "Negotiate REYNOBOND 55 proposal sent 22.08.06 value 21 2.2 2.2 So what was it that was going to be sent? 2.3 I should have identified a little bit earlier or

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Continuing with the visit report, in the second

paragraph, the author of the report goes on

{MET00053158 P14/115}:

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above that in the document that those present from the

BBA were Bob Keyse, the business manager, John Albon,

1	"I have suggested that it could be better to	1	the line you can see that the visit reason was:
2	validate the material RB rather than the whole system.	2	"Reynobond & Reynolux certification.
3	This way a cross connection can be put together."	3	"Attendees: SOUTHGATE, RICH; SCHEIDECKER/Monsieur
4	Now, this raises the question about what that meant	4	HAMO GREGORIAN; Monsieur KEYSE Bob."
5	or who said it and in what context, but critically , why	5	Under the heading "Reynobond", it says:
6	it "could be better" to validate Reynobond material	6	"The need of the BBA certification is always more
7	rather than the whole system.	7	and more important.
8	The next sentence:	8	"In more than 50% of the projects the contractors
9	"This way a cross connection can be put together."	9	are requiring the BBA approval, and especially in
10	In what way could a cross—connection be put	10	residential buildings, which became a key market for
11	together? What does that mean?	11	ACM.
12	More broadly, was there any discussion at this	12	"We have lost orders in favour of Alucobond as we do
13	meeting of test 5B on PE cassette and what it showed?	13	not had this approval.
14	Was there a discussion about whether the proposed	14	"Alucobond is the only ACM supplier with this
15	BBA certificate should differentiate between rivet and	15	approval at the time being, but it will be a real
16	cassette—fix variants for PE? Was Arconic looking to	16	[differentiation] point for the coming month.
17	get the BBA to certify the Reynobond 55 panel as	17	"The BBA agrees to make the certification on the
18	a product without considering the fire performance of	18	product without to be linked to a specific system.
19	each of the different fixing systems, rivet and	19	"Possible fixing system will be simply [mentioned]
20	cassette?	20	in the certification .
21	If we go back to the report at the bottom, focusing	21	"It means we will have only 1 approval for all our
22	on the bottom of that page:	22	application, instead to make one approval per system.
23	"Conclusion — Very positive meeting and hard tactics	23	"If people will ask for more details we will use the
24	may have helped our situation.	24	CSTB specific approvals.
25	"RB proposal will be lower	25	"[Initially] there[sic] quotation was on 24.000£ but
	81		83
1	"Prepared to work with the CSTB data.	1	after [negotiation], CSO obtained to have it for
2	"AAP—M [Arconic Merxheim] do need BBA for UK	2	16.500£."
3	market."	3	Then "Action", you can see underneath that:
4	Two questions: what is meant by hard tactics?	4	"— sent our french building approvals in english —
5	Secondly, when it says "Prepared to work with the CSTB	5	[Claude Wehrle].
6	data", what precisely is that data or was that data?	6	"— sent the documents of our CSTBat approval —
7	There is then a further meeting a little bit later,	7	Claude Wehrle]."
8	also at Watford, early in the first few months of	8	And other things as well.
9	2007 — to be precise, 7 February 2007 — between	9	_
10	Arconic and the BBA, also at Watford.	10	If we go down to the bottom of page 131, please, we can see "Conclusion":
11		11	
12	Can we go, please, in the same exhibit bundle to page 130. This is {MET00053158_P14/130}. This is	12	"BBA approvals are very important for the development of the UK business.
13	an email from Didier Scheidecker to Guy Sheidecker and	13	"It is a real point of support and recognition on
	Claude Wehrle, copied to Serge Wahler and	14	
14			the market." Now, this document raises the specific question or
15	Colin Southgate, attachment, "Fiche ACTIONS", and it	15	
16	says:	16	overall question, which is whether there was
17	"Guy, Claude,	17	an agreement or an understanding or an arrangement of
18	"Please find attached the visit report following our	18	some kind whereby the BBA should avoid focusing on the
19	discussion at the BBA.	19	specific fixing system with a view to concealing the
20	"I remain at your disposal should you have any	20	poor fire performance of the cassette system behind the
21	questions."	21	better fire performance of the rivet system. When I say
22	Over the page at page 131 {MET00053158_P14/131}, we	22	"with a view to", I don't mean that anybody necessarily
23	will find the attachment. This is a visit report,	23	had any specific subjective intention, but whether that
24	"Rapport de visite", of 7 February 2007, and in the	24	was objectively viewed the goal. That is the line of
25	header we can see that the visit was to BBA, and under	25	investigation that would need to be pursued, even to the

1 point of understanding people's subjective intentions primer manufacturer." 2 2 So that's the request from Mr Gregorian. and motives 3 We then turn to the BBA contract itself, and that's 3 If we scroll down to page 136 $\{MET00053158_P16/136\}$, 4 March 2007 You will have seen this from earlier 4 at the top of the page we can see the solution proposed 5 examinations. The contract is dated March 2007. 5 by Claude Wehrle in his email of 5 December 2007: formally entered between Arconic and the BBA. We've "Hello Hamo. 6 6 seen that at {BBA00008042}, and since you're familiar 7 "After having checked with our paint laboratory and 8 with it, I shall just recite it very briefly. 8 the different certification we have today, I give you 9 It was signed on 21 February 2007 by Arconic and by 9 those two information in order to qualify the back face 10 10 the BBA on 23 March 2007. Its terms and conditions of our Reynobond panels. 11 include clauses 7(a) and (g), and in particular, under 11 "1- The only difference between front and back side 12 12 7(a), the terms and conditions required Arconic to is the thickness of the coating witch is 6 [microns] 13 provide the BBA with any test data already available. 13 instead of 35 [microns]. So we have 14.2 g/m² coating 14 Now, at that point, and again to some extent 14 weight on the back face for 47.2 g/m² on the front side. 15 repeating it, we know from the documents that, over 15 "2- Like you can see in the attached 'reaction to 16 16 fire classification report No. RA07-0182', our coated a period of time, Arconic provided the BS 476 test 17 reports for tests on FR core from 2003, test 5A from 17 [aluminium] used for the skins of Reynobond are 18 2005, and the 2006 European classification for the FR 18 classified as A1 (non combustible). 19 19 "Can you please now let me know if you have all the 2.0 We will see when we come to examine Mr Gregorian 20 required information to close our certification process?' 21 that test 5A from late 2004 and the test report from 21 22 early 2005, January 2005, was supplied to the BBA upon 22 This seems to be how the Reynolux certificate came their specific request in May 2007, so two months or so 2.3 23 to be sent to the BBA. Revnolux is a completely 2.4 2.4 different product from Reynobond. It's a single sheet after the formal contract was entered into. In November 2007 a further document was provided to 2.5 of coated aluminium. 85 87 1 the BBA, also in support of fire performance. Can we go 1 One can read these emails, but what appears to have 2 to the BBA technical file, please, at {BBA00008042/139}. 2 been happening is that Arconic was proposing that if the 3 This is a classification report numbered RA07-0182 under 3 paint or coating doesn't burn on the front side, then EN 13501. It's in the BBA technical file, so we know having less paint on the back side should be sufficient 5 they had it, and it relates, as you can see from the 5 to allay the BBA's concerns. If that's the right way of commercial brand, to Reynolux. At the bottom of the 6 reading these documents, then the technical basis of 6 7 screen, you can see that it's dated 14 May 2007. that assertion would itself invite examination. 8 Can we look, please, at page 145 $\{BBA00008042/145\}.$ 8 Again, we can see that the Reynolux certificate, 9 9 Here we see the classification and direct field of although I took you to it quite quickly, refers to 10 application for this Reynolux product, and we can see 10 a completely different set of tests, namely the European 11 under paragraph 4.2 that its classification is A1. 11 classification, EN 13501, and not class 0, not BS 476-6 12 Let's examine a little bit more closely why it was 12 and 7. The question that arises in that connection is 13 supplied to the BBA. 13 why Mr Wehrle provided that certificate in particular, 14 Can we start, please, by looking at Mr Wehrle's 14 and how it justified a claim about Reynobond achieving 15 exhibit at part 16, {MET00053158_P16/134}. At 134, 15 class 0 16 I would like to begin with the email at the bottom of 16 Can we then turn to the BBA certificate itself 17 that page from the BBA, Hamo Gregorian, to Claude Wehrle issued in the January of 2008, and this document is 17 18 on 29 November 2013 at 13.43. He says: 18 at -- I'm sure this reference is now familiar to you --19 "Claude 19 {BBA00000047}. 2.0 2.0 Now, can I start by taking you to section $\, 6 \,$ on "We already have the 'reaction to fire' data for the 21 21 page 5 $\{BBA00000047/5\}$, under the heading "Behaviour in exposed face. 2.2 'For our Building Regulations, we also require 2.2 relation to fire". I want to focus first on 2.3 23 similar data, i.e. testing and classification to section 6.5, resistance to fire. It says:

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"For resistance to fire, the performance of a wall

incorporating the product, can only be determined by

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EN 13501 or BS 476, for the back face.

"You may be able to obtain this information from the

1 tests from a suitably accredited laboratory, and is not pages 17 and 18 under section 5, and specifically 2 covered by this Certificate." 2 section 5.2.2 for part 6 and 5.2.3 for part 7. So 3 Now, that's what the certificate says. 3 that's reaction to fire. 4 Let's look and see what Mr Wehrle says about that. 4 For resistance to fire, you need to look at Can we go to his statement at ${MET00053190/17}$, a completely different part of BS 476, and that's 5 5 paragraph 58. He says -- I'll read it all so you have part 20, and that's at {BSI00001748}. It defines 6 6 7 the full context: 7 resistance to fire under section 2.3 on page 7 of that "The BBA Certificate also makes it very clear, in document as a measurement of the time for a standard 8 8 9 paragraph 6.5, that in relation to resistance to fire, 9 temperature over time and a pressure regime without loss 10 10 the performance of a wall incorporating the product, of its fire separating function or loadbearing function, 11 i.e., the performance of an actual cladding system (as 11 or both. 12 12 opposed to a mock system under test conditions), could So to test a wall incorporating Revnobond and other 13 only be determined by tests from a suitably accredited 13 elements, you would need to conduct tests under laboratory, and would not be covered by the certificate 14 14 BS 476-20. It's a different concept, it's a different 15 (which related to the product and not to the method of 15 test. The same distinction, I should say, also applies 16 16 fixing or any other feature of the system). In other in the European classification tests. 17 17 words, the fact that the certificate explains that a PE The question, when one comes back to see what 18 sample achieved an EN B classification in a particular 18 Mr Wehrle says in his statement, or one question, is 19 systems test was not a guarantee that the outcome would 19 whether Mr Wehrle understood that distinction when he 2.0 2.0 read the BBA certificate, whether in draft or at all. be the same in different systems or with different 21 fabrications ' 21 There is of course a question for you as a matter of 22 As you can see, he is referring specifically there 22 fact about whether he ever did read it anything other 2.3 23 to paragraph 6.5. than cursorily anyway. 2.4 2.4 I'm going to go on to a different document, which is The words in brackets there invite examination. 25 "which related to the product and not to the method of 2.5 quite a long document, and I'm not going to finish it 1 fixing or any other feature of the system", but let's go 1 before the break, but I'm making very good progress. 2 back to the certificate itself at page 5 {BBA00000047/5} 2. So, Mr Chairman, now would be an excellent time to stop 3 again, please. We have been looking at section 6.5, 3 for the lunch break if that is convenient to you and the which is about resistance to fire, as you can see. If SIR MARTIN MOORE-BICK: Yes. Well, that sounds very 5 we look up to the top of the screen, paragraph 6.1, and 5 ergo 6.2 and 6.3, relate to reaction to fire, as you can 6 6 sensible if you're going to start another document any 7 7 see under 6.1 in the third line, "when tested for moment. 8 8 reaction to fire". Also in the first line, "when tested So we will take a break now. We will resume at 9 9 for reaction to fire". 2 o'clock, please, and look forward to seeing you again 10 Now, the wording difference may be subtle, but it is 10 then. Thank you very much. 11 critical. The results stated in 6.1, 6.2 and 6.3 of the 11 (12.57 pm) 12 certificate pertain to reaction to fire; section 6.5 is 12 (The short adjournment) 13 not about reaction to fire, it's about resistance to 13 (2.00 pm) SIR MARTIN MOORE-BICK: Good afternoon. Welcome back, 14 14 fire 15 15 Reaction to fire and resistance to fire are everyone. We are currently in the course of hearing 16 different concepts. They have different test regimes, 16 a presentation by Mr Millett of the Arconic documents. 17 17 and that was explained in passing by Dr Lane in her So, if you're ready to continue, Mr Millett, please 18 presentation to you on {Day68/41} to {Day68/42}, and 18 do so. 19 indeed as referred to recently by Mr Mort in his 19 MR MILLETT: Mr Chairman, I am, thank you very much. 2.0 2.0 evidence on Day 102. There is one event that occurred during the time 21 21 If one uses the British Standard 476 suite of tests. that the BBA was assessing Revnobond for certification 2.2 you can see the scheme very clearly laid out. BS 476-6 2.2 in 2007, which is where we were when we left off before 23

