OPUS₂

Grenfell Tower Inquiry

Day 88

February 10, 2021

Opus 2 - Official Court Reporters

Phone: +44 (0)20 3008 5900

Email: transcripts@opus2.com

Website: https://www.opus2.com

1 Wednesday, 10 February 2021 1 Questions from COUNSEL TO THE INQUIRY (continued) 2. (10.00 am) 2. MR MILLETT: Mr Chairman, thank you very much. SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to 3 Good morning, Mr Chairman. Good morning, members of today's hearing. I'm here as usual with my fellow panel 4 the panel. Good morning, Ms French. 4 5 members, Ms Thouria Istephan and Mr Ali Akbor. 5 I want to ask you now, please, about your MS ISTEPHAN: Good morning. 6 6 presentations that you would give from time to time that 7 MR AKBOR: Good morning, everyone. 7 you refer to in your second witness statement. SIR MARTIN MOORE-BICK: Before we go back to the witness, 8 8 If we can go to your second witness statement, can I please just remind those of you who are not taking 9 please, at page 5 $\{MET00053162/5\}$, you say at 10 an active part in the hearing to keep your cameras and 10 paragraph 21, if we can just have that expanded a little 11 microphones switched off at all times to avoid 11 bit, please, that you gave a presentation or prepared 12 difficulties with the technology. Thank you very much. 12 a presentation for the RIBA as part of a continuing 13 13 professional development programme, and you refer to Now, today we're going to continue hearing evidence 14 14 that in the first two or three sentences of that from Ms Deborah French, so we are now going over to see 15 her. 15 paragraph. MS DEBORAH FRENCH (continued) 16 16 My question is a general one rather than focusing 17 SIR MARTIN MOORE-BICK: Ms French, are you there? 17 specifically on that presentation: did you give 18 THE WITNESS: Yes, I am, thank you, sir. 18 presentations to other organisations involving SIR MARTIN MOORE—BICK: Good morning. Can you see me and 19 19 architects or designers? 20 20 can vou hear me? A. I certainly did with RIBA. I did on occasions do it 21 THE WITNESS: Yes, I can, thank you. 21 with main contractors, if I was invited by fabricators, 22 22 SIR MARTIN MOORE-BICK: Good, thank you very much. for example. But as a general rule it was one-to-one 2.3 Now, I don't really need to remind you of everything 23 with an architect, rather than, you know, a -- we did 2.4 I said yesterday, but I think it would be a good thing 2.4 CPD with architects practices, which would be over 25 2.5 if you could just confirm, as you did yesterday, that a lunchtime period, so on and off. 1 you're alone in the room from which you're giving Q. Were you invited to give those presentations, or was it 1 2 2 part of a promotion by Arconic? evidence 3 THE WITNESS: Yes, I am, sir. 3 A. If it was with RIBA or architectural CPD deliveries, it SIR MARTIN MOORE-BICK: Thank you. That you have no 4 4 was generally something that we were trying to promote 5 documents or other materials with you? 5 or we were invited by architects to attend. If it was THE WITNESS: No. none. 6 with other clients, it was generally them requesting us 7 SIR MARTIN MOORE-BICK: And that your mobile phone is in 7 8 another room, and you don't have any other electronic 8 Q. Were you accredited to give CPD presentations to 9 device which is capable of receiving messages? 9 architects? 10 THE WITNESS: No, nothing, sir. 10 A. We had one presentation that was RIBA accredited to SIR MARTIN MOORE-BICK: Very good, thank you very much 11 11 deliver to architects, in a formal CPD environment. 12 12 Q. You say you don't believe you actually ever gave the 13 Well, as yesterday, your legal representatives are 13 particular RIBA presentation that you refer to; is that 14 here, as it were, in on the hearing, so that if they 14 15 feel it's necessary to intervene, they can do so. 15 A. Yes, I don't think it was -- we'd had it approved by 16 I hope we'll avoid the sort of problem we had the -- by RIBA, but it was never actually delivered. 16 17 17 But in order to give that kind of presentation and to yesterday with the transcript, I'm confident that we 18 shall, and, as yesterday, we will have a break during 18 put it together, you must have had some kind of 19 the morning and the afternoon, about halfway through. 19 technical knowledge about cladding; is that fair? 20 Is there anything you would like to raise before we 20 A. The information that was put together in that 2.1 continue with your evidence? 21 presentation, a lot of that was taken from the THE WITNESS: No, nothing, thank you. 2.2 2.2 information already within Arconic, and any other --23 23 SIR MARTIN MOORE-BICK: All right. Well, in that case, I'll from brochures and various things like that. Then there

24

2

invite Mr Millett to continue his questioning.

Yes, Mr Millett.

4

was a set text that would have gone with it.

Q. Yes, but in order to give the presentation, am I right

24

- 1 in thinking that you would have had to have had at least 2 some familiarity, working familiarity, with the
- 3 documents that formed the presentation?
- 4 A. Yeah, I would have had enough knowledge to have been
- 5 able to answer some questions, but in terms of the more
- technical details with relation to, you know, wind loads 6
- 7 or build-ups, then I would have taken questions and sent
- 8 that back over to Merxheim afterwards.
- 9 Q. So you would have had some technical knowledge, at least 10 enough to enable you to field questions from the floor
- 11 at the end of the presentation?
- 12 A. On some subjects, not on all, no.
- 13 Q. What about on fire safety?
- A. No, I would never have gone into discussions on fire 14 15
- with anybody. As I've said before, I didn't have the 16 knowledge or the experience to do that on fire.
- 17 Q. Were you accompanied by anybody from the technical 18 sales team when giving these presentations?
- 19
- 20 Q. So what would happen if somebody asked a question at the
- 2.1 end of the presentation about fire safety, such as: what
- 22 are the tests that underlie the claim that PE standard
- 2.3 has class 0 or should be regarded as class 0?
- 2.4 A. I would have arranged to have the necessary documents
- sent to them or I would have referred it to our

- 1 technical team in Merxheim, I would not have answered 2
- 3 Q. Why were you being sent into the field to give these
- presentations if you weren't able to answer a question 5
- A. Because I was the UK contact over there, and as I said, 6
- 7 I've had limited technical experience to be able to
- 8 answer certain points. I would gather the information 9 and I would get it -- I would get back to them
- 10
- 11 Q. Doing the best you can with your recollection, do you
- 12 recall any particular kinds of questions that you were
- repeatedly asked at the end of these kinds of 13
- 14 presentations?
- 15 A. It was unusual to get an awful lot of questions at the 16 end of CPD -- formal CPDs. They tended to -- the
- 17 audience that you were delivering it to tended to come
- 18 in, they listened and then they would basically disperse
- 19
- and go off.
- 2.0 So I don't recall having masses of questions at the 21 end. There might have been one or two about projects or
- 2.2 colours, mostly, or samples that they wanted because
- 2.3 they were looking at specific projects. But very, very,
- 2.4 very rare would we get a lot of technical questions.
- 25 Q. Do you remember ever being asked a question about fire

- classification?
- 2 A. I can't recall being asked that specific question.
- 3 Q. Let's talk about a presentation that you think you did
- 4 give. If we can go to paragraph 96 of this statement on
- 5 page 31 $\{MET00053162/31\}$, please. You can see that this paragraph is under the heading "Genius Facades/Simco", 6
- 7 and you describe in it not only your relationship with
- 8
- Genius Facades, connected to a business called Simco, 9 but also a presentation you gave. If you look about
- 10 a third of the way down that paragraph, you say there
 - that you gave a presentation. You say:
- 12 "I gave a presentation to Simco on this project in 13 around May 2011 ...'
- 14 That project, as you describe earlier in the
- 15 paragraph, was Pendleton, which was a large project in 16 Manchester or Salford involving three buildings.
- 17 Is it right that Genius Facades was a customer of
- 18 vours?

11

19

- 20 Q. And you say, as I've just shown you, that they are
- 21 connected or were connected to a business called Simco
- 22 External Framing Solutions, or Simco, if you like . Is
- 23 that right, they were?

A. Yes, they were

- 2.4 Α Yes
- 25 Q. Right.

7

- 1 Is it right that the connection that you had was 2 through a man called John Simmons, and possibly also
 - Graham Smith?
- 4 A. Yes

3

8

- Q. Is it right that they were partners in Simco? 5
- A. I believe so, yes. 6
- 7 Q. Is it right that John Simmons and Graham Smith also own
 - and run, or owned and ran, Genius Facades together?
- 9 Does that sound right to you?
- 10 Certainly John Simmons ran Genius Facades, but I'm not
- 11 entirely sure of the connection of Graham with Genius.
- 12 Q. Very good. Well, let me just read into the record one
- reference: it's John Simmons' first witness statement at 13 {MET00040808/1}. 14
- 15 Let's look at the presentation about the Pendletons
- 16 project. This is in your exhibit DF5, page 10,
- 17 {MET00053173/10}, please.
- 18 We can see on the front that, if we have that
- 19 expanded a little bit, please, it's Reynobond/Reynolux,
 - "Aluminium Reynobond"; do you see that?
- 21 A. Yes.

2.0

- 2.2 Q. Underneath that, it says:
- "Reynobond working with SIMCO -- Pendleton's Project 23 2.4 Manchester."
- 25 So is this an example, before we go into the

- 1 document, of you working with a cladding subcontractor, 2 specialist subcontractor?
- 3 A. It was on this particular project, yes.
- 4 Q. And would that be quite a common occurrence, that you 5 would work together with a cladding subcontractor such as Simco? 6
- 7 A. In terms of pulling together a presentation of this 8 detail, this was the only one that we did it with on --9 in this nature.
- 10 Q. You can see that, before we leave that page, I should 11 have pointed out to you, this is May 2011.

If we go to page 14 {MET00053173/14}, this says: "Reynobond 55 SPECIFICATION Details for Pendleton's Manchester (SIMCO)."

If we just go back to your second statement at paragraph 96 again, please, page 31 $\{MET00053162/31\}$, you say there that the Pendleton project involved both rivet and cassette in Reynobond 55 PE. You say that about a third of the way down the page in front of you:

"It was an unusual design which I think incorporated both rivet and cassette systems."

2.2 A. Yeah.

12

13

14

15

16

17

18

19

2.0

2.1

Q. If we then go back to the presentation, please, at 2.3 2.4 page 15 {MET00053173/15}, let's look at the last two

25 bullet points together. It says:

- "Reynobond has a BBA Cert (hard copy available with 1 2 this presentation)."
- 3 Then last bullet point:
- "Relevant UK & European Fire Certs."
- 5 Does that tell us that, in May 2011, you knew at least enough about the European fire certificates to 6 7 know that they were relevant to your UK customers?
- 8 A. I'm not sure I would have known that they were 9 completely relevant. in what context they were relevant. 10 I was taking -- I was pulling information out of other 11 marketing information and brochures to pull that 12 document together for a customer.
- 13 Q. What was relevant about the European fire certificates 14 on this project?
- 15 A. As I say. I would have been just taking information from 16 other parts of the documentation that was available 17 within other marketing information and putting that on 18 that document.
- 19 Q. Why would you do that unless you thought that the 2.0 European fire certificates were relevant to this UK 21 customer and this UK project?
- 2.2 A. Because that text would have been available somewhere in 23 another document and I would have just used it in that 24 format
- 25 Q. What, unthinkingly, just cut and pasted it from another

10

1 document?

2 A. Yes

3

- Q. Which document, do you know?
- 4 A. No. I don't recall.
- 5 Q. Did you not think that it was important as part of the sale that the customer, either Simco or the end 6 7
 - customer, could be provided with the European fire
- certificates if they'd asked? 8
- 9 A. If they'd have asked, we would have provided it for 10 them, but I wouldn't have known whether it was relevant 11
- 12 When you were cutting and pasting this last bullet point 13 from some other document into this one, did you not
- 14 apply your mind to the question of whether or not
- 15 European fire certificates were relevant?
- 16 A. No. not -- I don't recall doing that, no.
- 17 Q. Right. So this was just as a knee-jerk cut and paste 18 without thinking about it?
- 19 A. No, it was putting together some information to present
- 20 to a client, and, as I say, if they'd have wanted
- 2.1 information further, then we would have provided it for 22 them.
- 2.3 Q. I feel bound to suggest to you, Ms French, that you
- 2.4 would not in fact have referred to the relevant UK and
- 2.5 European fire certificates -- you wouldn't have felt it

- 1 necessary to mention the European fire certificates
- 2. unless you knew that they were relevant to your customer
 - here

3

2.2

2.4

- A. As I say, I would have taken that information from
- 5 another document, and if customers had asked for
- 6 information, then I would have made sure that they had
- 7 the relevant documents.
- Q. Can we just go back to your second witness statement, 8 9 please, at page 13 {MET00053162/13}. Let's look

10 together at paragraph 47, please. You say there:

- 11 "I did not spend much if any time considering the 12 European fire testing regime and what the various
- 13 ratings meant, neither did I think them relevant to the UK market." 14

15 If the European fire testing regime was, as you 16 thought, not relevant to the UK market, is your 17 explanation for why your presentation referred to them

- 18 that you simply didn't think about it?
- 19 A. As I've said, I would have taken that text from another
- 2.0 document and I would have put it on to that
- 21 presentation, without necessarily, you know, thinking
 - what I was putting on there.
- 23 Was it your habit to make build-up presentations for
 - customers for substantial projects like Pendletons
- 2.5 without really applying your mind to whether what you

6

7

8

9

- 1 were putting into your presentations was relevant?
- 2 A. I would have been putting together information that
- 3 I thought was relevant and correct at the time, and it 4 would have been for other people to ask me questions as
- 5 to whether there was other information they needed and
- I would have provided that for them. 6
- 7 Q. You see, what I'm really suggesting to you, being blunt
- about it, is that you knew very well that European fire 8 9 certifications were relevant to the UK market because
- 10 that's why you put it in your presentation.
- 11 A. No, I don't recall thinking along those details . As
- 12 I say, technically I wouldn't have been thinking along 13 those lines. If people had wanted information, I would
- 14 have provided it for them
- 15 Q. We see that you also referred in this presentation to
- the BBA certificate available. What did you think was 16
- 17 the purpose of the BBA certificate, which we looked at 18 yesterday, referring to the Euroclass B test pass for
- 19
- standard PE, if it was irrelevant to the UK market? 20 A. As I explained yesterday, I didn't understand --
- 2.1 didn't — my knowledge of the detail in that BBA was
- 2.2 something that other people would have been asking
- 2.3 questions about, and I really wouldn't have given it,
- 2.4 you know, too much thought at the time as to whether it
- 25 was or wasn't relevant.

13

- 1 Q. Does it come to this: you didn't know the details of the
- 2 classification regime applicable in Europe, the Euro
- 3 system, but you did know that it was relevant to your UK
- 4 customers, but if they asked questions about it, that
- 5 was a matter for them?
- 6 A. In terms of the BBA, if there was -- like I said, I've
- 7 said before, I wasn't technically trained, I've had no
- 8 technical training. I was there to provide information,
- 9 and if customers had had questions, they would have 10
- asked me and I would have made sure I got them the
- 11 appropriate information and documents. I was not
- 12 qualified to understand the details that were set out in 13 those
- Q. You may not have been qualified to understand the 14
- 15 details, but I am suggesting to you that you knew enough
- 16 to know that the Euro classification regime for
- 17 fire safety was relevant to your UK market?
- 18 A. No, I wouldn't have done.
- 19 Q. If you didn't know it was relevant or didn't think it 2.0 was relevant to the UK market, why did you think it was
- 21 referred to in the BBA certificate at all?
- 2.2 A. I don't know. It's not something that I picked up or
- 23 would have even questioned at the time.
- 24 Q. You didn't pick up; does that mean you didn't notice its
- 25 presence in the BBA certificate?

- 1 A. I don't recall what -- I don't recall what I remember in 2 looking at that document at the time.
- 3 Q. Can we look at your witness evidence about how this slide deck was created. This is back to page 31 4

{MET00053162/31}, paragraph 96 again.

You say here, about halfway down the page that you have open on the screen:

 $^{\prime\prime}I$ gave a presentation to Simco on this project in around May 2011 which included reference to both the BBA

1.0 certificate and to the product having both UK and

11 European fire certificates . Two copies of this

12 presentation are included in DF/5 and I think that the

13 contents of these presentations was based on a standard

14 [Arconic] presentation and that specific input was

15 obtained from Claude Wehrle, in relation to the 30 year

16 warranty, and Yves Biehlmann on other points.

17 Peter Froehlich was aware of the presentation."

18 Now, you say this was taken, as you have told us 19 this morning as well, from another presentation. Do you

2.0 remember whether the claims about the European

21 certification in the original presentation which you

22 lifted this from were there, or were they added

following input from somebody at Arconic? 23

2.4 I really don't recall the exact detail of where that

2.5 information came from in relation to the question you've

15

- 1 iust asked.
- 2 Q. You say that Claude Wehrle had input and Peter Froehlich
- 3 was aware of the presentation, as I've just shown you.
- 4 Did either of those individuals write any part of this
 - presentation?
- 6 A. I had information from them in relation to certain
- 7 aspects of that presentation, and I would have taken
- 8 information and put that whole presentation together
- 9 myself. They were both aware of it.
- 10 Q. What aspects of the presentation did Yves Biehlmann
- 11 provide?

5

- 12 A. The -- there was some information on the paint that was
- 13 being offered in relation to the 30-year warranty. It's
- 14 unusual to offer a warranty of that period, and
- 15 Yves Biehlmann pulled together some information on the
- 16 gloss levels and the way the gloss would behave over
- 17 a -- over that 30-year period.
- 18 Q. Did any of those three individuals suggest to you that
- 19 you should refer to the European fire classification
- 2.0 regime in it?
- 2.1 A. I don't recall.
- 2.2 Did any of those individuals look over the slides in the
- 23 final presentation that you gave?
- 2.4 I $\,--\,$ some of the information that was in that
- 25 presentation, some of the images and some of the wording

14

- 1 would have come from them, and then I will have -- would 2 have pulled it into that overall presentation
- 3 Q. As a general question, we looked at diagram 40
- 4 yesterday, but just to be very clear, are you telling
- 5 the Inquiry that at this stage, at least 2011, you did
- not know that Approved Document B, forming guidance as 6 7 part of the Building Regulations, referred to national
- and European fire classification standards? 8
- 9 A. No, I wouldn't have known that.
- Q. You say you wouldn't have known that; did you know that? 10
- 11 A. No. I don't recall I did.
- 12 Q. I'd like to look at your knowledge of fires involving 13 cladding, starting in 2009, if I can.

14 Can we start with your second witness statement, 15 please, so this is the same statement we're in, at 16 page 34 {MET00053162/34}, at paragraph 100. You give 17 a list here of previous fires that you do recall. You

18 say in the third line:

22

"Save for the fires in the UAE referred to above, 19 2.0 I am not aware of any other fire involving ACM.

21 I vaguely recall a fire in or near Paris but I cannot

remember any details including whether it involved ACM."

2.3 Then you go to say that you don't remember anything 2.4 about the Melbourne fire.

25 Now, in 2009 there were two cladding fires I want to

17

- 1 ask you about. The first is one in Bucharest at the
- 2 Millennium Business Centre in July 2009. Were you aware
- 3 of that fire?
- A. No. I wasn't.
- Q. I take it that nobody at Arconic discussed this fire 5
- 6 with you or told you about it, alerted you to it; is
- 7 that right?
- 8 A. I've never heard of -- never heard it.
- 9 Q. Was there any discussion in 2009, do you remember, about
- 10 a PE-cored cladding fire?
- 11 A. Not that I recall, no.
- 12 Q. Was there any particular discussion about the safety of
- $\ensuremath{\mathsf{PE}}\mathrm{-cored}$ ACM in architectural application in 2009 that 13
 - you recall within Arconic?
- 15 A. Not that I recall . no.
- Q. Did Mr Wehrle ever tell you, in the context of
- 17 a cladding fire, that PE core can be dangerous when it
 - comes to architecture?
- 19 A. I don't recall.
- 2.0 Q. Do you remember that there was another fire in
- 21 July 2009, which had fatal consequences, in south London

18

- 2.2 in a building called Lakanal House?
- 23 A. No, I don't recall
- 2.4 Q. You don't recall?
- 25 A. No

14

18

- 1 Q. You weren't aware in 2009 or the years following 2009 of 2
 - the Lakanal House fire; is that right?
- 3 A. No, I've not heard of Lakan(sic) House.
- 4 Q. Even today you've not heard of it?
- 5 A. No, it doesn't -- no.
- Q. Right. 6
 - Moving forward then in time to 2011, by 2011 you had
- 8 been at Arconic for around four years or so; is that
- 9 right?
- 10 A. Yes.

7

15

17

21

2.4

- 11 Q. Let's look at some documents in 2011. I'm going to show
- 12 you some documents that show that there were further
- 13 European classification tests done on Reynobond PE in
- 14 that year at the CSTB in France
 - The first one I'm going to show you is a test in
- 16 February 2011 of Revnobond PE in rivet-fix, and this is
 - at {ARC00000383}. This is a reaction to fire
- 18 classification report, RA11-0032, done under EN 13501-1,
- 19 which is the European regime. You can see on the page
- 2.0 in front of you there that it was a test done on
- Reynobond 55 PE riveted system -- so PE, rivet -- with 22
- a date of issue of this report of 9 February 2011.
- If we go on in this document to page 4 23
- 2.5 obtains a B-s1, d0; do you see that?

19

{ARC00000383/4}, we can see the classification. It

- 1 A Yes
- 2 Q. There was also a test done in June 2011 - - sorry,
- 3 I should ask you, first of all: were you aware of this
- A. Not -- I wouldn't have necessarily been specifically 5
- 6 aware. I don't recall being totally aware of it.
- 7 Q. Did anybody at Arconic tell you that Reynobond PE in
- 8 a rivet -fix had been tested in 2011 and had obtained
- 9 a B-s1, d0?
- 10 A. I don't recall.
- Q. There was also a test -- and I'll just tell you what 11
- 12 happened -- in 2011, in June of that year, on
- 13 Reynobond PE in cassette-fix, in which large pieces fell
- 14 from the panel, there was widespread fire on the
- 15 surface, and the heat performance was so poor that the
- 16 test had to be stopped, as a result of which there was
- 17 no classification other than F.
- 18 Do you remember that?
- 19 A. No, I don't remember.
- 2.0 Q. I'm going to give a reference, but I'm not going to take you to the document: it's {MET00053158/172}. 21
- 2.2 Do you remember that, in October 2011, Arconic had 23 another test performed on Reynobond PE in cassette-fix
- 2.4 which achieved a class E?
- 25 A. No, I don't recall .

1 Q. You don't know that? No one ever told you about that "Reynobond 55 PE: Riveted/screwed: B-s1, d0. 2 either, did they? 2 "Reynobond 55 PE: Cassettes: E." 3 A. Not that I recall, no. 3 And then the FR results are set out below that, in 4 Q. Would you have expected to be made aware of those test 4 each case B-s1 d0 Did you know that Arconic was presenting its 5 results? 5 A. If it was relevant for the UK market, then yes, but 6 cassette variant of RB 55 PE as class E to Alucobond/3A 6 7 otherwise not really. 7 in July 2011? Did you know that as a fact? Q. Would you have expected to have been told that the 8 8 A. No, I didn't. 9 cassette-fix variant of Reynobond 55 PE had failed 9 Q. Can you explain how you did not know that fact? 10 10 a European fire test to such an extent that it could A. No. I can't. 11 only be classified as an F? 11 Q. Is that a fact that you would have expected to be told? 12 12 A. If again, it had been relevant to the -- any impact on If they'd have seen it necessary and it was relevant to 13 the UK, then, yes. 13 my role, then yes. But no, I don't recall it. Q. How could it conceivably not have been relevant to its Q. Given that it is radically different from what the 14 14 15 impact on the UK, given that that was one of the 15 BBA certificate states about the test results for variants of PE that you were selling in the UK market? Reynobond 55 PE as standard, I suggest to you that you 16 16 17 A. And, as I say, if they'd have seen that it was necessary 17 would have wanted to know that, so far from being a B in 18 for me to know that for the UK, then yes, I would have 18 cassette, it was E. That must be right, mustn't it? 19 expected to know. 19 A. Yes, if they'd have seen it, and if it was relevant to 20 $\ensuremath{\mathsf{Q}}.$ Can we then turn to a meeting in Freiburg. This is at 20 the role I was doing, then I would have expected to be 2.1 ${MET00053158_P04/35}$, please. This is a document 2.1 told about it. 2.2 recording a meeting which I do not think you were 22 Q. Can we look down to the bottom of that same page, then, 2.3 2.3 please. Under "Next steps", below the table, it says: present at, but let me show you what it says. It's 2.4 written by Claude Wehrle, and it was a meeting in 2.4 "For the moment, even if we know that PE material in 25 Freiburg on 5 July 2011, as you can see with me: 25 cassette has a bad behaviour exposed to fire, we can 1 "People present: Frank RITTER (3A) 1 still work with national regulations who are not as "People of AAP — Merxheim present: 2 2 3 "Peter FROEHLICH ... Claude WEHRLE ..." 3 4 Do you see that? EN 13501 standards and the PE in cassettes is no more 5 A. Yes 5 6 Q. If you scroll down to the table on the first page, you 6 "The evolution of fire regulation will put the PE 7 7 can see some products. You will see a table. out of the market in the coming month[s]." 8 8 Just to be clear, Frank Ritter of 3A was the Et cetera. 9 manufacturer of Alucobond; is that right? 9 My question is: did you realise yourself that 10 A. I don't know. 10 11 Q. At least 3A was the manufacturer, if not Mr Ritter 11 12 himself. 12 A. No, not -- no, I didn't. 13 In the table you can see that there is the product, 13 14 the system and the European class standard set out 14 document, that Arconic intended to continue to sell 15 15 Reynobond PE to countries that are not working solely there, and you can see that what is said above that 16 table is: 16 with the European classification system? 17 17

18

19

2.0

21

2.2

23

2.4

2.5

"European fire regulation.

18 "Remind.

19

2.0

21

2.2

23

2.4

"The European fire reaction classification norm EN 13501 is testing the product in his installation

"After the tests we did, the classifications for Reynobond in cassettes and riveted/screwed system

25 Then they're set out:

22

'Some countries (Spain...) are already working with Arconic considered that PE cassette had bad behaviour in Q. Were you aware, notwithstanding what we can see in this A. I wouldn't have had that knowledge to -- or thought about whether it -- that it was relevant or not. It's not something that I was involved in day to day. That would have been for the technical team and other senior management people at Merxheim to be making those decisions, not me. The countries that were not working solely with the European classification system included the UK, didn't they?

5

16

- 1 A. I really don't know.
- Q. You didn't know that at the time? You didn't know that 2 3 there was a dual system operating here?
- A. No, I wouldn't have had any reason to know. That would 4 5 have been dealt with by other people, the technical people, and the -- and other people within Merxheim. 6
- 7 That's not something I would have been involved in.
- 8 Q. Right. Did nobody ever communicate the strategy to you 9 that Arconic was going to continue to sell PE cassette, 10 notwithstanding its bad behaviour in fire, in the UK 11 market precisely because it had a dual system here?
- 12 A. Not that I recall. no.

15

16

17

18

19

2.0

2.1

22

2.3

2.4

25

1

2

3

5

6

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

2.2

13 Q. We move to 2012, then, in the chronology, and I want to ask you about more cladding fires in that year. 14

> Can we start with your second witness statement, please, at page 29 $\{MET00053162/29\}$, paragraph 93.1.

In that paragraph, you say -- and I should just preface this, actually, with the heading, "Companies involved in the Grenfell Tower refurbishment":

"With regard to the relevant companies and organisations that were involved in the Grenfell Tower refurbishment, I would say as follows:

"93.1. CEP — I had worked with CEP on a number of projects in the past, on all of which they had ordered Reynobond PE. One notable project was the

25

Chalcots Estate in Camden which was a substantial project involving five residential towers. It was a significant project for which Reynobond had been used in a rivet system. I remember that there had been a small fire at one of the towers (Taplow) on the Chalcots Estate in 2012 for which replacement sheets of Reynobond had been ordered. While I cannot recall the fire at Taplow tower specifically, I do remember undertaking CEP's original order of Revnobond for the Chalcots Tower. The project had originally been supplied with Etalbond, a competitor brand of ACM, but it was replaced with Reynobond after a number of issues with delamination "

I can pause there, I think, and ask you to go to page 34 {MET00053162/34}, four pages on, paragraph 100, that we've looked at a moment ago. Just coming back to it, you pick out the UAE fire and a vague recollection of a fire in Paris, but no other fires, you say, apart from the Chalcots fire.

Were you specifically aware of the Chalcots fire because you had been involved in the reordering of the panels? Is that why you knew about that one?

26

23 Yeah, the fact that we'd had a -- there'd been some 2.4 emails from CEP requesting some replacement panels 25 because of a small fire .

1 Q. You also refer, as I showed you before, to the fire in 2 or near Paris. Do you remember when that was?

3 A. I don't recall that, no.

Q. Was it the Mermoz Tower fire in Roubaix in May 2012? 4

5 A. As I say, I don't recall the name or any specific

details , I just know -- remember hearing something about 6 7 there being one.

8 Q. Right. What was the source of your hearing about there 9 being one, do you remember?

10 A. I really can't remember.

11 Q. Within Arconic or on the news or some publication?

12 A. I really can't remember.

13 Q. Let's go to {MET00053158_P06/171}, please.

14 This appears to be part of a sales team meeting in 15 mid-2012. If we go to page 189 {MET00053158_P06/189} of 16 that document, we can see here a slide entitled:

"News about certification.

18 "Fire issues - 'Incendie Roubaix' - New changes 19 coming in the building rules."

2.0 Did you see this slide at the time? As I say, we've 21 dated it to about mid-2012 for reasons appearing in

22 other parts of the document. But do you remember seeing

23 this document at about that time. Ms French?

2.4 I don't -- I can't remember. I don't recall it.

25 Is this how or might this be how you learnt about the

27

1 Roubaix fire?

2. A. I really can't remember. I'm sorry, but I can't recall .

3 Q. Were you not provided with any information about

cladding fires around the world from within Arconic,

those people in your reporting line above you?

6 A. I don't recall anything, no.

7 Q. Did you ever have any discussions with other salespeople 8 or your manager, Peter Froehlich, about other cladding

9 fires elsewhere in the world?

10 There was -- not specifically in relation to that.

11 There was one in the UAE that I got sent from somebody

12 else, that I sent over to our technical team for some

13 comments on. I don't recall any other information being 14

15 Q. We'll come to the UAE in a little bit of detail shortly.

Sticking with the period 2012, if we may, for the 17 moment, then, I would like to ask you some questions

18 about the changes in product literature at that time. 19 Can we please have up side by side the following

20 pair of documents: {ARC00000378} and {ARC00000388}. If 21 we can have those up side by side, we can see that this 2.2 is a list of certifications in several languages, and we

23 have been told by Arconic's solicitors, DLA Piper, that

2.4 the version on the left, 378, was produced in 2010, and 25 the document on the right, 388, was produced in 2012.

19

1 My first question is: are you familiar with these 2 documents, even sitting here today? 3 A. I don't recall —— I don't recall them, no. 4 Q. To show you a little bit more detail, they are in three 5 different languages, English, French and German, it appears, and in fact other languages as well across the 6 7 page, Spanish, Italian and Russian. 8 Do you know who within Arconic produced documents 9 such as this? 10 A. No, I don't, I'm sorry. 11 Q. To assist you further, if you look at the English 12 version on the left - hand side: 13 "All Reynobond Architecture and Reynolux products 14 15 are subjected to strict, internal quality tests." 16 Then a little bit lower down it says, "Reynobond 17 Architecture Certification", and it goes on in the text 18 19 "So far, no European standards exist for Aluminium 2.0 Composite Panels. 21 "Until this Euronorm standard is realised throughout 22 Europe, Reynobond Architecture products will be

29

certified according to three aspects in all countries.

" • Reaction to fire certification 1

" • Product certification

" System certification." 2

These are

2.3

2.4

2.5

- 3 That's what the documents are about to this extent.
- Do we take it from your answers you have given so
- 5 far on this document that you were never provided with
- 6 these to use in your marketing?
- 7 A. I don't recall seeing them, no.
- 8 Q. Are you able to explain what they were used for?
- 9 A. Sorry, could you ask the question again?
- 10 Q. Can you tell us what they were used for?
- 11 A. I couldn't -- I don't know.
- 12 Q. Can we have those documents back up, please, and look at 13 pages 3 and 5 of each of them, $\{ARC00000378/3\}$ and 14 {ARC00000388/5}. We can see that happily this time they
- 15 are both in English and other languages, but the English
- 16 we can see, and this is "2.1 Certification". If you
- 17 look in the 2010 version on page 3 $\{ARC00000378/3\},$ on
- 18 the left -hand side, you can see, under "Fire
- 19 certifications ", that "Europe" there, under "Country" --
- 2.0 do you see? — it lists both PE and FR core, and you can
- 21 see that PE core is listed as B-s2, d0, and the FR is
- 2.2 listed as B-s1, d0. Do you see that?
- 23
- 24 Q. If you look at the right-hand side, which is page 5 of 25 the 2012 version $\{ARC00000388/5\}$, you can see that under

- "Europe" only the FR certification is listed there,
- B-s1, d0. There is no claim there about the PE
- 3 classification under the Euro system at all.
- 4 My question is: do you know why that change
- 5 happened?
- A. No, I don't. 6
- 7 Q. Did you know that the change had happened as a fact?
- 8
- 9 Q. You're not able to explain it?
- 10 A. No. I can't.
- 11 Q. Were you aware of any decision at a high level, or
- 12 a higher level than you, perhaps, within Arconic to
- 13 remove references to class B on its marketing literature
- 14 for Reynobond PE between 2010 and 2012?
- 15 A. No, I wouldn't have been made aware of any of that.
- 16 Q. Are you able to explain why this document or these
- 17 documents are in English if these documents were not
- 18 intended for the UK market? A. I can't explain that, no
- 20 Q. Are these documents that you would have been expected to
- 21 have been provided with for use in your sales efforts in
- 22 the UK market?
- 2.3 A. They possibly were part of the marketing documents
- 2.4 I had. There was a number of brochures that I had
- 2.5 available to me. I could very well have used them.

- 1 Q. You could very well have used them?
- A. Or sent them out, yes, if they were available to me. 2
- 3 Q. Right. Being available to you -- I see, okay -- you
- wouldn't have sent them out without being thoroughly
 - familiar with them, would you?
- 6 A. In terms of all the technical aspects, then no,
- 7 I wouldn't have been studying them and understanding
- 8 every aspect of it and questioning it to that degree,
- 9

5

- 10 Q. Would you have been expected to have been told by those
- 11 who provided you with the 2012 version that some aspects
- 12 of it had changed?
- A. If it was relevant to what I was doing, yes. 13
- 14 Q. Right.
- 15 Did anybody as a fact ever point out to you that the
- 16 2012 version had changed from the 2010 version because
- 17 the European class B reference in relation to PE had
- 18 been removed and only the FR version was referred to?
- 19 A. No, I don't recall.
- 2.0 $\ensuremath{\mathsf{Q}}.$ Do you remember ever alerting your customers to the fact
- 21 that the 2012 document had been updated or changed from
- 2.2 the 2010 version, or indeed any earlier version?
- 23 No. As I've —— no, I don't recall.
- 24 Would you be expected to be told by those providing you
- 2.5 with this document that, even though you needn't worry

- yourself about the changes, there were changes in it and the customer should look carefully for them?
- 3 A. Yes, it would have been useful to have some pointers.
- 4 Q. Yes.
- Who provided you with these documents in 2010 and 2012 respectively, do you remember?
- 7 A. They would have come either from our marketing team or8 the sales technical team.
- 9 Q. Can you give us some names, though? First of all, who
 10 in the marketing team would have given you these
 11 documents?
- 12 A. As I explained yesterday, I can't remember the names of the people that were in the marketing team at the time.
- 14 Q. Who in the sales technical team would have given you 15 these documents?
- 16 A. There would have -- that would have been Claude and his team.
- 18 Q. When you say Claude and his team, do you mean 19 Claude Wehrle?
- 20 A. Claude Wehrle or ... and I can't remember the other —
- 21 there was two others in the team. Unfortunately I can't 22 remember their names.
- $23\,$ $\,$ Q. What about Peter Froehlich, would he have been the one
- 24 to have provided you with these documents, do you think?
- 25 A. He could have passed those on to me, yes.

33

- 1 Q. What about Nicholas Remy? What about him?
- 2 A. I ... possibly. I think he -- I can't remember which.
- 3 I recognise the name. I think he was in the sales
- 4 technical team, but I can't be certain.
- 5 Q. What about Philippe Vonthron?
- 6 A. He worked with the sales technical team.
- 7 Q. Did he provide these documents to you?
- 8 A. Sorry, say that again?
- 9 Q. Did he provide these documents to you?
- 10 A. He may have done, but most -- I would think it would 11 come from the marketing team.
- Q. When these documents came to you, how did they come?Did they come by post or by email?
- A. We had them on both. Some of them were on the website
 that you could download, some would come as hard copies
 and be posted over to me, and latterly they were on
- 17 a digital format.
- 18 Q. Right.
- Would somebody email you and attach them to the email and say, "Here you are, you should be using this version of these documents for your marketing"?
- 22 A. I don't recall any emails of that nature.
- 23 Q. If you downloaded them from the website, what told you
- $24\,$ that they were there on the website relevant to you,
- such that you should download them?

- 1 A. Nothing other than somebody requesting it, and
 - I would -- generally I'd got it stored on my own laptop.
- 3 Q. How would you go about getting it? You go on to the
- 4 website. What would tell you that you needed to check
- 5 the website to look for these documents?
- 6 A. Nothing, it was -- what I'm saying is that those
- 7 brochures could have been on the website to be able to
- 8 download them from there.
- 9 Q. But did nobody in the sales technical team alert you to
- $10\,$ $\,$ the fact this they existed and say, "Go and look at the
- 11 website, you'll need them"?
- 12 A. No, I don't recall that.
- 13 Q. So what would prompt you to go to the website and look
- 14 for documents such as these?
- 15~ A. If a customer had asked for something and I -- it was
- 16 the quickest way to get it to them was to show them the
- website and get them to take it off the website.
- 18 Q. Right
- 19 What kind of question would you get from a customer
- which would prompt you to look for this document?
- 21 A. If they -- just general questions, or if they wanted
- a brochure about Reynobond, any information about
 Reynobond, it would be the generally you would send
- them the group product brochure.
- 25 Q. Right. But if, as you told us, the fire classification

35

- $1 \qquad \quad \text{regime for Reynobond was irrelevant to your market, what} \\$
- 2 was the point of finding your customers a document which
- 3 had the product certifications for France, Germany,
- 4 Great Britain, Poland, Russia, Italy, Spain, et cetera,
- 5 and the European classifications?
- 6 A. Because that was the general documents that were in
- 7 circulation , so I would have to send that out.
- 8 Q. Yes, and so you would have sent it because it was
- 9 relevant to a customer who wanted it, wouldn't you?
- $10\,$ A. Because they'd asked for it so I would send that
- document out, or a general Reynobond document out.
- $12\,$ Q. So you would know that your customers were interested in
- 13 the Euro classifications , not only class 0.
- 14 A. It depends what they were asking the question on. It
- could have been that they were asking for information to
- do with colours or the types of panels that could be
- 17 made. It wouldn't necessarily always be about fire. It
- 18 was ... it could have been just general questions about
- 19 Reynobond and the product.
- 20 Q. Let me try and get at it this way: how would you be
- told, or would you be told, by anyone in Arconic that
 - these documents changed from year to year or period to
- period?A. I don't recall.

2.2

Q. You would need to be, wouldn't you? You would need to

34

14

15

16

- 1 be told that a document that you had previously accessed 2 or previously been sent by post had been updated?
- 3 A. As I've said before, if they'd -- it would be -- yes, 4 I would have been told, or they would have been alerting me to the fact that there had been some changes, but 5 I don't recall how that happened. 6
- Q. If we compare page 1 of the document on the left-hand side, $\{ARC00000378/1\}$, and page 3 of the later document, 8 9 $\{ARC00000388/3\}$, if we could just have those up, please, 10 at the same time, we had those before, they appear to be 11 identical, don't they?
- 12 A. Yes, if —— without reading them word for word, but ves.
- 13 Q. All right, take it from me that they are identical or 14 substantially identical.

We haven't been able to see anything in this document, either on this page or anywhere else, to tell the customer clearly that the one on the right, 2012, is a new document updated from the one on the left, 2010; is that right? Not just as a matter of reading the documents, but would that be a correct conclusion? There is nothing in the right-hand document, 2012, to say that the 2010 document has been revised, amended, updated in any way.

2.4 A. That's -- it's difficult for me to answer without having understood the exact -- all of the detail, but no,

37

- 1 I can't see anything that points it out.
 - Q. More generally, were you ever told by Peter Froehlich or anybody in the sales technical team to tell your customers that your marketing literature had changed?
- 5 A. Not that I recall

15

16

17

18

19

2.0

2.1

22

2.3

2

3

12

13

14

15

16

17

18

19

2.0

21

2.2

2.3

2.4

25

6 Q. Can we look at Claude Wehrle's witness statement, please. This is {MET00053190/28}, paragraph 96. He 7 8 says there -- well, he says a lot, and I think it's 9 probably worth just showing you all of this paragraph, 10 but there is one particular part I want to look at in 11 detail with you. He says this:

> "In relation to the removal from the relevant marketing materials of the EN classification reference for the PE product, I sent two emails in May 2012 requesting a meeting with Claude Schmidt and on the second occasion, on 29 May 2012, Claude Schmidt responded asking what the meeting was for. I confirmed that it was for a discussion on how the fire classifications are affecting the position in Europe. I do not recall $\mbox{ actually meeting with Claude Schmidt but }$ had a brief discussion early the following week when it was agreed between us that the reference to EN Class B in the marketing documents should be removed as it was no longer a wholly accurate reflection of the position.

It was agreed that the sales team for each jurisdiction

should be told of the EN E classification so that they

could take this into account as relevant to their

3 jurisdiction (and not all jurisdictions allowed the sale

4 of PE in any event). The intention was for customers to 5 be informed of the position when asking about the fire

performance of the cassette variant of the product and 6

7 that the classification was available on the CSTB

8 website. All of this was actioned. I do not know 9

exactly how this was done; it could have been by 10 discussion, or by sending customers the updated

11 marketing material. With respect to the communication

12 to the sales team, I believe that the result would have 13

been placed in the toolbox for their use."

Now, do you recall, having seen what Mr Wehrle says there, being told by anybody at Arconic in 2012 that Reynobond was no longer class B in the European tests?

17 A. No. I don't recall.

18 Q. Do you recall ever being instructed or advised to tell 19 your UK customers that Reynobond was no longer class B

20 in the European tests?

2.1 A. I don't recall.

22 Q. If Mr Wehrle is telling the truth in paragraph 96 of his 2.3 statement, are you able to explain why you weren't told?

2.4 No, I don't -- I can't answer that.

25 Q. Was there any discussion in any meetings of this change?

39

- 1 A. Not that I can recall.
- 2. Q. Were you sent any emails to tell you to tell your UK 3 customers that Reynobond 55 PE was no longer class B?

A. I recall, having since gone through the details since

5 Grenfell, there were some emails in relation to -- that

came from Claude in relation to the cassettes $\,--\,$ 6

7 Q. In 2014 --

8 A. -- classifications. I don't -- sorry, say again?

9 Q. So sorry, I spoke over you, that's my fault.

10 That was in 2014, I think, wasn't it?

11 A. Yes, it would have been.

12 Q. Yes.

13 Just focusing on 2012, do you remember any emails 14 telling you to tell your UK customers that Reynobond was 15 no longer class B?

16 A. Not that I recall, no.

17 Q. Did anybody instruct you in any way to get this message 18 out to your customer base?

19 A. Not that I recall, no.

2.0 Q. We discussed the toolbox yesterday. Is it right to say,

2.1 on the basis of what you told us vesterday, that even if

the toolbox had been updated, you would not have known

23

2.2

24 A. No, that's right.

 ${\bf Q}.\;\;{\bf Now,\;we\;can\;see\;that\;Mr\;Wehrle\;says}\;--\;{\bf if\;we\;can\;go\;back}$ 2.5

38

5

6

7

8

9

14

15

16

17

18

19

2.0

21

22

- 1 to his statement, please, at paragraph 96 2 ${\sf MET00053190/28}$ — that the intention was for customers 3 to be informed of the position. You can see he says 4 that two-thirds of the way down the paragraph. I showed 5 you that before. A. Yes. 6 7 Q. Did any customers actually ask about the fire performance of Reynobond, and in particular the fire 8 9 performance of cassette-fix, at this time, 2012? 10 10 A. Not that I can recall. 11 Q. Now, in her witness statement -- and I'll just give the 11 12 12 reference without going to it $\,--\,$ Gwenaelle Derrendinger 13 says at paragraph 34 on page 11 {MET00053191/11} that 13
- 15 A. Yes, as I've said, I don't recall any asking.
- 16 Q. If Claude Wehrle's intention was, as he says in his 17 statement, that customers would be told of the position 18 when asking, do we take from that that if the customers

they did not ask. Do you agree with that?

- 19 didn't ask, they didn't get told?
- 20 A. If they weren't —— yes.
- 2.1 Q. Does it follow from that that it was unlikely for 22 a customer in the UK to find out about the up-to-date
- 2.3 European classifications for Revnobond 55?
- 2.4 A Yes

14

25 Q. They wouldn't know to ask if there had been a change

- 1 unless they knew there had been a change, would they?
- 2. A. No.
- 3 Q. How would they know that there had been a change?
- A. They wouldn't unless they were told.
- 5 Q. If you had been told at the time what we now see, namely 6 that Reynobond 55 PE was no longer a European class B,
- 7 would you have told your customers?
- 8 A. Erm ... I honestly —— I don't know. I don't know the 9 answer to that question. If I'd been told that -- if 10 I'd been asked that they all needed to know, then 11 I would have made sure that that communication went out 12 to them.
- Q. What if you had been told only to tell them if they 13 14 asked about the fire performance of the cassette variant 15 of the product, as Mr Wehrle says? What if you had been 16 asked that question? What would you have said then?
- 17 A. It's difficult to answer that at this time. I can't 18 really answer that.
- 19 Q. Right.
- 2.0 I want just to look across, then, at what was 21 happening at this time, in 2012, on the Grenfell Tower 2.2 project. 2012, you'll appreciate, Ms French, was early 23
- 2.4 I can start, I think, please, by asking you some 25 questions about your connection with the fabricators.

1 Can we look at your first witness statement, please, 2 ${MET00019063/2}$, and we can see there at paragraph 6 you 3

"As a sales manager my primary focus was the origination and sale of the Revnobond product in the UK market and since [Arconic] had (and still has so far as I am aware) a number of commercial competitors selling product equivalent to the Reynobond range then a lot of my efforts were focussed on developing customer relationships with fabricators and promoting the Reynobond brand in the market place. Naturally this included fielding enquiries regarding the range of colours for that product as well as pricing enquiries and preparing estimates and quotations. My main contacts were fabricators, who would buy the product and cut to size and shape according to project needs and who were often approached by main contractors or specialist cladding installers . A few major housebuilders and architects were also among my contacts."

Can we take it from that that you had a deliberate marketing strategy to have good relationships with fabricators?

- 2.3 A. Yes, I was focusing on that element.
- 2.4 And fabricators for you were —— is this right? —— the 2.5 platform by which you could market Reynobond to the

- 1 end-user.
- 2 A. It was a way of us getting more exposure to Reynobond on 3 certain projects.
- Q. Does that mean that you would aim to have a smaller 5 number of good contacts, fabricators, rather than trying 6 to have a lot of direct relationships with designers,
- 7 contractors, employers and so forth?
- 8 A. Yes
- 9 Q. Yes.
- 10 Can we just look at a document, which is 11 a presentation given to you, we think, in June 2013 at 12 ${MET00019917/10}$. We have a diagram.
- 13 This is a document I think you compiled, isn't it?
- 14 A. Yes
- 15 Q. Let's just look at this diagram.
- 16 You can see the date at the bottom left-hand corner, 17 12 September 2017. That's obviously after the fire. 18
 - What is the relevance of that date?
- 19 A. There wouldn't have been any for that, as I wasn't there 2.0 at the time.
- 21 Q. That may very well therefore be just an exhibit mark.
- 2.2 Staying on this page, you can see that, from the left -hand side, you have got "6 Approved Fabricators" 23 2.4 and "Taylor Maxwell", and in the middle, "RB Arch UK" --
- 2.5 is that Reynobond Architecture UK?

1 A. Yes. 1 this is wrong -- that at that time at least, June 2013, Q. Then, "All Projects & Details Recorded in CRM", that's 2 you regarded your principal customer base as 2 3 the database that details the projects, isn't it? 3 fabricators, but also architects, cladding contractors 4 A. That's right. 4 and main contractors, perhaps to a lesser extent? 5 Q. That data. 5 A. Yeah, the main was fabricators and architects. But, as Then on the right-hand side: 6 6 I say, with the main contractor there was one specific 7 "Architects & Investors. 7 contractor that we were working with, which was to do with some general housing that they were dealing with. 8 "CPD Presentations. 8 9 "Specifications. 9 Q. So in very simple terms, can we take it from that that 10 10 "Main Contractors. your customer base -- we have been talking a lot about "Cladding Installers ." 11 11 your customers or customer base -- comprised fabricators What was the significance of "Architects &12 12 and some architects? 13 13 A. So that was to -- basically we were looking at trying to 14 14 Q. Thank you. 15 promote Reynobond through architects --15 Now, if we go back to your first statement, please, Q. Right. 16 ${MET00019063/3}$, please, paragraph 10. You say: 16 17 "One of the fabrication companies with whom I had 17 A. -- to get specifications. 18 Q. And --18 established a good working relationship, and who had A. -- with doing CPD presentations and developing 19 19 generated a number of opportunities for AAP SAS, was CEP 20 2.0 Architectural Facades Limited ('CEP')." specifications with them. 2.1 Q. What about main contractors? 21 You go on to say that Geof Blades of CEP contacted 22 22 A. I don't — can't remember why that was on there, but it you about supplying to the Grenfell Tower project. 23 2.3 would -- we would have been having contact -- so through Did you have an existing relationship with 2.4 2.4 Geof Blades before this time, early 2013? those approved fabricators and other people on there. 25 they -- we would have been having some contact with main 25 A. Yes, we'd done a number of -- we'd done one, possibly --1 contractors on specific projects, and we had $-\!-$ I had 1 some work with CEP before that, yes. some contact -- not much, probably one, maybe two --Q. Geof Blades, when he gave his evidence -- this is 2 2 3 with cladding installers . 3 ${Day41/31:23-25}$ — described your relationship as 4 a professional business working relationship; would you A. Very, very rare with cladding installers . 5 agree with that? Q. Then if we go to page 3 of this document 6 A. Yes, I would. 6 7 7 ${MET00019917/3}$, we can see that it's entitled: Q. Would you agree it was an informal relationship but one 8 8 "Reynobond/Reynolux. Business Case -: of trust; yes? 9 9 A. We had a professional relationship. "Strategy — Objectives — Actions." 10 "Route to Market & Why" is the second bullet point 10 Q. Yes. I'm not suggesting anything untoward, I'm just 11 11 asking you: is he right to say that it was an informal 12 "Taylor Maxwell - Fabricators. 12 relationship and one of trust? 13 "Architects & Main Contractors & Supply Agreements." 13 A. Yes, we worked well together, yes. 14 Do you see that? 14 Q. Now, Mr Blades told us that he didn't think that CEP 15 15 A. Yes. would get favourable deals from Arconic by virtue of 16 Q. Does that tell us that your main market were 16 that relationship. Is he right about that? 17 fabricators, but also architects and main contractors? 17 A. Yes, he's right. 18 A. Yes, we were getting involved with some main contractors 18 Q. You say in your second witness statement that your 19 due to -- a specific main contractor through 19 introduction to the Grenfell Tower project was in 2.0 2.0 fabricators. October 2012, and Mr Blades' evidence is that he 21 Q. Now, if you go -- and I should have shown you this, and 21 introduced you to the project. For our purposes, that's 2.2 I'm sorry —— back to page 2 of this document 2.2 {Day41/85:15-21}. Is that correct? 23 23 {MET00019917/2}, you can see that it's dated June 2013. Yes, I believe so.