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and 7 are reaction to fire tests, as defined in part 10

of BS 476. I'll just give you the reference for that:

that's at $\{BSI00001757\}$ that's the 2009 version, at

Can we go first, then, to {META00001953}. This is

an Alcoa visit report, as you can see, and the visit is

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1 to a company called Astrup in Oslo, Norway, and the 2 report is written by Gérard Sonntag. The date of the 3 visit is 11 to 13 September 2007. The people present 4 were some people from Astrup, and from Arconic you can 5 see who was present: Gérard Sonntag, the marketing manager, and Didier Felder, area sales manager. 6 7 At point 1, if we look a little bit lower down the 8 document, you can see the reason for visit: 9 "Astrup organized a 3 day open days to celebrate the 10 150 years of the company.' Below that we can see that, under "General 11 12 information". Astrup is described as: 13 "... the biggest Metal and Plastic distributor in Norway with 4 warehouses and 4 [additional] sales office 14 15 around the country." 16 That's what it says. 17 Can we look at page 2 of this report 18 {META00001953/2}, please. You can see a section there 19 called "Seminar presentations", under which it says: 2.0 "Each of the suppliers was invited to present two 21 times over the 3 days their product or a subject related 22 to his product." Below that we see "AAP-M", and then "OTEFAL" 2.3 2.4 underneath that. That OTEFAL presentation is 25 a reference to a presentation given by

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Mr Fred—Roderich Pohl, and you can see that towards the bottom of the page, if you go about halfway down that block of text.

Picking it up, it says:

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"Mr Fred—Roderich Pohl, 'Pohl Consult International', was during more [than] 20 years the export manager for Alcan/Novelis FF2 and FF3 in the Alloy 5754H42 and is working as consultant for specification work. He write also regularly article in different aluminium and wall cladding magazines in different countries. The last called 'Solid Aluminium versus ACM' was published in the 'International ALUMINIUM Journal' in July/August 2007. He is preparing a new book that he planned to publish for end of the year concerning cladding solutions with painted Aluminium."

Now, that's important because we get to see next what the content of the presentation is and what Mr Sonntag, the author of this report, says about it.

If we go to the bottom of page 2, we can see he says:

"The presentation where he compares ACM and solid aluminium was a very high [shock] for me from two points of view. On one side a part of the information that he used against technical possibilities and deflection of

the ACM were not true or only partly and two much orientated on the specification of Alucobond.

"On the other side, the true information that he give of the fuel power of a PE core on a project of 5000m² where he compare it to a truck of 19,000 liter oil is very impressive and was well received by all customers who were present during the presentation. The arguments was also documented with pictures of the ACM fire in the world and a movie from the twin tower in Doha showing how quick a fire can evolutes[sic] with a PE ACM core.

"All arguments were supported by the pictures who showed a tremendous big volume of topics smoke who is even much more dangerous than the fire himself because in such a case a person can die from the smoke emission within the first two or three minutes of the fire."

If we go down to the second—last paragraph in this section, staying on the same page, it says this:

"Claude Wehrle showed me two month ago a copy on paper from this Alcan/Novelis presentation where the arguments were mentioned but Mr. Pohl is a very persuasive person and the arguments are ten times much stronger during the seminars."

If we now go to the conclusion in this document, three paragraphs down, he says:

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"Let's imagine that OTEFAL organize a lobbying activity on the European [Parliament] and show such a presentation in Bruxelle, the result could become catastrophic for the ACM products. One of the arguments from Mr. Pohl was: 'what will happen if only one building made out PE core is in fire and will kill 60 to 70 persons, what is the responsibility of the ACM supplier?'

"If we want not to take any risk for anyone and be proud of the EHS value of Alcoa we should evaluate a new option in our LT strategic Analysis. What could be the financial results and impact on the market if Alcoa decide to sale Reynobond Architecture only with an FR core and launch it on BAU 2009. In parallel, we should of course in this case launch a cost reduction program to become able to produce the FR to the cost of the PE."

Then he signs himself off, "Gérard Sonntag, Marketing Manager".

Now, that document I've read at some length. Clearly allowances need to be made for the author's English, but it's very clear notwithstanding that.

Questions which arise would include: was there any discussion within Arconic, either before or after this meeting, about selling only ACM with an FR core? If there was, what happened to those discussions?

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1 Specifically, was there any discussion within Arconic ${MET00053190/19}$, at paragraph 64. At the end of that 2 about Mr Sonntag's question: what is the responsibility 2 paragraph, you can see it says, three lines up from the 3 of the manufacturer in the event of a fire of the type 3 bottom: 4 and magnitude he describes? 4 "It is correct to say that different air gaps and We can see from the last paragraph I've just shown 5 5 types/thicknesses of insulation, for example, are likely you that Mr Sonntag proposed that Arconic should launch to influence the test result achieved. I had previously 6 6 a cost reduction programme to be able to produce the FR 7 used an air gap of 50 mm for some tests, but since July 2011 I believe only air gaps of 20 mm were used." 8 to the cost of PE. The question there is whether this 8 9 meeting and the content of it, as shown by this 9 You can see the 2011 report was February 2011. 10 document, was the driver for the programme, "FR @ PE 10 Now, let's look at some contemporaneous documents on 11 cost", that was discussed in the evidence. Was the 11 that question next. 12 12 {MET00053158/184}. This is part 1 of Mr Wehrle's background to that programme the known dangers of 13 PE-cored ACM identified in this paper? 13 exhibit run. This is the end of an email chain with 14 14 If we could then turn to 2011. CSTB about testing later on in 2011. 15 We will go back with the BBA witnesses, of course, 15 If we go to the bottom of page 184, we can see 16 to the BBA certificate in due course. We have already 16 an email of 1 July 2011 from Claude Wehrle to 17 seen quite a lot of that already anyway. 17 Maxime Bauer at the CSTB, and he says: 18 In 2011, some six years after the initial tests 5A 18 and 5B on Reynobond 55 PE, Arconic performed two more 19 19 "Can you tell me how big the air gap between the 2.0 2.0 Reynobond cladding and the insulation was during the European classification tests on that material. I can 21 start with the rivet. 21 22 22 As you know from test 5A, the classification Above that you can see Mr Bauer responds, and he 2.3 accorded to rivet in 2005 was B-s1, d0. There was 23 savs 2.4 a further classification in 2011, and this is dated 2.4 "The air gap was 20 mm for all tests performed so 25 9 February 2011, and it's at {ARC00000383}. You can see 2.5 far. We use 30 mm rock wool." 1 the date of that, 9 February 2011, and if we go to 1 Above that we can see that Mr Wehrle thanks him and 2 page 4 {ARC00000383/4} we can see the classification: 2 3 B-s1, d0. So that's the 2011 classification . 3 "I do think that this is how the panels should be Can we have up at the same time test 5A from 2005, 4 tested, because that's how they are used." and have again, please, page 4 $\{ARC00000358/4\}$. We can 5 5 That then raises a number of questions at this time. see there that in 2005 the test 5A was B-s2, d0. 6 First, who was responsible for designing the test set-up6 7 7 If you look at section 4.3 under "Field of in 2005 and 2011, in particular for testing the cladding 8 application" at the foot of each of the pages, you can 8 with a 50-millimetre air gap as opposed to 9 9 a 20-millimetre air gap? Did Mr Wehrle himself think compare the two. On the right—hand side of the screen 10 you've got test 5A, 2005, showing in the second bullet 10 that 20-millimetre air gaps were how Reynobond panels 11 point under the second heading under 4.3, "Field of 11 were typically used, and if so, was that the case in 12 application", it says: 12 2005 or did perhaps his understanding change between 13 "With a minimum air gap of 50 mm." 13 2005 and July of 2011? Did he think that 50-millimetre If you look then to the left -hand side of the 14 14 air gaps did reflect or did not reflect the typical 15 15 end use of panels? What was it about the situation that screen, and look at the 2011 classification report in 16 the same place, in the second bullet point, it says 16 pertained in 2005 that led him to test the panels with 17 again: 17 a 50-millimetre air gap in that year, and indeed the 18 "With a minimum air gap of 50 mm." 18 same in the February of 2011? 19 So you've got -- just to summarise -- the 2005 19 That leads to a broader question: if it's right that 2.0 2.0 the air gap can make a difference, and if it's right test 5A classification B-s2, d0, and in 2011 a slight 21 21 improvement, B-s1, d0, both of which say a minimum that the 50-millimetre air gap was not realistic, then

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were the tests that produced the B classifications for

February 2011, B-s1, d0, truly representative of the

PE in rivet-fix in 2005. B-s2. d0 under test 5A. and in

expected fire performance of PE-cored Reynobond in rivet

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air gap of 50 millimetres.

Now, there is a question or line of investigation

about that air gap. Can we start looking at that by

going to Mr Wehrle's witness statement at page 19

1	form?	1	Ernst Gregorites —— I think it's Ernst Gregorites rather
2	There is some further evidence that sheds a little	2	than Gregorites Ernst $$ and he says:
3	bit of light on that question. After the February 2011	3	"Hi Claude!
4	test, $rivet$ – fix Reynobond never got a B classification	4	"I don't think you understood my question.
5	in European tests under EN 13501 again. Thereafter, all	5	"According to the SBI test, Reynobond PE was 'B' and
6	the tests indicated that it was a class C.	6	now suddenly it's 'E'.
7	Can we go to a bundle of unexhibited documents,	7	"On the one hand 'E' cannot be mounted on the facade
8	${MET00064988/129}$. This is a set of documents not	8	any longer and on the other hand I don't understand how
9	exhibited to any of the Arconic witnesses' statements.	9	a core can be reclassified from 'B' to 'E'?"
10	At page 129 you can see an email from Claude Wehrle	10	The response, if one scrolls up a little bit higher,
11	to Julie Kasyanik, who was a sales representative for	11	from Claude Wehrle to Mr Gregorites is:
12	Arconic in 2016. They are discussing here fire	12	"Hi,
13	certification of a competitor. This is an email from	13	"It was always 'E' for cassettes.
14	Mr Wehrle to Julie Kasyanik, and he says:	14	"For the riveted system it was 'B' but only with
15	"Julie,	15	a certain rear ventilation distance.
16	"This is a certif. for PE, not for FR.	16	"The new certification is now valid for both systems
17	"We also had a class 'B' at the time in PE, but by	17	(cassettes and riveted). We were asked for there to be
18	'arranging' the system to pass.	18	only one class per product, depending on the system.
19	And he puts the word "arranging" there in inverted	19	"I hope it's clear. If not we can talk on Monday."
20	commas:	20	Now, this raises the obvious question whether
21	"So this report is really not a reference.	21	in fact the Euroclass B was and had always been known by
22	"Have a nice weekend."	22	Mr Wehrle to have been achieved by using a 50-millimetre
23	Now, this email and its meaning was put to	23	air gap, such that in fact, when tested with the
24	Mr Schmidt on $\{\text{Day}91/76{:}3{-}6\}$ and he was unable to assist	24	requisite 20-millimetre air gap, it would not have
25	us. The question therefore remains outstanding: what	25	achieved a B. That's the outstanding question. One
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1	did Mr Wehrle mean by arranging the system to pass?	1	outstanding question.
2	Does that mean that it was manipulated so that it would	2	Can we next turn back to 2011 and look at what
3	pass or was there some other meaning to what he's saying	3	happened with the test done by the CSTB for PE cassette
4	here? If that is correct, in what way was the	4	in that year.
5	arrangement made? Specifically, was the CSTB providing	5	If we go to Claude Wehrle's witness statement,
6	any particular advice or assistance in making the	6	please, at page 18 $\{MET00053190/18\}$, paragraph 62 first.
7	arrangements, whatever they were, for the rivet tests to	7	At paragraph 62 he says this:
8	get a B? Was anybody else assisting or advising,	8	"On 29 March 2011, I sent the CSTB an e-mail with
9	for example a fabricator? Who else within Arconic knew	9	a copy of the 'unclassified' test report from the 2005
10	about this arrangement to pass, as Mr Wehrle described	10	cassette PE test and enquired what was the best
11	it? Was this a course of conduct sanctioned by upper	11	classification that could be attained with the said
12	management?	12	report (I enquired whether a Classification D could be
13	There is another document which may also shed light	13	possible) (exhibited at P109). I had become aware from
14	on these questions, but it's later, it's in 2014. Can	14	discussions with either the EAA or the CSTB some time
15	we go to $\{MET00064988/64\}$. This is an email of	15	around 2010 that other products similar to AAP SAS' PE

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we go to $\{MET00064988/64\}$. This is an email of 31 January 2014. If we look at the bottom of the page, page 64, you can see that it is from a gentleman called Gregorites Ernst to Claude Wehrle. As we will see, and indeed have already seen, on that date, 31 January 2014, both rivet and cassette PE were classified as class E by

Now, if we follow the email chain up from page 64 through 63 to 62 {MET00064988/62}, you can see how this works.

The question, if we follow up 62, comes from

around 2010 that other products similar to AAP SAS' PE product had possibly shown a difference in reaction to fire testing between the cassette and rivet variant. I was therefore concerned to find out whether AAP's original understanding, i.e., that the rivet variant would perform less well, could be incorrect, and I wished to check this position through further testing."

So we see here that Arconic waited six years before instructing the CSTB to perform another test on Reynobond 55 PE. We can also see that Mr Wehrle says he

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1	didn't even ask for a full set of the three tests. The	1	"I propose that this project be concluded for an
2	question we would have is: why is that? Why did he not	2	amount of EUR 2297 (SBI test $+$ cleaning costs $+$ main
3	ask for that, and why did he wait so long?	3	burner repair)."
4	We can also see that he asked if he could use	4	So like the 5B test, the PE cassette test in 2011
5	test 5B in order to get a class D on the PE cassette.	5	was stopped for the reasons that Mr Bauer gives in this
6	Now, if one puts that in context, looking at the	6	email.
7	time $$ this is 2011, March 2011 $$ we know by this time	7	At the top of the page, if we look up at the top of
8	that Mr Wehrle is aware of fires, for example the	8	the screen there, we can see that Mr Wehrle responds on
9	Bucharest fire in 2009, and in his own words how	9	the same morning, a few minutes later:
10	dangerous PE can be when it comes to architecture.	10	"Hello,
11	That's a reference to his email of 17 July 2009 to	11	"Is this far from a 'D' classification?"
12	Claude Schmidt at {MET00053158_P10/122}.	12	The question that arises on that document is whether
13	To add to that, you saw emails on 15 and	13	he thought at that time that it was realistic for the PE
14	16 March 2010, so almost exactly a year before these	14	cassette version of Reynobond 55 to obtain a D
15	events he's describing at paragraph 62, in which	15	classification at all.
16	Claude Wehrle told Isabel Moyses "RB in cassette doesn't	16	Now, here is what Mr Wehrle has to say about that
17	achieve a B either", and that was something to keep, in	17	test. Can we go to his witness statement, please, at
18	his words, "VERY CONFIDENTIAL". The English version of	18	page 18 {MET00053190/18}, at paragraph 63. It's
19	that email is at {MET00064988/125}.	19	important that you put this in the context of his
20	Now, in the light of the background events I've just	20	witness statement.
21	described from the documents, the questions that arise	21	He says:
22	are whether it was the concerns expressed in 2009 and	22	"In May 2011, I made all the necessary arrangements
23	2010 that had prompted Mr Wehrle's concern to revisit	23	for the CSTB to undertake tests in accordance with the
24	his original understanding that rivet would perform less	24	EN 13501 standard on a Reynobond 55 PE cassette variant.
25	well than cassette, and whether indeed he had realised,	25	The CSTB subsequently informed me that it had stopped
	105		107
	105		107
1	105 or at least suspected, before he decided to test	1	107 the test conducted in accordance with the EN 13823
1 2		1 2	
	or at least suspected, before he decided to test		the test conducted in accordance with the EN 13823
2	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further	2	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it
2 3 4	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue	2	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not
2 3 4 5	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic,	2 3 4	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to
2 3 4	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue	2 3 4 5	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges
2 3 4 5 6 7	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect	2 3 4 5 6	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to
2 3 4 5 6	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect that it was unfounded.	2 3 4 5 6 7	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges along the outer lines of the rivet variant may mean that
2 3 4 5 6 7 8	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect that it was unfounded. Let's remind ourselves next about what happened in	2 3 4 5 6 7 8	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges along the outer lines of the rivet variant may mean that once the panel reaches a certain temperature the core
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2 3 4 5 6 7 8 9	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect that it was unfounded. Let's remind ourselves next about what happened in the 2011 Reynobond 55 PE cassette test. Can we go, please, to {MET00053158/172}. If we go	2 3 4 5 6 7 8 9	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges along the outer lines of the rivet variant may mean that once the panel reaches a certain temperature the core begins to melt, leading to a relatively consistent drip
2 3 4 5 6 7 8 9 10	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect that it was unfounded. Let's remind ourselves next about what happened in the 2011 Reynobond 55 PE cassette test. Can we go, please, to {MET00053158/172}. If we go to the second email from the top of the page, we can see	2 3 4 5 6 7 8 9 10	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges along the outer lines of the rivet variant may mean that once the panel reaches a certain temperature the core begins to melt, leading to a relatively consistent drip of core from the panel, whereas in the cassette variant, where the bottom of the panel may have either a single or double return, once the panel reaches a temperature
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect that it was unfounded. Let's remind ourselves next about what happened in the 2011 Reynobond 55 PE cassette test. Can we go, please, to {MET00053158/172}. If we go to the second email from the top of the page, we can see that it's from Maxime Bauer of the CSTB on 29 June 2011. Again, I think you've seen this document before, but let's revisit it now that we have some further context. He says: "Hello Mr Wehrle, "We have performed a test on your reference 'REYNOBOND PE'. Unfortunately, we stopped the test	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges along the outer lines of the rivet variant may mean that once the panel reaches a certain temperature the core begins to melt, leading to a relatively consistent drip of core from the panel, whereas in the cassette variant, where the bottom of the panel may have either a single or double return, once the panel reaches a temperature where the core begins to melt, the core does not simply drip out of the panel, rather it collects in the return and continues to increase in temperature until it reaches the point of auto—ignition, generating what is referred to as a 'flash—over' event. I was aware that products are often tested with the anticipated result
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect that it was unfounded. Let's remind ourselves next about what happened in the 2011 Reynobond 55 PE cassette test. Can we go, please, to {MET00053158/172}. If we go to the second email from the top of the page, we can see that it's from Maxime Bauer of the CSTB on 29 June 2011. Again, I think you've seen this document before, but let's revisit it now that we have some further context. He says: "Hello Mr Wehrle, "We have performed a test on your reference 'REYNOBOND PE'. Unfortunately, we stopped the test before the end of the test.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges along the outer lines of the rivet variant may mean that once the panel reaches a certain temperature the core begins to melt, leading to a relatively consistent drip of core from the panel, whereas in the cassette variant, where the bottom of the panel may have either a single or double return, once the panel reaches a temperature where the core begins to melt, the core does not simply drip out of the panel, rather it collects in the return and continues to increase in temperature until it reaches the point of auto—ignition, generating what is referred to as a 'flash—over' event. I was aware that products are often tested with the anticipated result not being achieved, and that the testing is therefore
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	or at least suspected, before he decided to test cassette again in 2011, that the cassette test 5B from January 2005 was not a rogue result. There is a further question whether in fact the idea that 5B was a rogue result was ever a view genuinely held within Arconic, and if it was, when Mr Wehrle first began to suspect that it was unfounded. Let's remind ourselves next about what happened in the 2011 Reynobond 55 PE cassette test. Can we go, please, to {MET00053158/172}. If we go to the second email from the top of the page, we can see that it's from Maxime Bauer of the CSTB on 29 June 2011. Again, I think you've seen this document before, but let's revisit it now that we have some further context. He says: "Hello Mr Wehrle, "We have performed a test on your reference 'REYNOBOND PE'. Unfortunately, we stopped the test before the end of the test. "Note: Fall of large pieces of the small wing,	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	the test conducted in accordance with the EN 13823 standard before the end of the test period, that it therefore could not deliver a classification and that it proposed to close the matter at that stage. I was not clear why this would be the case, but I was coming to the conclusion that in actual fact the exposed edges along the outer lines of the rivet variant may mean that once the panel reaches a certain temperature the core begins to melt, leading to a relatively consistent drip of core from the panel, whereas in the cassette variant, where the bottom of the panel may have either a single or double return, once the panel reaches a temperature where the core begins to melt, the core does not simply drip out of the panel, rather it collects in the return and continues to increase in temperature until it reaches the point of auto—ignition, generating what is referred to as a 'flash—over' event. I was aware that products are often tested with the anticipated result not being achieved, and that the testing is therefore stopped and a classification report not produced. This

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variant, because, as things stood, I had two separate

different understanding about the behaviour of the

' unclassified ' test $% \left(1\right) =\left(1\right) \left(1\right)$ results , and now I had a potentially

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"Therefore, we cannot provide you with

a classification for the cassette version.

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cassette variant, and I wanted this to be reflected in an actual classification report. I therefore enquired whether a D classification could be obtained and when I was informed by the CSTB that this was unlikely I requested an F classification (the worst classification). The CSTB, however, informed me that it could conduct the test in accordance with the EN 11925 standard, and if the product satisfied the relevant criteria under that test it could be granted an E classification. I confirmed this approach with the CSTB and the classification report was subsequently received on 12 October 2011. Relevant documents are exhibited at P117."

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Now, a number of questions flow from the documents I've shown you and Mr Wehrle's evidence.

If there had been any shred of a view within Arconic that test 5B was a rogue, did this test in 2011 dispel that view? If it did not, why did it not?

When it came to his theory, as he's explained in some detail in this paragraph, about why cassette performed worse, namely — and I summarise — the pooling of molten PE at the return base of the panel, did he share that conclusion with anyone else within Arconic? If he did, with whom? If he did not, why did

What was his reaction when discovering that PE in cassette form was capable of producing a flashover event before the end of the test? Did he take steps to alert relevant customers or the BBA, or did he take any steps to remove the BBA from circulation? If he didn't, why was that?

We then come a little bit later in 2011, or indeed starting more or less at the same time in 2011, to the BBA's review of the BBA certificate. You will recall that the certificate had been issued in January 2008 and it came up for review in 2011, three years later.

We will look at the audits in a little bit of detail with the BBA witnesses to come, but if I could just summarise the position, it is as follows: the BBA did not perform a factory inspection at Merxheim because the BBA had contracted the CSTB to do that task. A new review project was opened in August 2010 under a new contract which had incorporated the original terms and conditions. That was signed in December 2010. That's {BBA00008044/11}. The BBA project manager at the time requested documents to perform a review, and those documents were provided as requested. The BBA did not pick up the fact or were not told that test 5A only applied to Reynobond in rivet form or that there might be a separate test 5B which had been done on cassette.

In June 2011 the BBA produced a review report at {MET00053158_P16/174}, and that said that the BBA certificate for Reynobond was valid until 2014, and that was sent to Claude Wehrle on 1 July 2011. The email of that date from the BBA sending that document to Mr Wehrle is at {MET00053158_P16/179}.

I just want then to remind you of a document we saw a few minutes ago. Can we go back to the Maxime Bauer email to Mr Wehrle of 29 June 2011. This is at $\{MET00053158/172\}$. I have read this out to you in detail , I won't re—read it, but you will recognise that this was the email by which the CSTB told Mr Wehrle that the 2011 test on PE cassette had been terminated before the end of the test.

The timing is what matters here: 29 June 2011. That's two days before 1 July 2011, when the BBA review report comes from the BBA to Mr Wehrle.

So the questions raised by the timing here are, first, whether Mr Wehrle realised that the review that the BBA had just done and had sent to him was missing some very important information, namely the recent result of the CSTB Euro test on PE 55 in the cassette variant. We've seen no evidence that Mr Wehrle told the BBA about the results of that test in 2011, and so one has to look at what Mr Wehrle says about that.

If we go back to his statement at paragraph 59 $\{MET00053190/17\}$, we see what he does say, because he does address the question. He says:

"Given the purpose and status of the BBA certificate as outlined above, it did not occur to me that it would be necessary, at a later date, to provide to the BBA any further testing information such as, for example, the result of the 2011 EN 13501 standard tests on the cassette variant. I had no reason to suppose that this affected the capability of the product itself to achieve Class 0, and I believe that if the BBA had been provided with the result of the EN standard Class E classification and had requested a further test under BS 476, this would yet again have led to a Class 0 outcome. I am not aware of the detail of the contracts between AAP SAS and the BBA. Over time. Colin Southgate, myself and Nicolas Remy have received BBA contract documentation, but as I organised the certifications in numerous countries I did not know all the contractual details relating to such. I rely on the relevant certification body to let me know what information it requires in order to undertake its assessment process, I also have every confidence in the on-going audit processes that the certification bodies conduct."