2.4

2.5

Q. And he also told us that he introduced you because he

was aware that Studio E was interested in zinc products

48

2.4

25

I did say that it was; that's where we see it: "Sales

Meeting June 2013". So does that tell us -- tell me if

- $1 \hspace{1cm} \hbox{and Reynobond could be supplied in zinc or with a zinc} \\$
- 2 finish; is that right?
- 3 A. Yes.
- 4 Q. Were you told in advance that the architect was looking
- 5 for zinc products? I say in advance; before you met
- 6 Studio E.
- 7 A. I knew we were going in to talk about ACM. I can't
- 8 recall whether it was specifically about ZCM, zinc
- 9 material.
- 10 Q. Now, Geof Blades also told us -- and this is
- $11~~\{\mbox{Day41/86:3-6}\}$ to $\{\mbox{Day41/89}\}$ -- that CEP did not work
- 12 with solid zinc or ZCM; is that right?
- 13 A. That's my understanding, they hadn't, yes.
- $\,$ Q. So does that mean that if you were going to supply CEP
- $15 \hspace{1cm} \text{or going to supply a project using CEP as your} \\$
- $16 \hspace{1cm} \hbox{fabricator} \, , \, \, \hbox{it would rule out using zinc or ZCM} \\$
- 17 altogether?
- 18 A. No, there is no reason why they couldn't have -- the
- 19 fact they hadn't dealt with it before wouldn't have been
- $20\,$ any reason for them not to have been fabricating it at
- 21 some point.
- 22 Q. Right. Could Arconic supply solid zinc?
- 23 A. Not solid zinc, no, only ZCM.
- $24\,$ $\,$ Q. That was the only zinc metal product that you could
- supply, ZCM; is that right?

- 1 A. Yes.
- Q. Arconic, I think, could also supply, as you told us
- $3\,$ yesterday, zinc patina ACM, so ACM coated to look like
- 4 zinc 5 A. Yes
- 6 Q. I think it's right CEP would be happy to work with zinc
- 7 patina ACM because it was ACM and not ZCM.
- 8 A. I don't recall having those exact conversations with
- 9 them, but there's no reason why they couldn't have
- 10 fabricated ZCM or used the zinc painted look --
- 11 Q. Right.
- 12 A. -- ACM.
- $13\,$ $\,$ Q. Do you remember at that time -- October 2012, or indeed
- 14~ early 2013 -- who the main contractor on the
- 15 Grenfell Tower project was?
- 16 A. I remember at the very first meeting that there was the
- main contractor, Leadbitters, at that meeting, but that
- 18 was my only knowledge of main contractors that were
- 19 involved.
- 20 Q. Do you remember whether you brought product literature,
- a hard copy of product literature, with you to that
- 22 meeting?
- 23 A. I don't recall specifically .
- $24\,$ $\,$ Q. Do you remember discussing natural solid zinc at that

50

25 meeting?

- 1 A. I recall talking about ZCM.
- Q. You talked about ZCM, did you?
- 3 A. We talked about ZCM and possibly other ACM materials as 4 well
- 5 Q. Did you talk about zinc patina ACM?
- 6 A. I ... it would have been in the brochure, if I'd have
 - left the brochure. But I don't recall whether
- 8 I specifically spoke about z patina
- 9 Q. Mr Blades' recollection and, again, {Day41/88:16} —
- 10 was that you discussed at that meeting options where you
- $11\,$ could offer paint finish to replicate zinc. Is that
- 12 right?
- 13 A. Yeah. I don't recall it myself.
- 14 Q. You say you also discussed ZCM.
- 15 A. Yes

7

- 16 Q. What about the arrangement with Umicore at that time?
- 17 A. We were being encouraged to sell ZCM and not the zinc
- patina because of an arrangement that had been drawn up
- 19 between Umicore, who were supplying Alcoa the natural
- 20 zinc skin to produce the ZCM. So we were being
- 21 encouraged not to sell the painted zinc material --
- 22 Q. Why did you --
- 23 A. -- because of that.
- 24 Q. Why did you discuss zinc patina finished ACM given the
- 25 Umicore arrangement at that time?

51

- 1 A. I don't recall specifically why.
- 2 Q. Did you discuss anything about the fire performance,
- 3 either of ZCM or zinc patina finished ACM at that
- 4 meeting?
- 5 A. No, I don't recall.
- 6 Q. Did you mention the different core, the fact that ZCM
- 7 had an FR core, invariably, whereas ACM could have
- 8 either a PE core or an FR core? Did that topic ——
- 9 A. No, I don't recall.
- 10 Q. Did you discuss core at all at that meeting?
- 11 A. No, I don't recall doing so.
- 12 Q. Did you discuss the price of ZCM at that meeting?
- 13 A. No. I wouldn't have done.
- 14 Q. ZCM was substantially more expensive, wasn't it, than
- 15 ACM?
- 16 A. Yeah, but that wouldn't have been for me to discuss that
- 17 with -- in front of an architect. The fabricator would
- have done that through the right channels.
- 19 Q. How hard did you push ZCM, do you remember, in those
- 20 early meetings, or at that early meeting?
- 21 A. It's not -- it wasn't for me to try and persuade
- $22\,$ a customer either way. We had a range of materials and
- I would present that range of materials, and it wouldhave been up to them to decide what they wanted.
- 25 MR MILLETT: Can you give us an idea of the —— well, let me

Q. Right. It looks from this as if ZCM makes by far the 1 just ask you this, put it this way to you. 1 2 Can I ask you to look at Claude Schmidt's second 2 most profit. Do I take it, though, from what you're 3 witness statement. 3 telling us, that you didn't know that? 4 Mr Chairman, I note the time. This is probably 4 A. No, I definitely didn't know that. Q. Were you ever encouraged to sell PE over FR? 5 about a five-minute line of questions, but there is some 5 dipping into some evidence. It's as convenient a moment A. No 6 6 as ever, but we're on the same topic. 7 MR MILLETT: Mr Chairman, that I think is a convenient SIR MARTIN MOORE-BICK: Well, if it's a convenient point, 8 8 moment. 9 let's break there. If you would rather just continue 9 SIR MARTIN MOORE-BICK: Yes, very well. 10 1.0 Well, Ms French, we will have a break at that point. for, you know, five minutes or a little longer, I'm 11 quite happy with that. 11 Please remember not to talk to anyone about your MR MILLETT: If we can do that, I'd be very grateful. 12 12 evidence or anything to do with it while we have the SIR MARTIN MOORE-BICK: Yes, all right. 13 13 break, and we will resume at 11.35, please. All right? 14 THE WITNESS: Thank you. 14 MR MILLETT: Thank you very much. 15 Ms French, can I ask you, please, to be shown 15 SIR MARTIN MOORE-BICK: Thank you very much. 16 16 (11.20 am) Claude Schmidt's second witness statement at page 13 17 $\{MET00053187/13\}$ at paragraph 37. He says in that 17 (A short break) 18 statement at 37: 18 (11.35 am) SIR MARTIN MOORE-BICK: Welcome back, everyone. I'm going "37. With regard to the prices of ZCM and ACM FR in 19 19 2.0 comparison to ACM (55) PE around the time of the 2.0 to go next to Ms French to check that she is back with 21 refurbishment of Grenfell Tower, these were as follows: 21 "37.1. ZCM — circa EUR 80 per sgm. 22 Hello, Ms French, are you there? 22 23 2.3 "37.2. ACM FR - circa EUR 28 per sqm. THE WITNESS: Yes, I am, thank you, sir, 2.4 "37.3. ACM PE - circa EUR 26 per sqm." 2.4 SIR MARTIN MOORE-BICK: And you can see me and hear me 25 So on this basis, on this evidence from Mr Schmidt, 2.5 plainly, I hope? 55 1 ZCM was more than three times the cost of ACM PE. Does THE WITNESS: Yes, thank you. SIR MARTIN MOORE—BICK: And you're ready to carry on? 2 that accord with your recollection? 3 A. Yes, it was more expensive. 3 THE WITNESS: Yes, I am. SIR MARTIN MOORE-BICK: So I shall ask Mr Millett to Q. Now, he also tells us about Arconic's profit margin. If we can go to page 13 of this statement $\{\text{MET00053187}/13\}$ 5 5 continue his questioning at paragraph 38, just below it, he says: Yes, Mr Millett. 6 6 "38. So far as profit margins on ZCM, ACM FR and MR MILLETT: Mr Chairman. 7 7 8 ACM 55 (PE) products at the onset and during the 8 Welcome back, Ms French. 9 refurbishment of Grenfell Tower are concerned, these 9 I just want to explore a little bit more with you. 10 were as follows: 10 if I can, the topic of ZCM. 11 "38.1 ZCM - circa EUR 30-40 per sqm. 11 You told us before that Arconic had had 12 "38.2 ACM FR - circa EUR 5-6 per sqm. 12 an arrangement with Umicore by which you were obliged to "38.3 ACM PE - circa EUR 7-8 per sqm." 13 13 promote ZCM, in other words solid zinc panels. 14 Now, according to Claude Schmidt, therefore, it 14 A. Yes 15 looks as if PE makes around €2 more per square metre 15 Q. Yes. Could we look at exhibit DF4 at {MET00019919}, 16 than FR-cored ACM. Would that, again, correspond with 16 please. This is one of your exhibits, and if you go to the next page, this is the first page of the exhibit, if 17 your recollection? 17 18 A. I was not ever party to any of the profit that they were 18 you go to page 2 {MET00019919/2}, you can see that this 19 making on either -- any of the products. The only 19 is a list of samples provided for the Grenfell Tower 20 2.0 information I was working on was the overall project.

21

2.2

23

2.4

25

54

square—metre price to the customer. I was not party to

Q. You didn't know which was the more profitable of the

products in the range you were selling?

solicitors .

56

I think you put this together —— is this right? ——

when you were preparing your witness statements.

A. I didn't put it together; it was put together by the

Q. Right. Am I right in thinking that this was a list of

21

2.2

23

2.4

2.5

any of that.

A. No, definitely not.

7

8

9

- 1 samples that you historically had provided to Studio E 2 when you were involved? 3 A. Yes, it was. 4 Q. Yes. 5 Now, if we look down that list -- and it's chronological, 2013, 2014, and below that, 2014, right 6 7 through that year -- you can see that there are a large number of samples provided. If you look down that list, 8 9 and take your time, if you can just look first of all at 10 what's on the page in front of you, or screen in front 11 of you there, is any of those ZCM? 12 A. No. 13 Q. If you look at the bottom half of the page, then, is any 14 15 A. No -- yes, sorry, Reynobond zinc -- erm, no. Q No? 16 17 A. No 18 Q. So can you explain why you never provided any samples of 19 ZCM, notwithstanding your arrangement with Umicore that you were obliged to promote ZCM? 20 2.1 A. No, I don't recall . 2.2 Q. Do you remember whether you brought samples with you to the October 2012 meeting? 2.3 2.4 A. No. I don't remember. Q. You don't remember? 57 1 A. No, I don't remember. 2
- Q. Do you remember whether you took any particular samples 3 or you just don't remember one way or the other?
- A. I can't remember what I took with me on that particular 5 meeting
- 6 Q. Right.

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

2.2

Can we look at your first witness statement at page 4 $\{MET00019063/4\}$, please, and I would like to look with you at paragraph 11. You're talking here about the correspondence in late March 2013, and if you look five lines down in that paragraph, you say:

"In relation to the zinc patina ACM, I believe we must have spoken to Umicore regarding providing this colour ACM so as not to have been acting against our arrangement with them. I was not however involved in those discussions."

To be fair to you, it does appear that you attempted to introduce Umicore to the project. If we could just look at that, it's at {CEP000000014}. This is an email chain from October 2012, where you can see that Jonathan Lowy of Umicore writes to you -- or copies to you, he writes to Studio E, Adrian -- that's Adrian Jess, we believe -- on 16 October 2012, copied to

2.3 2.4

25 "Adrian,

58

"Debbie French from Reynobond asked me to contact 2 you concerning our pre-weathered zinc. She thought that 3 it maybe useful for you to see some photos of a project 4 completed 5 years ago or so in London - City Quarter by Berklev Homes in Leman Street." 5

He sends photographs.

You respond, if you scroll up that page, on 18 October to him:

"Hi Jonathan

1.0 $\ensuremath{^{\prime\prime}}\xspace\ensuremath{\mathsf{Many}}\xspace$ thanks for sending these pictures over to 11 STUDIO E.

12 "My approved Revnobond fabricator CEP Facades are 13 working closely with this project and introduce Reynobond ZCM to the Architect, I have copied Geof into 14 15 this e-mail so he can be kept in the loop."

So it looks from this -- is it right that you had 16 17 in fact introduced Revnobond ZCM, in other words with 18 zinc as opposed to zinc finish, to Studio E?

19 A. Again, I can't remember the specific conversations, but 20

2.1 Q. We haven't seen any emails where anybody from Umicore 2.2 actually gave permission to sell zinc patina ACM in

23 place of ZCM properly so-called. Do you remember any 2.4 emails of that nature?

2.5 A. Sorry, could you repeat the question?

- 1 Q. Yes. We haven't seen any emails where anybody from
- 2 Umicore gave permission to Reynobond, to Arconic, to 3 sell zinc patina ACM as opposed to pure zinc. Did you
- see any emails of that nature at the time?
- 5 A. No, I don't recall the details of that
- 6 Q. Do you know or can you remember who it was who gave 7 permission or sought permission $--\ \mbox{who}$ at Arconic sought
- 8 permission to use that material?
- 9 To use the ZCM? Α
- 10 Q. To use ACM with a patina finish.
- 11 A. No, I don't.

14

15

16

17

18

19

- 12 Q. Can we go to your first witness statement again, please,
- 13 at page 4 $\{MET00019063/4\}$, paragraph 14. You say there:
 - "I was asked to provide some indicative pricing for the supply of ZCM, which is an FR product, of a volume of approx. 5,000 m2. I cannot now remember whether I provided a formal quotation or written estimate but I do recall that soon after I had provided a price I was told (I think by Geoff[sic] Blades) that we were too
- 2.0 expensive.' 21 Is it right that at that stage you thought you had 2.2 lost the Grenfell Tower project?
- 23 A. I believe so. ves.
- 24 Q. Was that because, in your view, ZCM was too expensive?
- 2.5 A. I can't recall, but yes, I believe so.

4

5

6

7

1 Q. Right.

2 Was any part of that thinking related to the fact 3 that, as Geof Blades told us in his evidence, CEP did 4 not work with or had never worked with 7CM?

- 5 A. I don't believe that would have been a reason for it, 6 no.
- Q. Right. Were you still hopeful at that time that CEP 7 8 would still promote Reynobond products, including 9 perhaps zinc patina ACM?
- 10 A. On this particular project?
- 11 Q. (inaudible) projects.
- 12 A. I don't recall whether —— what I would have thought at 13 the time. It would have been down to the customer to decide what they wanted. It wasn't for us to try and 14 15 manoeuvre them down any particular route. It would have 16 been up to them to decide.
- 17 Q. Right. And in fact it's right, isn't it, that even as 18 early as late March 2013, you were supplying samples of 19 zinc patina ACM to Studio E, weren't you?
- 20 A. Yes.

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

2.2

23

2.4

25

21 Q. Yes

22 Can we then turn to 2013 proper. I've taken the 2.3 chronology slightly out of order, I'm afraid, but I want 2.4 to try to stay, if I can, with the events in those early days of the Grenfell Tower refurbishment, rolling back

the clock a little bit to the very beginning of 2013. So that's where we are in the chronology.

Can we look at {CEP00048975}, please. This is a run of emails in early 2013, January 2013. If we look at the second email down, this is an email from Mohit Kotecha of Leadbitter to Geof Blades on 24 January 2013, and it's said to be email 1 of 2. It says

"Geof,

"Nice to meet you today at the Baseline offices to review the Grenfell Tower Project with Gareth and myself. As discussed please find attached all necessary details for CEP Architectural to produce a design, manufacture and supply price along with installation costs from your approved installer Highrise Solutions."

We can see that this was forwarded to you, if you look a little bit higher up the page, by Geof Blades a little bit later on the same day, 24 January 2014.

Now, take it from me that we have seen that attached to this email from Mr Kotecha to Mr Blades was a bundle of documents, and I'll just give the reference, it's {CEP00048977}, there is no need to go to those. That's

If we go to the bundle, it's {CEP00048978}, this is what gets sent, and this is an outline specification for

the rainscreen cladding. If we go to page 10 of this

document {CEP00048978/10}, you will see that here is

3 an early drawing of the overclad tower.

When you received the email that Mr Kotecha had sent to Mr Blades and Mr Blades had forwarded to you on 24 January 2013, did you open the bundle of documents

- and look at this document? A. I don't recall whether I did or didn't. 8
- 9 Q. Also attached to his email and forwarded to you is 10 $\{\mbox{CEP00048979}\}.$ This is another bundle of documents. If 11 we go to page 3 {CEP00048979/3} in that, please, we can 12 see that this is a picture of the tower before 13

14 You say you didn't look at these, I think. In your 15 statement you say you don't recall receiving these 16 emails, and you don't know if you ever looked at the 17

- 18 A. No, I don't recall whether I did or didn't.
- 19 Q. It's right, isn't it, that you were asked to quote for 20 the project at about this time, weren't you?
- 2.1 A. I don't recall the details of the date that we were
- 22 first asked to produce a price.
- 2.3 Right. Well, you had a meeting, I think, with Studio E
- 2.4 in March 2013, didn't you?

2.5

63

- 1 Q. That's a couple of months later than this document.
- When you had that meeting, did you look back at this 2
- 3 email that you had got from Mr Kotecha in January and the bundle he had sent you about the project?
- 5 A. A lot of those details on there wouldn't have been
- necessarily relevant to me. That would have been down 6
- 7 to the ... we were basically providing a larger flat
- 8 material that other people would have been cutting down
- 9 and installing, so I wouldn't necessarily have looked 10
- over those details in great detail. But I don't recall 11 whether I did or didn't open them.
- 12 Q. Right, you don't recall whether you did or didn't open 13 them

14 Can we proceed on the basis that, because Mr Blades 15 was sending you this information for this project, at 16 the very least at the time this was information that he 17 thought was important to you, and you would have

18 realised that?

19 A. Yes.

- 2.0 Q. Is there any reason you can think of why you wouldn't 21 have looked at these documents?
- 2.2 Because, as I say, we were providing -- the build-up of
- 23 that -- of any project is nothing -- it wasn't relevant
- 2.4 to what I was actually doing. We were supplying
- 2.5 a product that would have then been cut down by others,

62

2

3

4

5

6

7

8

9

10

11

12

13

10

11

12

13

14

21

2.2

23

2.4

25

it would have been designed by others, and it would have been installed onto a building by others. So all of those details — again, technically I wouldn't have had an awful lot of knowledge about what those drawings meant, what they involved or how specific or non—specific they were.

Q. That's fair enough. I'm really just asking you whether
 you looked at these at the time. You say you can't
 remember.

Did you look at them in preparation for the sales meeting that you had at the end of March, two months later?

13 A. I don't think —— I don't recall.

10

11

12

14

15

16

17

18

19

2.0

21

22

2.3

2.4

25

1

2

3

5

6 7

8

9

10

11

12

13

14

15

16

17

18

19

Q. Let's look at your second statement, paragraph 72, please, on page 21 {MET00053162/21}. You say there that

"I have also recently, again by virtue of disclosure ... seen that on 24 January 2013 Mr Geof Blades (CEP) forwarded me (copied to Mr Neil Wilson (CEP)) two emails that he had received from Mr Mohit Kotecha of Leadbitter. I do not recall receiving these emails and I do not know if I ever looked at the attachments. From looking at the emails again now, I also note that they do not ask me provide further information or respond. I have been asked to

65

describe what the attachments are and what they show. I can see that the emails include 12 attachments which I would describe as artistic renderings of what Grenfell Tower might look like after completion of the works along with technical architectural drawings, some showing the building as a whole and others showing cross sections. They include information such as the amount of area to be covered by cladding and technical drawings of the window installation. This was very early in the project and I am not sure that the documents would have been directly relevant for my purposes. I had no technical knowledge and did not get involved in the design of projects and therefore cannot explain in technical detail the drawings or what they show. Indeed it was common for me to have very limited details about a project. Copies of these emails and attachments appear from page 327 of DF/5."

Do you accept that at the very least what these show is that Grenfell Tower was a tall building?

20 A. Yes.

Q. And that you noticed that it was a tall building,a high-rise building?

23 A. Yes

Q. Can we look back at your statement at paragraph 73,which is the next paragraph down in the same statement.

You say there:

"I have been asked to confirm whether I knew if the building was taller than 18 metres and the extent of the cladding works. I do not recall ever thinking about the height of the building or the extent of the cladding, as far as I was concerned at the time, the product had a BBA certificate which referred to National Class 0."

Now, can we take that statement there in your statement as confirming that you understood the regulations in the UK at the time sufficiently to know that as long as the product you were supplying had class 0, you could sell it for any height of building, including Grenfell Tower, being a high building?

14 A. Yes

Q. Does that tell us that you knew at the time that it was
 important that Reynobond PE 55 had achieved a class 0
 fire classification because, without it, you couldn't
 sell it for use on a tall building such as

19 Grenfell Tower?

20 A. I don't recall thinking of it or understanding it in that detail .

Q. To be clear, is it because you knew or perhaps
thought — let's say thought — that Reynobond 55 PE had
achieved class 0 that you didn't concern yourself with
the height of the building?

67

A. No, and, as I say, other people had all the details as
 well and would have been able to make those judgement
 calls as well.

Q. Yes. Well, I'm just asking about your thinking, you
 see, because in your statement you say you don't recall
 thinking about the height of the building or the extent
 of the cladding because "as far as I was concerned at
 the time, the product had a BBA certificate which
 referred to National Class 0".

What I'm just trying to understand is your thought process. Was your thought process that because it had class 0 you didn't have to think about the height of the building at all, or did you think because it's class 0, even though it's a tall building, it can be used?

A. It — basically it was that I didn't really think about
 any product — any building in terms of its height or
 its overall design. We had a BBA document and I — my
 understanding was that it was covered by the necessary
 regulations.

20 Q. Let me try and get at it in a different way.

You saw that Grenfell Tower was a tall building; when you saw that it was a tall building, was your thought process, "Well, that's all right because Reynobond PE 55 has got a class 0 so I can supply it"?

A. I'm honestly not sure that I would have even thought

66

- that at the time. It would have been that it had got
 a classification , we had a BBA document, and that was
- 3 enough
- 4 Q. Did you have any understanding about the relationship or about whether there was a relationship between class 0
- on the one hand and the height of the building on which
- 7 Reynobond PE 55 could be used on the other?
- 8 A. No
- $9\,$ $\,$ Q. Now, between March and April 2013, I think it's right,
- $10\,$ $\,$ isn't it , that you sent samples to Studio E, because we
- $11 \hspace{1cm} \text{saw that list that you had compiled; that's correct,} \\$
- 12 isn't it?
- 13 A. Yes.

- 14 Q. Now, in her evidence, Gwenaelle Derrendinger says
 - that -- and this is paragraph 29 of her statement
- 16 {MET00053191/8} that samples are A4 size or smaller; 17 is that right?
- 17 is that right?
- $18\,$ $\,$ A. Yes, there were a couple of different sizes , A4 or A3.
- Maybe slightly smaller than a A3.
- Q. Right. And they're supplied purely for aestheticpurposes?
- 22 A. Yes.
- 23 Q. Is it right that Arconic, as she says, produced ACM to
- order, and when Arconic produces ACM to order,
- 25 additional sheets are made up and cut up into sample

69

- 1 sizes and that's how samples are generated?
- 2 A. That's right.
- 3 Q. Is that correct?
- 4 A. Yes.
- 5 Q. Yes, thank you
- 6 She also says that, because of that method of
- 7 production, Arconic doesn't pay any attention to the
- 8 core of the sample, samples are for colour and finish
- 9 only: is she right about that?
- 10 A. Yes
- 11 Q. To the best of your understanding, did your customers
- 12 understand that that was the purpose of your sending
- 13 them samples?
- 14~ A. I believe so, yes. We -- again, we were never asked any
- questions about the core on any samples provided. It
- was always to do with the aesthetics.
- Q. So does it follow from that that you never discussed the core of samples that you were sending your customers?
- 19 A. From my recollection, no.
- 20 Q. I'd like to turn, then, to a topic about internal
- 21 records within Arconic about the Grenfell Tower project,
- 22 if I may.
- Now, in your first witness statement you say that
- you had a meeting with Studio E on 4 March 2013. That's
- 25 paragraph 10 {MET00019063/3}. I can take you back to it

70

- 1 if you like, but do you remember that?
- 2 A. Yes
- 3 Q. If we look at your first statement in the same place,
- 4 you also said on 11 March you confirmed the entry onto
- 5 the Arconic CRM programme showing CEP as the potential
- 6 customer for Grenfell Tower, with Geof Blades as the
- 7 potential customer. In fact, it's come up on the screen
- $\,\,$ for your convenience. So you can see there, do you see,
- 9 you say in the last few lines?
- 10 A Yes
- 11 Q. Yes. CRM, does that stand for customer relationship
- 12 management?
- 13 A. Yes

15

- $14\,$ $\,$ Q. Can you just explain to us, what is that? Is it
 - a database?
- 16 A. Yes, in effect. It was just a main portal for
- 17 information to be stored about projects, customers and
- other details. Samples were ordered through that CRM
- 19 system at a later stage as well.
- 20 Q. If we go to the entry in the CRM that you refer to,
- I think we find that at $\{MET00019920/5\}$. Can we go to
- 22 that. This is dated 11 March 2013, and it comes from
- "donotreply@crmondemand.com", 11 March 2013, to
- Gwenaelle Derrendinger, "Task 'Grenfell Tower' Is
- 2.5 Submitted".

71

- Just help me with this: is this an automated email
- 2 from the CRM system?
- 3 A. Yes.

1

- 4 Q. What would prompt it to go?
- 5 A. That they'd sent some -- that they'd shipped samples out
- 6 to satisfy the request that had been put into the
- 7 system.
- 8 Q. Right.
- Do I understand it this way: you would make an entry
 on to the CRM about the project and what was needed, and
- 11 that would then automatically email
- 12 Gwenaelle Derrendinger, or perhaps the inside sales
- 13 team, about what was needed?
- 14 A. I believe the requests went direct to somebody else
- 15 within Merxheim for them to pull together the necessary
 - sample and send it out. So either myself or Gwen would
- 17 raise the request for samples.
- 18 Q. I see.

16

- 19 If we look at the substance of the email that's
- sent, just go back to that, please, it says:
- ${\tt 21} \qquad {\tt "Order~Ship-Brochures/Samples}$
- 22 Gwenaelle Derrendinger ...
- 23 "**Task Information**
- 24 "Grenfell Tower.
- 25 "Normal.

1 "[Arconic] Contact 1: French Deborah ... Contact 2: 18 March -- sorry, 18 October -- no, perhaps that's not2 Derrendinger Gwenaelle 2 the right date. Yes, it's the bottom right-hand corner "**Account Information** 3 3 of this document, which, under "Sales Detail "CEP ARCHITECTURAL FACADES LTD. Information" -- I think you have to scroll down a little 4 4 bit further. Yes, in the top right of your screen in 5 5 "**Contact Information** 6 front you it says "Created External Deborah French 6 "GEOF BLADES. 7 7 18/10/2013". That's the date I think you get in your 8 "English." 8 statement. Do you see that? 9 Does that reflect an entry that you had made 9 A. Yes. 10 10 Q. Did you make this entry at that time? vourself on to the CRM? 11 A. Yeah, it could very well be from me. I don't know 11 A. Yes, possibly. 12 Then if we look under "Project Address", which you will 12 whether it -- I can't remember whether it would have 13 been from me or whether it would have been put in there 13 see just a little bit above that in the page -- can you see it says "Project Address"? 14 14 by Gwen. As I say, we would have both had access to 15 that and do that, depending on where the request came 15 A. Yes. Q. Just above that it says "Type of Building: Residential", 16 16 from 17 17 "Type of Market: Public" Q. Does the existence of this email tell us that the 18 Grenfell Tower project had actually been entered onto 18 Does that tell us that at this time, October 2013, 19 you knew that the Grenfell Tower project was 19 the CRM database at this time or by this time? 20 2.0 a residential building and that it was part of public A. Yes 21 Q. This is 11 March 2013, yes. 2.1 22 What was the significance of the entry of the 2.2 A. Yes 2.3 2.3 Q. Yes Grenfell Tower project onto the CRM database? 2.4 A. We had to put everything into -- that we were working on 24 Can I then turn to another document, which is your 25 into the CRM and start to build up a sort of knowledge 25 exhibit DF1 at {MET00019920/31}. This is earlier in the 1 of the project and the details of the project so that we 1 year, 2013. It looks like an automatically generated 2 could track samples and other information. 2 email, dated 5 April 2013, and again sent to 3 Q. Can we then look back at your first witness statement at 3 Gwenaelle Derrendinger. You can see underneath that the page 5 {MET00019063/5}, please, paragraph 16. You say "Objet ... Grenfell Tower. 5 5 6 "I cannot recall any further activity or exchanges 6 "Client ... Studio E. 7 7 for the rest of 2013, although I note from page 1 of "Contact ... Cagney Blaine. 8 'DF3' that on 18 October 2013 I created a new CRM 8 " Utilisation ... 9 programme entry for the Grenfell project. This CRM 9 I'm sorry, it's in French: 10 document shows Leadbitters as a potential party and the 10 ... Reynobond 55. 11 product identified was ACM RB, Painted, (this would be 11 "Mode de transformation ... Cassettes." 12 PE or FR) and ZCM RB (this was FR)." 12 Do you see that? 13 A Yes Now, is that your recollection, that there was a new 13 14 Q. "Format ... A6." CRM programme entry for Grenfell Tower project in 14 15 October 2013? 15 Now, do you remember making this entry yourself? A. I don't recall that. I've just seen the email that 16 16 A. No, looking at the very top, where it says "From", 17 17 that's something that would have been generated by Gwen, you've just shown me. 18 Q. The one I showed you was March 2013, and what I was just 18 I believe. 19 interested to know was what happened to the March entry 19 Q. Right, but how would she have known to generate these 2.0 2.0 onto the CRM if the one in October was, as you call it, details unless she had had direct contact with Studio E? 21 21 There could have been an email in direct requesting a new entry? 2.2 A. I don't know, I can't recall. 2.2 that, or it could have been that I forwarded it on and

23

2.4

2.5

Studio E?

74

Q. Can we look at your exhibit 3 which you refer to,

 ${MET00019918/2}$, please. You can see that this is

an entry onto the CRM, and you can see the date,

76

Q. Do you remember whether she ever had direct contact with

she raised it in the CRM system.

23

2.4

- A. I don't recall, no.
- Q. I don't want you to speculate, but doing the best you
- 3 can with your recollection, is it right that in fact 4 those details came from you?
- 5 A. Again, it could have been an email that was sent in to
- both myself and Gwen, and that she's picked it up and 6
- 7 entered it into the CRM system, or it could have been that I'd phoned her and asked her to do it. I really
- 9 can't recall

- 10 Q. Do you recall whether there had been any discussions 11 about using cassette in particular at this time,
- April 2013? 12
- 13 A. No. I don't recall.
- Q. Can you explain why "mode de transformation" is cassette 14 15 as opposed to cassette or rivet, or even just rivet?
- 16 A. No. I don't know.
- 17 Q. Now, looking at the format, A6, does that suggest that 18 this was actually about a sample?
- 19 A. Yes, it would have been a smaller sample.
- 20

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

24

25

2.1 I'm now going to turn to a different topic, also 22 within 2013, which is the UAE fires in late 2012 and 2.3 early 2013.

2.4 Now, in this next section. I ought to give a trigger warning. We may be showing pictures of fires in tall

77

buildings . We saw one or two earlier, but I just ought

Can we start by going to Claude Schmidt's exhibit 10, {MET00053157/32}. I just want to see what you know about this.

At the very bottom of the page there on the screen in front of you, you can see the start of an article entitled "Cladding Blamed in Skyscraper Fire", Monday, November 26, 2012.

Over the page at page 33 $\{MET00053157/33\}$ you can see the substantive start of the article, and an embedded video with a picture of a tower on fire. We can't play it and I'm not going to play the video, but you can see the caption underneath it, and it says:

"The fire at Tamweel Tower started near the top of the building and moved down, raining down flaming pieces of the building onto the ground."

This is November 2013.

Did you know at that time that there had been a cladding fire at the Tamweel Tower, which was in Dubai, on 20 November 2012?

2.2 A. I recall there being a fire of some description in the 23 UAE, but I didn't know the details or had no further

information or knowledge of it.

Q. Right. So do we take it from that that you didn't know

about this specific fire?

- 2 A. No, not the specific details, no.
- 3 Q. Do you remember any discussion within Arconic, either
- with Peter Froehlich or with Claude Wehrle or anybody 4
- 5 else in those departments, about the fact of a high-rise
- fire in a tall building in Dubai at that time, 6
- 7 November 2012?
- A. No, I wouldn't have been party to any of those 8
 - discussions, I -- as I say, I visited the factory very
- 10 rarely and certainly wouldn't have been involved or even
- 11 heard discussions going on in Merxheim.
- 12 There was another fire in April 2013 at the
 - Al Hafeet Tower in the UAE, and that was on
- 14 22 April 2013. Do you remember that fire?
- 15 A. No. As I say, I recall a fire in the UAE, but
- 16 I can't -- I couldn't begin to tell you what the details
- 17 were, when it was or what the project details were.
- 18 Q. Right

9

13

- 19 Let's see how far we go with the next document,
- 20 then, which is one of Claude Wehrle's exhibits, part 10,
- 21 page 157. That is at $\{MET00053158_P10/157\}$.
- 22 Now, this is an email from Richard Geater of 3A to
- 23 Barrie Wingrove dated 9 May 2013.
- 2.4 Now, we understand that Richard Geater was the sales 2.5 representative in the UK for Alucobond, 3A's product.

79

- 1 Are you able to confirm that?
- A. Yes, I believe he was. 2.
- $\ensuremath{\mathsf{Q}}.$ Yes. He was effectively your direct competition; is 3
- 4 that fair?
- 5 A. (Witness nods)
- 6 Q. If we scroll up very briefly to the bottom of page 156
- 7 ${MET00053158_P10/156}$, we can see that this email was
- 8 passed on in turn, do you see, by Barrie Wingrove to
- 9 a number of people on 9 May, and copied to you? Do you
- 10 see your name at the very bottom there, cc?
- 11

16

18

- 12 Q. Then just following the email up a little bit further on
- 13 page 156, we can see that you sent that email on
- 10 May 2013 to Peter Froehlich, Claude Wehrle, 14
- 15 Alain Flacon and Claude Schmidt:
 - "Morning All
- 17 "Just to make you aware I sent this link over to
 - Claude W last week concerning a BBC report covering
- 19 a fire in UAE using ACM.
- 2.0 "Richard Geater — Alucobond Rep in the UK is
- 21 emailing all fabricators explaining that Alucobond is 2.2 now using a fire core only as [standard].'
- 23 Then you embed the link into your email.
- 2.4 Then you go on to say:
- 25 "Would welcome any comments/statement we have ref

78

1		the fire and our [standards] so I can communicate this	1		when being tested turns out to be
2		to our relevant customers."	2		a recycled PE core burning like paper. Half of the
3		Now, I've shown you that, and I want just to go back	3		country is full of this rubbish due to price. We have
4		now, if I can, to the email that Barrie Wingrove sent.	4		taken random samples and done a live test in Bangkok in
5		Can I just ask you: Barrie Wingrove, he has	5		front of architects, they almost fainted. Indeed, this
6		an Argonaut UK email address; who was Barrie Wingrove,	6		panel is a whole cheat and burns fiercely."
7		do you remember?	7		Did you read that message specifically?
8	Α.	He was a fabricator.	8	Α.	I —— as I say, I'm pretty sure I would have done, but
9		He was a fabricator, right.	9		I don't recall reading it or even recognise it now.
10	•	Geof Blades also told us that he had received	10	Q.	Would it be right to conclude from the fact that you
11		an email from Richard Geater at about this time	11	•	sent it on up the chain to senior people in Arconic that
12		concerning this fire . Were you aware whether	12		you regarded it as an important message?
13		Richard Geater of 3A was sending an email about this	13	Α	Yes.
14		fire to other fabricators, like CEP, or did you not	14		Were you shocked by what Barrie Wingrove was passing on
15		know?	15	ų.	to you from his colleague?
16	۸	I don't —— I can't recall the instance of that	16	۸	I don't recall —— I can't remember what my response
17	Λ.	happening. But he'd obviously sent it to a number of	17	Λ.	would have been, but, as I say, having passed it on up,
		•	18		
18	^	people, looking at that.	19	_	I was obviously concerned about it.
19	Q.	Let's look then at the email he sends to Barrie Wingrove		Q.	Did you appreciate that there was a view, at least
20		which gets passed to you and you pass on within Arconic	20		expressed in this email, that a ventilated façade with
21		up the chain $\{MET00053158_P10/157\}$. He starts by	21		a polyethylene—cored panel could transport fire up
22		saying:	22		a building like a chimney, as he says?
23		"Hi Barrie,	23	Α.	I probably wouldn't have taken that element on board,
24		"You may or may not have seen the recent press	24		not being a $$ having any knowledge of design.
25		coverage of a building fire in Dubai clad in ACM?"	25	Q.	Did you note his view or observation that the recycled
		81			83
1		He then goes on to say, after the link:	1		PE burns like paper?
2		"Having taken the time to investigate with my	2	A.	I don't recall.
3		colleague responsible for this market he has responded	3	Q.	What about the observation that architects, when shown
4		as follows"	4		a live test, almost fainted?
5		We can see the response, which is all in italics .	5	A.	Again, I don't recall the specifics in that.
6		When you got this email and then passed it up the	6	Q.	Right. Really I'm just trying to get a feel for your
7		chain, did you read it?	7		reaction when you saw this email for the first time.
8	Α.	Yes, I probably did at the time, but again, I don't	8		Did it occur to you at that moment that PE-cored ACI
9		recall it, it's a long time ago.	9		was not fire—safe?
10	Q.	No, I understand that, but I just want to confirm	10	A.	Again, I can't comment on how I would have felt. I've
11		that	11		obviously sent it to Merxheim for a reason, and would
12	Α.	I wouldn't have not $$ I wouldn't have not read it, no.	12		have expected them to, you know, comment as appropriate,
13		Right. Okay.	13		and if it was affecting what we were doing here, then
14	•	Can we then go to the third paragraph in the	14		I would have had the necessary information.
15		italics . It says:	15	O	Did it occur to you, from reading this, that PE—cored
16		"The trouble is that the cladding system here in	16	•	ACM might be dangerous?
17		particular but all over in general, using PE, is like	17	Α	Probably not, no. It would —— again, it would have been
18		a chimney which transports the fire from bottom to top	18	,	relevant to the BBA document if anything was altering,
19		or vice versa within shortest time."	19		and then I would have been notified about that.
20		Then if you look at the fourth paragraph, he says:	20	0	Did you note Mr Geater's comment after the end of the
21		"The worst of all: in our field of composite panels:	21	٧.	italics — actually, to be fair to you, I'm not sure
22		YOU DO NOT GET WHAT YOU SEE!! The Mulk Holding ALUBOND			I've shown you those yet. Let's scroll down a little
23		people are responsible for the huge damage in this part	23		bit, if we can, because I haven't. Let me show you
23 24		of the world. They, since a very long time promote fire	24		that.
		or the world. They, since a very folig tille pioniote inc	~ '		uruc.

25

25

 $\mbox{'rated'}$ composite panels with a white core which

After the end of the italics , if you scroll down on

1 page 157, which are the quotations, Mr Geater says: 2 "Again the perils of using cheap ACM alternatives 3 have been exposed. As you are aware our standard core

is the PLUS FR mineral core achieving Class B, s1, d0, 4 according to EN 13501-1, unlike other ACM producers." 5

Now, I'm assuming that since you read this email and 6 7 passed it on, you would have read that sentence?

- 8 A. Possibly, yes.
- 9 Q. When you did read that sentence, did it occur to you 10 that your competitor, Mr Geater at 3A, regarded the 11 European classifications as relevant?
- 12 A. I wouldn't have taken that on board. As I say, my 13 knowledge -- I do not -- I didn't have enough knowledge 14 in those areas. I would have sent that on for other
- 15 people to be guiding as to what -- you know, whether the 16 materials we'd got were suitable or not.
- 17 Q. Did it not occur to you at the time that -- given what 18 vou've told us about your view about the relevance of 19 the European fire classifications, did you not ask 20 yourself or wonder why it was that Mr Geater was 2.1 referring to them, given that you were competing in the
- same market? 2.2 A. No.

2.3

2.4 Q. Right. When he says that the perils of using cheap ACM 25 have been exposed, did that not cause you some concern

- 1 or surprise?
- 2 A. Again, I can't comment because I can't remember how 3 I reacted at the time.
- Q. Right.
- 5 Did you note the fact that 3A's standard product was 6 an FR product?
- 7 A. I knew at the time that their product had been changed 8 to an FR.
- 9 Q. Did you wonder why yours hadn't?
- 10 A. Again, I was being guided by Merxheim. If they thought 11 it was relevant then that's what they would have 12 provided us.
- 13 Q. Do you know from your own recollection whether
- Alucobond -- 3A, that is -- stopped selling PE-cored 14 15 Alucobond at this time?
- 16 A. I don't recall
- Q. Did you have any thoughts about whether perhaps Arconic 17 18 should stop selling PE core and offer FR as standard in 19 all regions at this time?
- A. Again, I can't recall at -- in 2013 whether that was --2.0 21 whether I did or didn't.
- 2.2 Q. Right.
- 23 Can we look up, then, to -- well, we've seen 2.4 page 156 $\{MET00053158_P10/156\}$ and the email that you 25 forwarded on on 10 May. You say in your statement that

86

you sent this $\,--\,$ and I just want to show you what you 2 say on page 156, if we can just scroll up to that. I've 3 shown you the text there.

4 You link the story or rather the topic which

5 Mr Geater is passing on to you to a link that you had already sent to Claude Wehrle the previous week 6

7 concerning the BBC report covering a fire in the UAE

using ACM. So do we take it from that that, even before 8 9 Mr Geater's message to Mr Wingrove, and that coming to

10 you, you were aware of this fire and thought it

11 appropriate to discuss it with Mr Wehrle?

- 12 A.
- 13 Q. Do you remember what you said to Mr Wehrle about it at 14
- 15 A. No. I don't.
- Q. What was the purpose of your bringing that fire to 16
- 17 Mr Wehrle's attention, even before you'd seen the Geater 18 message?
- 19 A. It was possibly because of some questions that were
- 20 coming from some UK customers.
- 2.1 Q. Do you remember receiving questions from UK customers
- 22 about this fire?
- 2.3 A. I remember -- I think it was related to that particular
- 2.4 fire. I remember receiving a —— one or possibly two
- 2.5 emails from customers about it.

- 1 Q. Do you remember which customers?
- A. I believe I had an email from Simco over that. 2.
- 3 Q. And? Anybody else?
- A. I don't recall any others.
- 5 Q. Right. And what was the nature of the query, can you 6 recall?
- 7 A. I think it was just, again, highlighting that there had
- been some fires and just alerting me to them, or making 8 me aware of them.
- 9 10 Q. What did you want Mr Wehrle to do?
- 11 A. I don't recall what I was thinking at the time. It was
- 12 possibly some reassurances that everything we were doing 13 was okay and I was okay to carry on.
- $\ensuremath{\mathsf{Q}}.$ Did Mr Wehrle respond to your message that we can see 14 15 here you sent him the previous week?
- 16 A. I don't recall specifically whether he did or didn't.
- 17 Q. In passing these messages or this email up the chain to
- 18 seniors at Arconic, you were obviously bringing it to
- 19 their attention because you thought it was important, as
- 2.0 you told us. Were you looking to them to give you lines
- 21 of communication that you could give to customers who
- 2.2 called in and asked about it?
- 23 Yes, I was obviously needing some sort of reassurance
- 24 that we were -- I was okay to carry on as I was, and be

88

2.5 told differently otherwise.

- 1 Q. Did anybody from the group of people to whom you sent 2 this email respond to you?
- 3 A. I don't recall specifically if they did or didn't.
- 4 Q. So you don't remember whether anyone told you what to 5 tell customers?
- A. I'm sure I would have had a response, but I can't 6 7 remember specifically what it was, what that
- 8 communication was or what it involved
- 9 Q. Do you remember the gist, though, the flavour of what 10 you were told to say to customers in response to this 11
- 12 A. Again, I can't remember specifically.
- 13 Q. Do you remember that you sent an email to fabricators on 14 13 May 2013, a few days later?
- 15
- Q. We find that at {MET00053173/79}, if we can go to that, 16
- 17 please. This is an email from you dated, as we can see,
- 18 13 May 2013, to Graham Smith and John Simmons at Simco,
- 19 copied to Claude Wehrle and Peter Froehlich, subject:
- 2.0 "BBC Report Ref ACM in UAE". If we could just have that
- 2.1 on the left -hand side of the screen and pull up the
- 22 identical version that it appears you also sent to CEP
- the same day, that's at {CEP00049719}, please. We can 2.3 2.4
- see, just looking at the right-hand side, you sent this 25
- one on the same day at around about the same time,

- 1 in fact two minutes later, on the morning of $13\ \text{May}$, to
- 2 CEP. It looks as if, but you can confirm, that the text
- 3 is exactly the same.
- A. Yes. it is.

9

10

11

12

- Q. We can work with either of these emails, it doesn't 5
- matter which. Let's go with the first one I put up, 6
- 7 which is the one to Graham Smith and John Simmons.
 - As I've shown you, you can see that Claude Wehrle and Peter Froehlich were copied. Peter Froehlich, in his evidence, says that he spoke to you about the contents of this email that you sent. He says that at paragraph 57.1.2 of his statement at page 20
- 13 {MET00053197/20}, just for our reference.
- 14 Can you confirm from your recollection that 15 Peter Froehlich did speak to you about the contents of
- 16 this email? A. I can't recollect that exactly, but I wouldn't have put 17
- 18 that sort of information together without having some 19 sort of guidance from Merxheim.
- Q. Right. Did you draft this email yourself? 2.0
- 2.1 A. I don't recall whether I did or didn't, or whether it
- 2.2 was a combination of some wording from Merxheim and me 23 adding stuff in, I can't recall.
- 24 Q. Right. Do you remember who was involved in pulling 2.5 together the text of this email, apart from you and

90

- possibly Peter Froehlich?
- 2 A. No, I don't. I would have said that if it's gone -- if
- 3 I've copied in Claude and Peter, then it would have been
- 4 those two. But --
- Q. And --5
- A. Sorry. 6
- 7 Q. Sorry, do you want to finish your answer?
- 8 A. I don't know whether that would have then gone up from 9 them, up further, I don't know.
- 10 Q. We can see from those two examples on the screen that
- 11 you sent one to Simco and another to CEP. Was this
- 12 a general round-robin that you were sending to all of
- 13 your small group of fabricators?
- 14 A. If I've sent it to those two and done it straightaway,
- 15 then yes, I could very well have been sending it to the
- 16 key fabricators that we were working with.
- 17 Q. Did anybody tell you to whom to send this email?
- 18 A. No. they wouldn't necessarily have done that.
- 19 Q. Right. So whose idea was it to send it to these two
- 20 fabricators, or the fabricators in general?
- 2.1 A. That would have probably been guided by me, because
- 22 I obviously know the customers that were asking the
- 2.3 relevant questions.
- 24 Q. Right.
- 25 We've seen that Claude Wehrle was copied in to the

- 1 version on the left, the one to Simco, although it
 - doesn't appear that he was copied in to the one on the
- 3

2

- Is it fair to say, to the best of your recollection,
- 5 that Claude Wehrle knew what you were saying to
- 6 customers?
- 7 A. Yes.
- 8 Q. And that he approved it?
- 9 A. He would have been aware of it, yeah -- yes.
- 10 Q. Now, did you consider sending this email to end
- 11 customers, for example Studio E, with whom you had had
- 12 meetings on the Grenfell Tower project?
- 13 A. No
- 14 Q. You don't mention in your statement that you sent this
- 15 email to CEP, only to Simco. Why is that?
- 16 A. I don't recall having sent it to CEP until just seeing
- 17 the email that you've shown me.
- 18 Q. I see. Does that mean that, when you were preparing
- 19 your statement, nobody showed you the version of this
- 2.0 email you sent to CEP?
- 21 A. No. I'd just seen the one sent to Simco.
- 2.2 Q. Why didn't you consider sending this email to end
- 23 customers outside the group of fabricators?
- 2.4 A. I don't recall, and -- I don't recall. I can't recall
- 2.5 who even received that email, apart from the two that

1 you've shown me, I don't know.

Q. Let's now look at the text of the message. If you can go back to it, please, at $\{MET00053173/79\}$. This is the one sent to John Simmons and Graham Smith, copied to Claude Wehrle and Peter Froehlich, as we can see.

I'm just going to show the whole thing to you, and take it slowly. You say:

"Hi

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

22

2.3

2.4

25

1

2

3

5

6 7

8

9

10

11

12

13

14

15

16

17

18

19

25

"As you may be aware there had been some reports via BBC concerning a fire on a building in UAE regarding

"As a business we are aware of this report and our technical team are following the details, but in the meantime I wanted to add some thoughts that may help if you get questions from your customers/clients etc.

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

"At this stage we will continue to offer both PE &

FR core and continue the close working relationship we have with our Approved Fabricators to make sure the right technical support, Reynobond Specification and Materials are being used and installed on Reynobond Projects.

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

Just looking at those two paragraphs before the end, the third and fourth paragraphs —— the one starting "Regarding the supply of Reynobond" and the next one which starts "At this stage" -- when you wrote those two paragraphs describing Arconic's practice there, was what you said in those paragraphs true?

- A. I think, looking back on it, there was -- they were sent as a -- some information to the fabricators to give them some comfort that we were aware of what was going on. I think some of the language that's been used in it is -- I wouldn't necessarily put back in there again. It's probably heavy on the sales side.
- 2.0 $\mathsf{Q}.$ Well, let's go through it. I'm going to come back to 21 that answer shortly. if I can, because I just want to 2.2 understand it a little better. Before we do, let's see 23 if we can break down for absolute clarity what it is 2.4 you're saying here.

Was it true that Arconic controlled and understood

1 what core was being used in all projects?

- 2 A. No
- 3 Q. Was it true that Arconic worked very closely with the 4 fabricators it approved?
- A. We worked -- we did work closely with the fabricators 5 6 that we were supplying materials to.
- 7 Q. Was Arconic able to follow what type of project was 8 being designed or developed?
- 9 A. Only through the CRM system and the information that was 10 being put and developed in there.
- 11 Q. Was it true that Arconic would then offer the right
- 12 Revnobond specification, including the core?
- 13
- 14 $\mathsf{Q}.\;\;\mathsf{So}\;\mathsf{those}\;\mathsf{four}\;\mathsf{statements}\;\mathsf{I've}\;\mathsf{just}\;\;\mathsf{put}\;\mathsf{to}\;\mathsf{you},\;\mathsf{of}\;\mathsf{those}\;\;$
- 15 four statements, two were false and two had to be
- 16 qualified in the way you've done. That's right, isn't
- 17 it?
- 18 A. Yes
- 19 Q. So it wasn't true to say to your fabricators, including
- 20 CEP, that Arconic informed itself in sufficient detail
- 2.1 about each project so as to be able to advise whether
- 22 an FR core or a PE core was suitable?
- 23 A. No
- 2.4 Q. If it wasn't true, why did you make those statements?
- 25 A. As I say, reading back on it now, it was not the right

1 thing to put in there, and it was, as I say, very heavy

- 2 on -- in terms of the wording, it was too heavy on the
- 3 sales side, to basically give customers some comfort
- that we were still able to continue with what we were
- 5
- 6 Q. Heavy on the sales side; what do you mean?
- 7 A. As in it was a document that was sent to give them some
- 8 reassurances that the business was comfortable with
- 9 offering the materials that we were offering and that it 10 was all still okay for us to use and supply.
- 11 Q. Based on at least two false statements?
- 12 A. As I say, reading back -- reading the details again in
- 13 the context of what we're looking at now, then it wasn't
- 14 the right thing to have sent.

that they needed.

- 15 Q. You knew at the time that at least two of these
- 16 statements I've put to you were false, didn't you?
- A. I wouldn't have said I'd looked at it in that sense. As 17
- 18 I say, I was sending a communication out to our
- 19 customers to say that they were still okay to deal with
- 2.0 us and that we were still providing materials in the way 21
- 2.2 Q. When you told CEP and other fabricators that Arconic
- 23 informed itself in sufficient detail about each project
- 2.4 so as to be able to advise whether an FR core or a PE
- 25 core was suitable, not only was that false, but it

94

- 1 appears that you knew it was false; is that right?
- 2 A. No, I wouldn't have necessarily known that in that
- 3 context at the time. As I say, reading it now, in the 4 details that we're looking at today, I wouldn't have 5 sent that information out.
- 6 Q. What have you learnt since you wrote this email that you 7 didn't know at the time, which means that when you wrote 8 it at the time, you didn't know that what I've just put 9 to you was false?
- 10 A. I've learnt a huge amount since. I mean, an enormous 11 amount. As I say, as I've said numerous occasions, the 12 topic of fire, my understanding of it, the implications 13 of it, were just not discussed in the market. So I was 14 basically trying to give the customers that were asking 15 at the time some reassurances that we were doing the right things. The wording that I've used in that was, 16 17 looking back on it now, not necessarily the right thing 18 to have -- was not the right way to have worded it or 19
- 20 Q. Let's take the two statements that you accepted straight 2.1 away were false: Arconic control and understand what 2.2 core is being used in all projects. Not only was that 2.3 false, but you knew that was false at the time.
- 2.4 A. As you -- as I say, at the time of writing it. I hadn't 25 thought of it in that context. I didn't write it

- 1 knowing that that was the context it was being written 2
- 3 Q. When you said in this email that Arconic controlled and understood what core is being used in all projects, you 5 accepted that that was a false statement. What I'm putting to you is that when you made that false 6 7 statement, you knew it was false; do you accept that?
- 8 A. Some of the wording in there, as I say, was not in the 9 way that it should have been, and so, ves, some of that 10 wording was -- should not have been put in there in the 11 way that it was, in the context of what we're looking 12 at -- how we're looking at it today.
- 13 $\mathsf{Q}.\;\;\mathsf{Ms}\;\mathsf{French},\;\mathsf{there}\;\mathsf{is}\;\mathsf{a}\;\;\mathsf{difference}\;,\;\;\mathsf{I}\;\;\mathsf{would}\;\mathsf{suggest}\;\mathsf{to}\;\;$ 14 you, between unfortunate wording that could be worded 15 better on the one hand, and a statement that is 16 factually false on the other. Do you understand that 17
- 18 A. I do understand the difference, and I'm just trying to 19 explain that, at the time, with the market in the way 2.0 that it was, with the knowledge that I had, then I'd 21 written that in that vein. I had not written that 2.2 deliberately to write false information in there.
- 23 Q. When you wrote in this email that Arconic controlled and 2.4 understood what core is being used in all projects, you 25 accept that that was false. What was it that led you to

98

- 1 think that it was true?
- 2 A. There was -- sometimes customers would ask for
- 3 warranties on the buildings. There was a warranty
- 4 questionnaire that would have been sent in to Merxheim
- 5 and there was information on there that could have been
- picked up if it wasn't relevant, because they wouldn't 6 7 have offered a warranty against the questionnaire. So
- 8 that would have been the information that they were --
- 9 that we could have been looking at.
- 10 Q. In the first of the two paragraphs I'm taking you to,
 - you don't say sometimes; what you say is that you supply
- 12 and can control and understand what core is being used 13 in all projects.
- 14 A. Yeah, and as I've explained, reading back on some of
- 15 that wording, it was not -- and looking at the context
- 16 that I wrote it then and the context of how I'm writing
- 17 it now -- looking at it now, I wouldn't have written
- 18 that

11

- 19 Q. What was it at the time that led you to believe that the
- 20 statement that Arconic can control and understand what 2.1
 - core is being used in all projects was true?
- 22 A. I don't know.
- $\ensuremath{\mathsf{Q}}.$ What was it that led you to believe that Arconic could 2.3
- 2.4 offer the right Reynobond specification including the
- 25 core was true?

99

- 1 A. I don't know.
- Q. I'm bound to suggest to you that, at least in those two 2 3 respects, those statements were not only false, as you
- have accepted, but you knew them to be false.
- 5 A. As I've explained, if I'd understood the context of what
- 6 I was doing at the time, then I wouldn't have worded it
- 7 in that way. I did not write that information on there 8
 - with that intention.
- 9 Q. Can we look at page 12 of your second witness statement, 10 please $\{MET00053162/12\}$. I'd like to look with you,
- 11 please, at paragraph 44. Four lines down, you say this:
- 12 "How the finished product was assembled and whether 13 it complied with relevant regulations was a matter for the customer or otherwise the person who designed the 14
- 15 rain—screen cladding system".
- 16 How do you reconcile that statement as part of your 17 witness statement with the email of 13 May that we've
- 18 just been looking at?
- 19 A. Yeah, I can't, and as I explained -- and I will say the 2.0 same thing again -- looking at that email now, and in
- 21 the context of what I wrote at the time, then I did it
- 2.2 for those reasons, and some of the wording was not how
- 23 I would be writing it now, with the knowledge that I now
- 24
- 2.5 Q. Do you think it might actually be the case that what you

- wrote in your 13 May email was true, and what you're saying in your statement about not knowing about the finished product and it being a matter for the customer was untrue?
- A. No, what's in my statement is true, it is down for the
 people they understand what the final end use of the
 building is going to be.
 - Q. Now, let's look in your witness statement at paragraph 96.4 on page 32 {MET00053162/32}, please.

You say here -- and this is, just to be clear to you, in relation to this email, and that in fact starts in the previous paragraph, 96.3. Perhaps we should just show you that for the full context, to be fair to you. 96.3:

"On 13 May 2013 I sent an email to Graham Smith ..."
Then you say in 96.4:

"I do not recall sending this email but reading it now, I think it requires some clarification . In particular \dots "

Then you say at 96.4.1:

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

22

2.3

2.4

25

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

"[Arconic] did not pro—actively check what core had been ordered for any particular project and whether that core complied with Building Regulations or any other legislation. Neither do I ever recall advising any customer that they required a particular core or that a

101

certain core was inappropriate (I was in no position to do so). What I meant was that technical support was available, if it should be needed, through the Technical Sales Support Team if a customer had queries about the product (including the core). In practice, this would involve me seeking a response from the Technical Sales Support team and providing this to a customer or asking for the Technical Sales Support Team to engage with the customer direct."

I just want to focus, if I can, on the words at the bottom of the previous page {MET00053162/32} and the top of this page {MET00053162/33}. Let's just look at them again, if you go to the bottom of the previous page. You say:

"What I meant was that the technical support was available, if it should be needed, through the Technical Sales Support Team if a customer had queries about the product (including the core)."

That sentence there, is that not completely contradictory of what you said in your 13 May 2013 email?

- 22 A. Yes, it doesn't -- the two don't correlate.
- 23 Q. No. They don't sorry.
- A. As I've explained, having read that email again, and in
 the context of how I wrote it at the time, and I am now

102

saying that my knowledge now, I wouldn't have written it in the way that I have.

- 3 Q. It's not that they don't correlate; they're completely 4 contradictory of one another, aren't they?
- 5 A. Yes

6

7

8

17

- Q. If you had really meant at the time that a customer should contact the technical sales support team if they had any queries, you would very simply have said so in
- 9 your email.
- 10 A. Yes, I would have done.
- 11 Q. Why didn't you?
- 12 A. I don't know.
- 13 Q. In fact, you wouldn't have put anything that we've seen 14 in those two main paragraphs of that email out to your
- 15 customers, would you?
- 16 A. No, and, as I say, I -- having read that email,
 - I don't -- I wouldn't have written it in that way, and
- 18 I don't know what -- I don't know what I was thinking to 19 do it.
- Q. Why would you have told your valued customers, in thissmall group of fabricators who were essential for your
- route to market, a series of lies? Why would you have
- 23 done that?
- 24 A. As I say, I didn't set out to do that, that's not -- wasn't my intention at all . And having re-read that,

103

- then my knowledge now, I wouldn't have written it like that.
- $3\,$ Q. I feel bound to suggest to you that the clarification
- $4 \hspace{1.5cm} \hbox{that you are setting out here in your witness statement} \\$
- 5 is an argument you have come up with after the event to
- 6 try to get away from what you said to all of your
- 7 fabricators in your 13 May email.
- 8 A. No, I'm just trying to explain what -- how I would think
- 9 about that now, rather than the way that I did at the 10 time.
- 10 time.
- $11\,$ $\,$ Q. In fact, your practice as described at the time was true
- 12 at the time you made it, you made no false statements to
- your customers, but what you have come up with in your
- statement trying to explain that email away is the true
- falsehood here; do you accept that?
- 16 A. Sorry, I'm not following what you're asking me.
- 17 Q. I'm putting to you that your email of 13 May was
- actually true, in all its respects, you made no false
- statements to your customers, and it's your witness
- $20\,$ statement now which is false in pretending that the
- contents of that email were, as you would say there,
- $22 \hspace{1cm} \text{requiring explanation, but in fact false as you have} \\$
- 23 explained
- 24 A. No, I don't believe that's right.
- Q. Going on to paragraph 96.4.2 of your statement, just

1 below what we have been looking at, you say: 2 "[Arconic] did not have 'Approved Fabricators' in 3 any formal sense, rather [Arconic] simply supplied Reynobond to a small number of fabricators in the UK. 4 I felt that working with a small number of fabricators 5 would generate a form of brand loyalty so that they 6 would be willing to recommend Reynobond when responding

to tenders. The UK fabricators that [Arconic] primarily 8 9 worked with were Simco, CEP, Sotech, CGL and Argonaut. 10 We occasionally worked with a fabricator called Ash &

11 Lacy and some other small fabricators, but this was not 12 often.'

> Now, is it your evidence that, contrary to what you say in the 13 May 2013 email, Arconic doesn't have approved fabricators in the UK?

- 16 A. We don't have -- no, there wasn't approved -- they 17 didn't have to go through a set of procedures or 18 demonstrate anything to be an approved fabricator.
- 19 Q. No. In truth, supplying to a small group of known 20 fabricators was a marketing strategy, wasn't it?
- A. Yes. 21

13

14

15

- 2.2 Q. It wasn't for reasons of Arconic's assurance about 2.3 safety, whether fire safety or any other quality 2.4 assurance.
- 25

7

8

9

11

12

13

14

105

- 1 Q. Whether they were approved in that sense or simply part 2 of your marketing strategy, was it not the case that you 3 worked with a small number of fabricators so that you could keep a close eye on each project and be able to 5 give bespoke advice about whether the right core was 6
- going on to the right building? A. No, the main reasons for only working with such a small group was that fabricators at the time were looking for us to pass any leads that we had, which was relatively 10 small compared to some of our competitors, on to them. We would only pass those leads on to one or two of them at a time, rather than some of our competitors that would give a lead out to a considerable —— the majority of the fabricators. So --
- 15 Q. If -- I'm sorry, do you want to finish your answer?
- 16 A. That was the main reason for it, was passing of leads 17 and generating leads and awareness of Reynobond, or any 18 work that they were picking up that they would look to 19 pass on -- look to get Reynobond involved with.
- 2.0 Q. If the 13 May 2013 email was as false as you have 21 accepted that it was, what was the point of sending it?
- 2.2 A. As I say, having read it again, and looking at the 23 context at the time rather than the context of what we 2.4 all understand now. I don't know.
- 25 Q. What message were you seeking to convey to the

106

- 1 fabricators in that 13 May email?
- 2 A. I can't answer that question, I don't know.
- 3 Q. Did anybody more senior to you in Arconic require you to 4 send that email in those terms?
- 5 A. I can't recall.
- Q. Did you tell anybody in Arconic that you couldn't send 6 7 this email out in this form because it was substantially 8 false?
- 9 A. Sorry, say that again.
- 10 ${\sf Q}.\;\;{\sf Did}$ you tell anybody in Arconic -- Peter Froehlich,
- 11 for example, Claude Wehrle, for example -- that you
- 12 weren't prepared to send this email out to this valued
- 13 group of fabricators because it contained substantially
- 14 false statements?
- 15 A. I don't recall.
- 16 Q. You would have done, wouldn't you? If you had been put
- 17 up to sending out an email to valued customers.
- 18 fabricators being your customers, which you knew were 19
 - substantially false, you would have objected, wouldn't
- 20
- 2.1 A. I would have questioned it. As I say, having read that
- 22 document again, in the context of -- at the time of
- 23 what -- my knowledge at the time, I wouldn't -- and
- 2.4 looking at the context of it now, I wouldn't have sent
- 2.5

107

- 1 Q. We've seen no trace of any communications between you
- 2 and Claude Wehrle or Peter Froehlich in which you tell
- 3 them that you're not prepared to send this message in
- this form, with these statements in it, to your customer
- 5 base. Do we take it from that that you never did object
- to doing so? 6
- 7 A. I don't recall.
- 8 Q. I'm going to suggest to you that you didn't do so, and
- 9 the reason you didn't do so is because there was nothing
- 10 to object to, and the reason there was nothing to object
- 11 to is because there is nothing false in any of those
- 12 statements and you were quite content to send them out.
- 13 A. I don't know. I can't answer that.
- 14 Q. Now, can we just go back to the presentation we saw in
- 15 June 2013. It's at {MET00019917/2}. We looked at this
- 16 earlier on at a different point of the questioning.
- This is your presentation of June 2013. Do you remember 17 18
- we looked at this? It says, "Sales Meeting June 2013".
- 19 Was this a sales meeting such as you would attend 20 every year at Merxheim, or perhaps twice a year at
- 21 Merxheim?
- 2.2 A. Possibly. I -- yes. I don't recall, but possibly.
- 23 Q. What was the target audience of that meeting, or rather 2.4 of this slideshow?
- 2.5 A. If it was the annual sales meeting, it would have been

the other European — other managers, sales managers from other countries, European countries. Sometimes there were internal salespeople there, the technical team, and various other people from production and further up would be coming in and out.

O. Now, we looked at page 10 {MET00019917/10} earlier of the country of t

Q. Now, we looked at page 10 {MET00019917/10} earlier on. Let me just remind you of what that looks like. This is the route to market slide we saw earlier on and I asked you some questions about that.

If we go to the next page, page 11 {MET00019917/11}, there is a specific message to Taylor Maxwell and fabricators I don't think we did look at it, which is why I'm coming to it now.

It says on the right — there is a picture of the British Isles, not a particularly accurate one, in blue with the geographical locations of what you call "Approved RB Fabricators", and there is a list of six of them: CGL, Sotech, CEP, Simco, Downer and Argonaut.

The messages on the left—hand side in the red next to the bullet points say:

- " Sell Specification to Architects.
- 22 "■ Sell concept of special Colour.
- 23 "• Offer to Match other materials.
- 24 "■ Push Design/Effects/Nat.

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

7

8

18

19

25 "• Understand what the client REALLY wants.

109

- 1 "• CPD presentations to Architects.
- 2 "■ Get in there early."

Those messages in this slideshow — this is

June 2013, only a month after you sent this May email ——
are consistent, aren't they, with the message that you
sent to these fabricators on 13 May 2013?

sent to these fabricators on 13 May 2013?

A. No, I don't think so. This is an internal document that

was -- this is what -- I would be talking to the fabricators and basically what I was doing was

 $9 \qquad \qquad \text{fabricators and basically what I was doing was} \\ 10 \qquad \qquad \text{selling } -- \text{ talking to architects, focusing heavily on} \\$

the special colours that we had, matching other colours

from other competitors, promoting certain designs which was being -- which is something we were being asked to

do from Merxheim, ie design, the effects and the

natural. The "Understand what the Client REALLY wants"was to do more with the colour and the aesthetics, to

understand exactly what they want and what they wanted

their building to end up looking like, and CPDs to architects.

Q. Doesn't this slideshow — and in particular page 10 that
 we looked at and this page, page 11 — show that in fact
 you were operating, or seeking to operate, a tightly
 controlled supply chain?

24 A. No, only inasmuch as -- the main reason for working with 25 such few -- as I said, such few fabricators was those

110

1 fabricators would get a lot of leads in from other

competitors who had got huge exposure to the market, far

3 greater than Reynobond, but they were competing very

4 heavily with multiple fabricators, and part of what we

5 were doing was any leads that we had, we would pass it

to two or three of them, and therefore they weren't —

the pricing of those projects potentially were only

the pricing of those projects potentially were only
 between sort of, you know, a small handful of those

9 fabricators rather than multiple fabricators .

10 Q. When you see in the third bullet point from the bottom,

"Understand what the Client REALLY wants", why did you accentuate the word "really"?

13 A. I don't know, I can't recall . It's a presentation that

was put together for internal purposes and was not sentout externally.

16 Q. What did you mean by, "Understand what the Client REALLY wants"?

18 A. In terms of generally, in terms of colours and what they
19 wanted it to look like.

20 Q. And that presumably was entirely consistent with the

idea that you knew what product was going on to whatbuilding in what project.

23 A. No, it was to understand what colour that they

particularly wanted. But, as I say, that was written at
 the time for an internal document for a presentation

111

 $1\,$ $\,$ only. This is not necessarily anything that was given

2 out to those fabricators specifically or I would have 3 necessarily discussed with those fabricators.

4 Q. I'm not suggesting that it was given to the fabricators .

What I am suggesting is that this reflects your own

6 strategy, and what I'm suggesting specifically is that

7 the strategy that you are presenting to your sales

8 colleagues in June 2013 is entirely consistent with the

9 messages that you were giving your fabricators, indeed

10 members of the self—same list on this slide; do you

11 accept that?

12 A. I don't recall. I don't recall what my thought process

13 was in terms of what the itemised areas would have been

of the word "really".

Q. When you say you don't recall, I'm not really sure

16 I understand what you mean by "don't recall". Here is 17 a document that you made, I'm showing you, and even

a document that you made, I'm showing you, and even though you may not be able to remember precisely your

thought processes, what I'm suggesting to you is that

 $20\,$ your internal strategy, as demonstrated by this slide,

was entirely consistent with the email you sent to your

2.2 fabricators

23 A. No, I wouldn't necessarily put those two together in

24 that context.

25 Q. You wouldn't necessarily put them together. What I'm

9

- 1 suggesting to you is that you can put them together,
- 2 because the 13 May email matched externally what you
- 3 were saying internally
- 4 A. No, I don't think that was the reason I put this slide
- 5 together. That wasn't my thinking on this slide here.
- 6 It was purely to —— how we were going to be generating
- 7 additional leads and awareness in the market. It was --
- 8 I don't believe it was anything to do with that.
- $\begin{array}{ll} 9 & \text{Q. Understanding what the client really wants rather} \\ 10 & \text{suggests some kind of tailoring or bespoking of your} \end{array}$
- product to the clients' needs, isn't that right?

 A. I think this was written in the context of understanding
- $13 \hspace{1cm} \hbox{how we could increase our awareness within the market,} \\$
- 14 nothing more.
- $15\,$ $\,$ Q. I would suggest to you, just before we break, that the
- $16 \hspace{1cm} \text{messages that you're giving to your sales team in this} \\$
- document are inconsistent with the idea that
- Reynobond 55 sheets leave Arconic's factory unfabricated
- 19 and that is the last you hear, see or know of their
- destiny; do you accept that?
- $21\,$ $\,$ A. Once they'd left Merxheim and arrived with a fabricator,
- $22\,$ on a lot of occasions we wouldn't see anything to do
- 23 with the project after that. I may have -- I took
- $24\,$ various pictures of -- or obtained various pictures of
- 25 finished products -- projects, but not necessarily all

113

- of them. So I wouldn't necessarily follow those
- 2 projects once they'd materials had left us.
- 3 MR MILLETT: Mr Chairman, I have one very short question 4 still on this document.
- 5 SIR MARTIN MOORE—BICK: Then you had better ask it,
 6 Mr Millett.
- 7 MR MILLETT: It is very short.
- 8 If we could turn to the next page of this slideshow, 9 please {MET00019917/12}, here is a list of, I suppose.
- please {ME 100019917/12}, nere is a list of, I suppose, logos, really, of well known construction companies in
- 11 the UK. You can see Keepmoat, Wates, Lovell,
- Balfour Beatty, Willmott Dixon these are familiar
 names under the heading "Route to market".
- 14 What was the purpose of this slide?
- VVnat was the purpose of this slide?
- working with some of those people, and that's again who
- we would start to get exposure to, through some of thoseroutes, no more, no less.
- Q. Did you deal with any of these organisations directly orwere you looking to deal with them directly?
- 22 A. No, we wouldn't have had any need to deal with them directly in that sense, it was more --
- Q. What was the relevance of these organisations to your

114

- A. That our fabricators would be working at some point
- 2 through them, and that our awareness of -- Reynobond
- 3 awareness would then be filtering its way through to
- $4 \qquad \qquad \text{these people because they would be using the Reynobond} \\$
- 5 material on site.
- 6 MR MILLETT: I see. I see. Very well.
 - Mr Chairman, is that a convenient moment? I should
- - the break.
- $10~\,$ SIR MARTIN MOORE—BICK: Yes, I think we should have a break
- 11 at that point, Mr Millett.
- Ms French, we're going to stop there so we can all
- have some lunch. We will come back at 2.05, please, and
- 14 please remember not to talk to anyone about your
- evidence or anything to do with it over the break.
- 16 All right?
- 17 THE WITNESS: Okay, thank you.
- 18 SIR MARTIN MOORE-BICK: 2.05, then, please. Thank you very
- 19 much.
- 20 (1.05 pm)
 - (The short adjournment)
- 22 (2.05 pm)

21

3

- 23 SIR MARTIN MOORE-BICK: Welcome back, everybody. We are now
- 24 ready to continue taking evidence from Ms French.
- 25 Ms French, are you there?

115

- 1 THE WITNESS: Yes, I am, thank you, sir.
- 2 SIR MARTIN MOORE-BICK: Hello. And can you see me and hear
 - me well?
- 4 THE WITNESS: Yes, I can.
- 5 SIR MARTIN MOORE—BICK: And you are ready to go on, I hope?
- 6 THE WITNESS: Yes.
- 7 SIR MARTIN MOORE-BICK: Good, thank you.
- 8 Then, Mr Millett, when you're ready.
- 9 MR MILLETT: Yes, thank you very much.
- $10\,$ $\,$ Ms French, can we please go back to the message that
- 11 Richard Geater sent at $\{MET00053158_P10/157\}$. If we
- could look, please, at the third paragraph from the
- bottom, "Again the perils", can you see that?
- 14 A. Yes
- 15 Q. "Again the perils of using cheap ACM alternatives have
- $16\,$ been exposed. As you are aware our standard core is the
- PLUS FR mineral core achieving Class B, s1, d0,
- according to EN 13501-1, unlike other ACM producers."

 Now, we've seen that he gives a warning here about
- Now, we've seen that he gives a warning here about the fire dangers of PE and against cheap ACM
- 21 alternatives and says that 3A will offer Alucobond FR
- 22 as standard.
- 23 Is it right that you didn't give, yourself, any such warning to your customers, having seen this email?

116

25 A. No.

- 1 Q. It's not right or it's right that you didn't?
- 2 A. No, I didn't
- 3 Q. No, you didn't.

Indeed, your email of 13 May says that Arconic will continue to offer both PE core and FR core; that's right, isn't it?

- 7 A. Yes.
- $8\,$ $\,$ Q. Did Mr Geater's email, which you received and read and
- 9 then passed on to Claude Wehrle, among others, not
- prompt you to re—examine the fire test classifications
- for each of the Reynobond products, both PE and FR core, in both rivet and cassette forms?
- 13 A. No. As I've explained before, I didn't have the
- technical knowledge to be able to do that, and that
- would have been for other people to do and communicate to me
- Q. Do you know whether they examined the fire testclassifications for those products?
- 19 A. I'm not sure. I don't know.
- $20\,$ $\,$ Q. You sent the email of 13 May 2013, as you have told us,
- $21\,$ out to the selection of fabricators , certainly Simco and
- 22 CEP, and probably others, in the knowledge that ACM with a PE core had been involved in the tower fire in Dubai:
- that's right, isn't it? That's the background.
- 25 A. Yes.

117

- $1\,$ $\,$ Q. Is it right that you also then continued thereafter to
- 2 supply PE-cored ACM automatically as standard in the UK?
- 3 A. Yes
- 4 Q. Was that a safe practice, did you think?
- 5 A. Again, it would have been for others to tell me if that
- $^{-}$ hadn't been the case. That wasn't -- I didn't have the
- technical background to be able to make that decisionone way or another.
- 9 Q. Maybe you didn't, but I'm interested in what you thought 10 at the time.
- At the time, did you think to yourself that this was a safe practice, or did you think to yourself, in light of what you knew about the UAE fire, this was no longer
- a safe practice?

 A. I must have been starting to have some questions in my mind. But, again, I would have been taking guidance
- from Merxheim, and they would have been guiding me as to what was or wasn't correct.
- 19 Q. On what you knew from the UAE fire the subject of
- 20 Mr Geater's email, and indeed what you had already
- 21 alerted Mr Wehrle to in the previous week, why did you
- 22 continue to offer Reynobond 55 PE core as a standard in
- 23 the UK market without at least some kind of warning
- 24 about its fire performance?
- $25\,$ $\,$ A. I would have needed to have had a specific guidance from

118

1 Merxheim to do any different.

- 2 Q. Did you seek any such specific guidance from Merxheim?
- 3 A. I don't recall doing so.
- 4 Q. You don't recall doing so; does that mean you don't
- 5 think you did so, to the best of your recollection?
- 6 A. Yeah, I can't recall.
- 7 Q. Why did you not do so?
- 8 A. I don't know. As I say, I wouldn't have had the
 - knowledge or the experience to have been able to
- 10 challenge it in that way, and would have been waiting
- 11 for guidance from Merxheim, if they'd seen it was
- 12 necessary

9

- 13 SIR MARTIN MOORE—BICK: Well, just help me. You might have
- 14 said to Merxheim, "Should we still be offering PE as
- 15 standard?", without expressing a view either way, but at
- least prompting them to consider the question.
- $17\,$ A. And I don't recall whether I did or didn't, sir .
- $18 \quad {\sf SIR\;MARTIN\;MOORE-BICK:\;\; All\; right.\;\; Thank\; you.}$
- 19 MR MILLETT: Did you have any discussion at all with those 20 at Merxheim about whether you should continue to offer
- at Merkhelli about whether you should continue to
- 21 PE to the UK market as standard?
- 22 A. I don't recall.
- 23 Q. Does that mean you recall that you didn't, or you don't
- 24 recall one way or the other?
- 25 A. I don't recall whether I did.

119

- 1 Q. Right.
- 2 Is it right to say that you at least were now on
- $3\,$ $\,$ $\,$ notice, aware of, the dangers of PE cladding panels on
- $4 \qquad \quad \mathsf{high-rise} \ \mathsf{buildings} \ \mathsf{from} \ \mathsf{this} \ \mathsf{point} \ \mathsf{onwards?}$
- 5 A. It was certainly more -- being discussed more and more,
- 6 yes
- 7 Q. Well, my question was -- I'll repeat it, because I'm not
- 8 sure I quite got an answer to it -- is it right that you
- 9 at least were on notice of, aware of, the dangers of PE
- 10 cladding panels on high—rise buildings from this point
- 11 onwards?
- 12 A. Yes.
- 13 Q. Yet you continued to deal with CEP, in respect of the
- 14 Grenfell Tower project specifically , in the knowledge of
- 15 those dangers, without alerting them to those dangers?
- 16 A. Again, I would say that the documentation we were -- we
- were still covered with the BBA and I would have been
- waiting for any further guidance from Merxheim if that
- 19 was changing.
- 20 Q. Did you have a discussion with Mr Blades of CEP about
- the dangers of using PE cladding on high—rise buildings,
- 22 whether Grenfell Tower or not?
- 23 A. I don't recall doing so, no.
- $24\,$ $\,$ Q. Given that you knew Grenfell Tower was a high—rise
- $25\,$ residential building, as we've seen, why did you not

1 seek to take any steps, even by asking those at 1 2 Merxheim, to make sure that the PE products you were 2 "Could you please advise rates for Reynobond 3 selling in respect of that building were suitable for 3 accordingly.' 4 it? 4 You can see, as I've shown you, that he attaches a document which he describes as the rainscreen spec. 5 A. I don't know. 5 Q. Now, in the summer of 2013, I think you tell us that you Can we look at that, please. It's at {CEP00050722}. 6 6 understood that you had lost the sale to the 7 Now, this is part H92, or section H92, as you can see 8 there on the screen, of the Studio E NBS specification Grenfell Tower project. 8 9 A. I believe so. 9 for the Grenfell Tower project, and this part, H92, is 10 10 Q. And that one of the reasons, if not the reason, was that concerned with the rainscreen cladding, as you can see. 11 ZCM, which was then being suggested, was too expensive. 11 There is not much else -- well, there is nothing else on 12 12 A. I believe so. the page in front of you. If you go to page 3 {CEP00050722/3} of this 13 Q. You say in your statement -- I don't think there is 13 document, here you can see the detailed specification in 14 a need to go to it, it's paragraph 88.2.6, your second 14 15 statement ${MET00053162/27} --$ that following that sales 15 respect of the rainscreen cladding for Grenfell Tower 16 16 meeting in June 2013 we have been looking at, you under section 120 17 17 decided to stop proactively promoting ZCM. Is that Is it right that when you received this email from 18 correct? 18 Mr Blades on 7 January 2014, you opened the attachment? 19 A. Yes. 19 A. I don't recall opening it, but I see no reason why Q. If we go to your first witness statement at page 5 20 20 I wouldn't have done. 2.1 {MET00019063/5}, please, you say that you created a new 2.1 Q. And do you see any reason why you wouldn't, having 22 CRM programme entry. This is at paragraph 16. Do you 22 opened it, have read the attachment, and this part in 2.3 23 particular? 2.4 2.4 There is no reason why I wouldn't have read it, but A Yeah 25 Q. We've looked at that 18 October CRM entry before, and again, it wouldn't have meant an awful lot to me. 121 123 1 you say at the bottom of that paragraph that the product 1 Q. Well. let's have a look at it. You can see that at identified was "ACM RB, Painted, (this would be PE or 2 2 section 120, three bullet points down, there is 3 FR) and ZCM RB (this was FR)". 3 a rainscreen panel there to be manufactured, can you 4 see, by KME Architectural Solutions; do you see that? Q. Is it right to say, given that that's October, so after 5 5 6 the June meeting we've been talking about, that although 6 Q. And some way below that, just before the next bullet 7 7 you had stopped proactively selling ZCM, you would still point, it says "Product reference", and then in 8 8 capitals, "PROTEUS HR honeycomb rainscreen panel". sell ZCM if the customer asked for it, perhaps? 9 A. Yes. 9 Did you see that at the time, do you remember? 10 Q. Right. 10 A. I don't recall seeing that at the time. 11 Now, we saw earlier that you were forwarded 11 There is no reason, sitting there today, why you 12 a specification in January 2013 which came from 12 wouldn't have done though, is there? 13 Leadbitter. We looked at that before. Just for our 13 A. No, I don't recall seeing it at the time. reference, that's at {CEP00048975} and {CEP00048978}. 14 14 Q. Right. 15 We don't need to turn to that, we've looked at it 15 A. I don't remember seeing it at the time. 16 before. 16 Q. No, but looking back on it at the time, having been sent 17 But in that context, can we go to the discussions 17 a document of this nature in respect of this project, as 18 you had with Mr Blades in early January 2014 now. So 18 a matter of your practice, would you have opened it and 19 we're on the Grenfell Tower project, early 2014. 19 studied it carefully? Can we look, please, at $\{CEP00050721\}$. Here is 2.0 2.0 A. I wouldn't have necessarily studied all elements of it, 21 21 no, because it wasn't for -- it wasn't particularly Mr Blades emailing you on 7 January 2014, subject, 2.2 "Grenfell Tower", attachments, "Grenfell Tower 2.2 relevant to what I was doing. So, no, I wouldn't have

23

2.4

2.5

doing?

124

Q. Why was it not particularly relevant to what you were

2.3

2.4

25

spec.pdf", and the text says:

"Please see the attached rainscreen spec ref the

122

"Hi Debbs

1	Α.	Because I would have had no interest in whether there	1		"Just to confirm the exceptionally good rates
2		was $$ KME was in the specification or not. I wouldn't	2		I quoted you for Grenfell Towers!!"
3		have particularly looked at those details . That wasn't	3		Then you set out the spec and a number of different
4		relevant to Reynobond, so I wouldn't have particularly	4		colours and quantity, and you give him a price of £28
5		looked at it.	5		per square metre. You say at the bottom:
6	Q.	Why did you think Mr Blades was sending you this	6		"Hope this is OK to start the bidding with Harleys,
7		document?	7		I am sure you or Neil will be back on the pone if you
8	A.	For the Reynobond elements within it, I guess.	8		need any other details/reductions."
9	Q.	Right.	9		With a little non-smiley face.
10		Let's look at those. If we go back to page 2	10		Having shown you that, can we look at your first
11		$\{CEP00050722/2\}$, at the bottom of the page we can see	11		witness statement, please, at page 5 {MET00019063/5}.
12		section 11, "Information to be provided with tender":	12		I would like to look with you at paragraph 17 where you
13		"• In addition to the cladding [specified] in the	13		cover this exchange.
14		below clauses 120 & 123 submit [comparative] supply and	14		You say in that paragraph, in the third line down:
15		install costs per m2 of the whole cladding system for	15		"In addition, the price of £28 per m2 could have
16		the following alternative materials:	16		related to a competitive price for FR or a relatively
17		"Reynobond — Duragloss 5000:	17		high price for PE. CEP would have recognised that this
18		"■ Metallic std & non—std (Satin gloss)	18		was not a competitive quote for PE. A more usual price
19		"■ Chameleon	19		for PE would be £22 to £24 per m2. In my email dated
20		"■ Anodised Look (Satin gloss)	20		15 January 2014 I mentioned a 'good price' for the
21		"Alucobond:	21		product and this indicates to me that the £28 per m2 wa
22		"■ Spectra, Sakura 917.	22		really competitive."
23		"Zinc:	23		Then if you skip down to the very bottom of the
24		"■ QUARTZ ZINC composite polymer panel by VM Zinc."	24		page, you say there:
25		Now, clearly Reynobond's Duragloss 5000 is Arconic's	25		"I do not have available to me a copy of the
		125			127
1		product, isn't it?	1		rainscreen specification that appears to have been
2	Α.	Yes.	2		forwarded by Geoff[sic] Blades of CEP on 7 January 2014
3	Q.	And Alucobond there is 3A's product?	3		and therefore cannot say whether PE or FR was
4		That's right.	4		specifically requested."
5		Am I right in thinking that the zinc product, quartz	5		Now, I've shown you the specification that you were
6	•	zinc composite panel, is Arconic's ZCM product?	6		sent, and we can see that it was silent as to the core
7	Α.	Yes.	7		of the Reynobond ACM. We can look at it again if you
8	Q.	So would that mean that you could supply it if that was	8		like, but do you recall that it was silent on that
9	·	what was asked for?	9		subject?
10	Α.	Yes.	10	Α.	. I do, yes.
11	Q.	And although you had personally decided you weren't	11		. Yes.
12		proactively going to be selling ZCM, if in fact you were	12		Your email back to Geof Blades is also silent on
13		asked to quote for ZCM as per this specification, you	13		what core the £28 per square metre refers to. That's
14		would do that?	14		right, isn't it? You didn't identify whether the £28
15	Α.	Yes.	15		per square metre was for FR core or PE core.
16		Let's go to {CEP000000244}, please. This is an email	16	Α.	. No, I didn't.
17	-	from Goof Blades to you on 7 January at the bottom of	17		Now you have told us that you would automatically quote

18

19

20

21

22

23

24

25

for Reynobond PE core unless the customer asked for

On that basis, did you intend that this was

A. I don't recall what it would have been originally raised

recall . It's not on the -- it's not on there, and

for, but as standard it would have been PE. But I don't

128

something else. You told us that yesterday.

a quotation for PE core?

I don't recall.

18

19

20

21

22

23

24

25

the page, I've just shown you that, and he asks you to

If we go back up the page, we see your response.

This is 15 January, so about a week later, from you to

Geof Blades, copied to Neil Wilson at CEP and also to

Gwenaelle Derrendinger at Arconic inside sales. You

advise the rates for Reynobond.

"Hi Geof

15

1 Q. Right.

2 Although, as you say, a more usual price for PE

3 would be £22 to £24 per square metre, was this

4 a relatively high price, in fact, for PE, knowing that

Geof Blades and possibly Harley might negotiate it down?

A. If it was for a PE core, then it was a -- on the higher 6 7 side. ves.

Q. So it wasn't a really competitive price at all; it was 8 9 a reasonably toppy price for PE which you thought they 10 might knock down; is that a fair way of looking at it?

11 A. That's possibly my thinking, yes.

12 Q. Yes.

13

14

15

5

Now, we've seen no evidence that there were any discussions at all between you and CEP and you and Harley about the core.

First of all, is that right? I will just put it to 16 17 you squarely: is that correct?

18 A. Yeah, I don't recall any discussions about the core.

19 Q. And is it right that therefore at all times you assumed 20 that Arconic, you in fact, would be supplying PE core 2.1 for the Grenfell Tower project?

2.2 A. Yes

Q. We've seen nothing to suggest that either CEP or Harley 2.3

2.4 asked for FR or that you volunteered FR as the core

25 material for Reynobond 55 for the Grenfell Tower

129

1 project. Is that correct?

- 2 A. Yes, I don't recall any conversations about the core.
- 3 Q. You say you don't recall any conversations about the 4
- 5 A. I don't recall conversations about the core.
- $\ensuremath{\mathsf{Q}}.$ Is it right that you were continuing to offer PE core as 6
- 7 standard and, as we see here in respect of the
- 8 Grenfell Tower project, notwithstanding the dangers that the fire in the UAE had shown you were present in the 9
- 10 use of PE core on tall buildings?
- 11 A. Yes, I was
- 12 Q. Is there a reason why you didn't alert Geof Blades or
- 13 Harley, when quoting for Reynobond 55 PE for Grenfell, 14 about those dangers?
- 15 A. As I've explained before, unless I was getting
- 16 a specific instruction from Merxheim to do differently,
- 17 then I would have carried on as I was
- 18 Q. Even though you knew the use of Reynobond 55 PE core 19 might present a risk to life and safety?
- 2.0 A. As I say, I didn't have the technical background to be
- 21 able to make those decisions. I would have been led by
- 2.2 Merxheim as to whether the product was still suitable
- 23
- 24 Q. Giving a warning about the use of a PE panel on a tall
- 2.5 building was not a technical piece of advice, was it, it

130

1 was common sense; no?

- A. Well, I didn't pass that information on, no.
- 3 Q. My question really is: why not?
- 4 A. I don't —— I can't answer that question, I don't know.
- 5 Q. Were you told not to?
- A. No. I don't believe I was. 6
- 7 Q. Now, I want to -- and I'm sorry to jump around in the
- 8 chronology -- take a step back just a few months into
- 9 late 2013 and look at what the testing position actually 10

was at the time in relation to these panels. 11 Do you know, or did you know at the time, I should

12 say, that Arconic had done some further European

13 fire tests on PE-cored Reynobond in the November of

14 2013, indeed at the very time that the NBS specification

was being put together?

16 A. No. I don't believe I do recall that.

17 Q. Is that something that you would have been expected to

18 have known?

19 A. Again, not unless it was relative to the information

20 that we were providing for the UK, then no, there was no

21 reason for them to tell me.

2.2 Q. Can we look at the Wehrle exhibits at

{MET0000053158_P02/38}. This is part 2, page 38 of the 2.3

2.4 Wehrle exhibit

2.5 Now, this is an email chain, and I should tell you

131

1 straight away that you weren't copied in on this email

2 at the time. It's in yellow highlight because those

3 words are translations from the French. The originals

are in French.

5 Just looking at the subject matter, and this is 6 a communication between Philippe Vonthron at Alcoa and

7 Benoit Forest at CSTB, do you think you might have seen 8

these emails at the time, about testing?

9 No. I don't think so.

10 Q. Now, I'm going to ask you not about the document but

11 about the content in general and see what you know about

12

16

18

13 Can we please have the bottom of page 38 and the top of page 39 {MET0000053158_P02/39} up together. 14

15 At the bottom of page 38 is the email from

Benoit Forest of CSTB to Philippe Vonthron at Alcoa, and

17

"Hello Mr VONTHRON,

19 "The first SBI tests on the product 'REYNOBOND PE'

2.0 have been completed.'

21 If we switch to the top of page 39, you can see that 2.2 now on the right-hand side of the screen, thank you.

23 You can see "SBI test", that's -- well, did you know SBI

2.4 stands for single burning item?

2.5 A. No

1 Q. Well, you can see that there is the result of the single 2 burning item test for PE, and this is on the riveted 3 system, as you can see in the box on the left-hand side, 4 "Behaviour: C-s2, d0 on a test". Can you see that? 5 A. Yes. I can. Q. To be clear, at this time, November 2013, Arconic are 6 being told by the CSTB that in a Euro fire test, riveted system Reynobond PE has achieved a class C. 8 9 If we look at the second table down, that is in 10 relation to a test done on Reynobond PE cassette system, 11 and next to that you can see, within the box: 12 "Stopping the test at 800 [seconds] out of 1260 13 [seconds] for widespread ignition. Best possible classification : E (ignition test).' 14 15 Then it goes on: 16 "Following these results, can you tell me what you 17 want to do? You have the possibility to continue with 18 the ignition test in order to envisage an E 19 classification for both systems or to continue with SBI 2.0 but only in order to obtain a C classification for the 21 'riveted' system since 'cassette' does not pass. 22 Lastly, you can also decide to stop. 2.3 "We remain at your disposal for any further 2.4 information and await your decision." 25 Now, I've shown you that, it's contemporaneous

133

1 material from the time.

2 My question for you, Ms French, is: did anybody tell 3 you at the time that Reynobond PE in rivet form had been tested in November 2013 and achieved a Euroclass C?

5 A. I don't recall it at the time, but there have -- I have

6 been shown some emails since, I think, that we were

7 sent. but I don't know when -- I can't remember the date 8 that that came to us.

9 Q. Right.

10 Do you remember being told at the time that the 11 Reynobond PE in cassette form had been tested and had 12 got a Euroclass E?

13 A No I don't

14 Q. Did anybody tell you that the tests on cassette had been 15 stopped again in relation to Revnobond cassette for 16

fire spread reasons?

17 A. No, I don't.

18 Q. So is it right that at the time you were quoting 19 Reynobond 55 PE for use on the Grenfell Tower project, 2.0 you were ignorant of the results of these tests I've

21 iust shown you?

2.2 A. Yes

23 Q. Are you able to explain, sitting there, how it is that 2.4 you were not made aware of these results?

134

A. I can't. No, I can't begin to. 25

1 Q. You can't begin to.

2 Are you surprised, having been shown these results,

3 that you were not made aware of them?

4 A Yes Lam

Q. Who would you have expected to have told you about them? 5

A. That would have obviously come from Merxheim. It would 6 7 have been up to people within Merxheim as to who that

8 would have filtered through from. It would have either

9 been from Peter, or possibly even higher up, or

10 Claude Wehrle's team.

11 Q. Right.

12 A. It could have been any number of them.

13 Q. Let's move then, on the same topic, into early 2014, and 14 we start with a CSTB certificate in January of that

15

16 Can we please go to Claude Wehrle's exhibit 4. 17 page 135. This is at {MET00053158 P04/135}.

18 This is a CSTB reaction to fire classification

report, RA13-0333, under EN 13501-1+A1:2013, and you can 19

2.0 see that it relates to Reynobond 55 PE, if you look down

21 the screen, and it's described as "composite panel with

22 polyethylene core". If you go to the very bottom of the

23 page, you can see the date, 31 January 2014.

2.4 If you go to the next page, page 136

2.5 {MET00053158_P04/136}, under "Product description", you

135

1 can see that it is a composite panel, et cetera, and

then underneath that, "Systems", do you see, it says 2.

"riveted or cassette"? Do you see that?

4

3

Q. If we go down to page 137 $\{MET00053158_P04/137\}$, please, 5

6 we can see the classification in the box, E. Do you see

7 that?

8 A. Yes

9 Q. So this certificate says that in both fixing methods. 10 rivet or cassette, Reynobond PE is class E in the

11 European regime.

12 Did anybody tell you, do you remember, in or just 13 after the end of January 2014, that Reynobond PE in either fixing variant, rivet or cassette, had achieved 14

15 a class E in the European fire classification regime?

16 A. I believe that I have seen that document, but I think

17 it's been since the -- obviously going through this 18 process with the Inquiry that I've seen them. I can't

19 remember what date it was.

2.0 Q. To be fair to you, we're going to come to a document 21 which may jog your recollection a little bit more

2.2 closely or accurately.