1	So you can see what he says.	1	are: did Mr Wehrle realise not only (i) that test 5B was
2	The second sentence there, which starts "I had no	2	not a rogue, but also (ii) that the theory that the
3	reason to suppose that this affected the capability of	3	cassette variant could be assumed to perform better than
4	the product itself to achieve Class 0", is one which	4	the rivet variant because of the cassette's lack of
5	raises questions. It raises particular questions about	5	exposed edges was no longer tenable, if it ever was?
6	how Mr Wehrle came to that conclusion, if it was one he	6	Was it also relevant that the Spanish regulation had
7	did come to at the time, and whether there was any	7	restricted the use of PE, but the UK had not changed any
8	discussion of that conclusion within Arconic.	8	regulations affecting the use of PE, or, in particular,
9	Later on in 2011 there is further relevant	9	requiring only the use of EN 13501 classification?
10	communication. Can we go to {MET00053158_P04/54}. We	10	We then go two years on to 2013, and an email of
11	can see from this document what Arconic is telling	11	April of that year.
12	customers at this time, namely in November 2011.	12	I'd like to go to {MET00053158_P04/123}. Now, this
13	Now, this is a formal letter from Claude Wehrle to	13	is an internal email within Arconic dated 4 April 2013.
14	Mr González of Endesa dated Merxheim, 23 November 2011,	14	We believe that it is to the French sales team at the
15	and he says:	15	time, from Hervé Marichez, copied to, among others,
16	"As the fire reaction tests recently changed in	16	Claude Wehrle and Peter Froehlich.
17	Europe, and especially for Spain, we kindly inform you	17	In the wider context, this is 4 April 2013, it's
18	that some modifications have to be taken into	18	a month or so before the 13 May 2013 email from
19	consideration for your project 'ENDESA'.	19	Debbie French which she sent to Simco and CEP and other
20	"Cladding systems for projects in Spain have to be	20	fabricators in the UK in the wake of the UAE fires, and
21	classified B-s3,d2 minimum (based on the EN 13501	21	you will recall that material. It is also after
22	standard)	22	Claude Wehrle's discussions in the February of 2013 with
23	"For the Reynobond FR, our riveted and cassette	23	CSTB about classifying both rivet and cassette—fix PE to
24	systems are both $B-s1,d0$.	24	class D, a topic he covers in his witness statement at
25	"For the Reynobond PE, our riveted systems are	25	paragraph 65 on page 19 {MET00053190/19}.
			, ,
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1	B-s1,d0 and our cassette systems are E.	1	You can see that the email is from Hervé Marichez,
2	"The ENDESA project is made with cassettes,	2	as I say, and he says:
3	therefore, we recommend you to use our Reynobond FR	3	"Hi JP and everybody,
4	product."	4	"After talking with Claude, we agreed that we (you,
5	The document speaks for itself. The question on	5	Patrice, Mareva, me) must not write anything related to
6	this document is: why did Claude Wehrle not tell the BBA	6	fire regulations which has not been validated or issued
7	what he was telling his customer, Mr González, here,	7	by Alcoa technical dept.
8	namely that the cassette PE had achieved a class E?	8	
9		9	"Why that? After showing Acodi and Sunclear
10	If we go to look on at Mr González's response of the next day, 24 November 2011, we can see what he says.	10	documents that they send to specifiers and customers
		11	(see attached), Claude advised me not to do the same
11 12	This is at {MET00064988/34}. He says:	12	since these does involve too much our responsibility on
13	"Dear Claude,	13	a 'touchy' subject.
	"After reading your letter, as technician, there is		"So I pass this info to all French sales dream team
14	some issues that I would like to have a bit more clear	14	[smiley face] so to avoid potential mistakes!"
15	in order to clarify them to our con custom and the	15	The attachment which you can see is identified from
16	constructors. We would like a brief explanation about	16	this email as "Classement feu d'Acodi", is at
17	how the fire reaction test have changed, how did they	17	{MET00053158_P04/125}, so just a couple of pages on from
18	affected to the PE and why if riveted system gets	18	here.
19		1.0	THE RESERVE TO A SECOND SECOND
20	B-s1-d0, the cassette one goes straight to E what, if	19	This email raises a number of questions —— that's
	B-s1-d0, the cassette one goes straight to E what, if you let me be sarcastic, is close to the spontaneous	20	the attachment, and in fact it's worth looking at the
21	B-s1-d0, the cassette one goes straight to E what, if you let me be sarcastic, is close to the spontaneous combustion."	20 21	the attachment, and in fact it's worth looking at the attachment while it's on the screen, because you can see
21 22	B-s1-d0, the cassette one goes straight to E what, if you let me be sarcastic, is close to the spontaneous combustion." Now, we've not seen in the Inquiry records any	20 21 22	the attachment, and in fact it's worth looking at the attachment while it's on the screen, because you can see Arconic's understanding of what the equivalences were
21 22 23	B-s1-d0, the cassette one goes straight to E what, if you let me be sarcastic, is close to the spontaneous combustion." Now, we've not seen in the Inquiry records any response from Mr Wehrle to the question posed in this	20 21 22 23	the attachment, and in fact it's worth looking at the attachment while it's on the screen, because you can see Arconic's understanding of what the equivalences were between the Euroclasses and the French classes, and
21 22	B-s1-d0, the cassette one goes straight to E what, if you let me be sarcastic, is close to the spontaneous combustion." Now, we've not seen in the Inquiry records any	20 21 22	the attachment, and in fact it's worth looking at the attachment while it's on the screen, because you can see Arconic's understanding of what the equivalences were

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equivalent to M4. You can see that on the right—hand

From this point on, November 2011, the questions

1 side it says: So that's how matters stood as at 31 January 2014. 2 "E. M4. Cassette: Reynobond PE/Alucobond 2 Both rivet and cassette were class E. 3 PE/Larson PE." 3 We then move through 2014. The next thing is the 4 The questions that arise on this email are: well. 4 email of 3 February 2014, which was sent by Mr Wehrle to what was the touchy subject exactly? What, if anything, 5 5 RAF liste commercial externe, among others, informing was it that Mr Wehrle had instructed the French the sales representatives in various European countries 6 6 7 sales team not to discuss with customers? Which 7 that the new classification for Reynobond Architecture 8 customers? And was it a specific instruction not to say 8 in PE was class E. 9 anything about fire regulation in particular? 9 We looked at that document with Arconic witnesses 10 10 The question for Mr Froehlich would be what he who gave evidence. There is no evidence that we have 11 understood by that message when he received it and what, 11 seen that Deborah French for the UK sent that 12 12 if anything, did he do about it. information to her UK customers. For your note, her 13 We then come a little bit later in that year to 13 evidence about this is at {Day88/138:2} and 14 14 July 2013 when Arconic instructed the CSTB to conduct {Day88/140:12}. She accepted that she would have read 15 further tests. The results of those tests were returned 15 that email, and she didn't forward it, and I don't want 16 in November 2013 16 to paraphrase her evidence, but you have her evidence 17 We've seen the document in the evidence of 17 about that. But that's the context of this event in the 18 Mr Schmidt, but just to remind you, can we look at 18 wider history Claude Wehrle's exhibits at $\{MET00053158_P02/38\}$, 19 19 Let's then look at the communications in the months 2.0 please. This is a run of emails you will have seen 2.0 after the 3 February 2014 email, and specifically what 21 before. At the very bottom of page 38 we have an email 21 happened in relation to a project called Woodberry Down, 22 from Benoit Forest to Philippe Vonthron at Arconic on 22 a residential high-rise property in North London. 7 November 2013, with the results of the SBI, single 2.3 23 Can we go to {MET00064988/97}, please. On page 97 2.4 burning item, test. Just to remind you, the SBI test is 2.4 here, we see an email dated 6 March 2014 from 25 EN 13823 2.5 a Mr Steeve Burger of Arconic to Michael Graf of 119

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He says, if we go over the page ${MET00053158_P02/39}$, that the result for the rivet-fix PE was class C-s2, d0, and the test for the cassette system, if you look a little lower down, said that the test had to be stopped at 800 seconds out of 1,260 seconds for widespread ignition.

"Best possible classification : E (ignition test)."

Now. that was the third time that the cassette test had been stopped for widespread ignition. We had test 5B in late 2004, we had the test done in the February of 2011, and now we've got it again in November 2013.

Now, the class C that you can see on this page, C-s2, d0 for PE in rivet, was not memorialised or formalised in any final classification report as opposed to a test report. Instead, Arconic, it appears, decided to classify all PE-cored Reynobond, whether rivet or cassette, as class E.

You've seen this before, I'll just show it to you again: $\{MET00053158_P04/135\}$. This is the CSTB classification report re-issue dated 31 January 2014. and you'll recall what's noted at the bottom of that page, if we just scroll down to the bottom of the page. It's a cancellation and rewrite, essentially, of the February 2011 and test 5A from January 2005.

Wittenauer in relation to "Woodberry down London/REYNOBOND core selection".

If you go to page 98 {MET00064988/98}, please, first , you can see that Steeve Burger is an area sales manager for Alcoa in Germany.

If we go back to where we were, page 97 ${MET00064988/97}, he says:$

"Hello Mr. Graf

"As discussed over the telephone: It is accurate, in England a PE core is enough (because PE and FR have the same test requirements).'

At page 88 of this email run {MET00064988/88}, if you just dot back to that, we can see that attached to the original German version of this email -- because what I've shown you is an English translation -- there is a list of fire classifications showing that both PE and FR have class 0 in the UK. You can see there Great Britain, and both PE and FR are said to have passed both part 6 and part 7 and therefore have class 0.

If we go to page 96 in the same exhibit run {MET00064988/96}, we can see what happens to the email from Steeve Burger. It is forwarded to a number of people in the Lindner Group from Michael Graf, and the Lindner Group appear to have been the façade specialists

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1	on the Woodberry Down project.	1	the bottom half of the page, we can see how Mr Burger
2	If we go to the bottom half of that page, you can	2	responds to Mr Dobmeier. He says:
3	see that Mr Graf of Wittenauer says to Mr Eigner of	3	"Thank you for your message.
4	Lindner, in the first paragraph, "Fire protection":	4	"After consultation with our technical department,
5	"Reynobond offers 2 different 'core materials'. On	5	I unfortunately have to inform you that we are not
6	the one hand, a PE core, which in Germany qualifies for	6	permitted to provide you with the full version of the
7	the classification B2 (normally flammable). On the	7	'Class 0 summary report'.
8	other hand, the FR core, which in Germany qualifies as	8	"This document does indeed contain some information
9	B1 (hardly flammable). The FR core is, in principle,	9	which is owned by Alcoa (such as secrets regarding the
10	also made of PE material, which, however, is mixed with	10	names of the supplier, material specifications, etc.).
11	fire retardant substances and thus qualifies as B1. In	11	"The same statement applies to the reports No.
12	England, according to Alcoa, even the slightly cheaper	12	322844 and 322845.
13	PE core would meet the fire protection requirements. To	13	"Other manufacturers only publish the results
14	what extent this makes sense, would have to be	14	(classification) and not the full reports as well.
15	coordinated with the customer or the authorities."	15	"If you have further questions on this subject,
16	Now, Mr Dobmeier of the Lindner Group takes this	16	please do not hesitate to contact our Mr. Claude WEHRLE
17	up —— because he gets this email from Mr Eigner, as you	17	(Head of Technical Dept.)"
18	see a little bit higher up the page —— with Arconic. If	18	And gives a number.
19	we scroll slowly up the page you can see that the email	19	Now, again, you can see the references there to
20	that I've just read out to you to Mr Eigner gets sent to	20	322844 and 322845. Those are the 2012 FR tests, not PE.
21	Mr Dobmeier, also of Lindner, and then if we scroll on	21	If we go on up then to page 93 in the same email run
22	up to page 95 {MET00064988/95}, we can see that he comes	22	{MET00064988/93}, Mr Dobmeier responds on the same day,
23	back to Steeve Burger on 4 April 2014, and he says:	23	and he says:
24	"Dear Mr Burger,	24	"Dear Mr. Burger,
25	"For the construction project Woodberry Down in	25	"Of course, I understand that your company does not
23	For the construction project woodberry Down in	23	Of course, I understand that your company does not
	121		123
1	London you have sent us the attached documents.	1	want to hand over the test report.
2	"Including the excerpt from the Class 0 summary	2	"However, you also want your product to be used and
3	report (4 pages)."	3	our duty is to account for the product with regard to
4	Just note the four pages there.	4	the building contractor. Moreover, in contrast to the
5	"For full supporting documentation of the materials	5	opinion of your technical department, you are only
6	used by us, I would like to ask you to send me the full	6	allowed to publish the report in its entirety. Every
7	report (9 pages), please.	7	classification report provides for this, as does your
8	"In addition, we need the supporting documents	8	report:
9	322844 and 322845 to account for the products to our	9	•
10	building contractor.	10	"This version of the report has been produced from a
			pdf format electronic file that has been provided by
11	"This summary should be read in conjunction with,	11	Exova Warringtonfire to the sponsor of the report and
12	and not accepted as a substitute for, the Exova	12	must only be reproduced in full. Extracts or
13	[Warringtonfire] test reports No's 322844 and 322845.	13	abridgements of reports must not be published without
14	Those test reports may include additional information	14	permission of Exova Warringtonfire.
15	which may be relevant to the assessment of the potential	1,5	"As far as I know, there are no secrets in the
16	fire hazard of the product."	16	classification report and your competitors will also
17	Now, we can tell from those certificate references	17	send us the complete documents.
18	that the Lindner Group was provided with the 2012	18	"We will not forward this information and will not
19		19	start recreating a sandwich panel.
	classification reports for Reynobond 55 with an FR core	10	·
20	done under BS 476-6 and 7 dated 5 November 2012. Those	20	"For this reason, I ask you once again to send me
20 21	done under BS 476 -6 and 7 dated 5 November 2012. Those are at $\{ARC00000610\}$ and $\{ARC0000608\}$ respectively. We		·
	done under BS 476-6 and 7 dated 5 November 2012. Those	20	"For this reason, I ask you once again to send me
21	done under BS 476 -6 and 7 dated 5 November 2012. Those are at $\{ARC00000610\}$ and $\{ARC0000608\}$ respectively. We	20 21	"For this reason, I ask you once again to send me the complete test and classification report."
21 22	done under BS 476 -6 and 7 dated 5 November 2012. Those are at {ARC00000610} and {ARC00000608} respectively. We looked at those with the Arconic witnesses briefly . So	20 21 22	"For this reason, I ask you once again to send me the complete test and classification report." Above that on page 93 we can see Mr Wehrle's