23 Can we go to {MET00053158_P04/134}, please, three

2.4 pages back in this exhibit run of emails. 25 Here is an email from Claude Wehrle to RAF liste

1		commercial externe, and RAF liste commercial interne,	1		systems and that the overall classification given is E.
2		and you told us yesterday that you would have received	2		In the covering email Claude notes [we've seen it]
3		emails on the externe list . Just to double confirm	3		' the new fire test report for Reynobond Architecture
4		that, that's correct, isn't it?	4		PE in accordance with EN13501 Norm. The fire achieved
5	Α.	Yes, I believe so.	5		classification is "E". The previous "B" class report
6		It's dated 3 February 2014 —— it's in American dating	6		done for Reynobond PE in riveted system can no more be
7	•	there, but let's not worry about that —— and it has two	7		used from now'."
8		attachments to it, one in Anglais and one not. They're	8		Then you go on to say a copy of this email is
9		both the same document but one is a translation.	9		attached, et cetera, and then you say this:
10		It says:	10		"I do not recall seeing this email or having any
11		"Dear colleagues	11		discussions about it at the time and I am not sure that
12		"Please find enclosed the new fire reaction test	12		I would have appreciated its relevance to sales in the
13		report for Reynobond Architecture PE in accordance with	13		UK because I understand that the relevant classification
14		EN 13501 Norm. The fire achieved classification is	14		for Reynobond in the UK was [national class 0]. Looking
15		'E'."	15		at the name of the distribution list to which that email
16		That's all in bold in the email.	16		was sent, I think it likely that I did receive it at the
17		"The previous 'B' class report done for Reynobond PE	17		time. I do not recall ever being specifically asked to
18		in riveted system can no more be used from now. Indeed,	18		send or highlight this report to customers. If
19		this new report cancel all the previous reports. I stay	19		a customer had asked me for such a report then I would
20		at your disposal if you have any further question."	20		have obtained a copy from the Technical Sales Support
21		Do you recall receiving this email, Ms French?	21		Team and provided it (see for example paragraph 48.3
22	Α.	I don't recall receiving it, but I do recognise it,	22		below). I cannot recall sending a copy of any
23		having gone through the process that we're going through	23		classification reports for Reynobond (either those dated
24		currently.	24		31 January 2014 or any others) to CEP or any of the
25	Q.	Right. Can you confirm that you would have read it at	25		companies involved in the refurbishment of
		137			139
1		the time you received it?	1		Grenfell Tower."
2	Α.	Yes. I mean, if I was on that then yes, I would have	2		Just summarising what you are saying there, to see
3		done.	3		what you accept, do you accept that you did receive the
4	Q.	Right.	4		email?
5		Who else would have been included on the group email	5	Α.	Yes. Well, again, I can't confirm that definitely, but
6		RAF liste commercial? Would Peter Froehlich have been	6		yes, I would likely be on that distribution list .
7		on that list?	7	Q.	It looks as if you didn't have any discussions with
8	Α.	I'm — my understanding is that all external people were	8		anybody within Arconic about it; is that right?
9		on that list .	9	Α.	I believe so.
10	Q.	What about Alain Flacon, would he have been on that list	10	Q.	It looks as if you didn't do anything with it either,
11		or either of those lists?	11		such as forwarding it on to anybody; is that right?
12	Α.	I don't know without —— without checking, I couldn't	12	Α.	Yes, I believe so.
13		answer that.	13	Q.	Do you think you opened the attachment?
14	Q.	Right.	14	Α.	I can't recall.
15		Now, in your second witness statement, you address	15	Q.	Or perhaps asked the technical sales support team to
16		this email. I would like to look with you at what you	16		send the attachment to you?
17		say about it. Can we look at it at second witness	17	A.	I don't recall.
18		statement, page 13 {MET00053162/13}, paragraph 48.2. At	18	Q.	When you say you're not sure you would have appreciated
19		that paragraph, you say:	19		its relevance to sales in the UK, as you do $$
20		"I have seen an email dated 3 February 2014 to the	20		I'm afraid it's the previous page {MET00053162/13}, yo

22

23

24

25

to the use of Reynobond in both rivet and cassette $138 \label{eq:constraint}$

[Arconic] sales distribution list . The email is from

Claude Wehrle which attached a European classification

report relating to Reynobond PE dated 31 January 2014.

I can see from looking at the report now that it related $% \left(1\right) =\left(1\right) \left(1\right) \left($

that European testing classification $% \left(1,0\right) =0$ was recognised in 140

" ... I am not sure that I would have appreciated its

When you say that, was that because you didn't know

say there, seven lines up:

relevance to sales in the UK \ldots "

21

22

23

24

9

15

16

17

- 1
- 2 A. As I've said previously, my understanding was that it --
- 3 providing the information coming from Merxheim was to 4 continue using the BBA, then that's what I was 5 continuing to use.
- Q. Right. I'm just trying to get to the bottom of what you 6 mean here when you say you weren't sure you would have 8 appreciated its relevance to sales in the UK.
- Is it that you didn't appreciate its relevance 10 because you thought it was relevant but, because there 11 was class 0 for this product, the downgrading of the Euroclass didn't matter?
- 13 A. Yeah, I don't think I fully appreciated the different testing regimes between how the BBA would be taking 14 15 information and issuing a certificate or whether -- how 16 much relevance that had with the European ones.
- 17

9

12

- 18 A. And because it only referred to the European, I wouldn't 19 have necessarily seen that it was relevant.
- 20 Q. Looking at what you say here in your statement, "I am 2.1 not sure I would have appreciated its relevance to sales 22 in the UK because Lunderstand that the relevant 2.3 classification for Revnobond in the UK was Inational 2.4 class 01", are you saving that you essentially ignored the email that Claude Wehrle was sending you about

141

- 1 Euroclass B being downgraded to class E, because you 2 thought that in the UK the only thing that mattered was 3 national class 0?
- 4 A. Yes, which was the BBA document.
- 5 Q. I see
- 6 Now, we've seen that the BBA certificate says not 7 only that standard PE Reynobond 55 may be regarded as 8 class 0, but it also stated that Reynobond PE had 9 Euroclass B. We saw that yesterday; yes?
- 10
- 11 Q. When you received this email, did it not occur to you 12 that the BBA certificate did present Euro tests as 13 relevant to the UK market because it formed the basis on 14 which it was stating that the product may be regarded as 15 having class 0?
- 16 A. No. it didn't.
- 17 Q. When you saw this email, did it not occur to you that 18 although the BBA certificate from 2008 said that 19 standard PE had a Euroclass B, that certificate could no 2.0 longer be relied on, because --
- 2.1 A. That didn't occur to me.
- 2.2 Q. Why is that?
- 23 A. I don't know. It -- I can't answer that. It didn't 2.4
- 2.5 Q. If the one thing that you were relying on was the

142

- BBA certificate, I would like to understand why it is
 - that you didn't at that stage go back to it and ask
- 3 yourself, given that you had received this email,
- whether the BBA certificate still spoke the truth so 4 5 that you could use it in your sales, or whether in fact,
- because Reynobond PE had now received a Euro E class and 6
- 7 not a B class, it could no longer be relied on?
- 8 A. I don't know. I don't know.
 - Q. Did you do anything in response to this email?
- 10 A. I can't remember.
- 11 $\ensuremath{\mathsf{Q}}.$ You say at the bottom of the page in the statement that
- 12 we've just been looking at that you don't recall ever
- 13 being specifically asked to send or highlight this
- 14 report to customers
 - Was it not reasonably clear to you at the time when you received this information from Mr Wehrle that it was being sent to you for you to do something with?
- 18 A. At the time, no, I didn't think it was relevant to the
- 19 UK. It wasn't very specific in what it was asking to
- 20
- 2.1 Q. Did you check with Mr Wehrle or your line manager
- 22 whether you should do anything as a result of being
- 2.3 given this information?
- 2.4 A. I don't remember.
- 25 Q. Did you check and ask them whether it applied to you?

143

- 1 A. I don't remember.
- Q. Did you just simply take it on yourself to ignore it 2
- 3 without seeking any advice or instruction or guidance or
- help from those senior to you at Arconic?
- 5 A. Yeah, I don't recall what I -- what action I took at the 6 time.
- 7 Q. Well, on the look of it, you just sat on it; is that
- 8 right?
- 9 A. Yeah, I don't recall what action I did or didn't take 10
- 11 Now, at this point -- this is early February 2014 -- you
- 12 have been sent the Grenfell Tower NBS spec and you have
- quoted for Reynobond PE 55, you know from what you 13
- learnt in the spring of 2013 about the dangers of the 14
- 15 use of PE-cored rainscreen panels on high buildings, and
- 16 you are now being told that the PE, rivet or cassette, was no longer class B but class E. Surely, putting 17
- 18 those two facts together, this would have indicated to 19
- you that not all was well with continuing to use 20 Reynobond 55 PE, whether rivet or cassette, on
- 21 a high-rise building?
- 2.2 I honestly can't recall having made those -- pulling
- 23 that information together in the way that you're
- 2.4 explaining it.
- 25 Q. Did you address your mind to how it could be that

- 1 Reynobond PE could continue to have a class 0 standing,
- 2 if you like, in circumstances where it had tested only
- 3 to class E in the Euro system and was no longer class B?
- 4 A. No, I just didn't have enough knowledge about it and put 5 it together.
- Q. Is the reality that you kept this to yourself because 6
- 7 you realised that it would damage your sales and in fact
- damage your market sufficiently if it became known that 8
- 9 Reynobond 55 PE with a PE core, whether rivet or
- 10 cassette, was class E?
- 11 A. No. absolutely not.
- 12 Q. And therefore couldn't be used above 18 metres?
- 13 A. No. absolutely not.
- 14 Q. You say, "Absolutely not"; why are you so convinced of 15
- A. Because -- well, we didn't have a big enough market for 16
- 17 it to be that damaging, to be honest. We didn't sell
- 18 huge amounts and that certainly -- I most definitely
- 19 would not have been doing that for that reason.
- 20 Q. We saw with your May 2013 email about the UAE fires that
- it was entirely possible for you to send important 2.2 messages about fire safety in relation to products you
- 2.3 were selling to your key fabricators. We saw that,
- 2.4 didn't we?
- 25 A. Yes.

2.1

18

145

- Q. Why did you not send a similar message to a similar
- 2 group of fabricators with whom you routinely worked that
- 3 Reynobond 55 PE had been downgraded from class B to
- A. I don't know. Again, I can only think it was because
- I didn't associate it as being relevant in terms of the 6 7 BBA
- 8 Q. Why did you not simply send them the information and
- 9 leave it for them to decide what to do with it or what 10 questions to ask about it?
- 11 A. I can't answer that question, I don't know.
- 12 Q. In order not to send it on, did you make a positive
- 13 decision not to send it on to customers?
- 14 A. No, I wouldn't have done that. I generally don't
- 15 think -- as I say, I don't know why I didn't.
- 16 Q. You don't know why you didn't?
- 17 A. I don't know what I did with it and I don't know -- if
 - I didn't, I don't know why I wouldn't have done it.
- 19 Q. You see, the reason you give in your statement is that 2.0 the reason you didn't do it is because you didn't think
- 21 the European classes had anything to do with the UK
- 2.2 market and that it had a national class 0. Is that not
- 2.3 the reason, or is there another reason?
- 2.4 A. Yeah, I've already said that is the reason for not
- 25 sending it out, and I wouldn't have seen the relevance

146

- to the BBA document.
- 2 Q. Doesn't that tell us that you actually made a positive
- 3 decision not to send this certificate out because you
- 4 mistakenly thought, positively thought, that there was
- 5 no relevance to the UK market, and that the only thing
- that mattered was class 0? If that was the case, how 6
- 7 could you be so confident about that, given your lack of
- 8 technical expertise?
- 9 A. I can't answer that, I don't know.
- 10 Q. It seems that you made this decision based on
- 11 a technical assumption, namely that the only thing that
- 12 mattered was class 0.
- 13 Yeah, I don't know
- Q. So my question again: if you really had no technical 14
- 15 expertise at all and had no feel or understanding of the
- 16 relevance of the European classifications in the UK
- 17 market, why not just send this report to your customers.
- 18 your fabricators, and let them decide what to do with
- 19
- 20 A. I don't know, I can't answer that.
- 2.1 Q. I suggest it's because you took a positive decision to
- 2.2 keep it from them.
- 2.3 A. No, I'm not -- I won't -- no, I'm not going to say yes,
- 2.4 I did that, because I don't recall doing it and
- 2.5 I don't — that's not something I would do.

147

- 1 Q. But it is something you did do, because you didn't send
- 2 it to them, and that --
- 3 A. Well, I didn't -- I'm not necessarily agreeing that
- I would have made a positive decision not to send that.
- 5 I don't know why I didn't, but it wouldn't have been for
- 6 that reason. That's not the way that I work.
- Q. Right. 7
- 8 Let's discount one thing. Can we discount that you
- 9 didn't fail to send this document to them by accident,
- 10 you didn't just forget about it? Can we discount that?
- 11
- 12 Q. Right. So, therefore, when you didn't send it on to
- 13 customers, you must have made a positive decision not to
- 14 do so?
- A. Again, I can't recall why I wouldn't have sent it on, 15
- 16 whether it was a positive decision for whatever reasons
- 17 for not sending it on, I don't know why I didn't send it
- 18

2.0

- 19 ${\sf Q}.\;\;{\sf Even}\;{\sf though}\;{\sf this}\;{\sf document}\;{\sf --}\;{\sf well},$ you must have
 - realised that this document had significant
- 21 ramifications, consequences in terms of the fire safety
- 2.2 of the material you were selling?
- 23 Again, I'm not sure that I fully understood that at the
- 24 time. no.
- 2.5 Q. Well, okay, what did a downgrading from class B to

- 1 class E mean to you at the time?
- 2 A. I wouldn't —— I don't know. I can't recall what it
- 3 would mean. I didn't have enough knowledge of all the 4 clarifications to have been able to make that call.
- 5 Q. Nonetheless, it would have surely meant to you that
- 6 there was a downgrade and it was less safe than had been
- 7 previously thought. Is that not the obviously take—away
- 8 from what this is telling you?
- A. Yes.
- $10\,$ $\,$ Q. Given that that very simple message, it's not as safe as
- we thought it was, was being communicated by Mr Wehrle to you, why did you not simply communicate that very
- to you, why did you not simply communicate that very simple message, "It's not as safe as we thought it was",
- 14 to your customers?
- 15 A. But, again, I don't -- I can't recall whether I did or
- didn't send it on to those customers. I have no
- 17 recollection of whether I did or didn't send it on to
- anybody.
- 19 Q. We do know that others in Arconic -- and I won't go into 20 the details with you -- did send this information on to
- their customers. We've seen that Julie Kasyanik sent
- this message on to customers in Sweden, and
- 23 Gwenaelle Derrendinger also passed this information on
- $24\,$ $\,$ to her customers. You appear to have been a lone voice
- or lone non-voice in this exercise. Are you able to

- 1 explain why that is?
- 2 A. No. I can't.
- 3 Q. Can we go to Gwenaelle Derrendinger's evidence about
- 4 this, or rather an exhibit to her statement, which is at
- 5 {MET00053159/282}. We can see here that she has sent
- 6 an email dated 3 February 2014, so the same day --
- $7\,$ $\,$ in fact, accounting for the time difference, within
- $8 ext{ minutes } -- ext{ and she sends this email to Jaymes Bulman at}$
- 9 Taylor Maxwell, with whom I think you then became 10 employed.
- 11 A. Yes

15

16

25

- Q. The subject is "New fire European fire class forReynobond PE":
- 14 "Dear Jaymes.
 - "As spoken with Debbie last week on the phone please find enclosed the new fire reaction test report for Reynobond Architecture PE in accordance with EN 13 501
- 17 Reynobo 18 Norm.
- "We remain at your disposal ..."
- Now, there is an attachment to this email, you can see from the email itself , and it's identified as the
- 22 Anglais version, the English translation of that
- 23 31 January test, take it from me that that's what it is,
- $24\,$ which classified all PE, as we've seen, as class E.
 - You deal with this email in your second statement at
 - 150

- page 14 {MET00053162/14}, if you can just look at that,
- 2 please, and go, please, to paragraph 48.3. You say
- 3 there
- 4 "Also on 3 February 2014 I was copied into an email
- $5 \hspace{1cm} \hbox{from Gwenaelle Derrendinger to Mr James Bulman}.$
- 6 Mr Bulman was a sales representative at Taylor Maxwell.
- 7 The email appears to follow a conversation that I had 8 with Mr Bulman the previous week although I do not
- 8 with Mr Bulman the previous week although I do not 9 remember the conversation. Gwenaelle attached to the
- 10 email the 'new fire reaction report for Reynobond
- Architecture PE in accordance with ENJ3501 Norm'.
- 12 Looking at that attachment now I can see that it is the
- same document that Claude Wehrle had circulated that
- same day. Again, I do not recall any discussions about
- 15 this at the time."
 - And then you exhibit the email.
- You're not saying, are you, that you had no discussions at all with Mr Bulman and Ms Derrendinger,
- you just can't recall one way or the other; is that your
- 20 evidence here?

16

- 21 A. No, I can't recall it, no.
- $22\,$ $\,$ Q. You can't rule out that you did have a discussion with
- 23 Mr Bulman?
- 24 A. No, I can't rule it in and I can't rule it out, because
- 25 I don't remember.

151

- 1 Q. You just don't remember one way or the other?
- 2 A. I don't remember one way or the other.
- 3 Q. Now, you're copied in on this email, and it looks from
- 4 the email -- well, let me ask you this: Jaymes Bulman
- $5 \hspace{1cm} \text{was in the UK, wasn't he?} \\$
- 6 A. Yes, he was.
- $7\,$ $\,$ Q. And I think we saw from the slideshow that
- 8 Taylor Maxwell were very much part of your UK marketing
- 9 strategy, weren't they?
- 10 A. Yes
- 11 Q. Yes. What was your relationship with Taylor Maxwell at
- 12 this time?
- 13 A. They were a customer. I was working with them. They
- 14 were going out and dealing with architects on
- 15 specifications .
- 16 Q. In the UK market?
- 17 A. In the UK market.
- 18 Q. Now, as we see, you're copied in on this email, and it
- 19 looks as if you talk to Jaymes Bulman -- you can't
- $2\,0\,$ $\,$ recall $\,$ now, but it looks from this document that you
- 21 did -- and you can see that Gwenaelle Derrendinger had
- forwarded that information, the specific report indeed, on to Jaymes Bulman. She clearly thought that it was
- 24 relevant to the UK market.
- Why did that email or possibly the conversation that

- 1 you had had yourself with Mr Bulman not alert you to the
- 2 fact that this revised classification from B down to E
- 3 for PE was relevant to your customers?
- 4 A. I don't know, I can't answer that.
- Q. You shared this information with Mr Bulman, but not more widely among your customers. Can you explain that?
- 7 A. No, I can't. As I say, I can't remember whether I did
- 8 or didn't send it over to other customers.
 9 O Now you said in your witness statement that it's up to
- 9 Q. Now, you said in your witness statement that it's up to
 10 designers, you say, to make decisions about using
 11 Reynobond products.
- Just to repeat a pair of points I put to you a few
- minutes ago, you knew by this stage, early

 February 2014, first that there had been fires in the
- 14 February 2014, first that there had been fires in the 15 UAE involving PE—cored ACM; yes?
- 16 A. Yes.
- 17 Q. You knew that those fires were on tall buildings; yes?
- 18 A. Yes.
- 19 Q. You knew that Reynobond PE had been reclassified as
- $20\,$ class E down from class B, and you had been told that by
- $21 \hspace{1cm} \hbox{your superiors or line managers at Merxheim; yes?} \\$
- 22 A. Yes.
- $23\,$ $\,$ Q. How would you expect, in those circumstances, a designer
- 24 to make a decision about whether or not to use Reynobond
- PE, when you hadn't provided them with that information

- 1 about the downgrading?
- 2 A. Well, it would have been difficult for them.
- 3 Q. Yes. Isn't the reality that, in failing to update your
- 4 customers about the European classification tests, it
- $\,\,$ $\,\,$ was you who decided that it wasn't relevant to them,
- $\,$ 6 $\,$ $\,$ rather than leaving it to them to decide whether the
- 7 information that you were giving them was relevant to
- 8 them?
- 9 A. Well, as I say, I can't remember whether I did or didn't send that information out to them.
- 11 Q. It was you who decided that only national class 0
- mattered and that Euroclass was irrelevant; is that right?
- 14 A. The information we were always asked for was for the BBA certificate, not for any European certificates.
- 16 Q. You made a decision on that basis to withhold from your
- 17 customers something that you knew they didn't know, and 18 therefore you deliberately limited the information made
- therefore you deliberately limited the information made available to them on the basis of which they could make
- available to them on the basis of which they could make their choice; do you accept that?
- 21 A. I didn't deliberately withhold that, no. I was clearly 22 not understanding enough about what I was and wasn't
- passing on, but I didn't deliberately hold back
- 24 anything.
- $25\,$ $\,$ Q. Do you realise that not a single person who has given

154

- 1 evidence to this Inquiry so far knew that the Reynobond
 - panels were ever classified as class E? Did you know
- 3 that?
- 4 A. No.

2

- $5\,$ $\,$ Q. Accepting that that is true, the only reason for that is
- 6 because you failed to tell them.
- 7 A. As I say, I don't recall whether I did or didn't alert
- 8 anybody to that fact.
- 9 Q. Following this email or following the receipt of the 10 email from Claude Wehrle to the two lists, do you accept
- that you had authority to tell your customers about the
- downgrade from B to E?
- 13 A. Yes
- 14 Q. Do you accept that you should have told them?
- 15~ A. I -- looking at it, yes, I should have sent that on to
- 16 them
- 17 Q. Thank you.
- 18 A. But at the time I wouldn't have deliberately withheld it 19 for any reason.
- 20 Q. Can we go to Claude Wehrle's exhibit, part 7, which is
- 21 {MET00053158_P07/33}. This is a sales meeting in
- January 2014, "Technical Assistance", so during the
- 23 month before the email of 3 February.
- 24 Do you remember being present at this sales meeting?
- 25 A. I don't think I missed any, so -- but I don't recall it

155

- specifically , but I don't remember missing any.
- $2\,$ $\,$ Q. Yes, you said that yesterday, so can we assume that you
 - would have been present at this sales meeting?
- 4 A. Yes.

3

18

2.2

2.5

- $5\,$ $\,$ Q. And can we assume that you would have seen this
- 6 slideshow or note?
- 7 A. Yes
- 8 Q. It says "Technical Assistance". Just help me: do you
- 9 know who would have drafted or created this document?
- 10 A. No, I don't
- 11 Q. Would you have had any input into it, do you think?
- 12 A. Doubtful.
- 13 Q. Who was it who did, do you know? You don't know?
- 14 A. I don't know.
- 15 Q. If we go, please, to page 36 in this document
- 16~ {MET00053158_P07/36}, we can see, under "2014", there is
- 17 a set of bullet points.
 - I just want to give you a little bit more context to
- 19 this, if you go back to the previous page
- $2\,0\,$ {MET00053158_P07/35}. The previous page is "2013
- 21 Highlights", and it says:
 - " Team involved on support of R&D projects
- 23 "■ Mechanical process analyze of NPD (Mechanical
- $24 \qquad \quad \text{behavior, transformation, fire class } \dots \text{ etc } \dots)$
 - "• Preparing technical datasheets with Marketing dpt

1		" • Day to day business — Answers to	1		Did you hear that message at this sales meeting?
2		"Inside sales, Outside sales, Architects,	2	A.	I don't recognise it, I don't remember it.
3		Fabricators, Distributors, Customers of customers of	3		Did you understand even vaguely, or remember even
4		customers of customers of our customers"	4	•	vaguely, that it was expected that you, in charge of UK
5		Was there any discussion that you recall at this	5		sales and the UK market for Reynobond 55, had to check
6		sales meeting about transmission of fire class	6		the certifications and qualifications needed to make
7		information through the sales teams out to architects,	7		a sale?
8		fabricators, distributors and customers, customers,	8	Δ	I don't remember that, no.
9		customers, et cetera?	9		If you had, as it says, checked the certifications and
10	Δ	I don't recall this, no.	10	۷.	qualifications needed to make a sale of Reynobond 55 PE
11	Q.		11		core standard in the UK, you would have realised
12	ų.	teams were expected to be familiar with things like	12		straightaway that the European fire classification for
13		mechanical behaviour, transformation, fire class, in	13		that product had been downgraded from B to E, wouldn't
14		order to be able to answer questions; is that right?	14		you?
	۸	•		۸	
15		Yes.	15 16		Yes.
16	Q.	Or at the very least, even if not completely equipped to		Q.	You would also have realised that the European
17		answer all technical questions, able to understand the	17		classification system was relevant in the UK, again not
18		questions and know to whom to pass them internally; is	18		least because the BBA certificate cited the European
19		that fair?	19		classification as the basis for the conclusion that it
20		Yes.	20		could be regarded as class 0; same again?
21	Q.	And then to understand the answers when they came back	21		Yeah.
22		from the technical sales support team.	22	Q.	Yes.
23		Yes.	23		I'm going to turn to the BBA certificate again, and
24	Q.	Let me look at the page I was wanting to go to, page 36	24		this time in the context of the Grenfell Tower project.
25		{MET00053158_P07/36}, page 4 internally, which says	25		Can we please go to $\{CEP000000281\}$. We are now at
		157			159
1		"2014":	1		April 2014, and this is an email from you to Mark Harris
2		"Adapted technical tool Accessible from	2		of Harley on 23 April 2014 at 13.37, copying
3		everywhere."	3		Mike Albiston and Geof Blades, subject, "Planning —
4		What is that a reference to, do you remember?	4		Rainscreen cladding samples/material". You can see from
5	A.	I don't know, I don't recall it.	5		the attachments that there are a number of them,
6	Q.	"New technical training for the sales team."	6		including a safety datasheet, warranty specimen,
7		Did that include you?	7		cleaning recommendations, colour charts, et cetera. But
8	Α.	It —— I was the —— part of the sales team, so it would	8		the first document that you attach is the
9		have included me.	9		BBA certificate 08/4510; do you see that?
10	Q.	Did you get any new technical training?	10	Α.	Yes.
11		I don't remember getting any technical training.	11	Q.	Let's go to the attachment. It's a document we looked
12		"Updating for existing certifications ."	12	•	at before, it's the BBA certificate. We can look at it
13	•	Did you get any updating for existing	13		either at {BBA00000047} or at {CEP000000282}, I don't
14		certifications , apart from the email we saw from	14		mind which we pick. We have gone for BBA.
15		Mr Wehrle?	15		You can see the certificate . We looked at it
16	Δ	Yeah, I can't recall.	16		yesterday. If we go to page 5 {BBA00000047/5}, please,
17		Then it says:	17		we can see at section 6.1 — we covered this yesterday,
18	ų.	"New certification for new countries, new	18		so I'm not going to take you through it all over again:
19		markets"	19		"A standard sample of the product with a grey/green
20		Then there's a plea:	20		Duragloss 5000 coating, when tested for reaction to
21		"Please The person in charge of a country	21		fire, achieved a classification of B–s2, d0 in
22		and/or market has to check the certifications and	22		accordance with EN 13501—1:2002."
23		,			
~ ~		dualifications needed to sale	7 4		Where it says that it had a classification of R
		qualifications needed to sale "Impossible for a project but Check and ask in	23 24		Where it says that it had a classification of B,
24 25		"Impossible for a project but Check and ask in order to Anticipate."	23 24 25		Where it says that it had a classification of B, that was wrong, wasn't it, when you sent this document to Mr Harris at Harley?

2

3

4

5

6

7

8

9

10

11

- $\begin{array}{lll} 1 & \text{A. Having seen the way that you've described it all now,} \\ 2 & \text{yes.} \end{array}$
- 3 Q. At the time you sent this BBA certificate, the European 4 classification was not B but E. wasn't it?
- 5 A. Yes
- 6 Q. And that was so regardless of whether the panels were 7 rivet or cassette; yes?
- 8 A. Yes
- 9 Q. There would be no way, would there, for Mike Albiston or 10 indeed Geof Blades to know that, would there, reading 11 the certificate that you were sending them?
- 12 A. No.

2

3

5

- 13 Q. It would have been very easy for you, wouldn't it, in
- 14 your covering email to say that the BBA certificate was
- no longer up to date and that the European
- 16 classification for Reynobond PE panels was no longer B 17 but E? It would have been, wouldn't it, easy for you to
- but E? It would have been, wouldn't it, easy for you to do that?
- I would have expected for it to have been withdrawn.
- Q. Right. But you're presenting this document whichcontains a statement at paragraph 6.1 that was in fact
- wrong, as you say, and you'd also been told by
- 25 Claude Wehrle that this standard sample of a product no

161

- 1 longer had a B but an E.
 - My question to you is: why didn't you simply put in your covering email, whether or not you thought it was relevant, that that part of the BBA certificate was no longer current because it had now achieved
- 6 a classification of E?
- 7 A. I don't know. I didn't associate the two together, as8 I say.
- 9 Q. You say you didn't associate the two together; this
 10 certificate that you were sending exactly associates the
 11 two together because it cites a Euro classification
 12 of B.
- 13 A. Yeah, I see that now, but I don't think I pulled ——
 14 I don't think I put the two together at the time.
- 14 I don't think I put the two together at the time. 15 Q. Can you explain why that is, given that this
- certificate , which was the lynchpin of your sales, as
 you have told us repeatedly, expressly states that
 Reynobond PE as standard had achieved a B, which was
- something that by this time you knew to be wrong?
- 20 A. I would have expected to have had something from 21 Merxheim to say that the BBA wasn't then relevant.
- $22\,$ $\,$ Q. Can we look at your first witness statement at page $3\,$
- 23 {MET00019063/3}, please, and I would like to look at 24 paragraph 8. Page 3 at the top is part of the way
- $25\,$ through paragraph 8, but I want to just look at what you

162

- say four lines down from the top of the page there.
 - You say:
- "I occasionally also pointed to the British Board of Agrément ('BBA') Certificate for the Reynobond architectural wall cladding panels, number 08/4510, and would provide a pdf copy if asked."
 - Do you see that? You then go on to say:
 - "However, I would point out that I generally worked with five or six fabricators and once they had received this BBA Certificate on a project it was very rare that they would ask me for it again on other projects."
- Just pausing there, does that mean that you thought at the time that fabricators like Geof Blades,
- $14\,$ for example, at CEP would think that the BBA certificate
- was still valid unless you pointed out errors to them?
- 16 A. Yes
- Q. Wasn't that all the more reason for you to highlight thechange in classification?
- 19 A. As I say, I would have expected that to have come from20 Merxheim, that the BBA was no longer valid.
- 21 Q. But you would have known it was no longer valid, or at
- 22 least to this extent, because you had two things in your
- $23\,$ hands: you had the BBA certificate saying B and you had
- the email from Mr Wehrle saying E. Why did you needanything from Merxheim to be able to go to your customer
 - to be able to go to your castor

163

- 1 and just qualify the email by reference to the fact that
- 2 it was no longer B but E?
- 3 A. As I've said, I don't think I -- at the time I don't
- think I associated the two together, and as there wasn't a specific instruction that the BBA wasn't valid, I was
- 6 clearly operating on the fact that it still was.
- $7\,$ $\,$ Q. Leaving aside CEP, who may well have had a certificate
- 8 from them in years previous, this was the first time,
- 9 I think, that you were dealing directly with Harley,
- 10 wasn't it?
- 11 A. Yes
- 12 Q. Yes. Given that you were now dealing directly with
- Harley here on the Grenfell Tower project for the first
- 14 time, and sending them this certificate for the first
- time, was that not absolutely the occasion on which to
- tell them that, "This certificate is dated 2008, but
- we've just had a recent new test on PE which says it's
- we ve just had a recent new test on PE which says it
- 18 class E"?
- 19 A. As I say, I wouldn't have associated the two together at the time and was obviously working that the BBA was
 - the time and was obviously working that the BBA was
- 21 still valid
- 22 Q. Do you accept that, had you alerted them to the fact
- $23\,$ simply that B was wrong and it was now E, you would have
- $24\,$ equipped them, you would have enabled Harley, to ask you
- 25 the next question, which was how standard PE could be

5

13

14

15

16

17

18

19

2.0

21

22

23

2.4

- 1 regarded as having class 0 in circumstances where it was 2 no longer a class B, European? 3 A. They would have had better information, yes. Q. Yes. And do you accept that by providing the 4 5 BBA certificate to Harley as you did here, without any qualification or caveat as to the fire classification of 6 7 standard PE, you allowed Harley to think that standard
- 8 PE, rivet or cassette, had a Euroclass B when it did 9 not?
- 10 A. As I say. I hadn't associated the two at the time, and 11 therefore I would have expected the BBA to have been 12 withdrawn at the same time as that email had come out.
- 13 Q. Yes, that's not quite an answer to my question. My 14 question is, just looking at your dealings with Harley: 15 do you accept that, by providing this BBA certificate to 16 Harley at this time, without any qualification or any 17 caveat as to the fire classification of Revnobond 55 18 standard PE, you allowed Harley to think that standard
- A. Yeah, that's because that's what's on the BBA, yes. 2.0
- 21 Q. And thereby to think that, because it had Euroclass B,
- 22 it may be regarded as having national class 0?
- 2.3 A Yes

19

- 2.4 MR MILLETT: Mr Chairman, is that a convenient moment?
- SIR MARTIN MOORE-BICK: Yes, Mr Millett, I think it is.

165

PE. rivet or cassette. had Euroclass B when it didn't?

- 1 We will have a short break now. Ms French. We will 2 come back at 3.30, please, and please remember not to 3 talk to anyone about your evidence while you're out of the room. All right? 5
- THE WITNESS: Okay. Thank you, sir.
- SIR MARTIN MOORE-BICK: Thank you very much. 3.30, please. 6
- 7 (3.16 pm)
- 8 (A short break)
- 9 (mg 08.8)
- 10 SIR MARTIN MOORE-BICK: Hello, everyone. Welcome back. I'm 11 going to ask Ms French if she can see me and hear me
- 12
- Are you there. Ms French? 13
- 14 THE WITNESS: Yes, I can see you and hear you, thank you,
- 15

2.0

- 16 SIR MARTIN MOORE-BICK: Good, thank you very much, and you 17 are ready to carry on, are you?
- 18 THE WITNESS: Yes, I am.
- 19 SIR MARTIN MOORE-BICK: Right, thank you.
 - Yes, Mr Millett, then, when you are ready.
- 21 MR MILLETT: Yes. thank you. Mr Chairman.
- 2.2 Ms French, welcome back.
- 23 Can I just ask you, please, to look at the email
- 2.4 chain again in April 2014. This is at {CEP000000281}.

166

25 Just looking at it again, at this time, 23 April 2014, do you remember, or do you know, that at this point

- 2 Rydon had been appointed the preferred bidder, but the
- 3 cladding had not yet been finalised?
- A. I couldn't -- without checking through documents, 4
 - I wouldn't be able to confirm that one way or another.
- Q. All right. 6
- 7 Now, if we go to the very bottom of page 1 in this email run, you will see that there is an email from 8 9 Mark Harris to you on the day before the day you sent
- 1.0 him the BBA certificate, 22 April, copied to
- 11 Mike Albiston, and he says, "Hi Deb", and then in the 12 fourth paragraph down, he says:

"As you can see, the architect is now looking at other options, however, Rydon do not want to increase the cost plan by a single penny being that we are already in a V/E phase. Before I start ordering up a myriad of samples again, can you give me your guide on which of the listed colours would be more expensive than the 'standard' range. This will hopefully help us to try and get the architect to focus on what can be afforded within the current cost plan, rather than going

Do you recall that the project was undergoing a value engineering exercise at that time?

25 That wouldn't have been something I would have been

167

- 1 involved with, but a lot of projects go through a VE, so 2 possibly
- 3 Q. Right. And you're certainly being told that here,
- 4 aren't you?
- 5 A. Yes
- 6 Q. Did you know that cladding, the choice of rainscreen
- 7 material, was central to that exercise?
- 8 A. No. it didn't.
- 9 Q. It looks from this, and did you understand from this. 10 that the employer might not have been able to afford
- 11 options other than ACM?

off at a tangent!!"

- 12 A. No, that's not information I would have had.
- 13 $\ensuremath{\mathsf{Q}}.$ Were you alive to the idea, even if not the fact, that 14 Rydon, as a newly appointed contractor, might not want 15 to increase the price with more expensive material?
- 16 A. No, again, that wouldn't have been something that 17 I would have been involved with.
- 18 Q. Right.
- 19 Now, we have seen the price that you quoted in early 2.0 2014, which was £28 per square metre, and we've seen the 21 evidence of Mr Schmidt earlier about the price
- 2.2 differential between PE and FR at the time of the supply
- 23 to Grenfell Tower on that project, we can go back to it
- 2.4 if you like, but do you remember he said that the
- 25 differential is around €2 per square metre for PE over

- 1 FR?
- 2 A. Yes.
- 3 Q. Now, that's of course the supply to fabricator. That's
- 4 the price -- is that right? -- on supply to the
- 5 fabricator, who would then add their own charges for
- $\ensuremath{\mathsf{f}}$ fabricating the sheets into cassettes and rivets, as the
- 7 case may be.
- 8 A. That's right.
- 9 Q. And then is it right that the fabricator would then add 10 those charges and then pass those on to the cladding 11 contractor, and the cladding contractor would add their
- charges and so on up the chain? Is that how it worked?
- 13 A. I believe so, yes.
- 14 Q. Right
- Looking at your end of things, the very bottom of the chain, if I can put it that way, there isn't a huge difference, is there, in price between PE and FR—cored
- 18 ACM?
- A. No, there was not, but again, from my recollection from
 the UK, there was somewhere round about €4 to €5, we
 would price it €4 to €5 difference.
- 22 Q. Right.
- 23 Peter Froehlich in his statement at paragraph 48, 24 page 17 {MET00053197/17} -- and I don't need to take you
- 25 to it unless you want me to show it to you -- says in

- 1 terms of the price difference in relation to the supply
- to Grenfell Tower, the cost to CEP for the raw fabric in
- 3 FR-core form would have been around €14,000 more than in
- 4 PE-core form, based on a rounded supply figure of
- 5 7,000—odd square metres.
- 6 Is that a figure that you would agree with?
- 7 A. I would have to work that back to what it would be8 a square metre.
- 9 Q. Yes. It may not be an accurate number, but that's the
- 10 sort of range of difference he has identified for this 11 project, \in 14,000 as the cost difference between PE core
- 12 and FR core. Would you agree with that even in round 13 terms?
- A. I would have probably said so more on the European
 market, but not necessarily on the UK market.
- 16 Q. What do you mean, more on --
- 17 A. My understanding is we were selling FR in the UK, and we
- didn't sell an awful lot of FR, was that the prices were
- more than €2, roughly €€2/2.50, they were more like
 sort of €4 a square metre difference.
- Q. So you say that in your experience, being at the front
 end of things, the difference wasn't €2 but €4, by which

170

- PE was cheaper than FR?
- 24 A. Yes.
- 25 Q. I see, okay.

So on the footing of a rounded supply of 7,000—odd

- $2 \hspace{1cm} \text{square metres on the Grenfell Tower project, that would} \\$
- 3 mean a total price difference between PE and FR of, say,
- 4 £28,000 or even £30,000. That's about it, isn't it?
- 5 A. Yes
- 6 Q. If that was the price differential , why didn't you just 7 supply the FR product as a standard product?
- 8 A. I can't answer that question, I don't know.
- 9 Q. Why didn't you offer the FR product?
- 10 A. I don't recall whether I did or didn't offer FR, but the
- $11 \qquad \quad \text{information that I } -- \text{ the quotations that we pulled} \\$
- 12 together don't specify FR or PE.
- $13\,$ $\,$ Q. That is right, and my question -- I'll just ask it
- 14 again -- is why didn't you specifically offer a choice
- between the FR and the PE variants, or core differences,
- and leave it to Harley or Rydon or the ultimate client
- $17 \hspace{1cm} \text{to decide whether they were prepared to spend the extra} \\$
- 18 money on FR?
- $19\,$ $\,$ A. I don't know. We just automatically quoted PE as a core
- 20 rather than FR. There's no other reason for it.
- There's no reason not to have quoted it.
- 22 Q. No.
- This automatic or default to PE, was that something that was ever discussed internally at Arconic, to your
- 25 knowledge?

171

- $1\,$ $\,$ A. My understanding when I first took over was the general
- 2 market was PE and everything was PE.
- 3 Q. Yes, but was that ever discussed? Was this default or
- 4 knee-jerk habit of just selling PE, not ever giving
- 5 customers a choice between PE and FR, ever actually
- discussed, either at sales meetings or even more
- 7 privately as between you and Mr Froehlich or you and
- 8 anybody else you dealt with at Arconic at Merxheim?
- $9\,$ A. I don't believe so, I think it -- no, I don't believe $10\,$ so.
- 11 Q. Let's then turn to the time when Rydon were appointed to
- be the preferred bidder in and after the spring of 2014
- up to September of that year, when the RBKC planners
- finally agreed the cladding. I say finally; formally
- 15 agreed it.
- Do you remember that planners had to be convinced
- 17 that ACM would be suitable on Grenfell Tower?
- 18 A. No, I didn't.
- $19\,$ $\,$ Q. Do you remember whether there was any uncertainty at all
- about what colour ACM would be chosen?
- $21\,$ $\,$ A. No. Again, I wouldn't have been that clear -- apart
- from the fact that we were supplying an awful lot of
- 23 samples, which would have intimated that they were
- 24 unsure which one they wanted.
- $25\,$ $\,$ Q. Exactly, so you knew there was uncertainty about what

- 1 they wanted, or some discussion, at least, about the
- 2 colours they were after, you knew that much?
- 3 A. Yeah, there was a lot of samples requested, an awful lot 4 of colours. lots of discussions about colours.
- 5 Q. Did you know that the planners also had to be persuaded that the rivet -fix was acceptable? 6
- 7 A. No. I didn't.
- Q. And indeed, as we know, in the end they agreed to 8
- 9 Reynobond in smoke silver with a cassette fix. I think 10 you know that.
- 11 A. I wasn't aware of that at the time.
- 12 Q. You weren't?
- 13 A. So -- no, sorry, I was aware of that at the time because
- I remember seeing an email from Harley, I believe. It 14 might have been CEP. 15
- Q. Yes. So looking at it slightly more broadly, did you 16
- 17 know at the time -- and when I say at the time. I mean
- 18 during the period April to September 2014 -- that there
- 19 was a debate as between Rydon and Harley on the one
- 2.0 hand, perhaps, and RBKC on the other about whether
- cassette-fix or rivet-fix should be used at 22 Grenfell Tower?
- 2.3 A. No. I wouldn't have been party to that information.
- 2.4 Q. Right.

21

25 I'm going to take your actions during this period

173

- 1 quickly and see if you agree, and if there is anything 2 I'm missing out, please tell me.
- 3 You provided a number of samples during this period, 4 didn't you?
- 5
- 6 Q. We've seen the list of samples that you provided, which 7 we saw at $\{MET00019919\}$. We looked at that earlier.
- 8 You also provided information and images to help the 9 customers understand the difference between the look of 10 rivet - fix and the look of cassette - fix; is that right?
- 11 A. I believe that some images were provided so they could
- 12 see the difference between -- on the various colours.
- 13 I can't remember whether it was specific to rivet-fixed 14 or cassette.
- 15 Q. During you remember you sent, for example, photographs 16 of other projects, like South Kilburn?
- 17
- 18 Q. Do you agree that you also arranged for material to be
- 19 provided for a mock-up so that the planners could 2.0 consider the colours?
- 21 A. There was a mock-up -- material was requested for 2.2 a mock-up by CEP, yes.
- 23 Yes, and you sent the mock-up fabric to CEP for the 24 mock-up, didn't you?

174

25 A. Merxheim sent that, yes.

- 1 Q. Merxheim sent it, and I think that was free, wasn't it,
 - there was no charge for that?
- 3 A. I believe so.
- 4 Q. Would Arconic usually provide fabric for a mock-up free
- 5 of charge?
- A. They would, if we had the material around. Again, from 6
- 7 reading the emails since, I think there was something
- 8 wrong with that particular material in terms of the
- 9 surface, so therefore they were able to provide it for
- 10 free. But not all occasions, we would charge for it in
- 11 some cases.
- 12 Q. Would you say that, looking at the things you said you
- 13 did during this period, you were very active on this
- 14 project at this particular time?
- 15 A. In providing samples, yes.
- Q. And you worked hard for this sale, I think it's fair to 16 17 say, isn't it?
- 18 A. No harder than I would have done others. I'm providing
- 19 a service. I was just trying to provide the information
- 20 that people needed.
- 2.1 Q. Right.
- Did you know that Peter Froehlich had visited the UK 22
- 2.3 and met CEP and also Harley?
- 2.4 A. Did I know?
- 25

175

1 A No

8

- 2 Q. He never told you that he had gone to the UK and met CEP 3 and Harley, didn't tell you that after he had gone?
- A. He came over to the UK on a couple of occasions, I took
- 5 him round to see -- did you mean he went on his own or 6 he was with me?
- 7 Q. Let's look and see what he says in his statement. Can
 - we go to $\{{\rm MET00053197/10}\},$ please, paragraph 37. He says at paragraph 37:
- 9 10 "I was aware that CEP and Harley were involved with
- 11
- the Grenfell Tower project and I attended separate 12 introductory meetings at their respective offices
- 13
- I cannot recall the exact date these meetings took place 14 but I believe that it was before June 2014. The purpose
- 15 of both of these meetings was not project specific but
- 16 was rather to introduce me as the Product Manager for
- 17 Reynobond and they were part of my general meetings with
- 18 customers which took place once or twice a year. In
- 19 terms of attendees at the CEP meeting, in addition to
- 2.0 myself and Deborah French, Neil Wilson (CEP) was in 21 attendance. I cannot recall who was present at the
- 2.2 meeting with Harley. I understand that a visit report
- 23 should have been created (as it would it be for meetings
- 2.4 with customers) and I would expect that Deborah did

176

25 this."

1 Then he goes on a little bit more to say: 2 "I would normally have received a copy of this but 3 I cannot recall if I received a copy for this particular 4 meeting. I do not have any notes from these meetings, 5 as when I attend meetings with sales representatives I do not normally make such notes as the representative 6 7 does this." 8 Do you, in the light of that evidence there from 9 Mr Froehlich, remember Peter Froehlich's visit to the 10 United Kingdom that he describes here? 11 A. I don't remember that — specifically going there, but

- 12 he did come over on occasions to the UK and I did take 13 him round over those periods to various customers and 14 fabricators, so yes, very -- yes, that very probably 15 happened.
- 16 Q. He recalls specifically a meeting at CEP at which you 17 were present.
- 18 A Yeah
- 19 Q. Is he right about that?
- 20 A. I can't recall it but, yes, I'm not disagreeing with 2.1
- 2.2 Q. Okay

2.3 He says that he recalls that the Grenfell Tower 2.4 project was discussed, and a section drawing showing 25 a level of an unidentified building was put out on the

177

- 1 table. Do you remember that happening?
- 2 A. No. I don't.
- 3 Q. He says that a little bit lower down the page, you don't recall that.
- Do you recall any discussion at that meeting of the 5 6 fire classification of Reynobond PE 55?
- 7 A. No. I don't.

21

- 8 Q. Do you recall any discussion at that meeting about the 9 BBA certificate?
- 10 A. No, I can't recall the meeting.
- 11 Q. Do you remember whether Mr Froehlich said anything about 12 the recent change in the classification of Reynobond PE 13 from B to F?
- 14 A. No, I can't, because I don't recall the meeting.
- 15 Q. On the subject of what he says about visit reports, can 16 we just look at your second witness statement, please,

17 at page 25 $\{MET00053162/25\}$, paragraph 88.1. You say: 18 "I may have taken notes during meetings about the 19 refurbishment of Grenfell Tower but I do not remember 2.0 anything specific and I disposed of all records of my

- time with [Arconic] after I left the business. I do not 2.2 know if anyone else at those meetings took such notes. 2.3 I cannot recall submitting any visit reports or
- 2.4
- summaries of these meetings to [Arconic]." 25
 - Was it part of your role to write visit reports for

178

meetings with customers?

- 2 Initially , no, we weren't requested to do any of that.
- 3 The CRM system was then being developed more and more at
- 4 that point for us to be doing -- recording certain visit
- reports. I don't recall whether I did any for that 5
- particular meeting or not. 6
- 7 Q. By the time of mid-2014, was the system sufficiently 8 developed whereby you were making notes of these
 - meetings and creating visit reports?
- 10 A. Yes. I believe it was.
- 11 Q. And were you supposed to submit them to Merxheim?
- 12 A. No. I think they were held within the CRM -- they were 13 generated through the CRM system and held in there.
- 14 Q. I see. So when you say they were generated through the
- 15 CRM system, did you type your notes onto the system or
- 16 did you create a report and then send that by email to
- 17 somebody to input into the system?
- 18 A. No. it would have been generated into the system.
- 19 Q. Right. So have you any reason to think that it wouldn't 20 still be there?
- 2.1 A. No, if I did one, there is no reason for it not to be 22
- there. 2.3 Q. If it's not there, where would it be?
- 2.4 A. I don't know.
- 2.5

179

- 1 Do you remember making a visit report for this
- particular meeting? I know you say you can't recall the 2
- 3 meeting, but I will ask you whether you remember writing at least --
- 5 A. No, I don't. I don't recall whether I did one for that
- 6 specific meeting or not.
- 7 Q. Do you remember writing any report of a meeting attended
- 8 by Peter Froehlich in the UK in mid-2014?
- 9 A. No.
- 10 Q. Can we go then to a slightly different topic,
- $\{CEP000000443\}$. This is a little bit further in time 11
- 12 during 2014. This is an email chain at the end of July
- 13 and early August of that year, and I would like to look
- 14 with you at the bottom of page 1 of the email run. It's
- 15 an email from Simon Lawrence to Mark Harris. Rob Maxwell
- 16 and Ray Bailey, copied to others at Rydon, and 17
- Mike Albiston at Harley. It's not copied to you at this 18
 - point, but let's just look together at the first
- 19 paragraph. 2.0
 - Three lines down, he says:
- 21 "The bottom line is that the client has just
- 2.2 confirmed to planning that they are looking to proceed
- 23 with the Reynobond Champagne colour (as shown on the
- 2.4 mock-up) for the main body of the building and the
- 2.5 cladding will be the 'cassette' fixing version."

Then if you look at the paragraph at the bottom of the page, it says:
"It is unlikely that the Planners will have any

"It is unlikely that the Planners will have any major issues with the above proposals as they have wanted 'cassette' fixings from the start. It may be wise not to order the champagne colour until we have 100% assurance but you can certainly start getting things rolling. Full design can now start."

If we scroll up immediately above that, we can see Mark Harris forwards this email on to you the same day, 31 July 2014, and to Geof Blades. It goes to Geof Blades, it's copied to you:

"Geof/Deb

"Copy for your interest ... "

Then if we go to the top of the page, we can see your response on 1 August to Mark Harris:

"Hi Mark

"It's getting exciting ... thank you for your hard work and perseverance in putting Reynobond forward. I think I owe you and Geof either lunch or dinner at some point.

2.2 "Debbs."

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

2.1

Now, at this point, is it right you must have been reasonably certain you had won the supply contract? Is that right?

181

- $\begin{array}{lll} 1 & \hbox{A. Yes, it was definitely clear that that was $--$} \\ 2 & \hbox{potentially that was the way it was going to go.} \end{array}$
- 3 Q. Your email says, "Thanks for putting Reynobond forward":
- 4 "Thank you for your hard work and perseverance in putting Reynobond forward."

Were they instrumental in getting Reynobond specified, do you think?

- 8 A. In terms of the specification and -- yes, they would 9 have been.
- Q. Now, this email goes to Mark Harris at Harley and
 Geof Blades of CEP. Were you thanking both of them or
 only one of them?
- 13 A. Both of them, I would have been referring that to.
- Q. So does this show your marketing strategy in action,
 namely good contacts with fabricators like CEP who would
 push your products directly to people like Harley?
- 17 A. Yeah, if Geof hadn't have introduced me to that then we wouldn't necessarily have been involved with it.
- Q. Geof Blades made it clear in his evidence that he did
 not have a celebratory meal with you; is that your
 recollection?
- 22 A. Absolutely.
- 23 Q. Is this just a nice thing to say to a colleague?
- 24~ A. Yes, I don't -- the only time I ever had anything with
- 25 Geof was a coffee either in their offices.