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"Dear Mr Dobmeier,

If we go up to page 94 {MET00064988/94}, and look at

1	"I have tried to call you but could not reach you.	1	core, and was all the available information sent to the
2	"Would it please be possible that we talk about it	2	client in order to assist him with the decision he had
3	together?	3	to make? The request was for information about which
4	"When would you have time for it?	4	core of Reynobond could be used in the UK. If all the
5	"Regards,	5	material in Arconic's possession was not sent to that
6	"Claude."	6	customer to enable him to make that decision, the
7	Let's go to {ARC00000609}, please. We can see that	7	question is: why not?
8	this is the report they were discussing, the class 0	8	Specifically , was this customer told that there was
9	summary report, 5 November 2012, and if we go to the	9	no test report supporting the classification of
10	fourth page, page 4 of this document {ARC00000609/4},	10	Reynobond 55 PE to class 0? If he wasn't told that, is
11	you will see that that is the last page. At the very	11	there a reason why he wasn't told that?
12	bottom of it, again you have the date, but you can see	12	We next go back a month or so to the October of 2014
13	just above the date, 5 November 2012, it says,	13	and further European tests run at that time.
14	"Page No.: 4 of 9". So that's the four pages that got	14	Can we look, please, at Mr Wehrle's statement at
15	sent.	15	page 21 {MET00053190/21}, paragraph 70. He says:
16	We do have, of course, a copy of the full report,	16	"The next EN 13501 testing that I organised on
17	the nine pages. Let's go to that. That's at	17	Reynobond 55 PE was later in 2014. It had become clear
18	{EXO0001948}. They're not exhibited by an Arconic	18	from discussions within AAP SAS and the wider market
19	witness; this is from Exova's disclosure. If you look	19	that, there was a desire to again have separate
20	at page 4 {EXO00001948/4}, under "Introduction", you can	20	classification reports for the PE rivet and cassette
21	see there that it summarises the tests that Mr Dobmeier	21	variants to more accurately reflect the classifications
22	referred to, numbers 322844 and 322845. You can see	22	that each had in practice obtained."
23	them there.	23	Then he goes on to explain how to achieve that goal.
24	Towards the middle of the page, at the blue header	24	As you've heard already, the rivet variant of PE was
25	"Introduction", you can see the penultimate paragraph	25	tested and classified C-s2, d0 in October 2014 in
	125		127
1		1	
1 2	there, which starts "This summary should be read in	1 2	various colours, and from that point on, all, or at
2	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied	2	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were
2	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we	2	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C.
2 3 4	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier.	2 3 4	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from
2 3 4 5	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this	2 3 4 5	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet
2 3 4 5 6	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down	2 3 4	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB
2 3 4 5 6 7	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to	2 3 4 5 6 7	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few
2 3 4 5 6 7 8	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers	2 3 4 5 6	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago.
2 3 4 5 6 7 8	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the	2 3 4 5 6 7 8 9	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January
2 3 4 5 6 7 8 9	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required	2 3 4 5 6 7 8 9	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both
2 3 4 5 6 7 8 9 10 11	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided?	2 3 4 5 6 7 8 9 10	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves
2 3 4 5 6 7 8 9 10 11	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page	2 3 4 5 6 7 8 9	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at
2 3 4 5 6 7 8 9 10 11	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided?	2 3 4 5 6 7 8 9 10 11	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette
2 3 4 5 6 7 8 9 10 11 12 13 14	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page version, if we go back to that —— I say the abridged four—page version; I mean the four—page abridged version	2 3 4 5 6 7 8 9 10 11 12 13	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette {MET00053158_P02/105}.
2 3 4 5 6 7 8 9 10 11 12 13 14 15	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page version, if we go back to that —— I say the abridged four—page version; I mean the four—page abridged version of the nine—page version at {ARC00000609/2} —— you can	2 3 4 5 6 7 8 9 10 11 12 13 14	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette {MET00053158_P02/105}. It's probably worth just putting the rivet report up
2 3 4 5 6 7 8 9 10 11 12 13 14	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page version, if we go back to that —— I say the abridged four—page version; I mean the four—page abridged version	2 3 4 5 6 7 8 9 10 11 12 13	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette {MET00053158_P02/105}.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page version, if we go back to that —— I say the abridged four—page version; I mean the four—page abridged version of the nine—page version at {ARC00000609/2} —— you can see that there is a table, and in the first row you can	2 3 4 5 6 7 8 9 10 11 12 13 14 15	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette {MET00053158_P02/105}. It's probably worth just putting the rivet report up on the screen, {ARC00000397}, please. You can see that
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page version, if we go back to that —— I say the abridged four—page version; I mean the four—page abridged version of the nine—page version at {ARC00000609/2} —— you can see that there is a table, and in the first row you can see that the product is described as, under "Product	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette {MET00053158_P02/105}. It 's probably worth just putting the rivet report up on the screen, {ARC00000397}, please. You can see that this is a classification report under EN 13501, commercial brand: Reynobond 55 PE riveted system, date: December 4, 2014. It's done pursuant to a test done in
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page version, if we go back to that —— I say the abridged four—page version; I mean the four—page abridged version of the nine—page version at {ARC00000609/2} —— you can see that there is a table, and in the first row you can see that the product is described as, under "Product reference", Reynobond FR. The original question posed by Lindner was whether	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette {MET00053158_P02/105}. It's probably worth just putting the rivet report up on the screen, {ARC00000397}, please. You can see that this is a classification report under EN 13501, commercial brand: Reynobond 55 PE riveted system, date:
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	there, which starts "This summary should be read in conjunction with", is exactly as Mr Dobmeier has copied it or perhaps screenshotted it into his email which we saw earlier. The questions which arise on this email run and this event, if I can call it that, are: did Arconic cut down reports like this routinely? Was it their policy to send only cut—down reports unless pressed by customers for the full report? Was that the case even where the testing house, such as Exova in this instance, required that the full report be provided? If we look at page 2 of the abridged four—page version, if we go back to that —— I say the abridged four—page version; I mean the four—page abridged version of the nine—page version at {ARC00000609/2} —— you can see that there is a table, and in the first row you can see that the product is described as, under "Product reference", Reynobond FR. The original question posed by Lindner was whether PE core was enough in England, that's what Steeve Burger	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	various colours, and from that point on, all, or at least the various colours of Reynobond PE rivet, were class C. Just to remind you, before that, from 31 January 2014, the class was class E for both rivet and cassette variants, and you saw the CSTB classification report re—issue of 31 January 2014 a few moments ago. So we have this period during 2014, from 31 January until October of that year, when Reynobond PE in both fixings was a class E. In October, rivet achieves a class C—s2, d0. The references for that are at {ARC00000397} for the rivet, and for the cassette {MET00053158_P02/105}. It's probably worth just putting the rivet report up on the screen, {ARC00000397}, please. You can see that this is a classification report under EN 13501, commercial brand: Reynobond 55 PE riveted system, date: December 4, 2014. It's done pursuant to a test done in October 2014. If you look at the classification on

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bullet point, "Various colours".

Now, the questions that arise at or by this point,

the end of 2014 -- as I say, the test was in October,

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The questions which arise on this whole exchange,

sent a report on FR core when the question was about $\ensuremath{\mathsf{PE}}$

beyond those I've identified already, are: why Arconic

1	this classification report is dated 4 December 2014 $$	1	sent to Gwenaelle Derrendinger, subject, "Labo Request
2	are, among other things, about the motivations for this	2	Client 'Harley Curtain Walling' créée par
3	further reclassification : who was it in the wider market	3	'Gwenaelle Derrendinger 04/10/2014'" $$ that must be
4	that had a desire for separate classification of rivet	4	10 April 2014 —— "is Submitted".
5	as opposed to cassette PE, according to Mr Wehrle?	5	The first line of the text you can see says:
6	Where was that desire coming from? Was there also	6	"Subject: Grenfell Tower project.
7	perhaps a desire within Arconic to have separate	7	"Client: Harley Curtain Walling.
8	classifications? If so, who was desiring that? What	8	"Contact: Mark Harris.
9	was the driver for this change? Was it commercial, or	9	"Use: Reynobond 55.
10	was it technical, or was it both in varying degrees?	10	"Transformation mode: Cassettes."
11	Now, that brings us to the end of 2014.	11	Questions arising on that document: did the mode of
12	One can look across to what was happening at	12	fabrication have to be entered into the CRM, as we can
13	Grenfell Tower at this point. You've seen the documents	13	see it has been here, in order to generate an order?
14	in Module 1, and when Deborah French gave evidence to	14	Did somebody have to manually enter the "Transformation
15	the Inquiry, and we know that she sent the	15	mode: Cassettes" into the CRM field? If they did have
16	BBA certificate to Harley on 23 April 2014, under	16	to enter that manually, who would have put "cassettes"
17	an email with the reference {CEP00000281}. That	17	in this document? Is it right that Arconic, as a result
18	certificate said that Reynobond 55 PE was classified as	18	of this system, could know in any given case the fixing
19	Euroclass B.	19	method for any given project? And is it right that in
20	We know that as at 23 April 2014, Reynobond 55 PE	20	this case Arconic did know that Reynobond 55 in cassette
21	was class E in any fixing system, rivet or cassette, as	21	form was going to go on to Grenfell Tower project if the
22	a result of the certification issued on 31 January 2014,	22	order was followed through?
23	which rewrote, among other things, test 5A.	23	Deborah French gave evidence about this and told
24	So when the planners approved Reynobond PE	24	the Inquiry that she believed that this document would
25	cassette-fix, as they did at the end of July 2014	25	have been generated by Gwenaelle Derrendinger. That's
	129		
	127		131
1		1	
1 2	informally and by the end of September 2014 formally,	1 2	French at $\{Day88/76:16-17\}$. If that is correct,
2	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had	2	French at $\{Day88/76:16-17\}$. If that is correct, questions arising are how Ms Derrendinger would have
2	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E.	2	French at $\{Day88/76:16-17\}$. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the
2 3 4	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the	2 3 4	French at $\{Day88/76:16-17\}$. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have
2 3 4 5	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the cassette remained class E, rivet was class C, C—s2, d0;	2 3 4 5	French at $\{Day88/76:16-17\}$. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have been doing so on instructions from somebody else, such
2 3 4 5 6	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the cassette remained class E, rivet was class C, C—s2, d0; therefore, neither of them met the EN 13501	2 3 4 5 6	French at {Day88/76:16—17}. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have been doing so on instructions from somebody else, such as Deborah French or perhaps Peter Froehlich or
2 3 4 5 6 7	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the cassette remained class E, rivet was class C, C—s2, d0; therefore, neither of them met the EN 13501 classification in ADB.	2 3 4 5 6 7	French at {Day88/76:16—17}. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have been doing so on instructions from somebody else, such as Deborah French or perhaps Peter Froehlich or perhaps — well, one doesn't know.
2 3 4 5 6 7 8	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the cassette remained class E, rivet was class C, C—s2, d0; therefore, neither of them met the EN 13501 classification in ADB. Now, for all that happened in 2014 on the	2 3 4 5 6 7 8	French at {Day88/76:16—17}. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have been doing so on instructions from somebody else, such as Deborah French or perhaps Peter Froehlich or perhaps — well, one doesn't know. Let's then pursue a little further the quotations
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2 3 4 5 6 7 8 9	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the cassette remained class E, rivet was class C, C—s2, d0; therefore, neither of them met the EN 13501 classification in ADB. Now, for all that happened in 2014 on the Grenfell Tower project, there was no order for Reynobond in 2014. That did not in fact happen until March 2015.	2 3 4 5 6 7 8 9	French at {Day88/76:16—17}. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have been doing so on instructions from somebody else, such as Deborah French or perhaps Peter Froehlich or perhaps — well, one doesn't know. Let's then pursue a little further the quotations and the order documents for Grenfell Tower. Can we go to Gwenaelle Derrendinger's witness
2 3 4 5 6 7 8 9 10	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the cassette remained class E, rivet was class C, C—s2, d0; therefore, neither of them met the EN 13501 classification in ADB. Now, for all that happened in 2014 on the Grenfell Tower project, there was no order for Reynobond in 2014. That did not in fact happen until March 2015. Let's turn to that year.	2 3 4 5 6 7 8 9 10	French at {Day88/76:16—17}. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have been doing so on instructions from somebody else, such as Deborah French or perhaps Peter Froehlich or perhaps — well, one doesn't know. Let's then pursue a little further the quotations and the order documents for Grenfell Tower. Can we go to Gwenaelle Derrendinger's witness statement at {MET00053191/36}. At paragraph 104 she
2 3 4 5 6 7 8 9 10 11	informally and by the end of September 2014 formally, Reynobond PE in cassette—fix was a class E, and had always been, and rivet was also a class E. After the reclassification on 4 December 2014, the cassette remained class E, rivet was class C, C—s2, d0; therefore, neither of them met the EN 13501 classification in ADB. Now, for all that happened in 2014 on the Grenfell Tower project, there was no order for Reynobond in 2014. That did not in fact happen until March 2015. Let's turn to that year. At the end of 2014 we know that Deborah French left	2 3 4 5 6 7 8 9 10 11	French at {Day88/76:16—17}. If that is correct, questions arising are how Ms Derrendinger would have known to generate those details, and in particular the fabrication mode, cassette, and whether she would have been doing so on instructions from somebody else, such as Deborah French or perhaps Peter Froehlich or perhaps — well, one doesn't know. Let's then pursue a little further the quotations and the order documents for Grenfell Tower. Can we go to Gwenaelle Derrendinger's witness statement at {MET00053191/36}. At paragraph 104 she says this:
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A copy of this email and the quotation appear from

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This email is dated Thursday, 10 April 2014. It's

1	page 278 to 281 of GD/1."	1	"I just spoke with Neil Wilson from CEP UK by phone
2	Can we look at the quotation she refers to, please.	2	and here are interesting news to share with you."
3	This is at $\{ARC00000010\}$. We can see that it bears	3	If you look at the second bullet point down, she
4	a quotation number 2015-8411 1, and it's dated	4	says:
5	3 March 2015 if you look a little bit lower down in the	5	"Project Grenfell Tower: 3000 m2 in RB 55 PE (4 mm)
6	same part of the document. It says:	6	1750 mm width Smoke Silver metallic color: they won the
7	"Position 1: Reynobond Aluminium Composite Material	7	project (total project represents 6000 m2 according to
8	Architecture RB55."	8	him). So, we should get the PO for it shortly."
9	If you look a little bit lower down, it says:	9	Note that it's PE there that she refers to.
10	"Feature: Standard.	10	So we then go to the order documents at
11	"Coating Top side: DG5000 2 coat(s) Smoke Silver	11	${MET00053161/40}$, so the same exhibit run but page 40.
12	Metallic E9107S."	12	Here is the purchase order from CEP, and you can see
13	Then there is a price below that: £23.25 per metre.	13	that the original project order date is 18 March 2015,
14	One question on this document is whether PE was	14	purchase order number ARC5213/A/023, as you can see at
15	requested by CEP specifically or whether it was	15	the top right—hand corner there.
16	Arconic's assumption that PE was required because CEP	16	Under "Description", it says the order is for
17	had not told Arconic that they wanted FR.	17	Reynobond 4 millimetres by 1,750 millimetres. There is
18	I say it's CEP; that is because immediately	18	no mention on this document of the fact that what is
19	underneath the quotation number, if you go back to the	19	being ordered is Reynobond 55 with a PE core. It's
20	top of the screen, it is CEP to whom the quotation is	20	silent on the core. It's just described as E9107S smoke
21	addressed. You can see that immediately under the date,	21	silver metallic.
22	3 March.	22	Now let's go to the email at $\{MET00053161/31\}$, so
23	Now, we know that this eventually led to an order,	23	nine pages back in the same exhibit run. This is
24	and let's look at some more documents on that.	24	an email from CEP to Gwenaelle Derrendinger on 18 March,
25	Mr Chairman, I note the time.	25	so same day, and it says "Deb", even though it's sent to
	100		
	133		135
	133		135
1	SIR MARTIN MOORE—BICK: Yes.	1	135 Gwenaelle Derrendinger, and that may be a reference to
1 2		1 2	
	SIR MARTIN MOORE—BICK: Yes.		Gwenaelle Derrendinger, and that may be a reference to
2	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break	2	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the
2	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to	2	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person:
2 3 4	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order.	2 3 4	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver
2 3 4 5	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea.	2 3 4 5	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation."
2 3 4 5 6	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea. How are you getting on? Quite well, I sense.	2 3 4 5 6	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation." If you cast your eye down those, there are two sets
2 3 4 5 6 7	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea. How are you getting on? Quite well, I sense. MR MILLETT: Yes, absolutely. I shall be finished	2 3 4 5 6 7	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation." If you cast your eye down those, there are two sets of orders, both to CEP, of different quantities, same
2 3 4 5 6 7 8	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea. How are you getting on? Quite well, I sense. MR MILLETT: Yes, absolutely. I shall be finished comfortably before the usual time for breaking at 4.30.	2 3 4 5 6 7 8	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation." If you cast your eye down those, there are two sets of orders, both to CEP, of different quantities, same totals but slightly different make—up, and the total
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea. How are you getting on? Quite well, I sense. MR MILLETT: Yes, absolutely. I shall be finished comfortably before the usual time for breaking at 4.30. SIR MARTIN MOORE—BICK: Well, we will take a break now. We will resume at 3.30 and see what you have in store for us then. All right? 3.30, then, please. Thank you very much. (3.15 pm) (A short break) (3.30 pm) SIR MARTIN MOORE—BICK: Welcome back, everyone. Mr Millett is in the course of presenting the Arconic documents, and I think he is ready to continue.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation." If you cast your eye down those, there are two sets of orders, both to CEP, of different quantities, same totals but slightly different make—up, and the total price: "I've split the requirement into two equal call—offs." The key point about this document is that there is no mention here either of PE core. So the purchase order doesn't have PE core, nor does the email raising the order. But if we look at the order acknowledgement at {ARC00000149}, we see that it does identify the core as PE. This is dated 18 March 2015, and this is an Alcoa
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea. How are you getting on? Quite well, I sense. MR MILLETT: Yes, absolutely. I shall be finished comfortably before the usual time for breaking at 4.30. SIR MARTIN MOORE—BICK: Well, we will take a break now. We will resume at 3.30 and see what you have in store for us then. All right? 3.30, then, please. Thank you very much. (3.15 pm) (A short break) (3.30 pm) SIR MARTIN MOORE—BICK: Welcome back, everyone. Mr Millett is in the course of presenting the Arconic documents, and I think he is ready to continue. Mr Millett, if you're ready, when it suits you.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation." If you cast your eye down those, there are two sets of orders, both to CEP, of different quantities, same totals but slightly different make—up, and the total price: "I've split the requirement into two equal call—offs." The key point about this document is that there is no mention here either of PE core. So the purchase order doesn't have PE core, nor does the email raising the order. But if we look at the order acknowledgement at {ARC00000149}, we see that it does identify the core as PE. This is dated 18 March 2015, and this is an Alcoa document, so this is the other side of the transaction.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea. How are you getting on? Quite well, I sense. MR MILLETT: Yes, absolutely. I shall be finished comfortably before the usual time for breaking at 4.30. SIR MARTIN MOORE—BICK: Well, we will take a break now. We will resume at 3.30 and see what you have in store for us then. All right? 3.30, then, please. Thank you very much. (3.15 pm) (A short break) (3.30 pm) SIR MARTIN MOORE—BICK: Welcome back, everyone. Mr Millett is in the course of presenting the Arconic documents, and I think he is ready to continue. Mr Millett, if you're ready, when it suits you. MR MILLETT: Thank you, Mr Chairman.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation." If you cast your eye down those, there are two sets of orders, both to CEP, of different quantities, same totals but slightly different make—up, and the total price: "I've split the requirement into two equal call—offs." The key point about this document is that there is no mention here either of PE core. So the purchase order doesn't have PE core, nor does the email raising the order. But if we look at the order acknowledgement at {ARC00000149}, we see that it does identify the core as PE. This is dated 18 March 2015, and this is an Alcoa document, so this is the other side of the transaction. This is what Arconic generates in response to the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	SIR MARTIN MOORE—BICK: Yes. MR MILLETT: Perhaps it's a convenient moment for a break before we go on to look at the documents that do lead to this order. SIR MARTIN MOORE—BICK: Yes. Well, that's a good idea. How are you getting on? Quite well, I sense. MR MILLETT: Yes, absolutely. I shall be finished comfortably before the usual time for breaking at 4.30. SIR MARTIN MOORE—BICK: Well, we will take a break now. We will resume at 3.30 and see what you have in store for us then. All right? 3.30, then, please. Thank you very much. (3.15 pm) (A short break) (3.30 pm) SIR MARTIN MOORE—BICK: Welcome back, everyone. Mr Millett is in the course of presenting the Arconic documents, and I think he is ready to continue. Mr Millett, if you're ready, when it suits you. MR MILLETT: Thank you, Mr Chairman. Can we go to Peter Froehlich's exhibit at page 28,	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Gwenaelle Derrendinger, and that may be a reference to Deborah Talbot, who is copied in on this, and she is the CEP person: "Please can you order the following, Smoke Silver Metallic 4mm thick Reynobond, as attached quotation." If you cast your eye down those, there are two sets of orders, both to CEP, of different quantities, same totals but slightly different make—up, and the total price: "I've split the requirement into two equal call—offs." The key point about this document is that there is no mention here either of PE core. So the purchase order doesn't have PE core, nor does the email raising the order. But if we look at the order acknowledgement at {ARC00000149}, we see that it does identify the core as PE. This is dated 18 March 2015, and this is an Alcoa document, so this is the other side of the transaction. This is what Arconic generates in response to the purchase order which we've seen. You can see there that

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UK". She says:

13 March 2015, and the subject is "Projects with CEP

"REYNOBOND 55 Smoke Silver Metallic E9107S DG5000

1	Washcoat."	1	an email from John Cobb at Symonite in New Zealand to
2	But just above it, it says "PE", in the case of each	2	Gwenaelle Derrendinger and Alain Flacon at Arconic. He
3	element of this order, "PE". One has to read across the	3	attaches the post-incident analysis at Lacrosse. He
4	two columns, the "Laquage" columns, "Laquage recto" and	4	says:
5	"Laquage verso", so top side coating and reverse side	5	"Hi Gwen and Alain
6	coating. There is no distinction between the two in the	6	"I have attached a fire report for a building that
7	way in which this product is identified in this order	7	caught fire in Melbourne. As you can see it is pretty
8	acknowledgement so far as we can see from this document.	8	scathing of Alucobest, but also ACM in general. As you
9	Let's go back to the quotation at $\{ARC00000010\}$,	9	know we only use your FR panel. Would it be possible to
10	which we saw earlier on before the break. If we go	10	send me all your current fire test documentation and any
11	right to the bottom of page 1, I showed you the price	11	material we can use to defend the impending criticism
12	but what I didn't show you was the names of those at	12	from local media."
13	Arconic: it's Gwenaelle Derrendinger and	13	Can we go to $\{MET00053158_P10/183\}$. This is
14	Peter Froehlich.	14	an email, at the top of the screen, from Brad Woods to
15	Now, Mr Froehlich explains in his statement	15	Claude Wehrle, and it attaches the post-incident
16	I don't think there's a need to see it, it's	16	analysis Lacrosse Docklands report, and he says:
17	paragraph 40.1 on page 12 $\{MET00053197/12\}$ — that his	17	"Hi Claude,
18	name is on this purchase order because there was no UK	18	"This is the fire report incident from Melbourne
19	salesperson at the time, and that the price quoted,	19	that I have been talking about."
20	£23.25 per square metre, was lower than he was able to	20	Brad Woods appears to be some kind of design or
21	approve, so this might also have gone to Alain Flacon,	21	cladding professional at Architectural Glass &
22	who was the director of sales and marketing at the time	22	Cladding Pty Ltd in New South Wales. So he sends that
23	for his approval.	23	to Mr Wehrle. Also you can see it's sent to
24	The questions that arise on this document run I've	24	Alain Flacon, Gwenaelle Derrendinger and Julie Kasyanik
25	shown you are: whether anybody in the inside sales team	25	at Arconic.
	137		139
	107		137
1	at Arconic would actually consider or did actually	1	Can we then look at ${MET00053158_P11/113}$. This is
2	consider whether the order was appropriate for this	2	an email from Claude Wehrle to CSTB, Martial Bonhomme
3	client, and indeed for any client, and if so, who would	3	and Gildas Creach, subject "Feu en Australie", "Fire in
4	that person be? Was there any process within Arconic	4	Australia", post—incident analysis Lacrosse Docklands:
5	for ensuring that PE was suitable for Grenfell Tower,	5	"Hello,
6	particularly as Arconic knew and recorded that the	6	"Please find attached a very interesting report that
7	intended fixing was to be cassette?		
8		7	I would like to share with you."
9	Now, 2015 was a year when the existence of the	7 8	I would like to share with you." It's forwarded also to Frank Ritter of 3A on the
4.0			
10	Now, 2015 was a year when the existence of the	8	It's forwarded also to Frank Ritter of 3A on the
10 11	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of	8 9	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's
	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures,	8 9 10	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at
11	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall	8 9 10 11	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at $\{ \text{MET00053158_P12/41} \}.$
11 12	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for	8 9 10 11 12	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at $ \{ \text{MET00053158_P12/41} \}. $ Let's look at the report itself . This is at
11 12 13	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't	8 9 10 11 12 13	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal
11 12 13 14	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert	8 9 10 11 12 13 14	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the
11 12 13 14 15	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert themselves. At this time, as I say, Arconic was told about	8 9 10 11 12 13 14	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the Lacrosse Docklands fire, post—incident analysis report,
11 12 13 14 15	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert themselves.	8 9 10 11 12 13 14 15	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the Lacrosse Docklands fire, post—incident analysis report, and you can see that MFB are based in Richmond,
11 12 13 14 15 16 17	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert themselves. At this time, as I say, Arconic was told about a cladding fire which had occurred in the	8 9 10 11 12 13 14 15 16	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the Lacrosse Docklands fire, post—incident analysis report, and you can see that MFB are based in Richmond, Victoria, I think one can see at the bottom left—hand
11 12 13 14 15 16 17	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert themselves. At this time, as I say, Arconic was told about a cladding fire which had occurred in the Lacrosse Building in Melbourne. The fire itself had	8 9 10 11 12 13 14 15 16 17	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the Lacrosse Docklands fire, post—incident analysis report, and you can see that MFB are based in Richmond, Victoria, I think one can see at the bottom left—hand corner.
11 12 13 14 15 16 17 18	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert themselves. At this time, as I say, Arconic was told about a cladding fire which had occurred in the Lacrosse Building in Melbourne. The fire itself had broken out on the evening of 24 November 2014.	8 9 10 11 12 13 14 15 16 17 18	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the Lacrosse Docklands fire, post—incident analysis report, and you can see that MFB are based in Richmond, Victoria, I think one can see at the bottom left—hand corner. If we go to page 65 of the exhibit
11 12 13 14 15 16 17 18 19 20	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert themselves. At this time, as I say, Arconic was told about a cladding fire which had occurred in the Lacrosse Building in Melbourne. The fire itself had broken out on the evening of 24 November 2014. In the April and again in the June 2015,	8 9 10 11 12 13 14 15 16 17 18 19 20	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the Lacrosse Docklands fire, post—incident analysis report, and you can see that MFB are based in Richmond, Victoria, I think one can see at the bottom left—hand corner. If we go to page 65 of the exhibit {MET00053158_P12/65}, we can see what is said. The highlighted points are highlighted in the document we
11 12 13 14 15 16 17 18 19 20 21	Now, 2015 was a year when the existence of the Lacrosse fire in Australia came to the attention of Arconic, and I'm going to show you one or two pictures, photographs and other things, which show fire in tall buildings, and I ought to give a trigger warning for anybody who finds that too difficult to see. They won't come for a few minutes yet, so people have time to avert themselves. At this time, as I say, Arconic was told about a cladding fire which had occurred in the Lacrosse Building in Melbourne. The fire itself had broken out on the evening of 24 November 2014. In the April and again in the June 2015, a post—incident analysis report of the fire done by	8 9 10 11 12 13 14 15 16 17 18 19 20 21	It's forwarded also to Frank Ritter of 3A on the same day asking whether he had already seen it. There's no need to turn up the reference, but it's at {MET00053158_P12/41}. Let's look at the report itself. This is at {MET00053158_P12/42}. This is a front page, internal front page, of the report produced by MFB into the Lacrosse Docklands fire, post—incident analysis report, and you can see that MFB are based in Richmond, Victoria, I think one can see at the bottom left—hand corner. If we go to page 65 of the exhibit {MET00053158_P12/65}, we can see what is said. The

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 $aluminium/polyethylene\ panel\ product\ which\ has\ been$

successful in being determined as non-combustible when

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Claude Wehrle, and Gwenaelle Derrendinger.

Can we go first to $\{MET00053159/404\}.$ This is

1	tested under AS 1530.1:1994 $-$ Combustibility Test for	1	on all floors where external fire spread occurred.
2	Materials."	2	Simultaneous fire incidence over many floors at heights
3	That's the Australian standard at the time:	3	possibly well beyond the external reach capabilities of
4	"As mentioned elsewhere in this report many	4	the attending Brigade, is an extremely challenging
5	competitor products have however gained a Certificate of	5	scenario for successful Fire Brigade intervention.
6	Conformity for their use under the $ABCB-CodeMark$	6	Based on the observations of the fire incident the Chief
7	Scheme based on alternative test results."	7	Officer believes that the building solution does not
8	If we go to page 67 of this document	8	incorporate elements to the degree necessary to avoid
9	${MET00053158_P12/67}$, we can see a little bit more	9	the spread of fire ."
10	detail . Under section 6.1:	10	Still in part 12 of this exhibit, as we're in, can
11	"External Wall Cladding (Alucobest) Rapid	11	we go to page 144 {MET00053158 $_$ P12/144}, please. This
12	fire spread.	12	is appendix 12 to the MFB analysis report on the
13	"MFB Comment:	13	Lacrosse fire in November 2014, which sets out a number
14	"First—hand accounts from attending MFB	14	of other cladding fires around the world, and some of
15	fire — fighters and residents of the building, describe	15	them will be by now familiar to most people.
16	the fire as appearing to be associated directly with the	16	On page 144 itself we can see The Torch Tower in
17	façade of the building rather than the combustible	17	Dubai, 21 February 2015; the Mermoz Tower in Roubaix in
18	contents and storage on the external balconies. Burning	18	France in 2012, that's familiar to you.
19	and flaming facades on high—rise buildings is not	19	Page 145 {MET00053158_P12/145}, the Al Tayer Tower
20	a common phenomenon witnessed by the MFB and is of	20	in Sharjah in 2012, you can see metal composite
21	genuine concern. Of even greater concern is the speed	21	cladding, second bullet point down:
22	and intensity of the fire spread."	22	"Aluminium/polyethylene composite panel façade."
23	Then there is a photograph of the rapid vertical	23	The Saif Belhasa Building in Tecom in Dubai, second
24	fire spread only 4 minutes after level 8 sprinkler	24	bullet point:
25	activation .	25	"Aluminium/polyethylene composite panel façade."
			,, , , , , , , , , , , , , , , , , , , ,
	141		143
1		1	
1 2	Then if you look a little bit lower down on the same	1 2	At the next page, 146 ${MET00053158_P12/146}$,
2	Then if you look a little bit lower down on the same page, you see the last paragraph:	2	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture.
2	Then if you look a little bit lower down on the same page, you see the last paragraph: "From the timeline described above, it is reasonable	2	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture. Second bullet point:
2 3 4	Then if you look a little bit lower down on the same page, you see the last paragraph: "From the timeline described above, it is reasonable to derive external vertical fire spread occurred from	2 3 4	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture. Second bullet point: "Aluminium/polyethylene composite panel façade."
2 3 4 5	Then if you look a little bit lower down on the same page, you see the last paragraph: "From the timeline described above, it is reasonable to derive external vertical fire spread occurred from the 8th floor to the roof above the 21st floor within	2 3 4 5	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture. Second bullet point: "Aluminium/polyethylene composite panel façade." Underneath that, Wooshin Golden Suites, Busan,
2 3 4 5 6	Then if you look a little bit lower down on the same page, you see the last paragraph: "From the timeline described above, it is reasonable to derive external vertical fire spread occurred from the 8th floor to the roof above the 21st floor within 10 to 15 minutes, penetrating the adjacent internal	2 3 4 5 6	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture. Second bullet point: "Aluminium/polyethylene composite panel façade." Underneath that, Wooshin Golden Suites, Busan, South Korea, you can see the photograph of that fire.
2 3 4 5 6 7	Then if you look a little bit lower down on the same page, you see the last paragraph: "From the timeline described above, it is reasonable to derive external vertical fire spread occurred from the 8th floor to the roof above the 21st floor within 10 to 15 minutes, penetrating the adjacent internal rooms on all floors. In the case examined in this	2 3 4 5 6 7	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture. Second bullet point: "Aluminium/polyethylene composite panel façade." Underneath that, Wooshin Golden Suites, Busan, South Korea, you can see the photograph of that fire. Second bullet point down:
2 3 4 5 6 7 8	Then if you look a little bit lower down on the same page, you see the last paragraph: "From the timeline described above, it is reasonable to derive external vertical fire spread occurred from the 8th floor to the roof above the 21st floor within 10 to 15 minutes, penetrating the adjacent internal rooms on all floors. In the case examined in this report, the upward vertical spread of fire was	2 3 4 5 6 7 8	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture. Second bullet point: "Aluminium/polyethylene composite panel façade." Underneath that, Wooshin Golden Suites, Busan, South Korea, you can see the photograph of that fire. Second bullet point down: "Aluminium/polyethylene composite panel façade."
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Then if you look a little bit lower down on the same page, you see the last paragraph: "From the timeline described above, it is reasonable to derive external vertical fire spread occurred from the 8th floor to the roof above the 21st floor within 10 to 15 minutes, penetrating the adjacent internal rooms on all floors. In the case examined in this report, the upward vertical spread of fire was restricted only by the height of the building. If the building and the construction of the external walls continued to a greater height of upward of 21 storeys, it is highly probable fire spread would have continued beyond 21 storeys." Looking at page 68 {MET00053158_P12/68}, can we look at the second and fourth paragraphs on that page. The second paragraph says: "In different circumstances and in contrast to the outcomes of this fire event, we may have witnessed internal fire growth and spread, established over 16 plus levels, aided by high easterly winds back into	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	At the next page, 146 {MET00053158_P12/146}, Tamweel Tower, Dubai, 2012, you can see the picture. Second bullet point: "Aluminium/polyethylene composite panel façade." Underneath that, Wooshin Golden Suites, Busan, South Korea, you can see the photograph of that fire. Second bullet point down: "Aluminium/polyethylene composite panel façade." Over the next page, page 147 {MET00053158_P12/147}, Water Club Tower, Atlantic City, USA, and there is a photograph there of that fire. Second bullet point down: "Aluminium/polyethylene composite panel façade." In the text on page 147 itself underneath that: "What is evident from the photos and descriptions above is the rapid and extensive vertical fire spread up and down the buildings in direct correlation with the fire at 673—683 La Trobe Street Docklands [Lacrosse]. Whilst the brand and make of the panels are not identified in the report, they would all appear to be of

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generally on a configuration of the façade where

internal returns, channels and/or balconies are present.