1 I certainly never had any meals out or lunches out with 2 anybody from Harley or CEP.

- Q. Was it usual for you to have these sorts of informal and
 very direct communications with an end customer such as
 Harley on projects?
- 6 A. No, they were the only ones that we did that with.
- 7 Q. So Grenfell Tower was a one—off, was it, in this

8 respect?

9 A. In terms of communicating with the installer, yes.

10 Q. Right.

So, so far as Grenfell was concerned, at the very least, coming back to your 13 May 2013 email that we discussed before the lunch break, we could say that at least in respect of Grenfell Tower, that was a project

where you had close control of the supply chain and

 $16 \hspace{1cm} \text{worked closely with your fabricator}; \hspace{0.1cm} \text{that's correct},$

isn't it, so far as Grenfell is concerned?

18 A. Yes

Q. Yes, and you were in a position to ensure that, asbetween FR core and PE core, the right product ended up

on Grenfell Tower, weren't you?

22 A. My -- as I say, my knowledge is clearly not what it should have been.

 $24\,$ $\,$ Q. But you were in a position to ensure that as between

25 those two cores, the right one, the appropriate one for

183

Grenfell Tower, ended up on that building, weren't you?

2 A. Yes

3 Q. How come PE was right and FR not right?

- 4 A. I don't know. As I say, my knowledge was not sufficient
 5 enough to have been able to have determined that.
- 6 Q. It's reasonably clear at this point, isn't it, early

7 August 2014, that Grenfell was going to be clad in

- 8 cassette—fix, although in fact the decision wasn't made
- 9 for another month or two? But do you agree with that,
- 10 that it was reasonably clear to you at this time that
- 11 Grenfell was going to be clad in cassette?

12 A. Yes

- 13 Q. Did you mention any particular risk with that fixing
- 14 method as opposed to rivet to --

15 A. I don't recall doing that.

- 16 Q. Right. Is there a reason why not?
- 17 A. As I say, I think my knowledge was lacking in being able to do that.
- 19 Q. Can we go to your second witness statement, please, at 20 page 18 $\{MET00053162/18\}$. I would like to look with you

21 at paragraph 65. You say there:

22 "I would again repeat that I had left [Arconic's] 23 employment over two months before the products were 24 ordered for the Grenfell Tower refurbishment project.

25 I therefore had no involvement in the final ordering or

182

supply of products. I would also repeat that [Arconic]
was involved only in the manufacture of a 'raw' product
which it supplied to specialist fabricators and
installers of cladding systems. [Arconic] was not
involved in the design or specification of materials for
building projects, that is done by [Arconic's] customers
or the people with whom they contract."

Now, Ms French, having looked at your involvement in the project from March 2013 up to the later part of the summer of 2014, when the panels ultimately used were agreed, do you accept that what you say here in this statement at paragraph 65 is wrong?

- 13 A. I wouldn't say it's incorrect, because at the time 14 that's that was my understanding.
- Q. Is not the truth that you worked extremely hard over
 a number of years, with direct contact with CEP,
 Studio E and Harley, to make sure that Reynobond PE 55
 was considered by the architect on the Grenfell Tower
 project and accepted by the RBKC planners?
- A. I worked with CEP and Harley to provide them with all
 the information that they needed, yes.
- Q. And that when you say that Arconic was involved only in
 the manufacture of a raw product which it then supplied,
 but not involved in the design or specification of
 materials for Grenfell Tower, that's just wrong, isn't

185

1 it?

2.0

21

2.2

2.3

8

9

10

11

12

- A. No, we were only responsible for —— we were only responsible for supplying the raw materials. We didn't write the specification, we weren't involved in the specification.
- 6 Q. And I would suggest to you that when you say what you
 7 say here, in all respects, this paragraph represents
 8 really an attempt by you to distance yourself from the
 9 choice of cladding materials made for Grenfell Tower,
 10 which in fact bears little relation to the facts as you
 11 have accepted them to be.
- 12 A. No, it's that's not the way that it was. It's as
 13 I say, my knowledge was clearly not what it needed to
 14 have been. Nothing was done in any other format other
 15 than that.
- Q. Now, you say you played no role in the design of the
 façade at Grenfell Tower; you say this essentially here,
 you have said it just now, you say it in other parts of
 your witness statement such as paragraph 82.

Did those in charge of design, whether it was Studio E or Harley or anybody in that chain, ever discuss or seek to discuss fire performance of cladding with you?

- 24 A. Not that I can recall, no.
- $\,$ Q. Did they ever seek to discuss the difference between PE

186

and FR core, so far as they knew it existed, with you?

- $2\,$ $\,$ A. Not that I can recall , no.
- 3 Q. Did they ever seek to discuss the difference between 4 rivet and cassette—fixed in terms of fire safety with 5 you?
- 6 A. No, not that I can recall.
- Q. Did you ever wonder why nobody on this project ever
 asked you about fire performance in relation to
 cassette-fix or rivet-fix?
- 10 A. No.
- 11 Q. Did you ever wonder why nobody ever asked you about the 12 difference in fire performance between FR and PE?
- 13 A. No

1

- Q. How did that lack of questioning compare with your other
 customers that you had dealt with over the years up to
 2013 and 2014?
- $17\,$ $\,$ A. As I've said previously, there was very, very few
- 18 questions asked about the differences between the cores
- or fire related questions. There may have been one or
- 20 two over the years, but very, very, very few.
- $21\,$ $\,$ Q. So are you telling us that Harley's and Studio E's and
- 22 Rydon's incuriosity about fire performance of the
- 23 cladding that you were providing them was not out of the
- 24 ordinary in your experience as it was at the time?
- 25 A. Yes, that was more normal than unnormal.

187

- Q. I just want to ask you about an email involving
- a gentleman called Serge Wahler. Have you heard thename Serge Wahler?
- 4 A. Yes, he headed up Reynolux in Merxheim.
- 5 Q. Yes. Can we look, please, at $\{MET00053158_P10/108\}$.
- This is an email chain from October 2014, and you are
- 7 not copied, so I'm going to assume that you didn't see
- 8 this at the time, but I do want to ask you about one or
- 9 two things in it.
- Serge Wahler, as I think you said, headed up
 Reynolux in Merxheim. He was in fact, I think, the
 sales manager for contracts and export. That's at least
 according to his signature in the email at the top of
- 14 the page. Would that be right?
- A. Yes. My understanding was it was just with Reynoluxmaterial, though, not anything else.
- 17 Q. I see
- 18 If you look at the subject of the second email down 19 from the top, let's just look at that email, it's from 20 Denk Guenther of PREFA to Claude Wehrle, copied to
- 21 Philippe Vonthron, Serge Wahler and Mike Bucher, and the 22 subject matter is "PE oder FR in England". The question
- 23 is:
- 24 "Hi, Mr Wehrle,
- 25 "Due to the circumstances, we need your help with

1	Reynobond in England.	1		is Mr Wahler back to Claude Wehrle:
2	"The question is:	2		"Please note, I have not answered any more questions
3	"When and for which building classes should the PE	3		about RB for months now, assuming that I no longer know
4	or FR core be used in England?	4		anything about the product.
5	"We are supposed to give the customer an answer by	5		"That being the case, I thought Debbie was logically
6	12:00 noon today at the latest!	6		the person who was best informed, and I stupidly
7	"Thanks in advance.	7		repeated what she told me (I am very good at doing
8	"Best,	8		that !!!!). "
9	"Guenther Denk."	9		Now, my first question is, having shown you the
10	If you then go up the page, 108, we can see that	10		whole of this email run: do you remember this discussion
11	Serge Wahler replied on the same day, copied to	11		or any discussion with Serge Wahler on this —
12	Claude Wehrle:	12	Α.	No, I don't.
13	"Hi,	13		Is what he says in his email to Claude Wehrle correct
14	"You can do everything with PE in England. As we	14	•	when he says that only PE is used in England regardless
15	have customers there, can you tell me what you want to	15		of the project?
16	do in England?	16	Α.	Yes.
17	"Thanks in advance!"	17		Did you in fact —— I'm sorry.
18	I should have noted the date, this is	18		Yes.
19	17 October 2014.	19		Did you in fact believe that no specific legislation was
20	If you go to the bottom of page 107	20	٦.	in place governing PE?
21	{MET00053158_P10/107}, we can see Claude Wehrle's	21	Α	I'm not sure I would have used that terminology that
22	response, sent only to Serge Wahler, it's an internal	22		he's put in that email, but I would have —— if I'd have
23	message:	23		had that conversation with him, then I would have said
24	"Be careful, this is not the case.	24		that it was —— generally PE was being used.
25	"Debby pushes hard for the PE prescriptions, but	25	0	He seems to suggest to Claude Wehrle that you told him
	Bessy passes hara to the 12 prescriptions, sat	20	۹.	The seems to suggest to clause from a that you told imm
	189			191
1	everything is moving to FR (from the British Standard to	1		that there was no specific legislation . Did you say
2	the European Norms)	2		that to him or words to that effect?
3	"Did you call him?	3	A.	I can't recall the conversation, so I can't confirm that
4	"Analyses of past figures are not necessarily	4		one way or another.
5	correct."	5	Q.	You did tell us on a number of occasions now that you
6	Immediately above that still, we see Serge Wahler	6		would automatically supply or offer PE core in the UK,
7	responding to Claude Wehrle on the same day,	7		and that you had understood that the relevant
8	17 October 2014, and he says:	8		classification for Reynobond PE in the UK was national
9	"Claude,	9		class 0.
10	"I called her, and she confirmed that so far, only	10		Would that be consistent $$ and I'm asking you
11	PE is used regardless of the project, no specific	11		really to comment $$ to the best of your recollection,
12	legislation .	12		with what Serge Wahler is telling Claude Wehrle here?
13	"A customer at Prefa is delivering a construction	13	Α.	Yes.
14	project in London and wanted to know."	14	Q.	This is in October 2014, so this is many months after
15	Then if you go above that on page 107, we can see	15		you had been told by Claude Wehrle that PE was
16	that Mr Wehrle goes —— well, it's not a response to him,	16		a Euroclass E.
17	but it seems to come three years later on 16 June 2017,	17		Did you have any conversation with Mr Wahler at that
18	that is two days after the Grenfell Tower fire, but it's	18		stage about this subject?
19	next in the email string:	19	Α.	Not that I can recall, no.
20	"Serge,	20		Did Mr Wahler or Mr Wehrle, either of them, tell you,
21	"Remember be careful with this kind of	21	•	whether at this time or in this context, the PREFA
22	communication to PREFA.	22		request, that PE no longer had a Euroclass B, but only
23	"Claude."	23		a class E and therefore couldn't be regarded as having
24	Now, if you go to the top of page 107, there is	24		national class 0 in the UK?
25	an email the same day, 16 June 2017, and he says, this	25	Α.	No, I don't recall that.

Q. Now, Claude Wehrle comments on this exchange in his witness statement. I just want to show you what he says about it. It's at {MET00053190/38}, paragraph 132, please. If we look down the page, 11 lines down in that paragraph, you can see some italicised text where he is quoting from emails. About halfway down he says, by reference to his reply to Serge Wahler saying:

"'Be careful, this is not the case. Debby pushes strongly for prescriptions in PE, but everything is switching to FR (transition from British Standards to Euronorms) Have you called her? The analysis of past figures is not necessarily ok'."

So he is quoting from his own email we looked at a moment ago together. He then says:

"The last sentence meant even in the UK I expected there would in time be a transition to Euronorms."

He says that.

1

2

3

4

5

6

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

22

2.3

2.4

25

1

2

3

5

6

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

2.2

23

2.4

25

If we go over the page to page 39 $\{MET00053190/39\}$, still within this paragraph, 132, the first line there, he says at the top of the page:

"Whilst I did not have any detailed knowledge outside of France, I was aware that different jurisdictions would have different regulatory regimes regarding the end—use of ACM PE and that in some countries it was only allowed for certain uses or at

193

certain heights and with certain test results. I was not aware of the regulatory regime in the UK and did not want people within [Arconic], even in attempt to be helpful, to provide any opinion on the suitability of particular products for particular end—uses when they could not know the regulatory regime in that jurisdiction, how the product would be used as part of a wider system, or the nature of the particular building project."

Then if you go down four lines from the bottom, he says:

"My sentence that 'Debbie pushes strongly for prescriptions in PE' was intended to mean that Deborah French would internally, within [Arconic], make the point that the UK market was principally a PE market and that, whilst [Arconic] was seeking to transition towards FR and A2 products her customers predominantly requested PE."

Now, I've shown you a lot of that.

Is Claude Wehrle right that, at the end of 2014, Arconic was seeking to transition to FR core even in the IJK?

A. I believe they were starting to move along those lines, but at that point I'd already handed my notice in and was in a transition period from it, so I wasn't

1 necessarily and completely aware of everything that they 2 were doing at that time.

3 Q. Right.

4

5

6

7

Had you received a specific communication from Claude Wehrle that your market should now start to transition from PE to FR and A2 products?

A. I don't recall receiving one.

8 Q. No. So how did you come to understand that that9 transition had begun?

10 A. I don't -- I'm not sure. It may have been afterwards, 11 once I'd left.

12 Q. Is he correct when he says that internally within

Arconic you would make the point that the UK market was principally a PE market?

15 A. It always had been a PE market, and therefore that was 16 the reasoning behind that.

17 Q. My question is --

18 A. Not for any other reason.

 $19\,$ $\,$ Q. My question is whether he is right to say that you

20 internally would make that point.

 $21\,$ $\,$ A. I wouldn't say I stressed the point that it was a PE $\,$

22 market, I said -- I would have been saying over a number

of years that the majority of what we sold was PE. The records of the orders that had come in from the UK

25 market would have shown that. There were very little FR

195

1 orders.

2 Q. Is he right when he says that you internally within

3 Arconic would make the point that your customers

4 predominantly requested PE?

5 A. They certainly requested and ordered PE.

 $6\,$ $\,$ Q. Isn't it the case that you would offer PE, as you told

7 us, automatically rather than them asking for it?

8 A. It would — it could have been both cases, there were 9 some that were PE and some were — we would

10 automatically supply PE, quotes for PE.

 $11\,$ Q. I see. So when he says that you were saying internally

 $12 \hspace{1cm} \hbox{that your customers predominantly requested PE, how are} \\$

we to read that? Was it them asking for PE or them

14 ordering it in response to you offering it to them?

15 Which is it?

 $16\,$ $\,$ A. I don't know, because I can't answer for what he's

17 written there

18 Q. No, you can't, but what you can do is recall the facts.

He's recalling the facts one way and I'm just putting to you his recollection of those facts.

21 I'll just try again: is he right when he recalls 22 that, internally within Arconic, you would make the 23 point that your customers predominantly requested PE?

24 A. Yes.

Q. Right. When he says "requested", is it the case that as

196

- 1 a matter of fact they would predominantly ask for it and
- 2 you would respond, or is it the case that in fact you
- 3 would routinely offer it and they would just accept it?
- A. I think it was probably a bit of both. 4
- 5 Q. He explains here, as you can see a little bit further up
- the paragraph I read to you, that he didn't want people 6
- 7 within Arconic providing any opinion on the suitability of particular products and particular end uses when they 8
- 9 could not know the regulatory regime in that
- 10 jurisdiction . Are you one of those salespeople whom
- 11 Claude Wehrle expected not to know the regulatory regime
- 12 in England and Wales?
- 13 A. Yes, I didn't understand the regime fully.
- Q. Did you ever receive any instruction from Claude Wehrle 14
- 15 or anybody else at Arconic to offer no assistance or
- 16 opinion on whether Revnobond 55 PE could be used for 17
- a particular project?
- 18 A. I don't recall.
- 19 Q. Did you understand at the time that, even if you knew or
- had good reason to suspect that PE was dangerous, you 20 2.1
- were still not going to offer any opinion about it, but 22 would leave it to the client to decide?
- 2.3 A. I didn't have enough knowledge to be able to offer any
- 2.4 opinions and I can't ever recall being asked the
- 25 guestion.

- 1 Q. Did you understand the instructions you had or at least
- 2 the authority that you had in your job that you should
- 3 simply sell what you could to whomever you could without
- troubling yourself to understand the fire safety regime
- 5 which applied?
- A. It was never thoroughly pointed out or I was given 6
- 7 sufficient training to fully understand the fire
- 8 implications. It's just not something I had a lot of
- 9 dealings with.
- 10 Q. Right. You see, what Mr Wehrle appears to be saying
- 11 here is that it was a policy of Arconic to make sure
- 12 that salespeople such as yourself offered no opinion at
- 13 all about the suitability of products for end uses
- 14 because you couldn't be expected to know the regulatory
- 15 regime. Was that the way you understood it?
- 16 A. Yeah. I mean, I wasn't aware that there was a policy to
- 17 do with it, I'd not seen a copy of that policy, but
- 18 I didn't have the knowledge to be able to do that and
- 19 certainly hadn't got the training.
- Q. So, so far as you were concerned -- is this right? -- it 2.0
- 2.1 was a policy within Arconic that you as the salesperson
- 2.2 for Arconic should sell what you could without troubling

198

- 23 yourself about the regulatory regime? 24 A. Yes.
- 2.5 Q. And indeed without troubling yourself to understand

- 1 whether the product that you were selling into
 - a particular project was suitable under that regime?
- 3 A. Yes

2

9

15

2

3

6

- 4 Q. Did anybody tell you that the UK might in time be
- transitioning to Euronorms, as he suggests? 5
- A. I don't recall 6
- 7 Q. Can we then turn to a little bit later in 2014, please,
- 8 which is the new classification in December that year,
 - and look at {ARC00000397}, this is a CSTB certificate
- 1.0 for a European classification of Reynobond PE,
- 11 number RA14-0339 under the European Standard 13501.
- 12 "Commercial brand(s): REYNOBOND 55 PE (riveted 13 system).
- 14 You see that? And the issue date is
 - 4 December 2014.
- 16 If we go to page 4 of this document {ARC00000397/4},
- 17 we can see the classification: C. C-s2. d0.
- 18 Do you remember seeing this document at the time or
- 19 around about the time it was issued?
- 20 A. No, I don't.
- 2.1 Q. Can we go next to {ARC00000395}. This is another CSTB
- 22 certificate for a European classification of Reynobond
- PE. This is RA13-0333, again under the European 23
- 2.4 Standard EN 13501, and if you look down, again the date
- 2.5 is 4 December 2014, you can see that at the bottom of

199

- the slide. This time, the commercial brand is 1
 - "REYNOBOND 55 PE (cassette system)".
 - If you turn to page 3 {ARC00000395/3}, you will see
 - that the classification is E.
- 5 Do you remember seeing this document at or around
 - this time?
- 7 A. I don't. I don't recall it.
- 8 Q. Now, did anybody, to the best of your recollection,
- 9 contact you or update you to tell you that there were
- 10 now separate classifications of PE cassette and
- 11 rivet - fix again in the European system, one C and one E?
- 12 I really can't remember.
- 13 Q. Do you remember any discussion about these new
- 14 classifications at the time?
- 15 A. I don't. As I say. I'd already -- I was literally
- 16 a few weeks away from finishing, so I can't recall
- 17 whether I would have been involved in that at the time
- 18
- 19 Q. Indeed. And I think you left Arconic at the end of
- 2.0 2014, didn't you?
- 21 A. Yes. I did.
- 2.2 And you left Arconic for a new role at Taylor Maxwell,
- 23 didn't vou?
- 24 A. That's right.
- 2.5 Q. I want to turn to that topic now.

1 You say in your second witness statement -- there is 2 no need, I think, to look at it, but it's paragraph 12 2 A. He certainly wasn't doing that while I was there. 3 $\{\mbox{MET00053162/3}\}$ -- that the reason for you leaving 3 Q. Right. 4 Arconic and joining Taylor Maxwell is that you wanted to 4 5 work in a team again in an office environment. Is that 5 6 right? 6 7 A. That's right. 7 handling at the time of your departure? Q. At Arconic, is it right that Vince Meakins replaced you? 8 8 9 A. Yes, he did. 9 customers after I'd left . $\mathsf{Q}.\ \mathsf{Is}\ \mathsf{it}\ \mathsf{right},\ \mathsf{he}\ \mathsf{didn't}\ \mathsf{come}\ \mathsf{in}\ \mathsf{for}\ \mathsf{some}\ \mathsf{months},\ \mathsf{I}\ \mathsf{think}$ 10 10 Q. Right. 11 May 2015? Is that right? 11 12 12 A. It was some months. I couldn't confirm when it was, but 13 it was some months after I'd left. 13 Q. Did anybody ask you to give Vince Meakins some kind of 14 14 15 induction or handover? 15 A No 16 16 Q. Do you happen to know whether Vince Meakins got any kind 17 17 18 of handover from you or induction? 18 19 A. No. I can't answer that. 19 any other reason; I'd left their employment. Q. You say in your statement at paragraph 12 that you may 20 20 2.1 have spoken to Peter Froehlich or Gwenaelle Derrendinger 2.1 not continue to act as a source of information for 2.2 as part of a handover process; did you do that? 2.2 ongoing projects that you had left behind? A. I don't recall whether I did or not. It would have been 2.3 2.3 2.4 in the early days of me leaving. I remember giving 2.4 25 Vince some product information that I'd got left over. 25 201 203 1 He had everything that I'd got, product information, 1 2 brochures and some samples, I think. 2 3 Q. So you gave him the BBA certificate, did you, among 3 anything else. other things? Q. Did you meet Vince Meakins? A. No, I didn't give him any documents, I just gave him 5 5 6 physical hard copies of brochures and some samples, 6 7 7 I believe. 8 work, and I obviously met him to hand over the 8 Q. I see 9 9 When you were leaving, did you have any kind of exit brochures. 10 10 11 11 12 Q. A download of what you knew so that that could be passed 12 some months after you had left? 13 on? 13 A. It would have been after he'd arrived, yes. A. No 14 14 15 15 Q. Right. 16 You say you left some brochures behind; were those 16 17 up to date, to the best of your knowledge?

Q. Now, Peter Froehlich says that between January and

2.0 May 2015, he took a more active role, besides

A. I don't recall what the dates were on them.

21 Gwenaelle Derrendinger, in the UK, more so than would 2.2

normally be the case, and assisted with ensuring that UK 2.3 sales enquiries were dealt with.

Was that something that you can tell us about or had you left by the time that he started doing that, do you

202

Do you remember whether Arconic customers were told that they could continue to contact you in the event of any queries in respect of projects that you were

A. No, I certainly didn't have any contact with those

You see, Mr Froehlich says in his statement -- it's paragraph 39 on page 11 $\{MET00053197/11\}$ — that you would act as an interim contact for UK sales and would direct customer enquiries and business through Taylor Maxwell to Arconic. Is that right?

A. Well, Taylor Maxwell were buying through a fabricator at the time, so that would have been the only reason.

I certainly wouldn't have been involved with them for

 $\mathsf{Q}.\;\;\mathsf{Yes},\;\mathsf{but}$ although you had left their employment, did you

A. No, I think there was one or two questions in the very, very first couple of weeks that they may have asked me

one or two questions about things, but I can't recall

what they were. But certainly no more than that. I'd

got a new job to do, it was \dots no, I wasn't involved in

A. I'd met him on a couple of occasions. I met him to --

I met him at one of the fabricators, I believe, for

a meeting, and that was to do with some Taylor Maxwell

Q. Right. Was that meeting when you handed over the brochures presumably in May 2015, after he had arrived,

Q. Where were the brochures in the meantime? Were they

kept in your office at home or had you given them to

somebody at Arconic to look after pending Mr Meakins'

17

2.0

18 A. No, there was -- I would have kept them here in my

19 office at home and then handed them to him. I believe

I met him at a service station somewhere.

21 Q. Right. Did you have a discussion with him at the

2.2 service station about anything particular he should know

23 in taking up your role?

24 A. I don't believe so, no.

2.5 Q. Right.

204

18

19

2.4

Can we look and see what you say about
Taylor Maxwell in your second statement, please. This
is your second statement at page 4 {MET00053162/4},
paragraph 13. You say:

"After leaving [Arconic] I commenced work with Taylor Maxwell, a brick, timber and facades supplier. I joined as National Cladding Manager and in early 2018 became National Cladding Director. My role at Taylor Maxwell is very different from what I was doing at [Arconic]. Taylor Maxwell is further up the supply chain than [Arconic] and does not supply single components used in cladding systems (for example, Reynobond), rather it recommends and supplies whole cladding systems to the construction industry, including cladding installers. Taylor Maxwell does not manufacture those systems, it sources them from specialist manufacturers and then sells them to the market."

When you say further up the supply chain there, do you mean that, for example, Arconic could supply cladding to Taylor Maxwell, cladding panels to Taylor Maxwell, who would then sell it on as part of a whole system?

24 A. No, Reynobond would -- Taylor Maxwell would still have 25 to buy the materials through a fabricator.

205

- 1 Q. Yes, I see. So they're one further up the supply chain 2 then from Arconic; is that right? Sorry, two further up 3 the supply chain.
- 4 A. Yes.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

22

2.3

- 5 **Q**. I see.
- Is it right, then, that Arconic would still be supplying cladding for onward transmission after fabrication to Taylor Maxwell so that Taylor Maxwell could then incorporate them into its whole system?
- A. So an installer would win a cladding contract and then
 would send details to Taylor Maxwell of the panels that
 they required. That would be Taylor Maxwell worked
 with a fabricator who would then liaise with the
 manufacturer.
- Q. So what were Taylor Maxwell doing, other than acting as
 a middleman? Were they actually building the cladding
 system?
- 18 A. No, Taylor Maxwell act as a marketing and sales company.
- 19 Q. Right. So they were another sales link between the 20 fabricator and the installer?
- A. Yes, they purely buy materials in from manufacturers and supply them on. They don't hold stocks of anything, they just act as the sales and marketing company.
- Q. Right. Okay. What I'm really trying to get at is
 whether, after you had joined Taylor Maxwell, you were,

206

- 1 in an indirect sense, a customer of Arconic?
- 2 A. Yes.
 - Q. Yes

3

4

5

6

7

8

9

10

11

12

13

14

15

1

2

3

5

6

7

8

Then in the same witness statement at page 14 $\{MET00053162/14\}$, paragraph 49, you say:

"As noted above, after my departure from [Arconic]

I took up a role at Taylor Maxwell selling whole façade systems to end users. This was very different to the position of [Arconic] which sold only one component of those systems. I have therefore since had more exposure to the UK requirements in respect of fire certification although it is not something that I specialise in. At around the same time, the industry in the UK was

I believe beginning to take an increased interest in the fire performance of cladding systems generally."

Can I just understand this evidence a bit better.

Are you saying here that you understood more fire
performance because you sold entire façades?

A. The exposure to fire was obviously after the tragedy of Grenfell, as, you know, an awful lot of people became far more aware of the details around fire. So, yes, my knowledge has increased significantly since then on that, and —

Q. I just want to explore that. Just looking at this, yousay in the third sentence, having explained the

207

difference between Arconic and Taylor Maxwell:

"I have therefore since had more exposure to the UK requirements in respect of fire certification \dots "

It looks as if what you're saying there is that that greater familiarity with the UK requirements in respect of fire certification came to you after you joined Taylor Maxwell in early 2015, rather than only after the Grenfell Tower fire in June 2017.

9 A. We were certainly — at Taylor Maxwell, because we were 10 dealing direct with the installers, the installers were 11 our customers, we were getting more questions around 12 information to do with all sorts of specifications which 13 we would have to get from the manufacturers we were 14 dealing with.

15 Q. Yes, thank you.

Did you learn, after you joined Taylor Maxwell, about the UK Building Regulations and the fire safety regime in it?

- A. I started to look into them in more detail, yes, becauseof the customers that we were dealing with.
- Q. Did you get any training on those matters when youarrived at Taylor Maxwell?
- 23 A. No, we would take all that information from the -- we 24 don't advise -- Taylor Maxwell don't advise on fire.
- $25\,$ $\,$ Any information that's requested, we get that from the

7

- manufacturers of the product. We don't advise on fire.
- 2 Q. Did you learn about the UK fire classification regime,
- 3 national class 0, and the European classification regime 4 once you joined Taylor Maxwell?
- 5 A. As I say, I've learnt more since that time and I have
- been -- I have had more contact with that type of 6 7 information, purely because of who we're dealing with
- 8 and who we're working with. We wouldn't be advising on
- 9 that.
- 10 $\ensuremath{\mathsf{Q}}.\ \ensuremath{\mbox{\,I'm}}$ trying to be specific here, to pin you down a bit.
- 11 Did you come to learn about the UK fire classification
- 12 regime and the European fire classification regime once 13 you joined Taylor Maxwell, asking you about those two
- 14 regimes specifically? 15 A. I started to become more aware of both after I'd left
- 16 Arconic -- after I'd left Alcoa
- 17 Q. You started to become more aware of both.
- 18 Did there come a time, after you joined
- 19 Taylor Maxwell but before the Grenfell Tower fire, when 20 you were familiar, at least passingly familiar, with the
- 2.1 fire classification regime which applied in England and
- 2.2 Wales?
- 2.3 A. I was becoming more familiar with it because we were --
- 2.4 we'd got more involvement with it, but I can't tell you
- 25 when that started, it was just over a gradual period of

209

- 1 time
- Q. Yes. Did there come a time when you were surprised to 2
- 3 find that you now knew things that you had not learnt at
- 4
- 5 A. Yes
- Q. Can you give me an example? 6
- 7 A. No, it was just my general knowledge of the certifications .
- 8
- 9 $\ensuremath{\mathsf{Q}}.$ What did you come to know generally about the 10 certification regime that you didn't know at Arconic
- 11 that you surprised you that you hadn't learned there?
- 12 A. As I say, it was just general information. My knowledge
- 13 was just building and developing over a period of time
- 14 because of the enquiries and the conversations we were
- 15 having with customers and the information we were
- 16 getting back from various different suppliers on various
- 17 different product types.
- 18 Q. Did there come a time when you thought to yourself,
- 19 "I didn't know that while I was at Arconic, I wish 2.0 I had"?
- 2.1 A. I think I've got an awful lot more knowledge now than
- 2.2 I ever had, and yes, if I had known that, then yes, it
- 23 would have been a lot better.
- 2.4 Q. I mean specifically once you joined Taylor Maxwell and

210

25 started in your role there. Did there come a time in that role, before the Grenfell Tower fire, when you

- discovered something that you didn't know at Arconic but
- 3 wish you had known?
- A. I can't recall that specifically, no. 4
- MR MILLETT: Mr Chairman, I'm going to turn to a different 5
- topic. I'm afraid I'm not quite finished. I'm not far 6
 - from the end, but I think it's going to be impossible to
- 8 finish with this witness, I regret to say, with
- 9 apologies to her primarily and to you, tonight, but I'm
- 10 not going to be very long tomorrow morning.
- 11 I have spoken to Ms Grange, who takes the next
- 12 witness. Mr Meakins, and she is -- I'm not sure
- 13 "content" is the right word, but she is not unhappy
- 14 about me taking a little bit of tomorrow morning to
- 15 finish off Ms French. I'm in your hands about what we
- 16 should do next
- SIR MARTIN MOORE-BICK: Well, Mr Millett, give us all some 17
- 18 idea of how much longer you think you might require with
- 19
- 20 MR MILLETT: Probably about an hour. I would think up to
- 21 the mid-morning break would be safe, and then perhaps
- 22 a little bit more to allow for any further questions to
- come from core participants. That's, I hope, 23
- 2.4 a reasonable estimate.
- 2.5 SIR MARTIN MOORE-BICK: All right. Well, I'm sure Ms French

211

- 1 would have liked to have finished today, but I think if
- 2 your current estimate is an hour plus, we would be very
- 3 unwise to try and carry on this evening. I think it's
- been a long enough day for everyone.
- 5 Ms French, you heard what Mr Millett said.
- 6 I'm afraid he has more questions and we will have to ask
- 7 you to make yourself available at least for part of
- 8 tomorrow morning. I hope that isn't going to be too
- 9 inconvenient.
- 10 THE WITNESS: No, that's fine.
- SIR MARTIN MOORE-BICK: You can manage that? All right. 11
- 12 Well, that's very good of you, thank you very much.
- 13 In that case, we'll stop now and we'll resume at
- 14 10 o'clock tomorrow, and hope that it doesn't last too
- 15 long
- THE WITNESS: Okay, thank you, sir. 16
- SIR MARTIN MOORE-BICK: Then, Mr Millett, you will keep your 17
- 18 questions, I'm sure, as confined as you can so that we
- 19 can start Mr Meakins without more delay than is
- 2.0 inevitable
- 21 MR MILLETT: Yes, Mr Chairman.
- 2.2 SIR MARTIN MOORE-BICK: Right, on that basis, as I say, we
- 23 will stop now and resume at 10 o'clock tomorrow
- 2.4 Please, again, because we're breaking overnight,
- 25 remember not to talk to anyone about your evidence or

```
1
         anything relating to it over the break in the
 2
         proceedings. All right?
 3
     THE WITNESS: Yes.
     SIR MARTIN MOORE—BICK: Thank you very much. I look forward
 4
 5
         to seeing you tomorrow.
     THE WITNESS: Thank you.
 6
     {\sf SIR} \ {\sf MARTIN} \ {\sf MOORE-BICK:} \ \ {\sf Thank} \ {\sf you, goodnight.}
 8
 9
                 (The hearing adjourned until 10 \ \mathrm{am}
10
                   on Thursday, 11 February 2021)
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
                                 213
 1
                              INDEX
 2
                                                     PAGE
     MS DEBORAH FRENCH (continued) ......1
 3
            Questions from COUNSEL TO THE INQUIRY ......3
 5
 6
            ({\sf continued})
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
                                 214
```

a2 (2) 194:17 195:6 a3 (2) 69:18,19 a4 (2) 69:16,18 a6 (2) 76:14 77:17 aap (2) 22:2 47:19 able (35) 5:5 6:4,7 30:8 31:9.16 35:7 37:15 39:23 68:2 80:1 93:22 95:7,21 96:4,24 106:4 112:18 117:14 118:7 119:9 130:21 134:23 149:4.25 157:14.17 163:25 167:5 168:10 175:9 184:5,17 197:23 198:18 above (12) 17:19 22:15 28:5 75:13 16 123:1 145:12 181:4.9 190:6.15 207:6 absolute (1) 94:23 absolutely (5) 145:11,13,14 164:15 182:22 accentuate (1) 111:12 accept (16) 66:18 98:7,25 104:15 112:11 113:20 140:3.3 154:20 155:10.14 164:22 165:4.15 185:11 197:3 acceptable (1) 173:6 accepted (6) 97:20 98:5 100:4 106:21 185:19 186:11 accepting (1) 155:5 access (2) 40:23 73:14 accessed (1) 37:1 accessible (1) 158:2 accident (1) 148:9 accompanied (1) 5:17 accord (1) 54:2 accordance (5) 137:13 139:4 150:17 151:11 160:22 according (6) 29:23 43:16 54:14 85:5 116:18 188:13 accordingly (1) 123:3 account (2) 39:2 73:3 accounting (1) 150:7 accredited (2) 4:8,10 accurate (3) 38:24 109:15 170:9 accurately (1) 136:22 achieved (11) 20:24 67:16,24 133:8 134:4 136:14 137:14 139:4 160:21 162:5.18 achieving (2) 85:4 116:17 acm (59) 17:20,22 18:13 26:11 49:7 50:3,3,7,7,12 51:3,5,24 52:3,7,15 53:19.20.23.24 54:1.7.8.12.13.16.58:12.14 59:22 60:3.10 61:9.19 69:23,24 74:11 80:19 81:25 84:8,16 85:2,5,24 87:8 89:20 93:11 116:15.18.20 117:22 118:2 122:2 128:7 153:15 168:11 169:18 172:17,20 193:24 across (2) 29:6 42:20 acting (2) 58:14 206:15 action (3) 144:5,9 182:14 actioned (1) 39:8 actions (2) 46:9 173:25 active (3) 1:10 175:13 202:20 activity (1) 74:6 actually (16) 4:12.16 25:18 38:20 41:7 59:22 64:24 73:18 77:18 84:21 100:25 104:18 131:9 147:2 172:5 adapted (1) 158:2 add (4) 93:14 169:5,9,11 added (1) 15:22 adding (1) 90:23 addition (3) 125:13 127:15 176:19 additional (2) 69:25 113:7 address (5) 75:12,14 81:6

also (38) 7:9 8:2,7 13:15 adjourned (1) 213:9 20:2.11 27:1 43:19 46:17 adjournment (1) 115:21 47:3 48:24 49:10 50:2 adrian (3) 58:22,23,25 51:14 54:4 63:9 65:17.24 advance (4) 49:4.5 189:7.17 70:6 71:4 77:21 81:10 advice (3) 106:5 130:25 89:22 118:1 126:22 128:12 133:22 142:8 149:23 151:4 advise (7) 95:21 96:24 123:2 159:16 161:24 163:3 173:5 126:19 208:24,24 209:1 174:8,18 175:23 185:1 altering (1) 84:18 advised (1) 39:18 advising (2) 101:24 209:8 alternative (1) 125:16 aesthetic (1) 69:20 alternatives (3) 85:2 aesthetics (2) 70:16 110:16 116:15.21 although (10) 74:7 92:1 affecting (2) 38:19 84:13 122:6 126:11 129:2 142:18 afforded (1) 167:21 151:8 184:8 203:20 207:12 afraid (4) 61:23 140:20 altogether (1) 49:17 alubond (1) 82:22 after (37) 22:22 26:12 44:17 alucobond (9) 22:9 79:25 60:18 66:4 82:1 84:20.25 80:20.21 86:14.15 116:21 104:5 110:4 113:23 115:8 125:21 126:3 122:5 136:13 172:12 173:2 alucobond3a (1) 23:6 176:3 178:21 190:18 aluminium (2) 8:20 29:19 192:14 201:13 203:9 always (4) 36:17 70:16 204:11,12,13,16 205:5 154:14 195:15 206:7,25 207:6,19 mended (1) 37:22 208:6.7.16 209:15.16.18 american (1) 137:6 afternoon (1) 2:19 mong (4) 43:19 117:9 afterwards (3) 5:8 6:10 153:6 202:3 amount (3) 66:7 97:10,11 amounts (1) 145:18 again (74) 9:16 15:5 21:12 30:9 34:8 40:8 51:9 54:16 analyses (1) 190:4 59:19 60:12 65:3,17,24 analysis (1) 193:11 70:14 76:2 77:5 82:8 analyze (1) 156:23 84-5 10 17 85-2 86-2 10 20 andor (1) 158:22 88:7 89:12 94:18 96:12 anglais (2) 137:8 150:22 100:20 102:13,24 106:22 annual (1) 108:25 107:9,22 114:15,17 anodised (1) 125:20 116:13.15 118:5.16 120:16 another (20) 2:8 10:23,25 123:25 128:7 131:19 12:5,19 15:19 18:20 20:23 134:15 140:5 146:5 147:14 63:10 75:24 79:12 91:11 148:15,23 149:15 151:14 103:4 118:8 146:23 167:5 159:17,20,23 160:18 184:9 192:4 199:21 206:19 swer (28) 5:5 6:4,8 37:24 166:12.24.25 167:17 39:24 42:9.17.18 91:7 94:21 106:15 107:2 108:13 168:16 169:19 171:14 172:21 175:6 184:22 120:8 131:4 138:13 142:23 196:21 199:23,24 200:11 146:11 147:9,20 153:4 157:14,17 165:13 171:8 189:5 196:16 201:19 against (3) 58:14 99:7 ago (5) 26:16 59:4 82:9 answers (3) 30:4 157:1,21 anticipate (1) 158:25 agree (8) 41:14 48:5,7 anybody (30) 5:15,17 20:7 170:6,12 174:1,18 184:9 32:15 38:3 39:15 40:17 agreed (6) 38:22,25 59:21 60:1 79:4 88:3 89:1 172:14,15 173:8 185:11 91:17 107:3,6,10 134:2,14 agreeing (1) 148:3 136:12 140:8,11 149:18 agreements (1) 46:13 155:8 172:8 183:2 186:21 agrment (1) 163:4 197:15 199:4 200:8 201:14 anvone (7) 36:21 55:11 89:4 115:14 166:3 178:22 212:25 alain (2) 80:15 138:10 anything (31) 2:20 17:23 albiston (4) 160:3 161:9 28:6 37:15 38:1 48:10 52:2 55-12 84-18 103-13 105-18 alcoa (4) 51:19 132:6,16 112:1 113:8,22 115:15 140:10 143:9,22 146:21 alert (4) 35:9 130:12 153:1 154:24 163:25 174:1 178:11.20 182:24 188:16 alerted (3) 18:6 118:21 191:4 204:3,22 206:22 213:1 alerting (4) 32:20 37:4 88:8 anywhere (1) 37:16 apart (5) 26:18 90:25 92:25 158:14 172:21 apologies (1) 211:9 appear (5) 37:10 58:17 allowed (4) 39:3 165:7.18 66:17 92:2 149:24

wered (2) 6:1 191:2

appearing (1) 27:21

applicable (1) 14:2

209:21

apply (1) 11:14

application (1) 18:13

applied (3) 143:25 198:5

appears (7) 27:14 29:6 89:22

97:1 128:1 151:7 198:10

138:15 144:25

144:3

afford (1) 168:10

211:6 212:6

195:10

161:20 163:11

201:5 212:24

153:13 193:14

116:20

aim (1) 44:4

al (1) 79:13

209:16

155:7

164:22

120:15

ali (1) 1:5

193:25

alone (1) 2:1

66:5 194:23

194:24 200:15

alive (1) 168:13

allow (1) 211:22

almost (2) 83:5 84:4

along (5) 13:11,12 62:14

already (8) 4:22 24:3 87:6

118:20 146:24 167:16

akbor (2) 1:5.7

167:11 180:17

applying (1) 12:25 appointed (3) 167:2 168:14 172:11 appreciate (3) 42:22 83:19 141:9 appreciated (6) 139:12 140:18,22 141:8,13,21 approached (1) 43:17 appropriate (4) 14:11 84:12 87:11 183:25 approved (16) 4:15 17:6 44:23 45:24 59:12 62:15 92:8 93:20 94:2 95:4 105:2,15,16,18 106:1 109:17 approx (1) 60:16 april (11) 69:9 76:2 77:12 79:12,14 160:1,2 166:24 25 167:10 173:18 arc00000378 (1) 28:20 arc000003781 (1) 37:8 arc000003783 (2) 30:13,17 arc00000383 (1) 19:17 arc000003834 (1) 19:24 arc00000388 (1) 28:20 arc000003883 (1) 37:9 arc000003885 (2) 30:14,25 arc00000395 (1) 199:21 arc000003953 (1) 200:3 arc00000397 (1) 199:9 arc000003974 (1) 199:16 arch (1) 44:24 architect (7) 3:23 49:4 52:17 59:14 167:13,20 185:18 architects (23) 3:19,24 4:5.9.11 43:19 45:7.12.15 46:13,17 47:3,5,12 83:5 84:3 109:21 110:1,10,19 152:14 157:2.7 architectural (8) 4:3 18:13 47:20 62:13 66:5 73:4 124:4 163:5 architecture (9) 18:18 29:14.17.22 44:25 137:13 139:3 150:17 151:11 arconic (107) 4:2,22 15:14,23 18:5,14 19:8 20:7,22 23:5 24:10,14 25:9 27:11 28:4 29:8 31:12 36:21 39:15 43:6 48:15 49:22 50:2 56:11 60:2.7 69:23.24 70:7.21 71:5 73:1 79:3 81:20 83:11 86:17 88:18 94:25 95:3,7,11,20 96:22 97:21 98:3,23 99:20,23 101:21 105:2,3,8,14 107:3,6,10 117:4 126:23 129:20 131:12 133:6 138:21 140:8 144:4 149:19 171:24 172:8 175:4 178:21.24 185:1.4.22 194:3.14.16.21 195:13 196:3,22 197:7,15 198:11,21,22 200:19,22 201:4,8 203:4,15 204:16 205:5.10.11.20 206:2.6 207:1,6,9 208:1 209:16 210:4.10.19 211:2 arconics (9) 28:23 54:4 94:12 105:22 113:18 125:25 126:6 184:22 185:6 area (1) 66:8 areas (2) 85:14 112:13 arent (3) 103:4 110:5 168:4 argonaut (3) 81:6 105:9 109:18 argument (1) 104:5 around (16) 7:13 15:9 19:8 28:4 53:20 54:15 89:25 131:7 168:25 170:3 175:6 199:19 200:5 207:13,21 208:11 arranged (2) 5:24 174:18

arrangement (6) 51:16,18,25

56:12 57:19 58:15

arrival (1) 204:17

arrived (4) 113:21 204:11,13 208-22 article (2) 78:7,11 artistic (1) 66:3 ash (1) 105:10 aside (1) 164:7 ask (38) 3:5 13:4 18:1 20:3 25:14 26:14 28:17 30:9 41:7,14,19,25 53:1,2,15 56:4 65:24 81:5 85:19 99:2 114:5 132:10 143:2.25 146:10 152:4 158:24 163:11 164:24 166:11.23 171:13 180:3 188:1,8 197:1 201:14 212:6 asked (42) 5:20 6:13,25 7:2 11:8,9 12:5 14:4,10 16:1 35:15 36:10 42:10.14.16 59:1 60:14 63:19 22 65:25 67:2 70:14 77:8 88:22 109:8 110:13 122:8 126:9,13 128:18 129:24 139:17.19 140:15 143:13 154:14 163:6 187:8,11,18 197:24 203:24 asking (21) 13:22 36:14,15 38:17 39:5 41:15 18 42:24 48:11 65:7 68:4 91:22 97:14 102:7 104:16 121:1 143:19 192:10 196:7,13 209:13 asks (1) 126:18 aspect (1) 32:8 aspects (5) 16:7,10 29:23 32.6 11 assembled (1) 100:12 assist (1) 29:11 assistance (3) 155:22 156:8 197:15 assisted (1) 202:22 associate (3) 146:6 162:7,9 associated (4) 161:19 164:4,19 165:10 associates (1) 162:10 assume (3) 156:2.5 188:7 assumed (1) 129:19 assuming (2) 85:6 191:3 assumption (1) 147:11 assurance (3) 105:22,24 181:7 attach (2) 34:19 160:8 attached (7) 62:12,19 63:9 122:25 138:22 139:9 151:9 attaches (1) 123:4 attachment (7) 123:18,22 140:13,16 150:20 151:12 160:11 attachments (8) 63:17 65:23 66:1,2,16 122:22 137:8 160:5 attempt (2) 186:8 194:3 attempted (1) 58:17 attend (3) 4:5 108:19 177:5 attendance (1) 176:21 attended (2) 176:11 180:7 attendees (1) 176:19 attention (3) 70:7 87:17 88:19 audience (2) 6:17 108:23 august (3) 180:13 181:16 184:7 authority (2) 155:11 198:2 automated (1) 72:1 automatic (1) 171:23 automatically (8) 72:11 76:1 118:2 128:17 171:19 192:6 196:7.10 available (13) 10:1.16.22 13:16 31:25 32:2,3 39:7 102:3,16 127:25 154:19 avoid (2) 1:11 2:16 await (1) 133:24 aware (41) 15:17 16:3,9

17:20 18:2 19:1 20:3.6.6

21:4 24:13 26:20 31:11,15

209:15.17 awareness (5) 106:17 113:7,13 115:2,3 132:1 200:16 207:20 210:21 h (42) 13:18 17:6 23:17 31:13 32:17 38:22 145:3 146:3 148:25 160:23 161:4.16 162:1.12.18 163:23 178:13 192:22 back (54) 1:8 5:8 6:9 130:20 bailey (1) 180:16 balfour (1) 114:12 bangkok (1) 83:4 barrie (8) 79:23 80:8 108:5 based (4) 15:13 96:11 147:10 170:4 baseline (1) 62:10 159:19 212:22 154:15 159:18.23 162:4.21 163:4.10.14.20.23 93:10 bears (1) 186:10 beatty (1) 114:12 205:8 207:20 become (2) 209:15,17 becoming (1) 209:23 87:8,17 94:8,22 113:15

43:7 48:25 80:17 81:12 85-3 87-10 88-9 92-9 93:9.12 94:6.16 116:16 211:1 120:3.9 134:24 135:3 173:11.13 176:10 193:22 194:2 195:1 198:16 207:21 way (5) 97:21 104:6,14 awful (8) 6:15 65:4 123:25 203:22 170:18 172:22 173:3 39:16,19 40:3,15 42:6 85:4 116:17 137:17 139:5 142:1.9.19 143:7 144:17 153:2,20 155:12 159:13 164:2.23 165:2.8.19.21 9:15.23 12:8 15:4 26:16 30:12 40:25 46:22 47:15 55:19,20 56:8 61:25 64:2 66:24 70:25 72:20 74:3 81:3 93:3 94:14,18,20 95:25 96:12 97:17 99:14 108:14 115:8.13.23 116:10 124:16 125:10 126:20 127:7 128:12 131:8 136:24 143:2 154:23 156:19 157:21 166:2,10,22 168:23 170:7 183:12 191:1 210:16 background (3) 117:24 118:7 bad (3) 23:25 24:10 25:10 81:4,5,6,19,23 83:14 base (5) 40:18 47:2,10,11 basically (7) 6:18 45:14 64:7 68:15 96:3 97:14 110:9 basis (9) 40:21 53:25 64:14 128:20 142:13 154:16,19 bba (50) 10:1 13:16.17.21 16:10.15 14:6,21,25 15:9 23:15 67:7 68:8,17 69:2 84:18 120:17 141:4,14 142:4,6,12,18 143:1.4 146:7 147:1 160:9,12,14 161:3,14,20 164:5,20 165:5,11,15,20 167:10 178:9 202:3 bba00000047 (1) 160:13 bba000000475 (1) 160:16 bbc (4) 80:18 87:7 89:20 became (4) 145:8 150:9 before (36) 1:8 2:20 5:15 8:25 9:10 14:7 27:1 37:3.10 41:5 47:24 48:1 49:5,19 56:11 63:12

160:12 167:9.16 176:14 183:13 184:23 209:19 begin (3) 79:16 134:25 135:1 beginning (2) 62:1 207:14 begun (1) 195:9 behave (1) 16:16 behavior (1) 156:24 behaviour (5) 23:25 24:10 25:10 133:4 157:13 behind (3) 195:16 202:16 being (59) 6:3.25 7:2 13:7 16:13 20:6 23:17 27:7,9 28:13 32:3,4 39:15,18 51:17,20 67:13 78:22 83:1,24 86:10 93:18,23 94:4 95:1.8.10 97:22 98-1 4 24 99-12 21 101-3 107:18 110:13.13 120:5 121:11 131:15 133:7 134:10 139:17 142:1 143:13.17.22 144:16 146:6 149:11 155:24 167:15 168:3 170:21 179:3 184:17 191:5,24 197:24 believe (41) 4:12 8:6 39:12 48-23 58-12 23 60-23 25 61:5 70:14 72:14 76:18 80:2 88:2 99:19,23 104:24 113:8 121:9,12 131:6,16 136:16 137:5 140:9.12 169:13 172:9,9 173:14 174:11 175:3 176:14 179:10 191:19 194:23 202:7 204:6.19.24 207:14 below (8) 23:3,23 54:6 57:6 105:1 124:6 125:14 139:22 benoit (2) 132:7,16 berkley (1) 59:5 besides (1) 202:20 bespoke (1) 106:5 bespoking (1) 113:10 best (11) 6:11 70:11 77:2 92:4 119:5 133:13 189:8 191:6 192:11 200:8 202:17 better (6) 94:22 98:15 114:5 165:3 207:16 210:23 between (30) 31:14 38:22 51:19 69:5,9 98:14 108:1 111:8 129:14 132:6 141:14 168:22 169:17 170:11 171:3.15 172:5.7 173:19 174:9,12 183:20,24 186:25 187:3,12,18 202:19 206:19 bidder (2) 167:2 172:12 bidding (1) 127:6 biehlmann (3) 15:16 big (1) 145:16 bit (25) 3:11 8:19 28:15 29:4,16 56:9 62:1,17,18 75:5,13 80:12 84:23 136:21 156:18 177:1 178:3 180:11 197:4.5 199:7 207:16 209:10 211:14,22 blades (37) 47:21,24 48:2.14.20 49:10 51:9 60:19 61:3 62:6.17.20 63:5,5 64:14 65:19 71:6 73:7 81:10 120:20 122:18,21 123:18 125:6 126:17.22 128:2.12 129:5 130:12 160:3 161:10 163:13 181:11.12 182:11.19 blaine (1) 76:7 blamed (1) 78:8 blue (1) 109:15 blunt (1) 13:7 board (3) 83:23 85:12 163:3 body (1) 180:24 bold (1) 137:16 both (26) 9:17.21 15:9.10 16:9 30:15,20 34:14 73:14

117:13 121:25 122:13,16

124:6 130:15 155:23

77:6 93:17,25 117:5,11,12 133:19 136:9 137:9 138:25 176:15 182:11,13 196:8 197:4 209:15.17 bottom (30) 23:22 44:16 57:13 75:2 78:6 80:6,10 82:18 102:11,13 111:10 116:13 122:1 125:11 126:17 127:5,23 132:13,15 135:22 141:6 143:11 167:7 169:15 180:14,21 181:1 189:20 194:10 199:25 bound (3) 11:23 100:2 104:3 box (3) 133:3,11 136:6 brand (4) 26:11 43:11 105:6 200:1 brands (1) 199:12 break (15) 2:18 53:9 55:10,13,17 94:23 113:15 115:9.10.15 166:1.8 183:13 211:21 213:1 breaking (1) 212:24 brick (1) 205:6 brief (1) 38:21 briefly (1) 80:6 bringing (2) 87:16 88:18 britain (1) 36:4 british (4) 109:15 163:3 190:1 193:10 broadly (1) 173:16 brochure (4) 35:22,24 51:6,7 brochures (10) 4:23 10:11 31:24 35:7 202:2,6,16 204:9,11,14 brochuressamples (1) 72:21 brought (2) 50:20 57:22 bs1 (6) 19:25 20:9 23:1,4 30:22 31:2 bs2 (2) 30:21 160:21 bucharest (1) 18:1 bucher (1) 188:21 build (1) 73:25 building (47) 17:7 18:22 27:19 65:2 66:6.19.21.22 67:3.5.12.13.18.25 68:6,13,14,16,21,22 69:6 75:16,20 78:16,17 79:6 81:25 83:22 93:10 101:7,23 106:6 110:18 111:22 120:25 121:3 130:25 144:21 177:25 180:24 184:1 185:6 189:3 194:8 206:16 208:17 210:13 buildings (9) 7:16 78:1 99:3 120:4,10,21 130:10 144:15 153:17 buildup (2) 12:23 64:22 buildups (1) 5:7 bullet (9) 9:25 10:3 11:12 46:10 109:20 111:10 124:2.6 156:17 bulman (11) 150:8 151:5,6,8,18,23 152:4,19,23 153:1,5 bundle (5) 62:20,24 63:6,10 64:4 burning (3) 83:2 132:24 133:2 burns (2) 83:6 84:1 business (11) 7:8,21 18:2 46:8 48:4 93:12 96:8 114:25 157:1 178:21 203:14 buy (3) 43:15 205:25 206:21 buying (1) 203:16

c (5) 133:8,20 134:4 199:17 200:11 cagney (1) 76:7 call (4) 74:20 109:16 149:4 190:3 called (9) 7:8,21 8:2 18:22 88:22 105:10 188:2 190:10 calls (1) 68:3 camden (1) 26:1 came (10) 15:25 34:12 40:6 73:15 77:4 122:12 134:8 157:21 176:4 208:6 cameras (1) 1:10 cancel (1) 137:19 cannot (11) 17:21 26:7 60:16 66:13 74:6 128:3 139:22 176:13,21 177:3 178:23 cant (91) 7:2 23:10 27:10.12.24 28:2.2 31:10.19 33:12.20.21 34:2,4 38:1 39:24 42:17 45:22 49:7 58:4 59:19 60:25 65:8 73:12 74:22 77:9 78:13 79:16 81:16 83:16 84:10 86:2.2.20 89:6.12 90:17.23 92:24 100:19 107:2.5 108:13 111:13 119:6 131:4 134:7,25,25 135:1 136:18 140:5.14 142:23 143:10 144:22 146:11 147:9,20 148:15 149:2,15 150:2 151:19,21,22,24,24 152:19 153:4.7.7 154:9 158:16 171:8 174:13 177:20 178:10,14 180:2 192:3,3 196:16,18 197:24 200:12,16 201:19 203:25 209:24 211:4 capable (1) 2:9 capitals (1) 124:8 caption (1) 78:14 careful (3) 189:24 190:21 193:8 carefully (2) 33:2 124:19 carried (1) 130:17 carry (5) 56:2 88:13,24 166:17 212:3 cases (2) 175:11 196:8 cassette (35) 9:18,21 23:6.18.25 24:10 25:9 39:6 42:14 77:11.14.15 117:12 133:10,21 134:11,14,15 136:3,10,14 138:25 144:16,20 145:10 161:7 165:8,19 173:9 174:14 180:25 181:5 184:11 200:2.10 cassettefix (8) 20:13.23 21:9 41:9 173:21 174:10 184:8 187:9 cassettefixed (1) 187:4 cassettes (6) 22:23 23:2 24:4 40:6 76:11 169:6 cause (1) 85:25 caveat (2) 165:6,17 cc (1) 80:10 celebratory (1) 182:20 central (1) 168:7 centre (1) 18:2 cep (57) 25:23,23 26:24 47:19,20,21 48:1,14 49:11.14.15 50:6 59:12 61:3,7 62:13 65:19,20 71:5

73:4 81:14 89:22 90:2

91:11 92:15.16.20 95:20

96:22 105:9 109:18 117:22

163:14 164:7 170:2 173:15

182:11,15 183:2 185:16,20

120:13,20 126:22 127:17

128:2 129:14,23 139:24

174:22.23 175:23

176:2,10,19,20 177:16

cep000000014 (1) 58:19

сер000000244 (1) 126:16

cep000000281 (2) 159:25

cep000000282 (1) 160:13

cep000000443 (1) 180:11

cep00048975 (2) 62:3

cep00048977 (1) 62:22

cep00048978 (2) 62:24

166:24

122:14

cep00050721 (1) 122:20 cep00050722 (1) 123:6 cep000507222 (1) 125:11 cep000507223 (1) 123:13 ceps (1) 26:9 cert (1) 10:1 certain (11) 6:8 16:6 34:4 44:3 102:1 110:12 179:4 181:24 193:25 194:1,1 certificate (44) 13:16,17 14:21,25 15:10 23:15 67:7 68:8 135:14 136:9 141:15 142:6,12,18,19 143:1,4 147:3 154:15 159:18.23 160:9.12.15 161:3.11.14 162:4,10,16 163:4,10,14,23 164:7,14,16 165:5,15 167:10 178:9 199:9,22 202:3 certificates (9) 10:6,13,20 11:8,15,25 12:1 15:11 154-15 certification (13) 15:21 27:17 29:17,25 30:1,2,16 31:1 158:18 207:11 208:3.6 210:10 certifications (11) 13:9 28:22 29:13 30:19 36:3 158:12.14.22 159:6.9 210:8 certified (1) 29:23 certs (1) 10:4 cetera (6) 24:8 36:4 136:1 139:9 157:9 160:7 cgl (2) 105:9 109:18 chain (18) 58:20 81:21 82:7 83:11 88:17 110:23 131:25 166:24 169:12.16 180:12 183:15 186:21 188:6 205:11,19 206:1,3 chairman (11) 3:2,3 53:4 55:7 56:7 114:3 115:7 165:24 166:21 211:5 212:21 chalcots (5) 26:1,6,10,19,20 challenge (1) 119:10 chameleon (1) 125:19 champagne (2) 180:23 181:6 change (8) 31:4,7 39:25 41:25 42:1,3 163:18 178:12 changed (6) 32:12,16,21 36:22 38:4 86:7 changes (5) 27:18 28:18 33:1.1 37:5 changing (1) 120:19 channels (1) 52:18 charge (6) 158:21 159:4 175:2,5,10 186:20 charges (3) 169:5,10,12 charts (1) 160:7 cheap (4) 85:2,24 116:15,20 cheaper (1) 170:23 cheat (1) 83:6 check (8) 35:4 55:20 101:21 143:21,25 158:22,24 159:5 checked (1) 159:9 checking (2) 138:12 167:4 chimney (2) 82:18 83:22 choice (5) 154:20 168:6 171:14 172:5 186:9 chosen (1) 172:20 chronological (1) 57:6 chronology (4) 25:13 61:23 62:2 131:8 circa (6) 53:22,23,24 54:11,12,13 circulated (1) 151:13 circulation (1) 36:7 circumstances (4) 145:2

122-14

cep0004897810 (1) 63:2

cep00048979 (1) 63:10

cep000489793 (1) 63:11

cep00049719 (1) 89:23

153:23 165:1 188:25 cited (1) 159:18 cites (1) 162:11 city (1) 59:4 clad (3) 81:25 184:7.11 cladding (54) 4:19 9:1,5 17:13,25 18:10,17 25:14 28:4,8 43:18 45:11 46:3,5 47:3 63:1 66:8 67:4,5 68:7 78:8.20 82:16 100:15 120:3.10.21 123:10.15 125:13.15 160:4 163:5 167:3 168:6 169:10.11 172:14 180:25 185:4 186:9,22 187:23 205:7,8,12,14,15,21,21 206:7,10,16 207:15 claims (1) 15:20 clarification (2) 101:18 104:3 clarifications (1) 149:4 clarity (1) 94:23 class (70) 5:23,23 20:24 22:14 23:6 31:13 32:17 36:13 38:22 39:16,19 40:3,15 42:6 67:7,12,16,24 68:9,12,13,24 69:5 85:4 116:17 133:8 136:10 15 137-17 139-5 14 141-11 24 142:1,3,8,15 143:6,7 144:17,17 145:1,3,3,10 146:3,4,22 147:6,12 148:25 149:1 150:12.24 153:20,20 154:11 155:2 156:24 157:6,13 159:20 164:18 165:1.2.22 192:9.23.24 209:3 classes (2) 146:21 189:3 classification (60) 7:1 14:2.16 16:19 17:8 19:13,18,24 20:17 22:19 24:16,24 31:3 35:25 38:13 39:1,7 67:17 69:2 133:14,19,20 135:18 136:6.15 137:14 138:22 139:1.5.13.23 140:25 141:23 153:2 154:4 159:12,17,19 160:21,23 161:4,16 162:6,11 163:18 165:6,17 178:6,12 192:8 199:8,10,17,22 200:4 209:2,3,11,12,21 classifications (13) 22:22 36:5.13 38:19 40:8 41:23 85:11,19 117:10,18 147:16 200:10,14 classified (3) 21:11 150:24 155:2 claude (59) 15:15 16:2 21:24 22:3 33:16,18,19,20 38:6,15,16,20 40:6 41:16 53:2.16 54:14 78:3 79:4.20 80:14.15.18 87:6 89:19 90:8 91:3,25 92:5 93:5 107:11 108:2 117:9 135:10,16 136:25 138:22 139:2 141:25 151:13 155:10,20 161:25 188:20 189:12.21 190:7.9.23 191:1.13.25 192:12.15 193:1 194:20 195:5 197:11,14 clauses (1) 125:14 cleaning (1) 160:7 clear (11) 17:4 22:8 67:22 101:10 133:6 143:15 172:21 182:1.19 184:6.10 clearly (7) 37:17 125:25 152:23 154:21 164:6 183:22 186:13 client (10) 11:20 76:6 109:25 110:15 111:11,16 113:9 171:16 180:21 197:22 clients (2) 4:6 113:11 clock (1) 62:1

95:3.5 136:22 183:16 coated (1) 50:3 coating (1) 160:20 coffee (1) 182:25 colleague (3) 82:3 83:15 182:23 colleagues (2) 112:8 137:11 colour (9) 58:14 70:8 109:22 110:16 111:23 160:7 172:20 180:23 181:6 colours (13) 6:22 36:16 43:13 110:11.11 111:18 127:4 167:18 173:2.4.4 174:12,20 combination (1) 90:22 come (32) 6:17 14:1 17:1 28:15 33:7 34:11,12,13,15 71:7 94:20 104:5.13 115-13 135-6 136-20 163:19 165:12 166:2 177:12 184:3 190:17 195:8,24 201:10 209:11,18 210:2.9.18.25 211:23 comes (2) 18:18 71:22 comfort (2) 94:16 96:3 comfortable (1) 96:8 coming (10) 24:7 26:16 27:19 87:9 20 109:5 13 115:8 141:3 183:12 commenced (1) 205:5 comment (5) 84:10,12,20 86:2 192:11 comments (2) 28:13 193:1 commentsstatement (1) 80.25 commercial (6) 43:7 137:1.1 138:6 199:12 200:1 common (3) 9:4 66:15 131:1 communicate (4) 25:8 81:1 117:15 149:12 communicated (1) 149:11 communicating (1) 183:9 communication (8) 39:11 42:11 88:21 89:8 96:18 132:6 190:22 195:4 communications (2) 108:1 183:4 companies (5) 25:18,20 47:17 114:10 139:25 company (2) 206:18,23 comparative (1) 125:14 compare (2) 37:7 187:14 compared (1) 106:10 comparison (1) 53:20 competing (2) 85:21 111:3 competition (1) 80:3 competitive (4) 127:16,18,22 129:8 competitor (2) 26:11 85:10 competitors (5) 43:7 106:10.12 110:12 111:2 compiled (2) 44:13 69:11 completed (2) 59:4 132:20 completely (5) 10:9 102:19 103:3 157:16 195:1 completion (1) 66:4 complied (2) 100:13 101:23 component (1) 207:9 components (1) 205:12 composite (7) 29:20 82:21,25 125:24 126:6 135:21 136:1 comprised (1) 47:11 conceivably (1) 21:14 concept (1) 109:22 concern (2) 67:24 85:25 concerned (8) 54:9 67:6 68:7 83:18 123:10 183:11.17 198:20 concerning (5) 59:2 80:18 81:12 87:7 93:10 conclude (1) 83:10 conclusion (2) 37:20 159:19 conditions (1) 22:21 close (3) 94:1 106:4 183:15 confident (2) 2:17 147:7 closely (6) 59:13 93:21 confined (1) 212:18

confirm (13) 1:25 67:2 80:1 82:10 90:2.14 127:1 137:3,25 140:5 167:5 192:3 201:12 confirmed (4) 38:17 71:4 180:22 190:10 confirming (1) 67:9 connected (3) 7:8,21,21 connection (3) 8:1,11 42:25 148:21 consider (4) 92:10,22 119:16 174:20 considerable (1) 106:13 considered (2) 24:10 185:18 considering (1) 12:11 consistent (5) 110:5 111:20 112:8,21 192:10 onstruction (3) 114:10 190:13 205:14 contact (18) 6:6 45:23,25 46:2 59:1 73:1,1,6 76:7,20,24 103:7 185:16 200:9 203:5,8,13 209:6 contacted (1) 47:21 contacts (4) 43:15,19 44:5 182-15 contained (1) 107:13 contains (1) 161:23 contemporaneous (1) 133:25 content (3) 108:12 132:11 contents (4) 15:13 90:11,15 104:21 context (23) 10:9 18:16 96:13 97:3.25 98:1.11 99:15,16 100:5,21 101:13 102:25 106:23,23 107:22.24 112:24 113:12 122:17 156:18 159:24 192:21 continue (20) 1:13 2:21,24 24:14 25:9 53:9 56:5 93:25 94:1 96:4 115:24 117:5 118:22 119:20 133:17.19 141:4 145:1 203:5,21 continued (7) 1:16 3:1 94:7 118:1 120:13 214:3,6 continuing (4) 3:12 130:6 141:5 144:19 contract (3) 181:24 185:7 206:10 contractor (8) 46:19 47:6.7 50:14,17 168:14 169:11,11 contractors (12) 3:21 43:17 44:7 45:10,21 46:1,13,17,18 47:3,4 50:18 contracts (1) 188:12 contradictory (2) 102:20 103:4 contrary (1) 105:13 control (5) 93:17 97:21 99:12,20 183:15 controlled (5) 93:19 94:25 98:3,23 110:23 convenience (1) 71:8 convenient (5) 53:6,8 55:7 115:7 165:24 conversation (6) 151:7.9 152:25 191:23 192:3.17 conversations (6) 50:8 59:19 130:2,3,5 210:14 convey (1) 106:25 convinced (2) 145:14 172:16 copied (22) 58:23 59:14 65:19 80:9 89:19 90:9 91:3.25 92:2 93:4 126:22 132:1 151:4 152:3.18 167:10 180:16,17 181:12 188:7,20 189:11 copies (5) 15:11 34:15 58:21 66:16 202:6

ces (2) 18:21

195:12 170.2 11 193:25 158:21 212:2 сору (11) 10:1 50:21 127:25 139:8,20,22 163:6 177:2,3

core (78) 18:17 30:20,21 52:6,7,8,8,10 70:8,15,18 80:22 82:25 83:2 85:3.4 86:18 93:17.18.24 94:1 95:1.12.22.22 96:24.25 97:22 98:4,24 99:12,21,25 101:21,23,25 102:1,5,18 106:5 116:16,17 117:5,5,11,23 118:22 128:6,13,15,15,18,21 129:6,15,18,20,24 130:2.4.5.6.10.18 135:22 145:9 159:11 170:11.12 171:15,19 183:20,20 187:1 189:4 192:6 194:21 211:23 cores (2) 183:25 187:18 corner (2) 44:16 75:2 correct (15) 4:14 13:3 37:20 48:22 69:11 70:3 118:18 121:18 129:17 130:1 137:4 183:16 190:5 191:13 correlate (2) 102:22 103:3 correspond (1) 54:16 correspondence (1) 58:10 cost (5) 54:1 167:15,21 costs (2) 62:15 125:15 couldnt (12) 30:11 49:18 50:9 67:17 79:16 107:6 138:12 145:12 167:4 192:23 198:14 201:12 counsel (2) 3:1 214:5 countries (8) 24:3,15,23 29:23 109:2.2 158:18 country (3) 30:19 83:3 couple (5) 64:1 69:18 176:4 203:24 204:5 course (1) 169:3 cover (1) 127:13 coverage (1) 81:25 covered (4) 66:8 68:18 120:17 160:17 covering (5) 80:18 87:7 139:2 161:14 162:3 cpd (8) 3:24 4:3,8,11 6:16 45:8,19 110:1 cpds (2) 6:16 110:18 create (1) 179:16 created (6) 15:4 74:8 75:6 121:21 156:9 176:23 creating (1) 179:9 crm (25) 45:2 71:5,11,18,20 72:2,10 73:10,19,23,25 74:8,9,14,20,25 76:23 77:7 95:9 121:22,25 179:3,12,13,15 cross (1) 66:6 cs2 (2) 133:4 199:17 cstb (9) 19:14 39:7 132:7.16 133:7 135:14,18 199:9,21 current (3) 162:5 167:21 currently (1) 137:24 customer (42) 7:17 10:12,21 11:6,7 12:2 33:2 35:15,19 36:9 37:17 40:18 41:22 43:9 47:2.10.11 52:22 54:21 61:13 71:6,7,11 100:14 101:3,25 102:4,7,9,17 103:6 108:4 122:8 128:18 139:19 152:13 163:25 183:4 189:5 190:13 203:14 207:1 customers (88) 10:7 12:5.24 14:4.9 32:20 36:2.12 38:4 39:4,10,19 40:3,14 41:2,7,17,18 42:7 47:11 70:11,18 71:17 81:2 87:20,21,25 88:1,21 89:5,10 91:22 92:6,11,23 96:3.19 97:14 99:2

103:15.20 104:13.19

107:17,18 116:24 139:18

181:14 198:17

copying (1) 160:2

143:14 146:13 147:17
148:13 149:14,16,21,22,24
153:3,6,8 154:4,17 155:11
157:3,3,4,4,4,8,8,9 172:5
174:9 176:18,24 177:13
179:1 185:6 187:15 189:15
194:17 196:3,12,23
203:4,9 208:11,20 210:15
customersclients (1) 93:15
cut (5) 10:25 11:17 43:16
64:25 69:25
cutting (2) 11:12 64:8

D d0 (12) 19:25 20:9 23:1,4 30.21 22 31.2 85.4 116.17 133:4 160:21 199:17 damage (3) 82:23 145:7,8 damaging (1) 145:17 dangerous (3) 18:17 84:16 197:20 dangers (9) 116:20 120:3,9,15,15,21 130:8,14 144:14 data (1) 45:5 database (4) 45:3 71:15 73:19,23 datasheet (1) 160:6 datasheets (1) 156:25 date (16) 19:22 44:16,18 63:21 74:25 75:2,7 134:7 135:23 136:19 161:15 176:13 189:18 199:14.24 202:17 dated (13) 27:21 46:23 71:22 76:2 79:23 89:17 127:19 137:6 138:20,23 139:23 150:6 164:16 dates (1) 202:18 dating (1) 137:6 day (16) 24:19.19 62:18 89:23.25 150:6 151:14 157:1,1 167:9,9 181:10 189:11 190:7,25 212:4 day41312325 (1) 48:3 day41851521 (1) 48:22 day418636 (1) 49:11 day418816 (1) 51:9 day4189 (1) 49:11 days (5) 42:23 61:25 89:14 190:18 201:24 de (2) 76:11 77:14 deal (6) 96:19 114:20,21,22 120:13 150:25 dealing (8) 47:8 152:14 164:9,12 208:10,14,20 209:7 dealings (2) 165:14 198:9 deals (1) 48:15 dealt (5) 25:5 49:19 172:8 187:15 202:23 dear (2) 137:11 150:14 deb (1) 167:11 debate (1) 173:19 debbie (4) 59:1 150:15 191:5 194:12 debbs (2) 122:24 181:22 debby (2) 189:25 193:8 deborah (8) 1:14,16 73:1 75:6 176:20,24 194:14 214:3 december (3) 199:8,15,25 decide (9) 52:24 61:14,16 133:22 146:9 147:18 154:6 171:17 197:22

definitely (5) 54:25 55:4 140:5 145:18 182:1 degree (1) 32:8 delamination (1) 26:13 delay (1) 212:19 deliberate (1) 43:20 deliberately (5) 98:22 154:18,21,23 155:18 deliver (1) 4:11 delivered (1) 4:16 deliveries (1) 4:3 delivering (2) 6:17 190:13 demonstrate (1) 105:18 nonstrated (1) 112:20 denk (2) 188:20 189:9 departments (1) 79:5 departure (2) 203:7 207:6 depending (1) 73:15 depends (1) 36:14 derrendinger (14) 41:12 69:14 71:24 72:12,22 73:2 76:3 126:23 149:23 151:5.18 152:21 201:21 202:21 derrendingers (1) 150:3 describe (4) 7:7,14 66:1,3 described (4) 48:3 104:11 135-21 161-1 describes (2) 123:5 177:10 describing (1) 94:12 description (2) 78:22 135:25 design (11) 9:20 62:13 66:13 68:17 83:24 110:14 181:8 185:5,24 186:16,20 designed (3) 65:1 95:8 100:14 designeddeveloped (1) 93:23 designeffectsnat (1) 109:24 designer (1) 153:23 designers (3) 3:19 44:6 153:10 designs (1) 110:12 destiny (1) 113:20 detail (14) 9:8 13:21 15:24 28:15 29:4 37:25 38:11 64:10 66:14 67:21 75:3 95:20 96:23 208:19 detailed (2) 123:14 193:21 details (34) 5:6 9:13 13:11 14:1,12,15 17:22 27:6 40:4 45:2.3 60:5 62:13 63:21 64:5.10 65:3 66:15 68:1 71:18 74:1 76:20 77:4 78:23 79:2,16,17 93:13 96:12 97:4 125:3 149:20 206:11 207:21 detailsreductions (1) 127:8 determined (1) 184:5 developed (4) 95:8,10 179:3.8 developing (3) 43:9 45:19 210:13 development (1) 3:13 device (1) 2:9 df1 (1) 75:25 df3 (1) 74:8 df4 (1) 56:15 df5 (3) 8:16 15:12 66:17 diagram (3) 17:3 44:12.15 didnt (128) 5:15 12:18 13:20,21 14:1,19,19,24,24 23:8 24:12,24 25:2,2 31:8 41:19.19 48:14 54:23 55:3.4 56:23 63:8.14.18.24 64:11,12 67:24 68:12,15 78:23.25 85:13 86:21 88:16 89:3 90:21 92:22 96:16 97:7.8.25 103:11.24

105:17 108:8,9 116:23

117:1,2,3,13 118:6,9

119:17,23 128:14,16

140:7.10.24 141:9.12

142:16.21.23 143:2.18

144:9 145:4.16.17.24

146:6,15,16,18,20,20

130:12,20 131:2

148:1,3,5,9,10,12,17 149:3.16.17 153:8 154:9,17,21,23 155:7 162:2.7.9 165:19 168:8 170:18 171:6.9.10.14 172:18 173:7 174:4,24 176:3 186:3 188:7 197:6,13,23 198:18 200:20,23 201:10 202:5 203:8 210:10.19 211:2 difference (18) 98:13,17,18 150:7 169:17.21 170:1.10.11.20.22 171:3 174:9,12 186:25 187:3,12 208:1 differences (2) 171:15 187:18 different (18) 23:14 29:5 52:6 68:20 69:18 77:21 108:16 119:1 127:3 141:13 180:10 193:22,23 205:9 207:8 210:16,17 211:5 differential (3) 168:22,25 differently (2) 88:25 130:16 difficult (3) 37:24 42:17 154-2 difficulties (1) 1:12 digital (1) 34:17 dinner (1) 181:20 dipping (1) 53:6 direct (11) 44:6 72:14 76:20,21,24 80:3 102:9 183:4 185:16 203:14 208-10 directly (7) 66:11 114:20,21,23 164:9,12 182:16 director (1) 205:8 disagreeing (1) 177:20 disclosure (1) 65:18 discount (3) 148:8,8,10 discovered (1) 211:2 discuss (10) 51:24 52:2.10.12.16 87:11 186:22,22,25 187:3 discussed (14) 18:5 40:20 51:10,14 62:12 70:17 97:13 112:3 120:5 171:24 172:3,6 177:24 183:13 discussing (1) 50:24 discussion (18) 18:9.12 38:18.21 39:10.25 79:3 119:19 120:20 151:22 157:5 173:1 178:5,8 191:10,11 200:13 204:21 discussions (14) 5:14 28:7 58:16 77:10 79:9,11 122:17 129:14,18 139:11 140:7 151:14,18 173:4 disperse (1) 6:18 disposal (3) 133:23 137:20 150:19 disposed (1) 178:20 distance (1) 186:8 distribution (3) 138:21 139:15 140:6 distributors (2) 157:3,8 dixon (1) 114:12 dla (1) 28:23 document (79) 9:1 10:12,18,23 11:1,3,13 12:5,20 15:2 17:6 19:23 20:21 21:21 24:14 27:16,22,23 28:25 30:5 31:16 32:21,25 35:20 36:2.11.11 37:1.7.8.16.18.21.22 44:10,13 46:6,22 63:2,7 64:1 68:17 69:2 74:10 75:3,24 79:19 84:18 96:7 107:22 110:7 111:25 112:17 113:17 114:4 123:5.14 124:17 125:7 132:10 136:16.20 137:9

151:13 152:20 156:9.15 160:8.11.24 161:22 199:16.18 200:5 documentation (2) 10:16 120:16 documents (37) 2:5 5:3,24 12:7 14:11 19:11,12 28:20 29:2,8 30:3,12 31:17,17,20,23 33:5.11.15.24 34:7.9.12.21 35:5.14 36:6.22 37:20 38:23 62:21 63:6.10 64:21 66:10 167:4 202:5 does (27) 8:9 10:5 14:1,24 41:21 44:4 46:16,25 49:14 54:1 58:17 67:15 70:17 71:11 73:9,17 75:18 77:17 92:18 119:4.23 133:21 163-12 177-7 182-14 205:11.15 doesnt (9) 19:5 70:7 90:5 92:2 102:22 105:14 110:20 147:2 212:14 doing (31) 6:11 11:16 23:20 32:13 45:19 52:11 64:24 77:2 84:13 88:12 96:5 97:15 100:6 108:6 110:9 111-5 119-3 4 120-23 124:22,25 145:19 147:24 179:4 184:15 191:7 195:2 202:25 203:2 205:9 206:15 done (32) 14:18 19:13.18.20 20:2 34:10 39:9 47:25,25 52:13,18 83:4,8 91:14,18 95:16 103:10 23 107:16 123:20 124:12.23 131:12 133:10 137:17 138:3 139:6 146:14,18 175:18 185:6 186:14 donotreplycrn (1) 71:23 dont (262) 1:23 2:8 4:12,15 6:20 11:4,16 13:11 14:22 15:1.1.24 16:21 17:11.23 18:19.23.24 20:6.10.19.25 21:1 22:10 23:13 25:1 27:3,5,24,24 28:6,13 29:3,3,10 30:7,11 31:6 32:19,23 34:22 35:12 36:24 37:6,11 39:17,21,24 40:8 41:15 42:8,8 45:22 50:8.23 51:7.13 52:1.5.9.11 57:21.24.25 58:1,3 60:5,11 61:5,12 63:8,15,16,18,21 64:10,12 65:13,13 67:20 68:5 73:11 74:16,22 77:1,2,13,16 81:16 82:8 83:9,16 84:2,5 86:16 87:15 88:4,11,16 89:3.4 90:21 91:2.8.9 92:14.16.24.24 93:1 99:11.22 100:1 102:22.23 103:3,12,17,18,18 104:24 105:16 106:24 107:2,15 108:7,13,22 109:12 110:7 111:13 112:12.12.15.16 113:4,8 114:15 117:19

119:3.4.4.8.17.22.23.25

120:23 121:5.13 122:15

123:19 124:10.13.15

128:22,23,25 129:18

132:9 134:5,7,13,17

137:22 138:12 140:17

143:8.8.12.24 144:1.5.9

146:5.11.14.15.16.17.17.18

148:5,17 149:2,15 151:25

152:1,2 153:4 155:7,25,25

160:13 161:19 162:7,13,14

156:1,10,13,14 157:10

171:8.10.12.19 172:9.9

177:11 178:2,3,7,14

158:5,5,11 159:2,2,8

164:3.3 169:24

142:4 147:1 148:9,19,20

141:13 142:23

147:9.13.20.24.25

130:2,3,5 131:4,4,6,16

179:5.24 180:5.5 182:24 184:4.15 191:12 192:25 195:7.10 196:16 197:18 199:6.20 200:7.7.15 201:23 202:18 204:24 206:22 208:24,24 209:1 double (1) 137:3 doubtful (1) 156:12 down (47) 7:10 9:19 15:6 22:6 23:22 29:16 41:4 46:11 57:5.8 58:11 61:13.15 62:5 64:6.8.25 66:25 75:4 78:16.16 84:22,25 94:23 100:11 101:5 124:2 127:14,23 129:5,10 133:9 135:20 136:5 153:2,20 163:1 167:12 178:3 180:20 188:18 193:4,4,6 194:10 199:24 209:10 downer (1) 109:18 downgrade (2) 149:6 155:12 downgraded (3) 142:1 146:3 159:13 downgrading (3) 141:11 148:25 154:1 download (4) 34:15,25 35:8 202:12 downloaded (1) 34:23 dpt (1) 156:25 draft (1) 90:20 drafted (1) 156:9 drawing (2) 63:3 177:24 drawings (4) 65:4 66:5,8,14 drawn (1) 51:18 dual (2) 25:3.11 dubai (4) 78:21 79:6 81:25 117:23 due (4) 46:19 83:3 93:18 188:25 duragloss (3) 125:17,25 160:20 during (10) 2:18 54:8 155:22 173:18.25 174:3.15 175:13 178:18 180:12

e (57) 20:24 23:2,6,18 39:1 48:25 49:6 57:1 58:22 59:11.18 61:19 63:23 69:10 70:24 76:6.20.25 92:11 123:8 133:14.18 134:12 136:6,10,15 137:15 139:1,5 142:1 143:6 144:17 145:3.10 146:4 149:1 150:24 153:2.20 155:2,12 159:13 161:4,17 162:1.6 163:24 164:2.18.23 178:13 185:17 186:21 192:16,23 200:4,11 earlier (10) 7:14 32:22 75:25 78:1 108:16 109:6,8 122:11 168:21 174:7 early (24) 38:21 42:22 47:24 50:14 52:20,20 61:18,24 62:4 63:3 66:9 77:23 110:2 122:18.19 135:13 144:11 153:13 168:19 180:13 184:6 201:24 205:7 208:7 easy (2) 161:13,17 effect (2) 71:16 192:2 effectively (1) 80:3 effects (1) 110:14 efforts (2) 31:21 43:9 either (24) 11:6 16:4 21:2 33:7 37:16 52:3,8,22 54:19 72:16 79:3 90:5 119:15 129:23 135:8 136:14 138:11 139:23 140:10 160:13 172:6 181:20 182-25 192-20 electronic (1) 2:8 element (2) 43:23 83:23 elements (2) 124:20 125:8 else (14) 28:12 37:16 72:14

79:5 88:3 123:11.11

128:19 138:5 172:8 178:22 188:16 197:15 204:3 elsewhere (1) 28:9 email (157) 34:13.19.20 58:19 59:15 62:5.5.7.20.23 63:4,9 64:3 72:1,11,19 73:17 74:16 76:2,21 77:5 79:22 80:7,12,13,23 81:4,6,11,13,19 82:6 83:20 84:7 85:6 86:24 88:2.17 89:2,13,17 90:11,16,20,25 91:17 92:10.15.17.20.22.25.97:6 98:3,23 100:17,20 101:1,11,15,17 102:21,24 103:9,14,16 104:7,14,17,21 105:14 106:20 107:1.4.7.12.17 110-4 112-21 113-2 115-8 116:24 117:4.8.20 118:20 123:17 126:16 127:19 128:12 131:25 132:1,15 136:25 137:16.21 138:5,16,20,21 139:2,8,10,15 140:4 141:25 142:11,17 143:3,9 145:20 150:6.8.20.21.25 151-4 7 10 16 152:3,4,18,25 155:9,10,23 158:14 160:1 161:14 162:3 163:24 164:1 165:12 166:23 167:8.8 173:14 179:16 180:12,14,15 181:10 182:3,10 183:12 188-1 6 13 18 19 190:19.25 191:10.13.22 193:13 emailing (2) 80:21 122:21 emails (25) 26:24 34:22 38:14 40:2,5,13 59:21,24 60:1,4 62:4 63:16 65:20,22,23 66:2,16 87:25 90:5 132:8 134:6 136:24

137:3 175:7 193:6

embed (1) 80:23

embedded (1) 78:12 employed (1) 150:10 employer (1) 168:10 employers (1) 44:7 employment (3) 184:23 203:19.20 en (13) 19:18 22:20 24:4 38:13.22 39:1 85:5 116:18 135:19 137:14 150:17 160:22 199:24 en13501 (1) 139:4 enable (1) 5:10 enabled (1) 164:24 enclosed (2) 137:12 150:16 encouraged (3) 51:17,21 55:5 end (26) 5:11.21 6:13.16.21 11:6 65:11 84:20,25 92:10,22 94:8 101:6 110:18 136:13 169:15 170:22 173:8 180:12 183:4 194:20 197:8 198:13 200:19 207:8 211:7 ended (2) 183:20 184:1 enduse (1) 193:24 enduser (1) 44:1 enduses (1) 194:5 engage (1) 102:8 engineering (1) 167:24 england (8) 188:22 189:1,4,14,16 191:14 197:12 209:21 english (7) 29:5.11 30:15.15 31:17 73:8 150:22 enj3501 (1) 151:11 enormous (1) 97:10 enough (14) 5:4,10 10:6 14:15 65:7 69:3 85:13 145:4.16 149:3 154:22 184:5 197:23 212:4 enquiries (5) 43:12,13

202:23 203:14 210:14 ensure (2) 183:19,24 ensuring (1) 202:22 entered (2) 73:18 77:7 entire (1) 207:18 entirely (5) 8:11 111:20 112:8,21 145:21 entitled (3) 27:16 46:7 78:8 entry (14) 71:4,20 72:9 73:9,22 74:9,14,19,21,25 75:10 76:15 121:22.25 environment (2) 4:11 201:5 envisage (1) 133:18 equipped (2) 157:16 164:24 equivalent (1) 43:8 erm (2) 42:8 57:15 errors (1) 163:15 es (1) 187:21 essential (1) 103:21 essentially (2) 141:24 186:17 established (1) 47:18 estate (2) 26:1,6 estimate (3) 60:17 211:24 212:2 estimates (1) 43:14 et (6) 24:8 36:4 136:1 139:9 157-9 160-7 etalbond (1) 26:11 etc (2) 93:15 156:24 eur (6) 53:22,23,24 54:11.12.13 euro (9) 14:2.16 31:3 36:13 133:7 142:12 143:6 145:3 162:11 euroclass (13) 13:18 134:4.12 141:12 142:1,9,19 154:12 165:8,19,21 192:16,22 euronorm (1) 29:21 euronorms (3) 193:11,16 199:5 europe (5) 14:2 29:22 30:19 31:1 38:19 european (61) 10:4,6,13,20 11:7.15.25 12:1.12.15 13:8 15:11,20 16:19 17:8 19:13,19 21:10 22:14,17,19 24:16,24 29:19 32:17 36:5 39:16,20 41:23 42:6 85:11,19 109:1.2 131:12 136:11.15 138:22 140:25 141:16.18 146:21 147:16 150:12 154:4,15 159:12,16,18 161:3,15 165:2 170:14 190:2 199:10,11,22,23 200:11 209:3,12 even (31) 14:23 19:4 23:24 29:2 32:25 40:21 61:17 68:14,25 77:15 79:10 83:9 87:8.17 92:25 112:17 121:1 130:18 135:9 148:19 157:16 159:3,3 168:13 170:12 171:4 172:6 193:15 194:3,21 197:19 evening (1) 212:3 event (4) 39:4 89:11 104:5 203:5 events (1) 61:24 ever (36) 4:12 6:25 18:16 21:1 25:8 28:7 32:15,20 38:2 39:18 53:7 54:18 55:5 63:16 65:22 67:4 76:24 101:24 139:17 143:12 155:2 171:24 172:3,4,5 182:24 186:21.25 187:3.7.7.11.11 197:14.24 210:22 every (2) 32:8 108:20 everybody (1) 115:23 everyone (5) 1:3,7 55:19

decided (4) 121:17 126:11

decision (13) 31:11 118:7

decisions (3) 24:22 130:21

default (2) 171:23 172:3

133:24 146:13 147:3.10.21

148:4.13.16 153:24 154:16

154:5,11

184:8

153:10

deck (1) 15:4

166:10 212:4

everything (9) 1:23 73:24

193:9 195:1 202:1

everywhere (1) 158:3

88:12 172:2 189:14 190:1

evidence (25) 1:13 2:2,21 15:3 48:2.20 53:6.25 55:12 61:3 69:14 90:10 105:13 115:15.24 129:13 150:3 151:20 155:1 166:3 168:21 177:8 182:19 207:16 212:25 evolution (1) 24:6 exact (4) 15:24 37:25 50:8 176:13 exactly (6) 39:9 90:3,17 110:17 162:10 172:25 examined (1) 117:17 example (11) 3:22 8:25 92:11 107:11,11 139:21 163:14 174:15 205:12,20 210:6 examples (1) 91:10 exceptionally (1) 127:1 exchange (2) 127:13 193:1 exchanges (1) 74:6 exciting (1) 181:18 exercise (3) 149:25 167:24 168:7 exhibit (13) 8:16 44:21 56:15,17 74:23 75:25 78:4 131-24 135-16 136-24 150:4 151:16 155:20 exhibits (3) 56:16 79:20 131:22 exist (1) 29:19 existed (2) 35:10 187:1 existence (1) 73:17 existing (3) 47:23 158:12,13 exit (1) 202:9 expanded (2) 3:10 8:19 expect (2) 153:23 176:24 expected (20) 21:4,8,19 23:11,20 31:20 32:10,24 84:12 131:17 135:5 157:12 159:4 161:21 162:20 163:19 165:11 193:15 197:11 198:14 expensive (7) 52:14 54:3 60:20.24 121:11 167:18 168:15 experience (5) 5:16 6:7 119:9 170:21 187:24 expertise (2) 147:8,15 explain (17) 23:9 30:8 31:9.16.19.39:23.57:18 66:13 71:14 77:14 98:19 104:8.14 134:23 150:1 153:6 162:15 explained (10) 13:20 33:12 99:14 100:5,19 102:24 104:23 117:13 130:15 207:25 explaining (2) 80:21 144:24 explains (1) 197:5 explanation (2) 12:17 104:22 explore (2) 56:9 207:24 export (1) 188:12 exposed (4) 23:25 85:3,25 116:16 exposure (6) 44:2 111:2 114:18 207:10,19 208:2 expressed (1) 83:20 expressing (1) 119:15 expressly (1) 162:17 extent (7) 21:10 30:3 47:4 67:3,5 68:6 163:22 external (3) 7:22 75:6 138:8 externally (2) 111:15 113:2 externe (2) 137:1,3 extra (1) 171:17 extremely (1) 185:15 eve (1) 106:4

f (2) 20:17 21:11 faade (3) 83:20 186:17 207:7 faades (1) 207:18 fabric (3) 170:2 174:23 175:4 fabricated (1) 50:10 fabricating (2) 49:20 169:6

fabrication (2) 47:17 206:8 fabricator (16) 49:16 52:17 59:12 81:8,9 105:10,18 113:21 169:3.5.9 183:16 203:16 205:25 206:13.20 fabricators (73) 3:21 42:25 43:10,15,22,24 44:5,23 45:24 46:12,17,20 47:3,5,11 80:21 81:14 89:13 91:13,16,20,20 92:23 93:21 94:2.15 95:4.5.19 96:22 103:21 104:7 105:2.4.5.8.11.15.20 106:3,8,14 107:1,13,18 109:12,17 110:6,9,25 111:1,4,9,9 112:2,3,4,9,22 114:16 115:1 117:21 145:23 146:2 147:18 157:3.8 163:9.13 177:14 182:15 185:3 204:6 facades (8) 7:8,17 8:8,10 47:20 59:12 73:4 205:6 facadessimco (1) 7:6 face (2) 127:9 157:11 factory (2) 79:9 113:18 factually (1) 98:16 fail (1) 148:9 failed (2) 21:9 155:6 failing (1) 154:3 fainted (2) 83:5 84:4 fair (11) 4:19 58:17 65:7 80:4 84:21 92:4 101:13 129:10 136:20 157:19 175:16 false (26) 95:15 96:11,16,25 97:1.9.21.23.23 98:5,6,7,16,22,25 100:3,4 104:12,18,20,22 106:20 107:8.14.19 108:11 falsehood (1) 104:15 familiar (7) 29:1 32:5 114:12 157:12 209:20,20,23 familiarity (3) 5:2,2 208:5 far (18) 23:17 29:19 30:5 43:6 54:7 55:1 67:6 68:7 79:19 111:2 155:1 183:11,17 187:1 190:10 198:20 207:21 211:6 fatal (1) 18:21 fault (1) 40:9 favourable (1) 48:15 february (11) 1:1 19:16,22 137:6 138:20 144:11 150:6 151:4 153:14 155:23 213:10 feel (5) 2:15 11:23 84:6 104:3 147:15 fell (1) 20:13 fellow (1) 1:4 felt (3) 11:25 84:10 105:5 few (10) 43:18 71:9 89:14 110:25.25 131:8 153:12 187:17,20 200:16 field (3) 5:10 6:3 82:21 fielding (1) 43:12 fiercely (1) 83:6 figure (2) 170:4,6 figures (2) 190:4 193:12

filtered (1) 135:8

filtering (1) 115:3

finalised (1) 167:3

finding (1) 36:2

fine (1) 212:10

211:8,15

212:1

finally (2) 172:14,14

final (3) 16:23 101:6 184:25

find (7) 41:22 62:12 71:21

finish (9) 49:2 51:11 59:18

60:10 70:8 91:7 106:15

100:12 101:3 113:25 211:6

fire (145) 5:13.14.16.21 6:25

10:4,6,13,20 11:7,15,25

forward (5) 19:7 181:19

forwarded (9) 62:16 63:5,9

65:19 76:22 86:25 122:11

182:3,5 213:4

128:2 152:22

finished (7) 51:24 52:3

finishing (1) 200:16

89:16 137:12 150:16 210:3

12:1.12.15 13:8 14:17 15:11 16:19 17:8.20.21.24 18:3.5.10.17.20 19:2.17 20:14 21:10 22:17.19 23:25 24:6.11 25:10 26:5,8,17,18,19,20,25 27:1,4,18 28:1 30:1,18 35:25 36:17 38:18 39:5 41:7,8 42:14 44:17 52:2 67:17 78:8,12,15,20,22 79:1.6.12.14.15 80:19.22 81:1.12.14.25 82:18.24 83:21 85:19 87:7,10,16,22,24 93:10 97:12 105:23 116:20 117:10,17,23 118:13,19,24 130:9 131:13 133:7 134:16 135:18 136:15 137:12.14 139:3.4 145:22 148:21 150:12.12.16 151:10 156:24 157:6,13 159:12 160:21 165:6,17 178:6 186:22 187:4.8.12.22 190:18 198:4,7 207:11,15,17,19,21 208:3,6,8,17,24 209:1.2.11.12.19.21 211:1 firerelated (1) 187:19 fires (14) 17:12,17,19,25 25:14 26:18 28:4,9 77:22.25 88:8 145:20 153:14.17 firesafe (1) 84:9 first (37) 3:14 8:13 18:1 19:15 20:3 22:6 29:1 33:9 43:1 47:15 50:16 56:17 57:9 58:7 60:12 63:22 70:23 71:3 74:3 84:7 90:6 99:10 121:20 127:10 129:16 132:19 153:14 160:8 162:22 164:8,13,14 172:1 180:18 191:9 193:19 203:24 five (4) 26:2 53:10 58:10 163:9 fiveminute (1) 53:5 fix (1) 173:9 fixing (4) 136:9,14 180:25 184:13 fixings (1) 181:5 flacon (2) 80:15 138:10 flaming (1) 78:16 flat (1) 64:7 flavour (1) 89:9 floor (1) 5:10 focus (3) 43:4 102:10 167:20 focusing (4) 3:16 40:13 43:23 110:10 focussed (1) 43:9 follow (6) 41:21 70:17 93:22 95:7 114:1 151:7 following (12) 15:23 19:1 28:19 38:21 80:12 93:13 104:16 121:15 125:16 133:16 155:9,9 follows (4) 25:22 53:21 54:10 82:4 footing (1) 171:1 forest (2) 132:7.16 forget (1) 148:10 form (7) 105:6 107:7 108:4 134:3,11 170:3,4 formal (4) 4:11 6:16 60:17 105:3 formally (1) 172:14 format (5) 10:24 34:17 76:14 77:17 186:14 formed (2) 5:3 142:13 forming (1) 17:6 forms (1) 117:12 forth (1) 44:7

forwarding (1) 140:11 forwards (1) 181:10 four (7) 19:8 26:15 95:14,15 100:11 163:1 194:10 fourth (3) 82:20 94:9 167:12 fr (61) 23:3 30:20,21 31:1 32:18 52:7,8 53:19,23 54:7,12 55:5 60:15 74:12,12 85:4 86:6,8,18 93:17 94:1 95:22 96:24 116:17.21 117:5.11 122:3.3 127:16 128:3.15 129:24.24 168:22 169:1 170:12,17,18,23 171:3,7,9,10,12,15,18,20 172:5 183:20 184:3 187:1,12 188:22 189:4 190:1 193:10 194:17.21 195:6.25 framing (1) 7:22 france (3) 19:14 36:3 193:22 frank (2) 22:1,8 frcore (1) 170:3 frcored (2) 54:16 169:17 free (3) 175:1,4,10 freiburg (2) 21:20,25 french (38) 1:14,16,17 3:4 11-23 27-23 29-5 42-22 53:15 55:10,20,22 56:8 59:1 73:1 75:6 76:9 98:13 115:12.24.25 116:10 132:3.4 134:2 137:21 166:1,11,13,22 176:20 185:8 194:14 211:15,19,25 212-5 214-3 froehlich (26) 15:17 16:2 22:3 28:8 33:23 38:2 79:4 80:14 89:19 90:9,9,15 91:1 93:5 107:10 108:2 138:6 169:23 172:7 175:22 177:9 178:11 180:8 201:21 202:19 203:11 froehlichs (1) 177:9 front (11) 8:18 9:19 19:20 52:17 57:10.10 75:6 78:7 83:5 123:12 170:21 full (3) 83:3 101:13 181:8 fully (4) 141:13 148:23 197:13 198:7 further (21) 11:21 19:12 29:11 65:25 74:6 75:5 78:23 80:12 91:9 109:5 120:18 131:12 133:23 137:20 180:11 197:5 205:10,19 206:1,2 211:22

gareth (1) 62:11 gather (1) 6:8 gave (13) 3:11 4:12 7:9,11,12 15:8 16:23 48:2 59:22 60:2.6 202:3.5 geater (11) 79:22,24 80:20 81:11,13 85:1,10,20 87:5.17 116:11 geaters (4) 84:20 87:9 117:8 118:20 general (16) 3:16,22 17:3 35:21 36:6,11,18 47:8 82:17 91:12,20 132:11 172:1 176:17 210:7.12 generally (11) 4:4,6 35:2,23 38:2 111:18 146:14 163:8 191:24 207:15 210:9 generate (2) 76:19 105:6 generated (7) 47:19 70:1 76:1,17 179:13,14,18 generating (2) 106:17 113:6 genius (6) 7:6,8,17 8:8,10,11 gentleman (1) 188:2 geof (29) 47:21,24 48:2 49:10 59:14 61:3 62:6,9,17 65:19 71:6 73:7 81:10 126:17,22,25 128:12 129:5 130:12 160:3 161:10