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Then the fourth paragraph says:

"The fire resulted in internal ignition occurrences

1 This is perhaps attributed to the higher incidence of 1 bracket, which is likely, I think one can see, a smiley 2 ignition sources on balconies and the retention of heat 2 3 in channels and returns in the form and shape of the 3 We can see that Claude Wehrle does not appear to 4 facade rather than on flat plane areas of facades where 4 have any knowledge of the façade system, but we can see loss of heat straight to the atmosphere may occur." what he says about "In PE, the fire would have spread". 5 5 That I don't think needs any comment, that report. The question which this document raises is whether 6 6 7 You can see how it comes in to Arconic. 7 his general observation about PE on this document was At the same time, in early 2015, Arconic changed the 8 8 derived from his having seen the Lacrosse fire report 9 core colour of PE from translucent to black. I don't 9 earlier in 2015, or perhaps from other knowledge, 10 10 need to go into the details of that other than to give earlier knowledge that he might have had. Further, what 11 you some documentary references. 11 were his views at this time, now, October 2015, about 12 12 There was a notification to customers and to the the fire risks of using aluminium composite material 13 CSTB, but not to BBA. Documents to look at would be the 13 with a polyethylene core at height? CSTB notification at {MET00053158_P02/128}; customers 14 14 We come then to 2016. 15 being informed for example by Peter Froehlich 15 There are two further fires in that year. The first 16 {MET00053161/1}; CEP were told, {CEP00000547}, 16 is at The Address in the UAF on New Year's Eve 2015 to 17 {CEP00007141} and {CEP00054338}; Genius Facades being 17 2016. Can we go, please, to {MET00053158 P10/174}. 18 told the same thing at {MET00053161/8}; and Argonaut, 18 This is the image that was shared within Arconic in 19 another of Arconic's UK fabricators, at {MET00053161/9}. 19 emails about that fire. 2.0 There was another fire in October 2015. This is in 2.0 If we can go to those emails, please, two pages back 21 Riyadh in Saudi Arabia at the King Fahd Medical Centre. 21 at $172 \{MET00053158_P10/172\}$, you can see that at the 22 Again, I should give the trigger warning: we will be 22 bottom of the page there's an email from Robert Campbell 2.3 showing pictures of buildings damaged by fire, if not 23 of UK Revnolux -- he is area sales UK Revnolux, we heard 2.4 2.4 a little bit about him from Deborah French -- to in fact on fire. 25 If we can put $\{MET00053158_P10/168\}$ and 2.5 Katri Petit and Serge Wahler, "Reynodual", and in the 145 147 $\{{\rm MET00053158_P10/169}\}$ up together, please, simply 1 1 highlighted part it says: 2 because it's easier to read. 2 "The hotel in Dubai allegedly had Alucobond PE on it 3 At the bottom of 168, this is an email from 3 when it went quickly up in flames on New Year's Eve." Nazih Chaoul on Wednesday, 14 October 2015 to 4 The sentence before that I should also have read 5 Hafid Asserrar, and the subject is, "Fire in king fahed 5 medical center riyadh ALUCOBOND FR": 6 "It seems that Architects are once again sitting up 6 7 7 "Find the attached pictures." and pondering about how safe is a composite with a PE 8 Then they're attached. 8 9 9 That email went into the inbox of Alain Flacon. If You can see the pictures a little earlier on in the 10 exhibit run at pages 164 to 166, if we can quickly look 10 we can go to the second email from the top, we can see 11 at those. 164, then 165, then 166. This is the fire 11 that, and Mr Flacon replies, second email from the top, 12 damage done at the King Fahd Medical Centre in Riyadh 12 copied this time to, among others, Peter Froehlich, 13 13 using Alucobond. Claude Wehrle and Claude Schmidt: "No surprise. The only good news is that it seems 14 If we go to $168 \{MET00053158_P10/168\}$, please, we 14 15 15 can see that the email, which had come from the source to be AB products." 16 I showed you, makes its way to Claude Wehrle, looking up 16 At the top of the chain we see Claude Wehrle's 17 the email chain. It is an email from Claude Wehrle back 17 18 to Hafid Asserrar, who I should have said was at Alcoa, 18 "I hope that PE will gradually be excluded from 19 also to Alain Flacon and Serge Wahler, 16 October 2015: 19 façade cladding because each time it is the image of all 2.0 2.0 "FR showed a very good behaviour. the ACMs that takes a hit!' 21 21 "In PE, the fire would have spread over the entire Now, the question about that email run and his 2.2 height of the tower, while in this case only the area 2.2 response at the end of it there is whether anything was

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2.4

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done within Arconic about PE, whether by Mr Wehrle or

anybody else. Why did Mr Wehrle hope that PE would

gradually be excluded from façade cladding while Arconic

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2.4

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near the fire is affected

"Long Live FR ..."

And then there is a colon, a dash and a closed

1	was continuing to manufacture it and to sell it?	1	Between October 2013 and January 2015, the BBA made
2	If we can scroll down in Claude Wehrle's exhibits to	2	repeated attempts to contact Arconic. There are at
3	page 176 {MET00053138 $_$ P10/176}, only four pages on from	3	least five attempts to speak to Arconic, and one can see
4	this, we can see that the same day, 6 January 2016,	4	that at {MET00053158_P17/185} to {MET00053158_P17/182},
5	Guy Scheidecker sends an email to Claude Wehrle, subject	5	and also at $\{MET00053158_P17/186\}$.
6	"TR: The Address", forwarding the attachment:	6	On several occasions the BBA clearly requested
7	"Claude	7	information and confirmation that there had been no
8	"Can you read this article please.	8	changes that would affect the suitability for the use of
9	"I'd like to know what you think about it. They are	9	Reynobond PE. Just for the note, $\{MET00053158_P17/182\}$,
10	destroying the ACM in PE and I don't think it's the only	10	paragraph 2 of that email. We will be looking at those
11	component responsible for such a fire.	11	emails in due course with witnesses.
12	"I look forward to hearing your feedback."	12	There is no evidence that the Inquiry has seen that
13	The question there is whether that fairly reflected	13	anybody at Arconic ever responded with any positive
14	the attitude of Arconic's senior management to PE at	14	information relating to the many new fire testing
15	this time, and explore what was meant by it.	15	documents and certifications that Arconic had acquired
16	The second fire of the two in 2016 to refer to is	16	since the first issue of the BBA certificate in
17	the one at Place de Hageneau in Strasbourg in, we	17	January 2008.
18	believe, January 2016. You have seen something of that	18	The question is: why was there no communication
19	already.	19	about the revised classifications provided at this time?
20	Can we look at $\{MET00053158_P10/178\}$, so it's two	20	We know the review was completed and the certificate was
21	pages on from this. There is the email with which	21	confirmed as valid for three more years until
22	I think you're familiar from Claude Wehrle to	22	January 2017. It was signed off by Valentina Amoroso,
23	Alain Flacon and others at Arconic dated	23	the BBA project manager, for Arconic Reynobond 55 on
24	19 January 2016, and the embedded photograph. The	24	10 April 2015, and authorised by Prayer Nkomo, the team
25	translation is on the next page, 179	25	manager at the BBA.
	149		151
1	{MET00053158_P10/179}, if we could please look at that.	1	The certificate itself is at {MET00053158}. All of
2	He says:	2	that will be explored in evidence with the BBA witnesses
3	"Hello,	3	to come.
4	"We were very lucky The Wolleck tower is in	4	The re—issue of the BBA certificate had been due in
5	Reynobond PE 10 metres from the fire."	5	the July of 2014, and in fact the cycle was overdue, the
6	He sets out a web address there and embeds it.	6	review cycle had run over.
7	"Fortunately, the wind didn't change direction,	7	In the context of the Grenfell Tower project, and to
8	but we really need to stop proposing PE in	8	repeat to some extent what I've said before, in
9	architecture! We are in the 'know', and I think it is	9	July 2014 the information that would have been current
10	up to us to be proactive AT LAST."	10	was under the 2014 tests. At that point, as I say,
11	Now, the concern here is, as one can see, that the	11	between January and October 2014, Reynobond PE in rivet
12	fire on the roof of the building in the Rue de Hageneau	12	was a class E, cassette was also a class E, as it always
13	might have spread to a building 10 metres away clad in	13	had been, and would always remain. Had the
14	Reynobond PE. This time it's not Alucobond or some	14	BBA certificate been updated accurately and re-issued at
15	other manufacturer's PE, it's Reynobond.	15	that time, then the fire performance of PE cassette
16	The question is: what happened to Mr Wehrle's	16	might have come to the attention of Studio E, Rydon,
17	warning to senior management, Messrs Flacon and	17	Harley or CEP. As we know, in July 2014 the planners
18	Marconnet? Did they do anything about this, and if so,	18	were looking at the mock—up of the façade and were
19			
	what?	19	insisting on cassette—fix, to the disappointment, as
20	what? Now, there is then, before this time, a review done	19 20	insisting on cassette—fix, to the disappointment, as we've seen from Module 1, of several parties involved in
20 21			-
	Now, there is then, before this time, a review done	20	we've seen from Module 1, of several parties involved in
21	Now, there is then, before this time, a review done by the BBA between 2013 and 2015. We've not yet	20 21	we've seen from Module 1, of several parties involved in the project \cdot

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mention a further event in the May of 2015.

In that month, a re—issue contract was raised by the

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October 2013.

started, as we will see from later witnesses, in

1	BBA, and it's at $\{BBA00010889\}$ under reference $S1/57262$.	1	Mr Chairman, I've come to the end of this
2	That was stated to cover non-technical updates to the	2	presentation.
3	certificate . It was sent to Arconic on 5 May 2015, as	3	It may well be that there are other documents to
4	we can see from exhibits to Mr Wehrle's statements at	4	which core participants would wish to have attention
5	${MET00053158_P18/31}$. It was signed and returned by	5	drawn. This is not the usual situation where there is
6	Mr Wehrle under his email at the same place, page 38	6	a witness who must be asked any further questions before
7	${MET00053158_P18/38}$, and there was a signed contract,	7	release and the concomitant pressure of time on us.
8	page 41 of the same exhibit run $\{MET00053158_P18/41\}$.	8	There is, therefore, plenty of opportunity for core
9	It appears that the contract was never taken up by	9	participants, if they want to, to refer to any further
10	the BBA and the project was abandoned at that stage. We	10	documents that they consider to be relevant. They can
11	would have investigated with Mr Wehrle whether he sought	11	do that in their written closing submissions for
12	to push it along at all and, if he didn't, why he	12	Module 2, which are in a few weeks' time, and that
13	didn't, and why it was, from his perspective, that that	13	of course includes Arconic as well.
14	re—issue did not proceed.	14	So the fact that there are documents which others
15	Going back, then, to the next period of review,	15	consider to be relevant and need to be put into the
16	October 2016 to June 2017, which was when the	16	public domain for the purposes of the record, and the
17	certificate came up for its triannual review, there was	17	fact that I haven't covered them, does not mean that
18	another review. There is one document to look at from	18	they are not relevant and shouldn't be put into the
19	this review which I should show you, which is at	19	public domain. There is plenty of opportunity for all
20	${MET00053158_P18/61}$. It's a document we're going to	20	core participants to identify those documents in due
21	look at in due course with the BBA witnesses, but this	21	course.
22	is from the Arconic side internally .	22	That said, that brings me to the end of my
23	This is a draft of an email to be sent to	23	presentation.
24	Valentina Amoroso, who had conduct as project manager of	24	SIR MARTIN MOORE-BICK: Yes. Well, thank you very much
25	this review, the $2016/17$ review of the BBA certificate.	25	indeed, Mr Millett. That's been very helpful to get
	153		155
	153		155
1	153 It's an email from Nicolas Remy to Claude Wehrle on	1	155 that overview of the documents and the way in which
1 2		1 2	
	It's an email from Nicolas Remy to Claude Wehrle on		that overview of the documents and the way in which
2	It's an email from Nicolas Remy to Claude Wehrle on 18 October 2016, and it's a response in draft to some of	2	that overview of the documents and the way in which events developed over the ten years or so before the
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with the witnesses.

in the correspondence as between the $\ensuremath{\mathsf{BBA}}$ and $\ensuremath{\mathsf{Arconic}}$

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