G

163:13 181:11.12.20 182:11.17.19.25 geofdeb (1) 181:13 geoffsic (2) 60:19 128:2 geographical (1) 109:16 german (1) 29:5 germany (1) 36:3 get (31) 6:9,9,15,24 35:16,17,19 36:20 40:17 41:19 45:17 48:15 66:12 68-20 75-7 82-22 84-6 93:15 104:6 106:19 110:2 111:1 114:18 141:6 158:10,13 167:20 206:24 208:13,21,25 gets (2) 62:25 81:20 getting (10) 35:3 44:2 46:18 130:15 158:11 181:7.18 182:6 208:11 210:16 gist (1) 89:9 give (33) 3:6,17 4:1,8,17,25 6:3 7:4 17:16 20:20 33:9 41:11 52:25 62:21 77:24 88:20,21 94:15 96:3,7 97:14 106:5,13 116:23 127:4 146:19 156:18 167:17 189:5 201:14 202:5 210.6 211.17 given (24) 13:23 21:15 23:14 30:4 33:10,14 44:11 51:24 85:17.21 112:1.4 120:24 97:24 118:6 153:25 165:10 122:5 139:1 143:3.23 182:17 198:19 210:11 147:7 149:10 154:25 hafeet (1) 79:13 162:15 164:12 198:6 half (2) 57:13 83:2 204-15 halfway (3) 2:19 15:6 193:6 gives (1) 116:19 hand (4) 69:6 98:15 173:20 giving (8) 2:1 5:18 112:9 204:8 113:16 130:24 154:7 172:4 handed (3) 194:24 204:10,19 201:24 handful (1) 111:8 gloss (4) 16:16,16 125:18,20 handling (1) 203:7 goes (7) 29:17 82:1 133:15 handover (3) 201:15,18,22 177:1 181:11 182:10 hands (2) 163:23 211:15 190:16 happen (2) 5:20 201:17 going (48) 1:13,14 19:11,15 happened (6) 20:12 31:5,7 20:20.20 25:9 41:12 37:6 74:19 177:15 49:7,14,15 55:19 77:21 happening (3) 42:21 81:17 78:3,13 79:11 93:6 178:1 94:16,20 101:7 104:25 happily (1) 30:14 106:6 108:8 111:21 113:6 happy (2) 50:6 53:11 115:12 126:12 132:10 hard (10) 10:1 34:15 50:21 136:17:20 137:23 147:23 52:19 175:16 181:18 182:4 152:14 159:23 160:18 185:15 189:25 202:6 166:11 167:21 173:25 harder (1) 175:18 177:11 182:2 184:7,11 harley (29) 129:5,15,23 188:7 197:21 211:5,7,10 130:13 160:2.25 212:8 164:9.13.24 gone (9) 4:24 5:14 40:4 165:5,7,14,16,18 171:16 91:2,8 137:23 160:14 173:14.19 175:23 176:2.3 176:3,10,22 180:17 good (22) 1:3,6,7,19,22.24 182:10,16 183:2,5 2:11 3:3.3.4 8:12 43:21 185:17,20 186:21 44:5 47:18 116:7 127:1.20 harleys (2) 127:6 187:21 166:16 182:15 191:7 harris (7) 160:1,25 167:9 197:20 212:12 180:15 181:10,16 182:10 goodnight (1) 213:7 havent (4) 37:15 59:21 60:1 governing (1) 191:20 84:23 gradual (1) 209:25 having (35) 6:20 15:10 37:24

graham (7) 8:3,7,11 89:18

90:7 93:4 101:15

grange (1) 211:11

grateful (1) 53:12

great (2) 36:4 64:10

greater (2) 111:3 208:5

grenfell (75) 25:19,21 40:5

50:15 53:21 54:9 56:19

60:22 61:25 62:11 66:4.19

42:21,23 47:22 48:19

67:13.19 68:21 70:21

120:14,22,24 121:8

122:19,22,22 123:9,15

134:19 140:1 144:12

159:24 164:13 168:23

127:2 129:21.25 130:8.13

170:2 171:2 172:17 173:22

71:6,24 72:24 73:18,23

74:9,14 75:19 76:5 92:12

176:11 177:23 178:19 183:7.11.14.17.21 184:1,7,11,24 185:18,25 186:9.17 190:18 207:20 208:8 209:19 211:1 greygreen (1) 160:19 ground (1) 78:17 group (11) 35:24 89:1 91:13 92:23 93:20 103:21 105:19 106:8 107:13 138:5 146:2 guenther (2) 188:20 189:9 guess (1) 125:8 guidance (8) 17:6 90:19 118:16,25 119:2,11 120:18 144:3 guide (1) 167:17 guided (2) 86:10 91:21 guiding (2) 85:15 118:17 gwen (4) 72:16 73:14 76:17 77:6 gwenaelle (15) 41:12 69:14 71:24 72:12,22 73:2 76:3 126:23 149:23 150:3 151:5,9 152:21 201:21 202:21 h92 (3) 123:7,7,9 habit (2) 12:23 172:4 hadnt (10) 49:13,19 86:9

17:17 25:3,11 27:16 29:2 34:20 58:9 63:2 82:16 84:13 88:15 94:24 101:10 104:4,15 112:16 113:5 114:9 116:19 122:20 123:14 130:7 136:25 141:7.20 150:5 151:20 164:13 165:5 168:3 177:10 185:11 186:7,17 192:12 197:5 198:11 204:18 207:17 209:10 hes (4) 48:17 191:22 196:16,19 hi (9) 59:9 81:23 93:8 122:24 126:25 167:11 181:17 188:24 189:13 high (5) 31:11 67:13 127:17 129:4 144:15 higher (4) 31:12 62:17 129:6 135:9 highlight (4) 132:2 139:18 143:13 163:17 highlighting (1) 88:7 highlights (1) 156:21 highrise (8) 62:15 66:22 79:5 120:4.10.21.24 144:21 himself (1) 22:12 historically (1) 57:1 hold (2) 154:23 206:22 holding (1) 82:22 home (2) 204:15,19 homes (1) 59:5 honest (1) 145:17 honestly (3) 42:8 68:25 144:22 honeycomb (1) 124:8 hope (7) 2:16 55:25 116:5 127:6 211:23 212:8,14 hopeful (1) 61:7 hopefully (1) 167:19 hour (2) 211:20 212:2 house (3) 18:22 19:2,3 housebuilders (1) 43:18 housing (2) 47:8 75:21 however (3) 58:15 163:8 167:14 hr (1) 124:8 huge (5) 82:23 97:10 111:2

heavy (4) 94:19 96:1,2,6

hed (2) 81:17 204:13

height (7) 67:5,12,25

68:6.12.16.69:6

heights (1) 194:1

held (2) 179:12,13

174-8 188-25

helpful (1) 194:4

166:10

hello (4) 55:22 116:2 132:18

help (9) 72:1 93:14 119:13

here (44) 1:4 2:14 12:3 15:6

144:4 156:8 157:11 167:19

id (28) 17:12 35:2 42:9,10 51:6 53:12 70:20 77:8 92:21 96:17 98:20 100:5,10 161:19 191:22 194:24 195:11 198:17 200:15 201:13,25 202:1 203:9,19 204:1,5 209:15.16 idea (6) 52:25 91:19 111:21 113:17 168:13 211:18 identical (4) 37:11,13,14 89:22 identified (4) 74:11 122:2

145:18 169:16

39:14 40:4 45:23,25 50:8

82:2 83:17,24 90:18 92:16

102:24 103:16,25 106:22

107:21 116:24 123:21

137-23 139-10 142-15

144:22 161:1 165:1.22

210:15

headed (2) 188:4,10

185:8 191:9 192:23 207:25

heading (3) 7:6 25:18 114:13

hear (7) 1:20 55:24 113:19

116:2 159:1 166:11.14

heard (7) 18:8.8 19:3.4

79:11 188:2 212:5

27:6,8 213:9

heat (1) 20:15

hearing (7) 1:4,10,13 2:14

heavily (2) 110:10 111:4

124:16 127:10 135:2

150:21 170:10 identify (1) 128:14 ie (1) 110:14 ignition (3) 133:13,14,18 ignorant (1) 134:20 ignore (1) 144:2 ignored (1) 141:24 ill (7) 2:23 20:11 41:11 62:21 120:7 171:13 196:21

im (86) 1:4 2:17 8:10 10:8 13:7 19:11,15 20:20,20 28:2 29:10 35:6 46:22 48:10.10 53:10 55:19 61:23 65:7 68:4.10.25 76:9 77:21 78:13 83:8 84:6,21 85:6 89:6 93:6 94:20 98:5,18 99:10,16 100:2 104:8,16,17 106:15 108:8 109:13 112:4.6.15.17.19.25 117:19 118:9 120:7 131:7 132:10 138:8 140:20 141:6 147:23,23 148:3,23 159:23 160:18 166:10 173:25 174:2 175:18 177:20 188:7 191:17,21 192:10 195:10 196:19 206:24 209:10 211:5.6.6.6.9.12.15.25 212:6.18 images (3) 16:25 174:8,11 immediately (2) 181:9 190:6 impact (2) 21:12,15 implications (2) 97:12 198:8 important (6) 11:5 64:17 67:16 83:12 88:19 145:21 impossible (2) 158:24 211:7 inappropriate (1) 102:1 inasmuch (1) 110:24 inaudible (1) 61:11 incendie (1) 27:18 include (3) 66:2,7 158:7 included (6) 15:9,12 24:24 43:12 138:5 158:9 including (11) 17:22 61:8 67:13 93:24 95:12.19 99:24 102:5,18 160:6 205:14 inconsistent (1) 113:17 inconvenient (1) 212:9 incorporate (1) 206:9 incorporated (1) 9:20 incorrect (1) 185:13 increase (3) 113:13 167:14 168:15 increased (2) 207:14,22 incuriosity (1) 187:22 index (1) 214:1 indicated (1) 144:18 indicates (1) 127:21 indicative (1) 60:14 indirect (1) 207:1 individuals (3) 16:4.18.22 induction (2) 201:15,18 industry (2) 205:14 207:13 inevitable (1) 212:20 informal (3) 48:7,11 183:3 information (83) 4:20,22 6:8 10:10,11,15,17 11:19,21 12:4,6 13:2,5,13 14:8,11 15:25 16:6.8.12.15.24 28:3.13 35:22 36:15 54:20 64:15,16 65:25 66:7 71:17 72:23 73:3,6 74:2 75:4 78:24 84:14 90:18 94:15 95:9 97:5 98:22 99:5.8 100:7 125:12 131:2,19 133:24 141:3.15 143:16.23 144:23 146:8 149:20.23 152:22 153:5.25 154:7,10,14,18 157:7 165:3 168:12 171:11 173:23 174:8 175:19 185:21 201:25 202:1 203:21 208:12,23,25 209:7 210:12.15 informed (5) 39:5 41:3 95:20 96:23 191:6 initially (1) 179:2 input (5) 15:14,23 16:2 156:11 179:17 inquiry (5) 3:1 17:5 136:18 155:1 214:5 inside (3) 72:12 126:23 157:2 install (1) 125:15 installation (3) 22:20 62:14

itemised (1) 112:13 66.9 installed (2) 65:2 94:4 its (95) 2:15 8:13.19 installer (4) 62:15 183:9 14:22.24 16:13 20:21 206:10.20 21:14.23 23:5 24:18 25:10 installers (8) 43:18 45:11 31:13 37:24 38:8 42:17 46:3,5 185:4 205:15 46:7,23 50:6 52:21 53:6,8 208:10,10 57:5 58:19 61:17 installing (1) 64:9 62:7,21,24 63:19 instance (1) 81:16 68:13,14,16,17 69:9 71:7 instruct (1) 40:17 75:2 76:9 82:9 91:2 94:19 instructed (1) 39:18 103:3 104:18.19 108:15 instruction (4) 130:16 144:3 111:13 115:3 117:1.1 164:5 197:14 118:24 121:14 123:6 instructions (1) 198:1 128:24,24 132:2 133:25 instrumental (1) 182:6 135:21 136:17 137:6,6 intend (1) 128:20 139:12 140:19,20,22 intended (3) 24:14 31:18 141:8,9,21 147:21 194:13 149:10,13 150:21 153:9 intention (5) 39:4 41:2,16 160:11.12 164:17 175:16 100:8 103:25 179:23 180:14.17 181:12,18 184:6 185:13 interest (3) 125:1 181:14 207:14 186:12,12 188:19 189:22 interested (4) 36:12 48:25 190:16.18 193:3 198:8 74:19 118:9 201:2 203:11 206:9 211:7 interim (1) 203:13 212:3 internal (8) 29:15 70:20 itself (4) 62:23 95:20 96:23 109:3 110:7 111:14.25 150-21 112-20 189-22 ive (45) 5:15 6:7 7:20 12:19 internally (10) 113:3 14:6,7 16:3 18:8 19:3 157:18,25 171:24 194:14 32:23 37:3 41:15 61:22 195:12,20 196:2,11,22 74:16 81:3 84:10,22 87:2 interne (1) 137:1 90:8 91:3.14 95:14 96:16 intervene (1) 2:15 97:8,10,11,16 99:14 100:5 interview (1) 202:10 102:24 117:13 123:4 intimated (1) 172:23 126:18 128:5 130:15

into (27) 5:14 6:3 8:12.25

11:13 13:1 17:2 39:2 53:6

59:14 69:25 72:6 73:24,25

149:19 151:4 156:11 169:6

77:7 80:23 131:8 135:13

179:17,18 199:1 206:9

introduce (3) 58:18 59:13

introduced (4) 48:21.24

introduction (1) 48:19

introductory (1) 176:12

59:17 182:17

invariably (1) 52:7

investigate (1) 82:2

investors (2) 45:7,13

invited (3) 3:21 4:1.5

involved (32) 9:17 17:22

24:19 25:7,19,21 26:21

46:18 50:19 57:2 58:15

65:5 66:12 79:10 89:8

90:24 106:19 117:23

185:2.5.22.24 186:4

200:17 203:18 204:2

involvement (3) 184:25

involving (7) 3:18 7:16

17:12,20 26:2 153:15

irrelevant (3) 13:19 36:1

isnt (22) 44:13 45:3 61:17

63:19 69:10,12 95:16

113:11 117:6.24 126:1

185:25 196:6 212:8

issued (1) 199:19

issuing (1) 141:15

istephan (2) 1:5,6

italicised (1) 193:5

item (2) 132:24 133:2

italics (4) 82:5,15 84:21,25

italian (1) 29:7

italy (1) 36:4

128:14 137:4 154:3 169:16

171:4 175:17 183:17 184:6

issues (3) 26:12 27:18 181:4

176:10 182:18

185:8 209:24

188:1

154:12

isles (1) 109:15

139:25 156:22 168:1,17

involve (1) 102:6

invite (1) 2:24

208:19

176:16

133:25 134:20 136:18 141:2 146:24 164:3 187:17 194:19 209:5 210:21 iames (1) 151:5 january (22) 62:4,7,18 63:6 64:3 65:18 122:12,18,21 123:18 126:17.21 127:20 128:2 135:14.23 136:13 138:23 139:24 150:23 155:22 202:19 jaymes (5) 150:8,14 152:4.19.23 jess (1) 58:23 job (2) 198:2 204:2 jog (1) 136:21 john (7) 8:2,7,10,13 89:18 90:7 93:4 joined (8) 205:7 206:25

208:6.16 209:4.13.18 210:24 joining (1) 201:4 jonathan (2) 58:21 59:9 judgement (1) 68:2 julie (1) 149:21 july (6) 18:2,21 21:25 23:7 180:12 181:11 jump (1) 131:7

june (17) 20:2,12 44:11 46:23.25 47:1 108:15,17,18 110:4 112:8 121:16 122:6 176:14 190:17,25 208:8

jurisdiction (4) 38:25 39:3 194:7 197:10 jurisdictions (2) 39:3 193:23

kasyanik (1) 149:21 keep (4) 1:10 106:4 147:22 212:17 keepmoat (1) 114:11 kept (4) 59:15 145:6 204:15 18 key (2) 91:16 145:23 kilburn (1) 174:16 kind (9) 4:17,18 35:19 113:10 118:23 190:21 201:14.17 202:9

kinds (2) 6:12,13 kingdom (1) 177:10 kme (2) 124:4 125:2 kneejerk (2) 11:17 172:4 knew (36) 10:5 12:2 13:8 14:15 26:22 42:1 49:7 67:2,15,22 75:19 86:7 92:5 96:15 97:1,23 98:7 100:4 107:18 111:21 118:13,19 120:24 130:18 153:13.17.19 154:17 155:1 162:19 172:25 173:2 187:1 197:19 202:12 210:3 knock (1) 129:10 know (145) 3:23 5:6 10:7 11:3 12:21 13:24 14:1,3,16,19,22 17:6,10 21:1.18.19 22:10 23:5.7.9.17.24 25:1.2.2.4 27:6 29:8 30:11 31:4.7 36:12 39:8 41:25 42:3,8,8,10 53:10 54:23 55:3.4 60:6 63:16 65:22 67:10 73:11 74:19,22 77:16 78:5,19,23,25 81:15 84:12 85:15 86:13 91-8 9 22 93-1 17 97-7 8 99:22 100:1 103:12 18 18 106:24 107:2 108:13 111:8,13 113:19 117:17,19 119:8 121:5 131:4,11,11 132:11.23 134:7 138:12 140:24 142:23 143:8,8 144:13 146:5 11 15 16 17 17 18 147:9.13.20 148:5.17 149:2,19 153:4 154:17 155:2 156:9,13,13,14 157:18 158:5 161:10 162:7 167:1 168:6 171:8,19 173:5,8,10,17 175:22,24 178:22 179:24 180:2 184:4 190:14 191:3 194:6 196:16 197:9.11 198:14 201:17 204:22 207:20 210:9.10.19 211:2 knowing (3) 98:1 101:2 knowledge (39) 4:19

5:4,9,16 13:21 17:12 24:17

50:18 65:4 66:12 73:25

98:20 100:23 103:1 104:1

107:23 117:14,22 119:9

183:22 184:4,17 186:13

193:21 197:23 198:18

known (14) 10:8 11:10

120:14 145:4 149:3 171:25

202:17 207:22 210:7,12,21

17:9,10 40:22 76:19 97:2

145:8 163:21 210:22 211:3

105:19 114:10 131:18

kotecha (5) 62:6,20 63:4

78:24 83:24 85:13.13

64:3 65:21 lack (2) 147:7 187:14 lacking (1) 184:17 lacy (1) 105:11 lakanal (2) 18:22 19:2 lakansic (1) 19:3 language (1) 94:17 languages (4) 28:22 29:5,6 30:15 laptop (1) 35:2 large (3) 7:15 20:13 57:7 larger (1) 64:7 last (9) 9:24 10:3 11:12 71:9 80:18 113:19 150:15 193:15 212:14 lastly (1) 133:22 late (4) 58:10 61:18 77:22 131:9 later (11) 37:8 62:18 64:1

65:12 71:19 89:14 90:1

126:21 185:9 190:17 199:7

180:21 193:19

list (18) 17:17 28:22

140:6 174:6

latest (1) 189:6 latterly (1) 34:16 lawrence (1) 180:15 lead (1) 106:13 leadbitter (3) 62:6 65:21 122:13 leadbitters (2) 50:17 74:10 leads (7) 106:9,11,16,17 111:1,5 113:7 learn (3) 208:16 209:2,11 learned (1) 210:11 learnt (6) 27:25 97:6,10 144:14 209:5 210:3 least (27) 5:1,9 10:6 17:5 22:11 47:1 64:16 66:18 83:19 96:11,15 100:2 118:23 119:16 120:2,9 157:16 159:18 163:22 173-1 180-4 183-12 14 188:12 198:1 209:20 212:7 leave (5) 9:10 113:18 146:9 171:16 197:22 leaving (6) 154:6 164:7 201:3,24 202:9 205:5 led (4) 98:25 99:19,23 130:21 left (22) 28:24 37:18 51:7 92:1 113:21 114:2 178:21 184:22 195:11 200:19,22 201:13,25 202:16,25 203:9.19.20.22 204:12 209:15.16 lefthand (8) 29:12 30:18 37:7 44:16,23 89:21 100-10 133-3 legal (1) 2:13 legislation (4) 101:24 190:12 191:19 192:1 leman (1) 59:5 less (2) 114:19 149:6 lesser (1) 47:4 let (10) 8:12 21:23 36:20 52:25 68:20 84:23 109:7 147:18 152:4 157:24 lets (31) 7:3 8:15 9:24 12:9 19:11 27:13 44:15 53:9 65:14 67:23 79:19 81:19 84:22 90:6 93:2 94:20,22 97:20 101:8 102:12 124:1 125:10 126:16 135:13 137:7 148:8 160:11 172:11 176:7 180:18 188:19 level (3) 31:11.12 177:25 levels (1) 16:16 liaise (1) 206:13 lies (1) 103:22 life (1) 130:19 lifted (1) 15:22 light (2) 118:12 177:8 like (38) 2:20 4:23 7:22 12:24 14:6 17:12 28:17 50:3 58:8 66:4 70:20 71:1 76:1 81:14 82:17 83:2,22 84:1 100:10 104:1 109:7 110:18 111:19 127:12 128:8 138:16 143:1 145:2 157:12 162:23 163:13 168:24 170:19 174:16 180:13 182:15.16 184:20 liked (1) 212:1 likely (2) 139:16 140:6 limited (4) 6:7 47:20 66:15 154:18 line (8) 17:18 28:5 53:5 127:14 143:21 153:21

looked (23) 13:17 17:3 26:16 looking (46) 6:23 15:2 45:14 looks (14) 54:15 55:1 59:16 lines (11) 13:13 58:11 71:9 88:20 100:11 140:21 163:1 loop (1) 59:15 180:20 193:4 194:10,23 lost (2) 60:22 121:7 link (6) 80:17,23 82:1 87:4,5 lot (22) 4:21 6:15,24 38:8 56:19.25 57:5.8 69:11 109:17 112:10 114:9 137:3 138:7.9.10.21 139:15 lots (1) 173:4

109:12 111:19 116:12

131:9,22 133:9 135:20

138:16,17 144:7 151:1

162:22,23,25 166:23

174:9,10 176:7 178:16

180:13.18 181:1 184:20

199:9.24 201:2 204:16

188:5.18.19 193:4

205:1 208:19 213:4

63:16 64:9,21 65:8,23

96:17 108:15,18 109:6

110:21 121:25 122:13,15

125:3,5 160:11,15 174:7

49:4 65:23 76:16 77:17

96:13 97:4,17 98:11,12

99:9,15,17 100:18,20

105:1 106:8.22 107:24

110:18 114:21 121:16

124:16 129:10 132:5

138:24 139:14 141:20

143:12 151:12 155:15

165:14 166:25 167:13

169:15 173:16 175:12

76:1 90:2 109:7 140:7,10

152:3,19,20 157:11 168:9

43:8 44:6 47:10 64:5 65:4

111:1 113:22 123:25 168:1

170:18 172:22 173:3.3

194:19 198:8 207:20

210:21.23

180:22 207:24

208:4

81:18 88:20 89:24 94:8,14

185:8 193:13

157:24 160:12

125:10.20 127:10.12 128:7

122:20 123:6 124:1

liste (3) 136:25 137:1 138:6 lovell (1) 114:11 listed (4) 30:21,22 31:1 lower (2) 29:16 178:3 167:18 lowy (1) 58:21 listened (1) 6:18 loyalty (1) 105:6 lists (3) 30:20 138:11 155:10 Itd (1) 73:4 literally (1) 200:15 lunch (3) 115:13 181:20 literature (5) 28:18 31:13 183:13 38:4 50:20,21 lunches (1) 183:1 little (27) 3:10 8:19 28:15 lunchtime (1) 3:25 29:4,16 53:10 56:9 lynchpin (1) 162:16 62:1.17.18 75:4.13 80:12 84:22 94:22 127:9 136:21 156:18 177:1 178:3 180:11 m2 (5) 60:16 125:15 186:10 195:25 197:5 199:7 127:15,19,21 211:14,22 main (23) 3:21 43:14,17 live (2) 83:4 84:4 45:10,21,25 loads (1) 5:6 46:13 16 17 18 19 47:4 5 6 locations (1) 109:16 50:14.17.18 71:16 103:14 logically (1) 191:5 106:7,16 110:24 180:24 logos (1) 114:10 major (2) 43:18 181:4 london (3) 18:21 59:4 190:14

majority (2) 106:13 195:23 lone (2) 149:24,25 makes (2) 54:15 55:1 long (6) 67:11 82:9,24 making (7) 24:21 54:19 211:10 212:4,15 76:15 88:8 94:6 179:8 longer (23) 38:24 39:16,19 180:1 40:3,15 42:6 53:10 118:13 man (1) 8:2 142:20 143:7 144:17 145:3 manage (1) 212:11 161:15 16 162:1 5 management (2) 24:21 163:20,21 164:2 165:2 71:12 191:3 192:22 211:18 manager (6) 28:8 43:4 look (105) 7:9 8:15 9:24 12:9 143:21 176:16 188:12 15:3 16:22 17:12 19:11 205:7 23:22 29:11 30:12,17,24 managers (3) 109:1,1 153:21 33:2 35:5,10,13,20 38:6,10 manchester (3) 7:16 8:24 42:20 43:1 44:10 15 9:14 50:3.10 53:2 56:15 manoeuvre (1) 61:15 57:5,8,9,13 58:7,8,10,19 manufacture (4) 62:14 62:3,4,17 63:7,14 64:2 185:2,23 205:16 65:10,14 66:4,24 71:3 manufactured (1) 124:3 72:19 74:3,23 75:12 81:19 82:20 86:23 93:2 100:9,10 206:14 101:8 102:12 106:18,19

manufacturer (3) 22:9,11 manufacturers (4) 205:17 206:21 208:13 209:1 many (3) 59:10 94:6 192:14 march (14) 58:10 61:18 63:24 65:11 69:9 70:24 71:4,22,23 73:21 74:18,19 75:1 185:9 margin (1) 54:4 margins (1) 54:7

mark (8) 44:21 160:1 167:9 180:15 181:10.16.17 182:10 market (54) 12:14,16 13:9,19 14:17,20 21:6,16 24:7 25:11 31:18.22 36:1

43:6,11,25 46:10,16 75:17 82:3 85:22 97:13 98:19 103:22 109:8 111:2 113:7,13 114:13 118:23 119:21 142:13 145:8,16 146:22 147:5,17 152:16.17.24 158:22 159:5 170:15,15 172:2 194:15,15 195:5,13,14,15,22,25 205:18

marketing (22) 10:11.17 30:6 31:13,23 33:7,10,13 34:11,21 38:4,13,23 39:11 43:21 105:20 106:2 152:8 156:25 182:14 206:18,23 markets (1) 158:19 martin (38) 1:3,8,17,19,22 2:4.7.11.23 53:8.13 55:9,15,19,24 56:2,4 114:5 115:10,18,23 116:2,5,7

166:6,10,16,19 211:17,25 212:11,17,22 213:4,7 masses (1) 6:20 match (1) 109:23 matched (1) 113:2 matching (1) 110:11 material (17) 23:24 39:11 49:9 51:21 60:8 64:8 115:5 129:25 134:1 148:22

119:13.18 165:25

Opus 2 Official Court Reporters

168:7.15 174:18.21 175:6.8 188:16 materials (19) 2:5 38:13 51:3 52:22.23 85:16 94:4 95:6 96:9.20 109:23 114:2 125:16 185:5,25 186:3,9 205:25 206:21 matter (10) 14:5 37:19 90:6 100:13 101:3 124:18 132:5 141:12 188:22 197:1 mattered (4) 142:2 147:6,12 154:12 matters (1) 208:21 maxwell (39) 44:24 46:12 109:11 150:9 151:6 152:8,11 180:15 200:22 201:4 203:15,16 204:7 205:2,6,9,10,15,21,22,24 206:8.8.11.12.15.18.25 207:7 208:1.7.9.16.22.24 209:4,13,19 210:24 maybe (4) 46:2 59:3 69:19 118:9 meakins (7) 201:8,14,17 204:4,16 211:12 212:19 meal (1) 182:20 meals (1) 183:1 mean (25) 14:24 33:18 44:4 49:14 92:18 96:6 97:10 111:16 112:16 119:4,23 126:8 138:2 141:7 149:1,3 163:12 170:16 171:3 173:17 176:5 194:13 198:16 205:20 210:24 means (1) 97:7 meant (8) 12:13 65:5 102:2,15 103:6 123:25 149:5 193:15 meantime (2) 93:14 204:14 mechanical (3) 156:23,23 157:13 meet (2) 62:10 204:4 meeting (49) 21:20,22,24 27:14 38:15.17.20 46:25 50:16.17.22.25 51:10 52:4,10,12,20 57:23 58:5 63:23 64:2 65:11 70:24 108:18,19,23,25 121:16 122:6 155:21,24 156:3 157:6 159:1 176:19,22 177:4.16 178:5.8.10.14 179:6 180:2.3.6.7 204:7.10 meetings (16) 39:25 52:20 92:12 172:6 176:12,13,15,17,23 177:4,5 178:18,22,24 179:1,9 melbourne (1) 17:24 members (3) 1:5 3:3 112:10 mention (4) 12:1 52:6 92:14 184:13 mentioned (1) 127:20 mermoz (1) 27:4 merxheim (39) 5:8 6:1 22:2 24:21 25:6 72:15 79:11 84-11 86-10 90-19 22 99-2 108:20,21 110:14 113:21 118:17 119:1.2.11.14.20 120:18 121:2 130:16.22 135:6.7 141:3 153:21 162:21 163:20,25 172:8 174:25 175:1 179:11 188:4,11 nessage (18) 40:17 83:7,12 87:9,18 88:14 93:2 106:25 108:3 109:11 110:5 116:10 146:1 149:10.13.22 159:1 189:23 messages (7) 2:9 88:17 109:19 110:3 112:9 113:16 met (8) 49:5 175:23 176:2 204:5,5,6,8,20 met0000053158p0238 (1) 131:23

met000531918 (1) 69:16 met0005319710 (1) 176:8 met000190633 (3) 47:16 met0005319711 (1) 203:12 met0005319717 (1) 169:24 met0005319720 (1) 90:13 metal (1) 49:24 metallic (1) 125:18 method (2) 70:6 184:14 met0001991710 (2) 44:12 methods (1) 136:9 metre (9) 54:15 127:5 met0001991711 (1) 109:10 128:13.15 129:3 168:20.25 met0001991712 (1) 114:9 170:8.20 met000199172 (2) 46:23 metres (4) 67:3 145:12 170:5 171:2 microphones (1) 1:11 met000199182 (1) 74:24 mid2012 (2) 27:15,21 mid2014 (2) 179:7 180:8 middle (1) 44:24 met000199192 (1) 56:18 middleman (1) 206:16 met0001992031 (1) 75:25 midmorning (1) 211:21 met000199205 (1) 71:21 might (15) 6:21 27:25 66:4 84:16 100:25 119:13 met0005315732 (1) 78:4 129:5.10 130:19 132:7 met0005315733 (1) 78:10 168:10,14 173:15 199:4 met00053158172 (1) 20:21 211:18 met00053158p04134 (1) mike (5) 160:3 161:9 167:11 180:17 188:21 met00053158p04135 (1) millennium (1) 18:2 millett (28) 2:24,25 3:2 met00053158p04136 (1) 52:25 53:12,14 55:7 56:4,6,7 114:3,6,7 met00053158p04137 (1) 115:6.11 116:8.9 119:19 165:24,25 166:20,21 211:5,17,20 212:5,17,21 mind (5) 11:14 12:25 118:16 met00053158p06171 (1) 144:25 160:14 mineral (2) 85:4 116:17 met00053158p06189 (1) minutes (4) 53:10 90:1 150:8 153:13 missed (1) 155:25 missing (2) 156:1 174:2 mistakenly (1) 147:4 mobile (1) 2:7 mockup (7) 174:19.21.22.23.24 175:4 met00053158p10107 (1) 180:24 mode (2) 76:11 77:14 met00053158p10108 (1) mohit (2) 62:6 65:21 moment (9) 23:24 26:16 met00053158p10156 (2) 28:17 53:6 55:8 84:8 115:7 165:24 193:14 met00053158p10157 (3) monday (1) 78:8 money (1) 171:18 met00053159282 (1) 150:5 month (3) 110:4 155:23 met0005316212 (1) 100:10 184:9 months (11) 24:7 64:1 65:11 met0005316213 (3) 12:9 131:8 184:23 191:3 192:14 met0005316214 (2) 151:1 201:10,12,13 204:12 noorebick (38) met0005316218 (1) 184:20 1:3,8,17,19,22 2:4,7,11,23 met0005316221 (1) 65:15 53:8.13 55:9.15.19.24 met0005316225 (1) 178:17 56:2.4 114:5 115:10.18.23 116:2,5,7 119:13,18 met0005316227 (1) 121:15 met0005316229 (1) 25:16 165:25 166:6,10,16,19 met000531623 (1) 201:3 211:17,25 212:11,17,22 met0005316231 (3) 7:5 9:16 213:4.7 more (61) 5:5 24:4 25:14 met0005316232 (2) 101:9 29:4 38:2 44:2 52:14 54:1.3.15.23 56:9 107:3 met0005316233 (1) 102:12 110:16 113:14 114:19.23 met0005316234 (2) 17:16 120:5,5,5 127:18 129:2 136:21 137:18 139:6 153:5 met000531624 (1) 205:3 156:18 163:17 167:18 168:15 170:3.14.16.19.19 met0005317310 (1) 8:17 172:6 173:16 177:1 met0005317314 (1) 9:12 179:3,3 187:25 191:2 met0005317315 (1) 9:24 202:20.21 204:1 met0005317379 (2) 89:16 207:10.17.21 208:2.11.19 209:5,6,15,17,23,24 met0005318713 (2) 53:17 210:21 211:22 212:6,19 morning (14) 1:3,6,7,19 2:19 met0005319028 (2) 38:7 3:3,3,4 15:19 80:16 90:1

132-14

60:13

109:6

108:15

174:7

136-23

135:17

135:25

21.21

27:13

27:15

155:21

156:20

189:21

188:5

80:7 86:24

79:21 81:21 116:11

138:18 140:20

207:5

15:5

102:11

26:15

93:3

41:2

met000531625 (1) 3:9

met0005319038 (1) 193:3

met0005319039 (1) 193:18

met0005319111 (1) 41:13

met000190632 (1) 43:2

met000190634 (2) 58:8

met000190635 (3) 74:4

met000199173 (1) 46:7

met00019919 (2) 56:15

met000408081 (1) 8:14

met00053158p0435 (1)

met00053158p0733 (1)

met00053158p0735 (1)

met00053158p0736 (2)

156:16 157:25

70:25 162:23

121:21 127:11

194-23 moved (1) 78:16 moving (2) 19:7 190:1 ms (33) 1:5.6.14.16.17 3:4 11:23 27:23 42:22 53:15 55:10,20,22 56:8 98:13 115:12,24,25 116:10 134:2 137:21 151:18 166:1,11,13,22 185:8 211:11,15,19,25 212:5 214-3 much (20) 1:12.22 2:11 3:2 12:11 13:24 46:2 53:14 55:15 115:19 116:9 123:11 141:16 152:8 166:6,16 173:2 211:18 212:12 213:4 mulk (1) 82:22 multiple (2) 111:4,9 must (7) 4:18 23:18 58:13 118:15 148:13.19 181:23 mustnt (1) 23:18 myriad (1) 167:17 myself (7) 6:2 16:9 51:13 62:12 72:16 77:6 176:20 name (5) 27:5 34:3 80:10 139:15 188:3 namely (3) 42:5 147:11 182:15 names (4) 33:9,12,22 114:13 national (15) 17:7 24:1 67:7 68:9 139:14 141:23 142:3 146:22 154:11 165:22 192:8.24 205:7.8 209:3 natural (3) 50:24 51:19 110:15 naturally (1) 43:11 nature (7) 9:9 34:22 59:24 60:4 88:5 124:17 194:8 nbs (3) 123:8 131:14 144:12 near (3) 17:21 27:2 78:15 necessarily (23) 12:21 20:5 36:17 64:6,9 91:18 94:18 97:2,17 112:1,3,23,25 113:25 114:1 124:20 141:19 148:3 170:15 182:18 190:4 193:12 195:1 necessary (10) 2:15 5:24 12:1 21:17 23:12 62:12 68:18 72:15 84:14 119:12 need (13) 1:23 35:11 36:25,25 62:22 114:22 121:14 122:15 127:8 163:24 169:24 188:25 201.2 needed (15) 13:5 35:4 42:10 72:10.13 96:21 102:3.16 118:25 158:23 159:6.10 175:20 185:21 186:13 needing (1) 88:23 neednt (1) 32:25 needs (2) 43:16 113:11

negotiate (1) 129:5

176:20

neil (4) 65:20 126:22 127:7

neither (2) 12:13 101:24

newly (1) 168:14

news (2) 27:11,17

never (13) 4:16 5:14 18:8,8

30:5 57:18 61:4 70:14,17

108:5 176:2 183:1 198:6

next (18) 23:23 55:20 56:17

66:25 77:24 79:19 94:10

109:10,19 114:8 124:6

133:11 135:24 164:25

nobody (6) 18:5 25:8 35:9

nice (2) 62:10 182:23

nicholas (1) 34:1

92:19 187:7.11

nonetheless (1) 149:5

nonsmiley (1) 127:9

nonspecific (1) 65:6

nods (1) 80:5

none (1) 2:6

211:10.14 212:8

move (3) 25:13 135:13

mostly (1) 6:22

most (3) 34:10 55:2 145:18

190:19 199:21 211:11.16

nonstd (1) 125:18 nonvoice (1) 149:25 noon (1) 189:6 norm (5) 22:19 137:14 139:4 150:18 151:11 normal (2) 72:25 187:25 normally (3) 177:2,6 202:22 norms (1) 190:2 notable (1) 25:25 note (8) 53:4 65:24 74:7 83:25 84:20 86:5 156:6 191:2 noted (2) 189:18 207:6 notes (7) 139:2 177:4,6 178:18,22 179:8,15 nothing (13) 2:10,22 35:1,6 37:21 64:23 108:9,10,11 113:14 123:11 129:23 186-14 notice (4) 14:24 120:3.9 194:24 noticed (1) 66:21 notified (1) 84:19 notwithstanding (4) 24:13 25:10 57:19 130:8 november (7) 78:9,18,21 79:7 131:13 133:6 134:4 npd (1) 156:23 number (23) 25:23 26:12 31:24 43:7 44:5 47:19,25 57:8 80:9 81:17 105:4.5 106:3 127:3 135:12 160:5 163:5 170:9 174:3 185:16 192:5 195:22 199:11 numerous (1) 97:11 0 object (3) 108:5,10,10

objected (1) 107:19 objectives (1) 46:9 objet (1) 76:5 obliged (2) 56:12 57:20 observation (2) 83:25 84:3 obtain (1) 133:20 obtained (4) 15:15 20:8 113:24 139:20 obtains (1) 19:25 obviously (13) 44:17 81:17 83:18 84:11 88:18.23 91:22 135:6 136:17 149:7 164:20 204:8 207:19 occasion (2) 38:16 164:15 occasionally (2) 105:10 163:3 occasions (8) 3:20 97:11 113:22 175:10 176:4 177:12 192:5 204:5 occur (8) 84:8.15 85:9.17 142:11,17,21,24 occurrence (1) 9:4 oclock (2) 212:14,23 october (18) 20:22 48:20 50:13 57:23 58:20,23 59:8 74:8,15,20 75:1,18 121:25 122:5 188:6 189:19 190:8 192:14 oder (1) 188:22 offer (22) 16:14 51:11 86:18 93:23,25 95:11 99:24 109:23 116:21 117:5 118:22 119:20 130:6 171:9,10,14 192:6 196:6 197:3.15.21.23 offered (3) 16:13 99:7 198:12 offering (4) 96:9,9 119:14 office (3) 201:5 204:15,19 offices (3) 62:10 176:12 182-25 often (2) 43:17 105:12

ok (2) 127:6 193:12

okay (14) 32:3 82:13

88:13,13,24 96:10,19

115:17 148:25 166:5

170:25 177:22 206:24 212:16 once (8) 113:21 114:2 163:9 176:18 195:11 209:4.12 210:24 oneoff (1) 183:7 ones (2) 141:16 183:6 onetoone (1) 3:22 ongoing (1) 203:22 onset (1) 54:8 onto (8) 65:2 71:4 73:18,23 74:20.25 78:17 179:15 onward (1) 206:7 onwards (2) 120:4,11 open (4) 15:7 63:6 64:11,12 opened (4) 123:18,22 124:18 140:13 opening (1) 123:19 operate (1) 110:22 operating (3) 25:3 110:22 164:6 opinion (5) 194:4 197:7,16,21 198:12 opinions (1) 197:24 opportunities (1) 47:19 opposed (4) 59:18 60:3 77:15 184:14 options (3) 51:10 167:14 168:11 order (13) 4:17,25 26:9 61:23 69:24,24 72:21 133:18.20 146:12 157:14 158:25 181:6 ordered (6) 25:24 26:7 71:18 101-22 184-24 196-5 ordering (3) 167:16 184:25 196:14 orders (2) 195:24 196:1 ordinary (1) 187:24 organisations (4) 3:18 25:21 114:20,24 original (2) 15:21 26:9 originally (2) 26:10 128:22 originals (1) 132:3 origination (1) 43:5 others (13) 33:21 64:25

65:1,2 66:6 88:4 117:9,22

118:5 139:24 149:19

otherwise (3) 21:7 88:25

ought (2) 77:24 78:1

outside (3) 92:23 157:2

over (37) 1:14 3:24 5:8 6:6

40:9 55:5 59:10 64:10

78:10 80:17 82:17 88:2

177:12.13 184:23 185:15

187:15,20 193:18 195:22

201:25 204:8,10 209:25

overall (4) 17:2 54:20 68:17

own (7) 8:7 35:2 86:13 112:5

pages (3) 26:15 30:13 136:24

paint (2) 16:12 51:11

pair (2) 28:20 153:12

panel (12) 1:4 3:4 20:14

83:6.21 124:3.8 125:24

panels (18) 26:22,24 29:20

120:3.10 131:10 144:15

36:16 56:13 82:21,25

126:6 130:24 135:21 136:1

74:11 122:2

painted (4) 50:10 51:21

169:5 176:5 193:13

210:13 213:1

overclad (1) 63:3

owe (1) 181:20

owned (1) 8:8

overnight (1) 212:24

139:1

115:15 153:8 160:18

168:25 172:1 176:4

16:16,17,22 28:12 34:16

outline (1) 62:25

175:18 180:16

100:14

193:22

155:2 161:6.16 163:5 185:10 205:21 206:11 204:22 paste (1) 11:17 pay (1) 70:7 pdf (1) 163:6

paper (2) 83:2 84:1 paragraph (72) 3:10.15 7:4,6,10,15 9:16 12:10 15:5 17:16 25:16,17 26:15 38:7.9 39:22 41:1.4.13 43:2 47:16 53:17 54:6 58:9,11 60:13 65:14 66:24.25 69:15 70:25 74:4 82:14.20 90:12 100:11 101:9.12 104:25 116:12 121:14.22 122:1 127:12.14 138:18,19 139:21 151:2 161:23 162:24,25 167:12 169:23 176:8,9 178:17 180:19 181:1 184:21 185:12 186:7.19 193:3.5.19 197:6 201:2.20 203:12 205:4 207:5 paragraphs (6) 94:8,9,12,13 99:10 103:14 paris (3) 17:21 26:18 27:2 part (32) 1:10 3:12 4:2 11:5 16:4 17:7 27:14 31:23 38:10 61:2 75:20 79:20 82:23 100:16 106:1 111:4 123.7 9 22 131.23 152.8 155:20 158:8 162:4,24 176:17 178:25 185:9 194:7 201:22 205:22 212:7 participants (1) 211:23 particular (32) 4:13 6:12 9:3 18:12 38:10 41:8 58:2,4 61-10 15 77-11 82-17 87:23 101:19.22.25 110:20 123:23 175:8,14 177:3 179:6 180:2 184:13 194:5,5,8 197:8,8,17 199:2 particularly (6) 109:15 111:24 124:21,24 125:3,4 partners (1) 8:5 parts (3) 10:16 27:22 186:18 party (5) 54:18.21 74:10 79:8 173:23 pass (10) 13:18 81:20 106:9,11,19 111:5 131:2 133:21 157:18 169:10 passed (9) 33:25 80:8 81:20 82:6 83:17 85:7 117:9 149:23 202:12 passing (5) 83:14 87:5 88:17 106:16 154:23 passingly (1) 209:20 past (3) 25:24 190:4 193:11 pasted (1) 10:25 pasting (1) 11:12 patina (13) 50:3,7 51:5.8.18.24 52:3 58:12 59:22 60:3.10 61:9.19 pause (1) 26:14 pausing (1) 163:12 pe (185) 5:22 9:18 13:19 18:17 19:13.16.21.21 20:7.13.23 21:9.16 23:1.2.6.16.24 24:4,6,10,15 25:9,25 30:20,21 31:2,14 32:17 38:14 39:4 40:3 42:6 52:8 53:20.24 54:1.8.13.15 55:5 67:16,23 68:24 69:7 74:12 82:17 83:2 84:1 86:18 93:17.25 95:22 96:24 116:20 117:5.11.23 118:22 119:14,21 120:3,9,21 121:2 122:2 127:17,18,19 128:3,15,18,21,23 129:2,4,6,9,20 130:6.10.13.18.24 132:19 133:2,8,10 134:3,11,19 135:20 136:10.13 137:13,17 138:23 139:4,6

met0000053158p0239 (1)

142:7.8.19 143:6 144:13.16.20 145:1.9.9 146:3 150:13,17,24 151:11 153:3.19.25 159:10 161:16 162:18 164:17.25 165:7,8,18,19 168:22,25 169:17 170:11.23 171:3,12,15,19,23 172:2,2,4,5 178:6,12 183:20 184:3 185:17 186:25 187:12 188:22 189:3.14.25 190:11 191:14.20.24 192:6,8,15,22 193:9,24 194:13,15,18 195:6,14,15,21,23 196:4,5,6,9,10,10,12,13,23 197:16,20 199:10,12,23 200:2.10 pecore (1) 170:4 pecored (9) 18:10,13 84:8,15 86:14 118:2 131:13 144:15 153:15 pending (1) 204:16 pendleton (2) 7:15 9:17 pendletons (4) 8:15,23 9:13 12.24 penny (1) 167:15 people (33) 13:4,13,22 22:1,2 24:21 25:5,6,6 28:5 33:13 45:24 64:8 68:1 80:9 81:18 82:23 83:11 85:15 89:1 101:6 109:4 114:17 115:4 117:15 135:7 138:8 175:20 182:16 185:7 194:3 197:6 207:20 per (18) 53:22,23,24 54:11,12,13,15 125:15 126:13 127:5.15.19.21 128:13,15 129:3 168:20,25 performance (13) 20:15 39:6 41:8,9 42:14 52:2 118:24 186:22 187:8,12,22 207:15.18 performed (1) 20:23 perhaps (13) 31:12 47:4 61:9 67:22 72:12 75:1 86:17 101:12 108:20 122:8 140:15 173:20 211:21 perils (4) 85:2,24 116:13,15 period (13) 3:25 16:14,17 28:16 36:22.23 173:18.25 174:3 175:13 194:25 209:25 210:13 periods (1) 177:13 permission (5) 59:22 60:2,7,7,8 perseverance (2) 181:19 182:4 person (4) 100:14 154:25 158:21 191:6 personally (1) 126:11 persuade (1) 52:21 persuaded (1) 173:5 peter (25) 15:17 16:2 22:3 28:8 33:23 38:2 79:4 80:14 89:19 90:9,9,15 91:1,3 93:5 107:10 108:2 135:9 138:6 169:23 175:22 177:9 180:8 201:21 202:19 phase (1) 167:16 philippe (4) 34:5 132:6,16 188:21 phone (2) 2:7 150:15 phoned (1) 77:8 photographs (2) 59:6 174:15 photos (1) 59:3 physical (1) 202:6 pick (3) 14:24 26:17 160:14 picked (3) 14:22 77:6 99:6 picking (1) 106:18 picture (3) 63:12 78:12 109:14 pictures (4) 59:10 77:25 113:24.24 piece (1) 130:25

pieces (2) 20:13 78:16 pin (1) 209:10 piper (1) 28:23 place (6) 43:11 59:23 71:3 176:13.18 191:20 placed (1) 39:13 plainly (1) 55:25 plan (2) 167:15,21 planners (6) 172:13,16 173:5 174:19 181:3 185:19 planning (2) 160:3 180:22 platform (1) 43:25 play (2) 78:13,13 played (1) 186:16 plea (1) 158:20 please (84) 1:9 3:5,9,11 7:5 8:17,19 9:16,23 12:9,10 17:15 21:21 23:23 25:16 27:13 28:19 30:12 37:9 38:7 41:1 42:24 43:1 47:15,16 53:15 55:11,13 56:16 58:8 60:12 62:3,12 63:11 65:15 72:20 74:4.24 89:17,23 93:3 100:10,11 101:9 114:9 115:13,14,18 116:10,12 121:21 122:20.25 123:2.6 126:16 127-11 132-13 135-16 136:5,23 137:12 150:15 151:2,2 156:15 158:21 159:25 160:16 162:23 166:2.2.6.23 174:2 176:8 178:16 184:19 188:5 191:2 193:4 199:7 205:2 212:24 plus (3) 85:4 116:17 212:2 pm (5) 115:20,22 166:7.9 213:8 pointed (4) 9:11 163:3,15 198:6 pointers (1) 33:3 points (8) 6:8 9:25 15:16 38:1 109:20 124:2 153:12 156:17 poland (1) 36:4 policy (4) 198:11,16,17,21 polyethylene (1) 135:22 polyethylenecored (1) 83:21 polymer (1) 125:24 pone (1) 127:7 poor (1) 20:15 portal (1) 71:16 position (10) 38:19.24 39:5 41:3.17 102:1 131:9 183:19,24 207:9 positive (6) 146:12 147:2,21 148:4,13,16 positively (1) 147:4 possibility (1) 133:17 possible (2) 133:13 145:21 possibly (18) 8:2 31:23 34:2 47:25 51:3 75:11 85:8 87:19.24 88:12 91:1 108:22,22 129:5,11 135:9 152:25 168:2 post (2) 34:13 37:2 posted (1) 34:16 potential (3) 71:5,7 74:10 potentially (2) 111:7 182:2 practice (7) 94:12 102:5 104:11 118:4.12.14 124:18 practices (1) 3:24 precisely (2) 25:11 112:18 predominantly (5) 194:17 196:4.12.23 197:1 prefa (4) 188:20 190:13.22 192:21 preface (1) 25:18 preferred (2) 167:2 172:12 preparation (1) 65:10 prepared (4) 3:11 107:12

present (12) 11:19 21:23 22:1.2 52:23 130:9.19 142:12 155:24 156:3 176:21 177:17 presentation (42) 3:11.12.17 4:10,13,17,21,25 5:3,11,21 7:3,9,11,12 8:15 9:7,23 10:2 12:17,21 13:10,15 15:8,12,14,17,19,21 16:3,5,7,8,10,23,25 17:2 44:11 108:14.17 111:13.25 presentations (13) 3:6.18 4:1.8 5:18 6:4.14 12:23 13:1 15:13 45:8,19 110:1 presenting (3) 23:5 112:7 161:22 press (1) 81:24 presumably (2) 111:20 204-11 pretending (1) 104:20 pretty (1) 83:8 previous (15) 17:17 87:6 88:15 101:12 102:11,13 118:21 137:17,19 139:5 140:20 151:8 156:19,20 164:8 previously (5) 37:1,2 141:2 149.7 187.17 preweathered (1) 59:2 price (25) 52:12 54:21 60:18 62:14 63:22 83:3 127:4.15.16.17.18.20 129:2,4,8,9 168:15,19,21 169:4,17,21 170:1 171:3,6 prices (2) 53:19 170:18 pricing (3) 43:13 60:14 111:7 primarily (2) 105:8 211:9 primary (1) 43:4 principal (1) 47:2 principally (2) 194:15 195:14 privately (1) 172:7 proactively (4) 101:21 121:17 122:7 126:12 probably (13) 38:9 46:2 53:4 82:8 83:23 84:17 91:21 94:19 117:22 170:14 177:14 197:4 211:20 problem (1) 2:16 procedures (1) 105:17 proceed (2) 64:14 180:22 proceedings (1) 213:2 process (8) 68:11.11.23 112:12 136:18 137:23 156:23 201:22 processes (1) 112:19 produce (3) 51:20 62:13 63:22 produced (4) 28:24,25 29:8 69:23 producers (2) 85:5 116:18 produces (1) 69:24 product (64) 15:10 22:13.20 28:18 29:25 35:24 36:3,19 38:14 39:6 42:15 43:5,8,13,15 49:24 50:20.21 60:15 64:25 67:6,11 68:8,16 74:11 79:25 86:5.6.7 100:12 101:3 102:5.18 111:21 113:11 122:1 124:7 126:1,3,5,6 127:21 130:22 132:19 135:25 141:11 142:14 159:13 160:19 161:25 171:7.7.9 176:16 183:20 185:2,23 191:4 194:7 199:1 201:25 202:1 209:1 210:17 production (2) 70:7 109:4 products (23) 22:7 29:14,22 48:25 49:5 54:8,19,24 61:8 113:25 117:11,18 121:2 145:22 153:11 182:16

profitable (1) 54:23 programme (5) 3:13 71:5 74:9.14 121:22 project (87) 7:12,14.15 8:16.23 9:3.17 10:14.21 15:8 25:25 26:2,3,10 42:22 43:16 47:22 48:19.21 49:15 50:15 56:20 58:18 59:3,13 60:22 61:10 62:11 63:20 64:4.15.23 66:10.16 70:21 72:10 73:18.23 74:1.1.9.14 75:12.14.19 79:17 92:12 93:22 95:7.21 96:23 101:22 106:4 111:22 113:23 120:14 121:8 122:19 123:9 124:17 129:21 130:1,8 134:19 158:24 159:24 163:10 164-13 167-23 168-23 170:11 171:2 175:14 176:11,15 177:24 183:14 184:24 185:9,19 187:7 190:11.14 191:15 194:9 197:17 199:2 projects (31) 6:21,23 12:24 25:24 44:3 45:2,3 46:1 61-11 66-13 71-17 93-18 22 94-5 95-1 97-22 98:4,24 99:13,21 111:7 113:25 114:2 156:22 163:11 168:1 174:16 183:5 185:6 203:6.22 promote (6) 4:4 45:15 56:13 57:20 61:8 82:24 oting (3) 43:10 110:12 121:17 promotion (1) 4:2 prompt (4) 35:13,20 72:4 117:10 prompting (1) 119:16 proper (1) 61:22 properly (1) 59:23 proposals (1) 181:4 proteus (1) 124:8 provide (12) 14:8 16:11 34:7,9 60:14 65:24 163:6 175:4,9,19 185:20 194:4 provided (27) 11:7,9,21 13:6,14 28:3 30:5 31:21 32:11 33:5,24 56:19 57:1.8.18 60:17.18 70:15 86:12 125:12 139:21 153:25 174:3.6.8.11.19 providing (14) 32:24 58:13 64:7,22 96:20 102:7 131:20 141:3 165:4,15 175:15,18 187:23 197:7 public (2) 75:17,20 publication (1) 27:11 pull (3) 10:11 72:15 89:21 pulled (4) 16:15 17:2 162:13 171:11 pulling (4) 9:7 10:10 90:24 144:22 pure (1) 60:3 purely (4) 69:20 113:6 206:21 209:7 purpose (5) 13:17 70:12 87:16 114:14 176:14 purposes (4) 48:21 66:11 69:21 111:14 push (3) 52:19 109:24 182:16 pushes (3) 189:25 193:8 194:12 putting (12) 10:17 11:19 12:22 13:1.2 98:6 104:17 144:17 181:19 182:3.5 196:19

q (706) 4:1,8,12,17.25

5:9,13,17,20 6:3,11,25

7:3,20,25 8:5,7,12,22

9:4,10,23 10:13,19,25

11:3.5.12.17.23 12:8.23

148:1,7,12,19,25

184:23 185:1 194:5.17

professional (3) 3:13 48:4.9

195:6 197:8 198:13

profit (4) 54:4,7,18 55:2

13:7.15 14:1.14.19.24 15:3 16:2.10.18.22 17:3.10.12 18:5.9.12.16.20.24 19:1.4.6.11 20:2.7.11.20 21:1.4.8.14.20 22:6.11 23:9,11,14,22 24:13,23 25:2.8.13 27:1,4,8,11,13,25 28:3,7,15 29:4,11 30:8.10.12.24 31:7.9.11.16.20 32:1.3.10.14.20.24 33:4.9.14.18.23 34:1,5,7,9,12,18,23 35:3,9,13,18,25 36:8,12,20,25 37:7,13 38:2,6 39:18,22,25 40:2,7,9,12,17,20,25 41:7,11,16,21,25 42:3.5.13.19 43:24 44:4,9,15,21 45:2,5,16,18,21 46:4.6.16.21 47:9.14 48:2,7,10,14,18,24 49:4,10,14,22,24 50:2,6,11,13,20,24 51-2 5 9 14 16 22 24 52-2 6 10 12 14 19 54-4 23 55:1,5 56:15,25 57:4,13,16,18,22,25 58:2,6 59:21 60:1,6,10,12,24 61:1.7.11.17.21 63:9.19.23 64:1,12,20 65:7,14 66:21,24 67:15,22 68:4,20 69-4 9 14 20 23 70:3.5.11.17.20 71:3,11,14,20 72:4,8,18 73:17,21 74:3,18,23 75:10.12.16.23 76:14,19,24 77:2,10,14,17,20 78:25 79:3,12,18 80:3,6,12 81:9.19 82:10.13 83:10.14.19.25 84:3.6.15.20 85:9.17.24 86:4,9,13,17,22 87:13,16,21 88:1,3,5,10,14,17 89:1,4,9,13,16 90:5,20,24 91:5,7,10,17,19,24 92:8.10.14.18.22 93:2 94:20 95:3.7.11.14.19.24 96:6.11.15.22 97:6.20 98:3,13,23 99:10,19,23 100:2,9,25 101:8 102:23 103:3,6,11,13,20 104:3,11,17,25 105:19,22 106:1,15,20,25 107:3,6,10,16 108:1,8,14,23 109:6 110:20 111:10.16.20 112:4.15.25 113:9.15 114:20,24 116:15 117:1,3,8,17,20 118:1,4,9,19 119:2,4,7,23 120:1.7.13.20.24 121:6,10,13,20,25 122:5,10 123:21 124:1.6.11.14.16.24 125:6.9 126:3.5.8.11.16 128:11,17 129:1,8,12,19,23 130:3,6,12,18,24 131:3,5,7,17,22 132:10 133:1,6 134:9,14,18,23 135:1,5,11,13 136:5,9,20 137:6.25 138:4.10.14 140:7.10.13.15.18 141:6,17,20 142:5,11,17,22,25 143:9,11,21,25 144:2,7,11,25 145:6,12,14,20 146:1.8.12.16.19 147:2.10.14.21

149:5.10.19 150:3.12 151:22 152:1,3,7,11,16,18 153:5.9.17.19.23 154:3.11.16.25 155:5.9.14.17.20 156:2,5,8,11,13,15 157:11,16,21,24 158:6,10,12,17 159:3,9,16,22 160:11 161:3,6,9,13,22 162:9.15.22 163:17.21 164:7.12.22 165:4.13.21 167:6 168:3.6.9.13.18 169:3,9,14,22 170:9,16,21,25 171:6,9,13,22 172:3,11,19,25 173:5,8,12,16,24 174:6.15.18.23 175:1.4.12.16.21.25 176:2,7 177:16,19,22 178:3,8,11,15 179:7,11,14,19,23,25 180:7,10 182:3,10,14,19,23 183:3,7,10,19,24 184-3 6 13 16 19 185:15 22 186:6 16 25 187:3,7,11,14,21 188:1,5,17 191:13,17,19,25 192:5.14.20 193:1 195:3,8,12,17,19 196:2,6,11,18,25 197-5 14 19 198:1.10.20.25 199:4.7.21 200:8,13,19,22,25 201:8,10,14,17,20 202:3.8.12.15.19 203:3,10,20 204:4,10,14,21,25 206:1,5,15,19,24 207:3,24 208:15,21 209:2,10,17 210:2.6.9.18.24 qualification (2) 165:6.16 qualifications (3) 158:23 159:6,10 qualified (3) 14:12,14 95:16 qualify (1) 164:1 quality (2) 29:15 105:23 quantity (1) 127:4 guarter (1) 59:4 quartz (2) 125:24 126:5 queries (4) 102:4,17 103:8 203:6 query (1) 88:5 question (39) 3:16 5:20 6:4,25 7:2 11:14 15:25 17:3 24:9 29:1 30:9 31:4 35:19 36:14 42:9.16 59:25 107:2 114:3 119:16 120:7 131:3.4 134:2 137:20 146:11 147:14 162:2 164:25 165:13,14 171:8,13 188:22 189:2 191:9 195:17,19 197:25 questioned (2) 14:23 107:21 questioning (5) 2:24 32:8 56:5 108:16 187:14 questionnaire (2) 99:4.7 questions (38) 3:1 5:5,7,10 6:12,15,20,24 13:4,23 14:4,9 28:17 35:21 36:18 42:25 53:5 70:15 87:19.21 91:23 93:15 109:9 118:15

146:10 157:14.17.18

214:5

171:11

quickest (1) 35:16

quickly (1) 174:1

187:18.19 191:2 203:23.25

208:11 211:22 212:6.18

quite (6) 9:4 53:11 108:12

quotation (2) 60:17 128:21

quotations (3) 43:14 85:1

120:8 165:13 211:6

quote (4) 63:19 126:13
127:18 128:17
quoted (5) 127:2 144:13
168:19 171:19,21
quotes (1) 196:10
quoting (4) 130:13 134:18
193:6,13

R
ral10032 (1) 19:18
ral30333 (2) 135:19 199:23
ral40339 (1) 199:11
radically (1) 23:14
raf (3) 136:25 137:1 138:6

raining (1) 78:16 rainscreen (12) 63:1 100:15 122:25 123:5.10.15 124:3,8 128:1 144:15 160:4 168:6 raise (2) 2:20 72:17 raised (2) 76:23 128:22 ramifications (1) 148:21 ran (2) 8:8,10 random (1) 83:4 range (7) 43:8,12 52:22,23 54:24 167:19 170:10 rare (3) 6:24 46:5 163:10 rarely (1) 79:10 rated (1) 82:25 rates (3) 123:2 126:19 127:1 rather (20) 3:16,23 44:5 53:9 87:4 104:9 105:3 106:12.23 108:23 111:9 113:9 150:4 154:6 167:21 171:20 176:16 196:7 205:13 208:7 ratings (1) 12:13 raw (4) 170:2 185:2,23 186:3 ray (1) 180:16 rb (8) 23:6 44:24 74:11,12 109:17 122:2.3 191:3 rbkc (3) 172:13 173:20 185:19 rd (1) 156:22 reacted (1) 86:3 reaction (9) 19:17 22:19 30:1 84:7 135:18 137:12 150:16 151:10 160:20 read (17) 8:12 82:7,12 83:7 85:6.7.9 102:24 103:16 106:22 107:21 117:8 123:22,24 137:25 196:13 197:6 reading (12) 37:12,19 83:9 84:15 95:25 96:12,12 97:3 99:14 101:17 161:10 175:7 ready (6) 56:2 115:24 116:5.8 166:17.20 realise (2) 24:9 154:25 realised (6) 29:21 64:18 145:7 148:20 159:11,16 reality (2) 145:6 154:3 really (33) 1:23 12:25 13:7,23 15:24 21:7 25:1 27:10.12 28:2 42:18 65:7 68:15 77:8 84:6 103:6 109:25 110:15 111:11,12,16 112:14,15 113:9 114:10 127:22 129:8 131:3 147:14 186:8 192:11 200:12 206:24 eason (39) 25:4 49:18,20 50:9 61:5 64:20 84:11 106:16 108:9,10 110:24 113:4 121:10 123:19,21,24 124:11 130:12 131:21 145:19 146:19,20,23,23,24

108:3 171:17

92:18 156:25

193:9 194:13

presence (1) 14:25

preparing (4) 43:14 56:22

prescriptions (3) 189:25

148:6 155:5,19 163:17

171:20,21 179:19,21

184:16 195:18 197:20

reasonably (5) 129:9 143:15

201:3 203:17.19

reasonable (1) 211:24

181:24 184:6,10

reasoning (1) 195:16

reasons (7) 27:21 100:22 105:22 106:7 121:10 134:16 148:16 reassurance (1) 88:23 reassurances (3) 88:12 96:8 97:15 recall (199) 6:12,20 7:2 11:4,16 13:11 15:1,1,24 16:21 17:11,17,21 18:11,14,15,19,23,24 20:6.10.25 21:3 23:13 25:12 26:7 27:3.5.24 28:2.6.13 29:3.3 30:7 32:19,23 34:22 35:12 36:24 37:6 38:5,20 40:1,4,16,19 41:10,15 49:8 50:8.23 51:1.7.13 52:1.5.9.11 57:21 60:5.18.25 61:12 63:8,15,18,21 64:10,12 65:13,21 67:4,20 68:5 74:6.16.22 77:1.9.10.13 78:22 79:15 81:16 82:9 83:9,16 84:2,5 86:16,20 88:4,6,11,16 89:3 90:21,23 92:16 24 24 24 101:17 24 107:5 15 108:7 22 111:13 112:12,12,15,16 114:15 119:3,4,6,17,22,23,24,25 120:23 123:19 124:10.13 128:8.22.24.25 129:18 130:2,3,5 131:16 134:5 137:21,22 139:10,17,22 140:14.17 143:12 144:5.9.22 147:24 148:15 149:2,15 151:14,19,21 152:20 155:7,25 157:5,10 158:5.16 167:23 171:10 176:13,21 177:3,20 178:4,5,8,10,14,23 179:5 180:2,5 184:15 186:24 187:2,6 192:3,19,25 195:7 196:18 197:18.24 199:6 200:7.16 201:23 202:18 203:25 211:4 recalling (1) 196:19 recalls (3) 177:16,23 196:21 receipt (1) 155:9 receive (3) 139:16 140:3 197:14 received (16) 63:4 65:20 81:10 92:25 117:8 123:17 137:2 138:1 142:11 143:3,6,16 163:9 177:2,3 195:4 receiving (8) 2:9 63:15 65:22 87:21,24 137:21,22 195:7 recent (3) 81:24 164:17 178:12 recently (1) 65:17 reclassified (1) 153:19 recognise (4) 34:3 83:9 137:22 159:2 recognised (2) 127:17 140:25 recollect (1) 90:17 recollection (19) 6:11 26:17 51:9 54:2,17 70:19 74:13 77:3 86:13 90:14 92:4 119:5 136:21 149:17 169:19 182:21 192:11 196:20 200:8 recommend (1) 105:7 recommendations (1) 160:7 recommends (1) 205:13 reconcile (1) 100:16 record (1) 8:12 recorded (1) 45:2 recording (2) 21:22 179:4 records (3) 70:21 178:20 recycled (2) 83:2,25 red (1) 109:19 reexamine (1) 117:10 ref (3) 80:25 89:20 122:25

27:1 71:20 74:23 reference (14) 8:13 15:9 20:20 32:17 38:13,22 41:12 62:21 90:13 122:14 124:7 158:4 164:1 193:7 references (1) 31:13 referred (11) 5:25 11:24 12:17 13:15 14:21 17:7,19 32:18 67:7 68:9 141:18 referring (3) 13:18 85:21 182:13 refers (1) 128:13 reflect (1) 73:9 reflection (1) 38:24 reflects (1) 112:5 refurbishment (9) 25:19,22 53:21 54:9 61:25 63:13 139:25 178:19 184:24 regard (2) 25:20 53:19 regarded (10) 5:23 47:2 83:12 85:10 142:7,14 159:20 165:1,22 192:23 regarding (6) 43:12 58:13 93:10,16 94:10 193:24 regardless (3) 161:6 190:11 191:14 regime (25) 12:12,15 14:2.16 16:20 19:19 36:1 136:11,15 194:2,6 197:9,11,13 198:4,15,23 199:2 208:18 209:2.3.12.12.21 210:10 regimes (3) 141:14 193:23 209:14 regions (1) 86:19 regret (1) 211:8 regulation (2) 22:17 24:6 regulations (7) 17:7 24:1 67:10 68:19 100:13 101:23 regulatory (7) 193:23 194:2,6 197:9,11 198:14,23 related (4) 61:2 87:23 127:16 138:24 relates (1) 135:20 relating (2) 138:23 213:1 relation (19) 5:6 15:15,25 16:6,13 28:10 32:17 38:12 40:5,6 58:12 101:11 131:10 133:10 134:15 145:22 170:1 186:10 187:8 relationship (14) 7:7 47:18,23 48:3,4,7,9,12,16 69:4,5 71:11 94:1 152:11 relationships (3) 43:10,21 44:6 relative (1) 131:19 relatively (3) 106:9 127:16 129:4 relevance (13) 44:18 85:18 114:24 139:12 140:19.23 141:8,9,16,21 146:25 147:5,16 relevant (62) 10:4,7,9,9,13,20 11:10,15,24 12:2,7,13,16 13:1,3,9,25 14:3,17,19,20 21:6.12.14 23:12.19 24:18 25:20 32:13 34:24 36:9 38:12 39:2 64:6,23 66:11 81:2 84:18 85:11 86:11 91:23 99:6 100:13 124:22.24 125:4 139:13 141:10,19,22 142:13 143:18 146:6 152:24 153:3 154:5,7 159:17 161:20 162:4.21 192:7 relied (2) 142:20 143:7 relying (1) 142:25 remain (2) 133:23 150:19 remember (116) 6:25 15:1,20 17:22,23 18:9,20

40:13 45:22 50:13.16.20.24 52:19 55:11 57:22,24,25 58:1.2.3.4 59:19.23 60:6.16 65:9 71:1 73:12 76:15,24 79:3,14 81:7 83:16 86:2 87:13.21.23.24 88:1 89:4,7,9,12,13 90:24 108:17 112:18 115:14 124:9,15 134:7,10 136:12,19 143:10,24 144:1 151:9.25 152:1.2 153:7 154:9 155:24 156:1 158:4,11 159:2,3,8 166:2 167:1 168:24 172:16,19 173:14 174:13,15 177:9,11 178:1,11,19 180:1,3,7 190:21 191:10 199:18 200:5.12.13 201:24 203:4 212:25 remind (4) 1:9,23 22:18 109:7 removal (1) 38:12 remove (1) 31:13 removed (2) 32:18 38:23 remy (1) 34:1 renderings (1) 66:3 reordering (1) 26:21 rep (1) 80:20 repeat (5) 59:25 120:7 153:12 184:22 185:1 repeated (1) 191:7 repeatedly (2) 6:13 162:17 replaced (2) 26:12 201:8 replacement (2) 26:6,24 replicate (1) 51:11 replied (1) 189:11 reply (1) 193:7 report (25) 19:18,22 80:18 87:7 89:20 93:12 135:19 137:13,17,19 138:23,24 139:3,5,18,19 143:14 147:17 150:16 151:10 152:22 176:22 179:16 180:1.7 reporting (1) 28:5 reports (9) 93:9 94:6 137:19 139:23 178:15,23,25 179:5,9 representative (3) 79:25 151:6 177:6 representatives (2) 2:13 177:5 represents (1) 186:7 request (4) 72:6,17 73:15 requested (11) 128:4 173:3 174:21 179:2 194:18 196:4,5,12,23,25 208:25 requesting (5) 4:6 26:24 35:1 38:15 76:21 requests (1) 72:14 require (2) 107:3 211:18 required (2) 101:25 206:12 requirements (3) 207:11 208:3.5 requires (1) 101:18 requiring (1) 104:22 reread (1) 103:25 residential (4) 26:2 75:16.20 120:25 respect (12) 39:11 120:13 121:3 123:15 124:17 130:7 183:8.14 203:6 207:11 208:3,5 respective (1) 176:12 respectively (1) 33:6 respects (3) 100:3 104:18 186:7 respond (5) 59:7 65:25 88:14 89:2 197:2 responded (2) 38:17 82:3

responding (2) 105:7 190:7

response (11) 82:5 83:16

89:6.10 102:6 126:20

143:9 181:16 189:22

routes (1) 114:19

190:16 196:14 responsible (4) 82:3,23 186:2.3 rest (1) 74:7 restrictive (1) 24:2 result (4) 20:16 39:12 133:1 143:22 results (8) 21:5 23:3,15 133:16 134:20,24 135:2 194:1 resume (3) 55:13 212:13,23 review (1) 62:11 revised (2) 37:22 153:2 reynobond (146) 8:20,23 9:13,18 10:1 19:13,16,21 20:7,13,23 21:9 22:23 23:1,2,16 24:15 25:25 26:3,7,9,12 29:14,16,22 31:14 35:22.23 36:1.11.19 39:16.19 40:3.14 41:8.23 42:6 43:5,8,11,25 44:2,25 45:15 49:1 57:15 59:1.12.14.17 60:2 61:8 67:16,23 68:24 69:7 76:10 93:16,20,24 94:3,4,10 95:12 99:24 105:4,7 106:17 19 111:3 113:18 115-2 4 117-11 118-22 123:2 125:4,8,17 126:19 128:7,18 129:25 130:13,18 131:13 132:19 133:8.10 134:3.11.15.19 135:20 136:10,13 137:13,17 138:23,25 139:3,6,14,23 141-23 142-7 8 143-6 144:13.20 145:1.9 146:3 150:13,17 151:10 153:11,19,24 155:1 159:5,10 161:16 162:18 163:4 165:17 173:9 176:17 178:6,12 180:23 181:19 182:3,5,6 185:17 189:1 192:8 197:16 199:10,12,22 200:2 205:13.24 reynobondreynolux (2) 8:19 46:8 reynobonds (1) 125:25 reynolux (4) 29:14 188:4,11,15 riba (6) 3:12,20 4:3,10,13,16 richard (6) 79:22,24 80:20 81:11.13 116:11 righthand (6) 30:24 37:21 45:6 75:2 89:24 132:22 risk (2) 130:19 184:13 ritter (3) 22:1,8,11 rivet (19) 9:18,21 19:21 26:4 77:15,15 117:12 134:3 136:10,14 138:25 144:16.20 145:9 161:7 165:8.19 184:14 187:4 riveted (8) 19:21 133:2.7.21 136:3 137:18 139:6 199:12 rivetedscrewed (2) 22:23 23:1 rivetfix (7) 19:16 20:8 173:6,21 174:10 187:9 200:11 rivetfixed (1) 174:13 rivets (1) 169:6 rob (1) 180:15 role (11) 23:13,20 178:25 186:16 200:22 202:20 204:23 205:8 207:7 210:25 211:1 rolling (2) 61:25 181:8 room (3) 2:1,8 166:4 roubaix (3) 27:4.18 28:1 roughly (1) 170:19 round (4) 169:20 170:12 176:5 177:13 rounded (2) 170:4 171:1 roundrobin (1) 91:12 route (6) 46:10 61:15 93:19 103:22 109:8 114:13

run (6) 8:8 62:3 136:24 167:8 180:14 191:10 russia (1) 36:4 russian (1) 29:7 rydon (7) 167:2,14 168:14 171:16 172:11 173:19 180:16 rydons (1) 187:22 s1 (2) 85:4 116:17 safe (7) 118:4,12,14 149-6 10 13 211-21 safety (13) 5:13,21 14:17 18:12 105:23,23 130:19 198:4 208:17 sakura (1) 125:22 sale (8) 11:6 39:3 43:5 121:7 158:23 159:7,10 175:16 sales (66) 5:18 27:14 31:21 33:8.14 34:3.6 35:9 38:3,25 39:12 43:4 46:24 65:10 72:12 75:3 79:24 94:19 96:3.6 102:4.6.8.17 103:7 108:18,19,25 109:1 112:7 113:16 121:15 126:23 138:21 139:12,20 140:15,19,23 141:8,21 143:5 145:7 151:6 155:21.24 156:3 157:2,2,6,7,11,22 158:6,8 159:1,5 162:16 172:6 177:5 188:12 202:23 203:13 206:18,19,23 salespeople (4) 28:7 109:3 197:10 198:12 salesperson (1) 198:21 salford (1) 7:16 same (26) 17:15 23:22 37:10 53:7 62:18 66:25 71:3 85:22 89:23,25,25 90:3 151:13,14 159:20 165:12 181:10 189:11 190:7,25 207:4.13 sample (7) 69:25 70:8 72:16 77:18.19 160:19 161:25 samples (28) 6:22 56:19 57:1,8,18,22 58:2 61:18 69:10,16 70:1,8,13,15,18 71:18 72:5.17 74:2 83:4 167:17 172:23 173:3 174:3,6 175:15 202:2,6 samplesmaterial (1) 160:4 sas (1) 47:19 sat (1) 144:7 satin (2) 125:18,20 satisfy (1) 72:6 save (1) 17:19 saw (15) 68:21,22 69:11 78:1 84:7 108:14 109:8 122:11 142:9.17 145:20.23 152:7 158:14 174:7 saying (18) 35:6 81:22 92:5 94:24 101:2 103:1 113:3 140:2 141:24 151:17 163:23.24 193:7 195:22 196:11 198:10 207:17 208:4 sbi (4) 132:19,23,23 133:19 schmidt (7) 38:15,16,20 53:25 54:14 80:15 168:21 schmidts (3) 53:2,16 78:3 screen (10) 15:7 57:10 71:7 75:5 78:6 89:21 91:10 123:8 132:22 135:21 scroll (8) 22:6 59:7 75:4 80:6 84:22,25 87:2 181:9 second (25) 3:7,8 9:15 12:8

routinely (2) 146:2 197:3 rubbish (1) 83:3 rules (1) 27:19

145:22 148:21 160:6 187:4 100:20 135:13 137:9 150:6

17:14 25:15 38:16 46:10

48:18 53:2.16 62:5 65:14

100:9 121:14 133:9 138:15.17 150:25 178:16 184:19 188:18 201:1 205:2.3 seconds (2) 133:12.13 section (7) 77:24 123:7,16 124:2 125:12 160:17 177:24 sections (1) 66:7 see (168) 1:14,19 7:5 8:18.20 9:10 13:7.15 19:19.24.25 21:25 22:4.7.7.13.15 24:13 27:16,20 28:21 30:14,16,18,20,21,22,25 32:3 37:15 38:1 40:25 41:3 42:5 43:2 44:16,22 46:7,14,23,24 55:24 56:18 57:7 58:20 59:3 60:4 62:16 63:2.12 66:2 68:5 71:8.8 72:18 74:24,25 75:8,13,14 76:3,12 78:4,7,11,14 79:19 80:7.8.10.13 82:5.22 88:14 89:17,24 90:8 91:10 92:18 93:5 94:22 111:10 113:19,22 114:11 115:6,6 116:2.13 121:23 122:25 123-4 7 10 14 19 21 124:1,4,4,9 125:11 126:20 128:6 130:7 132:11,21,23 133:1,3,4,11 135:20,23 136:1.2.3.6.6 138:24 139:21 140:2 142:5 146:19 150:5,21 151:12 152:18,21 156:16 160:4 9 15 17 162:13 163:7 166:11.14 167:8,13 170:25 174:1,12 176:5,7 179:14,25 181:9.15 188:7.17 189:10,21 190:6,15 193:5 196:11 197:5 198:10 199:14,17,25 200:3 202:8 203:11 205:1 206:1,5 seeing (11) 27:22 30:7 92:16 124:10.13.15 139:10 173:14 199:18 200:5 213:5 seek (5) 119:2 121:1 186:22,25 187:3 seeking (6) 102:6 106:25 110:22 144:3 194:16,21 eems (3) 147:10 190:17 191:25 seen (38) 21:17 23:12.19 39:14 59:21 60:1 62:19 65:18 74:16 81:24 86:23 87:17 91:25 92:21 103:13 108:1 116:19,24 119:11 120:25 129:13,23 132:7 136:16,18 138:20 139:2 141:19 142:6 146:25 149:21 150:24 156:5 161:1 168:19.20 174:6 198:17 selection (1) 117:21 selfsame (1) 112:10 sell (17) 24:14 25:9 51:17,21

55:5 59:22 60:3 67:12.18

109:21,22 122:8 145:17

170:18 198:3,22 205:22

selling (15) 21:16 43:7 54:24

148:22 170:17 172:4 199:1

72:16 91:17,19 107:4,6,12

108:3.12 139:18 140:16

146:1,8,12,13 147:3,17

sending (22) 39:10 59:10

64:15 70:12.18 81:13

101:17 106:21 107:17

91:12.15 92:10.22 96:18

149:16,17,20 153:8 154:10

86:14.18 110:10 121:3

122:7 126:12 145:23

send (33) 35:23 36:7,10

207:7

sells (1) 205:17

143:13 145:21

148:1,4,9,12,17

179:16 206:11

125:6 139:22 141:25 146:25 148:17 161:11 162:10 164:14 sends (3) 59:6 81:19 150:8 senior (4) 24:20 83:11 107:3 144:4 seniors (1) 88:18 sense (6) 96:17 105:3 106:1 114:23 131:1 207:1 sent (74) 5:7,25 6:3 28:11,12,14 32:2,4 36:8 37:2 38:14 40:2 62:25 63:4 64:4 69:10 72:5.20 76:2 77:5 80:13,17 81:4,17 83:11 84:11 85:14 87:1,6 88:15 89:1,13,22,24 90:11 91:11,14 92:14,16,20,21 93:4 94:14 96:7,14 97:5,19 99:4 101:15 107:24 110:4.6 111:14 112:21 116:11 117:20 124:16 128:6 134:7 139:16 143:17 144:12 148:15 149:21 150:5 155:15 160:24 161:3 167:9 174:15,23,25 175:1 189:22 sentence (6) 85:7,9 102:19 193-15 194-12 207-25 sentences (1) 3:14 separate (2) 176:11 200:10 september (3) 44:17 172:13 173:18 serge (11) 188:2,3,10,21 189:11,22 190:6,20 191:11 192-12 193-7 series (1) 103:22 service (3) 175:19 204:20,22 set (9) 4:24 14:12 22:14,25 23:3 103:24 105:17 127:3 156:17 setting (1) 104:4 seven (1) 140:21 several (1) 28:22 shall (2) 2:18 56:4 shape (1) 43:16 shared (1) 153:5 sheets (4) 26:6 69:25 113:18 169:6 shes (1) 77:6 ship (1) 72:21 shipped (1) 72:5 shocked (1) 83:14 short (6) 55:17 114:3.7 115:21 166:1,8 shortest (1) 82:19 shortly (2) 28:15 94:21 should (37) 5:23 9:10 16:19 20:3 25:17 33:2 34:20,25 38:23 39:1 46:21 86:18 98:9,10 101:12 102:3,16 103:7 115:7.10 119:14.20 131:11.25 143:22 155:14,15 173:21 176:23 183:23 189:3,18 195:5 198:2,22 204:22 211:16 show (17) 19:11.12.15 21:23 29:4 35:16 66:1,14,18 84:23 87:1 93:6 101:13 110:21 169:25 182:14 193:2 showed (4) 27:1 41:4 74:18 92:19 showing (7) 38:9 66:6,6 71:5 77:25 112:17 177:24 shown (25) 7:20 16:3 46:21 53:15 74:17 81:3 84:3.22 87:3 90:8 92:17 93:1 123:4 126:18 127:10 128:5 130:9 133:25 134:6,21 135:2 180:23 191:9 194:19 195:25 shows (1) 74:10

refer (7) 3:7,13 4:13 16:19 32:20 33:6,12,20,22 34:2 Opus 2 Official Court Reporters

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

side (19) 28:19,19,21,21

29:12 30:18.24 37:8 44:23

45:6 89:21.24 94:19 96:3.6

109:19 129:7 132:22 133:3

20:18.19.22.26:4.8

27:2.6.9.10.12.22.24.28:2

signature (1) 188:13 significance (2) 45:12 73:22 significant (2) 26:3 148:20 significantly (1) 207:22 silent (3) 128:6.8.12 silver (1) 173:9 simco (19) 7:8,12,21,22 8:5,23 9:6,14 11:6 15:8 88:2 89:18 91:11 92:1,15,21 105:9 109:18 117:21 similar (2) 146:1.1 simmons (7) 8:2.7.10.13 89:18 90:7 93:4 simon (1) 180:15 simple (3) 47:9 149:10,13 since (15) 40:4,4 43:6 82:24 85:6 97:6.10 133:21 134:6 136:17 175:7 207:10.22 208:2 209:5 single (5) 132:24 133:1 154:25 167:15 205:11 sir (47) 1:3,8,17,18,19,22 2:3,4,7,10,11,23 53:8,13 55:9,15,19,23,24 56:2,4 114:5 115:10,18,23 116:1.2.5.7 119:13.17.18 165-25 166:5,6,10,15,16,19 211:17,25 212:11,16,17,22 213:4.7 site (1) 115:5 sitting (3) 29:2 124:11 134:23 six (2) 109:17 163:9 size (2) 43:16 69:16 sizes (2) 69:18 70:1 skin (1) 51:20 skip (1) 127:23 skyscraper (1) 78:8 slide (10) 15:4 27:16,20 109:8 112:10,20 113:4,5 114:14 200:1 slides (1) 16:22 slideshow (6) 108:24 110:3,20 114:8 152:7 156:6 slightly (4) 61:23 69:19 173:16 180:10 slowly (1) 93:7 small (13) 26:5,25 91:13 93:20 103:21 105:4.5.11.19 106:3.7.10 111:8 smaller (4) 44:4 69:16,19 smith (6) 8:3,7 89:18 90:7 93:4 101:15 smoke (1) 173:9 socalled (1) 59:23 sold (3) 195:23 207:9.18 solely (2) 24:15.23 solicitors (2) 28:23 56:24 solid (5) 49:12,22,23 50:24 solutions (3) 7:22 62:15 124:4 somebody (8) 5:20 15:23 28:11 34:19 35:1 72:14 179:17 204:16 something (25) 4:4 13:22 14:22 24:19 25:7 27:6 35:15 76:17 110:13 128:19 131:17 143:17 147:25 148:1 154:17 162:19,20 167:25 168:16 171:23 175:7 198:8 202:24 207:12 211:2 sometimes (3) 99:2,11 109:2 somewhere (3) 10:22 169:20 204:20 soon (1) 60:18 sort (8) 2:16 73:25 88:23 90:18,19 111:8 170:10,20

sought (2) 60:7,7 sound (1) 8:9 source (2) 27:8 203:21 sources (1) 205:16 south (2) 18:21 174:16 spain (2) 24:3 36:4 spanish (1) 29:7 speak (1) 90:15 spec (4) 122:25 123:5 127:3 144:12 special (2) 109:22 110:11 specialise (1) 207:12 specialist (4) 9:2 43:17 185:3 205:17 specific (27) 6:23 7:2 15:14 27:5 46:1,19 47:6 59:19 65:5 79:1,2 109:11 118:25 119:2 130:16 143:19 152:22 164:5 174:13 176:15 178:20 180:6 190:11 191:19 192:1 195:4 209:10 specifically (27) 3:17 20:5 26:8,20 28:10 49:8 50:23 51:8 52:1 83:7 88:16 89:3,7,12 112:2,6 120:14 128-4 139-17 143-13 156-1 171-14 177-11 16 209-14 210:24 211:4 specification (20) 9:13 62:25 93:24 94:3 95:12 99:24 109:21 122:12 123:8.14 125:2 126:13 128:1,5 131:14 182:8 185:5,24 186-4 5 specifications (5) 45:9,17.20 152:15 208:12 specifics (1) 84:5 specified (2) 125:13 182:7 specify (1) 171:12 specimen (1) 160:6 specpdf (1) 122:23 spectra (1) 125:22 speculate (1) 77:2 spend (2) 12:11 171:17 spoke (4) 40:9 51:8 90:10 143:4 spoken (4) 58:13 150:15 201:21 211:11 spread (1) 134:16 spring (2) 144:14 172:12 sqm (6) 53:22,23,24 54:11.12.13 square (11) 54:15 127:5 128:13,15 129:3 168:20,25 170:5,8,20 171:2 squarely (1) 129:17 squaremetre (1) 54:21 stage (8) 17:5 60:21 71:19 93:25 94:11 143:2 153:13 192:18 stand (1) 71:11 standard (34) 5:22 13:19 15:13 22:14 23:16 29:21 80:22 85:3 86:5,18 116:16.22 118:2.22 119:15,21 128:23 130:7 142:7,19 159:11 160:19 161:25 162:18 164:25 165:7.7.18.18 167:19 171:7 190:1 199:11,24 standards (5) 17:8 24:4 29:19 81:1 193:10 standing (1) 145:1 stands (1) 132:24 subjects (1) 5:12

start (16) 17:14 25:15 42:24

73:25 78:3.7.11 114:18

127:6 135:14 167:16

started (7) 78:15 202:25

208:19 209:15,17,25

starting (5) 17:13 94:9

starts (4) 81:21 94:11

101:11 132:17

114:16 118:15 194:23

210:25

181:5,7,8 195:5 212:19

submit (2) 125:14 179:11

substantial (2) 12:24 26:1

substantially (5) 37:14 52:14

submitted (1) 71:25

submitting (1) 178:23

substance (1) 72:19

107:7,13,19

184:4 198:7

substantive (1) 78:11

sufficient (4) 95:20 96:23

sufficiently (3) 67:10 145:8

stated (1) 142:8 179.7 statement (80) 3:7,8 7:4 suggest (13) 11:23 16:18 8:13 9:15 12:8 17:14,15 23:16 77:17 98:13 100:2 25:15 38:6 39:23 104:3 108:8 113:15 129:23 41:1.11.17 43:1 47:15 147:21 186:6 191:25 48:18 53:3,16,18 54:5 58:7 suggested (1) 121:11 60:12 63:15 65:14 suggesting (8) 13:7 14:15 66:24,25 67:8,9 68:5 69:15 48:10 112:4,5,6,19 113:1 70:23 71:3 74:3 75:8 86:25 suggests (2) 113:10 199:5 90:12 92:14,19 98:5,7,15 suitability (3) 194:4 197:7 99:20 100:9.16.17 198-13 101:2.5.8 104:4.14.20.25 suitable (7) 85:16 95:22 121:13.15.20 127:11 96:25 121:3 130:22 172:17 138:15,18 141:20 143:11 199:2 146:19 150:4,25 153:9 summaries (1) 178:24 161:23 162:22 169:23 summarising (1) 140:2 176:7 178:16 184:19 summer (2) 121:6 185:10 185:12 186:19 193:2 superiors (1) 153:21 201:1.20 203:11 205:2.3 supplied (6) 26:11 49:1 207:4 69:20 105:3 185:3.23 statements (13) 56:22 supplier (1) 205:6 95:14,15,24 96:11,16 suppliers (1) 210:16 97:20 100:3 104:12.19 supplies (1) 205:13 107:14 108:4,12 supply (38) 46:13 states (2) 23:15 162:17 49:14,15,22,25 50:2 60:15 stating (1) 142:14 62:14 68:24 93:16,17,19 station (2) 204:20,22 94-10 96-10 99-11 110-23 stav (2) 61:24 137:19 118-2 125-14 126-8 168-22 staying (1) 44:22 169:3,4 170:1,4 171:1,7 std (1) 125:18 181:24 183:15 185:1 192:6 step (1) 131:8 196:10 205:10,11,19,20 steps (2) 23:23 121:1 206:1.3.22 supplying (12) 47:22 51:19 sticking (1) 28:16 still (23) 24:1 43:6 61:7,8 61:18 64:24 67:11 93:20 96:4.10.19.20 114:4 95:6 105:19 129:20 172:22 119:14 120:17 122:7 186:3 206:7 130:22 143:4 163:15 support (13) 94:3,7 164:6,21 179:20 190:6 102:2,4,7,8,15,17 103:7 193:19 197:21 205:24 139:20 140:15 156:22 206:6 157:22 stocks (1) 206:22 suppose (1) 114:9 supposed (2) 179:11 189:5 stop (6) 86:18 115:12 121:17 133:22 212:13,23 sure (29) 8:11 10:8 12:6 stopped (4) 20:16 86:14 14:10 42:11 66:10 68:25 122:7 134:15 83:8 84:21 89:6 94:2 stopping (1) 133:12 112:15 117:19 120:8 121:2 127:7 139:11 140:18,22 stored (2) 35:2 71:17 story (1) 87:4 141:7,21 148:23 185:17 straight (2) 97:20 132:1 191:21 195:10 198:11 straightaway (2) 91:14 211:12,25 212:18 surely (2) 144:17 149:5 159:12 strategy (10) 25:8 43:21 surface (2) 20:15 175:9 46:9 105:20 106:2 surprise (1) 86:1 112:6,7,20 152:9 182:14 surprised (3) 135:2 210:2,11 street (1) 59:5 suspect (1) 197:20 stressed (1) 195:21 sweden (1) 149:22 strict (1) 29:15 switch (1) 132:21 string (1) 190:19 switched (1) 1:11 strongly (2) 193:9 194:12 switching (1) 193:10 studied (2) 124:19,20 system (42) 14:3 19:21 studio (18) 48:25 49:6 57:1 22:14.23 24:16.24 25:3.11 58:22 59:11.18 61:19 26:4 30:2 31:3 71:19 72:2,7 76:23 77:7 82:16 63:23 69:10 70:24 76:6,20,25 92:11 123:8 95:9 100:15 125:15 185:17 186:21 187:21 133:3,8,10,21 137:18 139:6 145:3 159:17 studying (1) 32:7 stuff (1) 90:23 179:3,7,13,15,15,17,18 **stupidly (1)** 191:6 194:8 199:13 200:2,11 subcontractor (3) 9:1.2.5 205:23 206:9.17 subject (11) 89:19 118:19 systems (11) 9:21 133:19 122:21 128:9 132:5 150:12 136:2 139:1 185:4 160:3 178:15 188:18,22 205:12,14,16 207:8,10,15 192:18 subjected (1) 29:15

T
table (7) 22:6,7,13,16 23:23
133:9 178:1
tailoring (1) 113:10
takeaway (1) 149:7
taken (12) 4:21 5:7 12:4,19
15:18 16:7 61:22 82:2
83:4,23 85:12 178:18
takes (1) 211:11
taking (9) 1:9 10:10,15
99:10 115:24 118:16
141:14 204:23 211:14

166:5,6,14,16,19,21

181:18 182:4 208:15

212:12.16 213:4.6.7

thanking (1) 182:11

69:1 73:19,19 75:10,18

77:11 78:19 79:6 81:11

82:2.8.9.19.24 84:7 85:17

86:3,7,15,19 87:14 88:11

talk (8) 7:3 49:7 51:5 55:11 115:14 152:19 166:3 212:25 talked (2) 51:2.3 talking (6) 47:10 51:1 58:9 110:8,10 122:6 tall (11) 66:19,21 67:18 68:14,21,22 77:25 79:6 130:10,24 153:17 taller (1) 67:3 tamweel (2) 78:15,20 tangent (1) 167:22 taplow (2) 26:5.8 target (1) 108:23 task (2) 71:24 72:23 taylor (38) 44:24 46:12 109:11 150:9 151:6 152:8,11 200:22 201:4 203:15.16 204:7 205:2.6.9.10.15.21.22.24 206:8,8,11,12,15,18,25 207:7 208:1,7,9,16,22,24 209:4.13.19 210:24 team (37) 5:18 6:1 24:20 27:14 28:12 33:7,8,10,13,14,17,18,21 34:4.6.11 35:9 38:3.25 30-12 72-13 93-13 102:4,7,8,17 103:7 109:4 113:16 135:10 139:21 140:15 156:22 157:22 158:6.8 201:5 teams (2) 157:7,12 technical (50) 4:19 5:6,9,17 6.1 7 24 14.8 24.20 25.5 28:12 32:6 33:8.14 34:4.6 35:9 38:3 66:5,8,12,14 93:13 94:3 102:2,3,6,8,15,16 103:7 109:3 117:14 118:7 130:20,25 139:20 140:15 147:8,11,14 155:22 156:8,25 157:17,22 158:2.6.10.11 technically (3) 13:12 14:7 65:3 technology (1) 1:12 telling (7) 17:4 39:22 40:14 55:3 149:8 187:21 192:12 tells (1) 54:4 tended (2) 6:16,17 tender (1) 125:12 tenders (1) 105:8 terminology (1) 191:21 terms (20) 5:5 9:7 14:6 32:6 47:9 68:16 96:2 107:4 111:18,18 112:13 146:6 148:21 170:1,13 175:8 176:19 182:8 183:9 187:4 test (29) 13:18 19:15,20 20:2.4.11.16.23 21:4.10 23:15 83:4 84:4 117:10.17 132:23 133:2,4,7,10,12,14,18 137:12 139:3 150:16,23 164:17 194:1 tested (6) 20:8 83:1 134:4,11 145:2 160:20 testing (7) 12:12.15 22:20 131:9 132:8 140:25 141:14 tests (12) 5:22 19:13 22:22 29:15 39:16,20 131:13 132:19 134:14,20 142:12 154:4 text (11) 4:24 10:22 12:19 29:17 76:4 87:3 90:2,25 93:2 122:23 193:5 thank (37) 1:12.18.21.22 2:4,11,22 3:2 47:14 53:14 55:14,15,23 56:1 70:5 115:17,18 116:1,7,9 119:18 132:22 155:17

thanks (5) 59:10 94:6 182:3 189:7.17 thats (68) 13:10 25:7 30:3 37:24 40:9.24 44:17 45:2.4 46:24 48:21 49:13 58:22 62:2,22 64:1 65:7 68:23 69:11 70:1,2,24 72:19 75:1,7 76:17 86:11 89:23 94:17 95:16 103:24 104:24 114:17 117:5.24.24 122:5.14 126:4 128:13 129:11 132:23 137:4.16 141:4 147:25 148:6 150:23 165:13,20,20 168:12 169:3,3,8 170:9 171:4 183:16 185:14,25 186:12 188:12 200:24 201:7 208:25 211:23 212:10,12 thereafter (1) 118:1 thereby (1) 165:21 thered (1) 26:23 therefore (16) 44:21 54:14 66:13 111:6 128:3 129:19 145:12 148:12 154:18 165:11 175:9 184:25 192:23 195:15 207:10 208-2 theres (4) 50:9 158:20 171:20,21 theyd (13) 11:8,9,20 21:17 23:12,19 36:10 37:3 72:5,5 113:21 114:2 119:11 theyre (5) 22:25 69:20 103:3 137:8 206:1 thing (12) 1:24 93:6 96:1,14 97:17 100:20 142:2.25 147:5,11 148:8 182:23 thinking (16) 5:1 11:18 12:21 13:11,12 56:25 61:2 67:4,20 68:4,6 88:11 103:18 113:5 126:5 129:11 third (9) 7:10 9:19 17:18 82:14 94:9 111:10 116:12 127:14 207:25 thoroughly (2) 32:4 198:6 though (10) 32:25 33:9 55:2 68:14 89:9 112:18 124:12 130:18 148:19 188:16 thought (35) 10:19 12:16 13:3,24 24:17 59:2 60:21 61:12 64:17 67:23.23 68:10.11.23.25 86:10 87:10 88:19 97:25 112:12,19 118:9 129:9 141:10 142:2 147:4,4 149:7,11,13 152:23 162:3 163:12 191:5 210:18 thoughts (2) 86:17 93:14 thouria (1) 1:5 three (11) 3:14 7:16 16:18 29:4.23 54:1 111:6 124:2 136:23 180:20 190:17 through (31) 2:19 8:2 40:4 45:15,23 46:19 52:18 57:7 71:18 94:20 95:9 102:3,16 105:17 114:18 115:2.3 135:8 136:17 137:23,23 157:7 160:18 162:25 167:4 168:1 179:13.14 203:14.16 205:25 throughout (1) 29:21 thursday (1) 213:10 tightly (1) 110:22 timber (1) 205:6 time (165) 3:6,6 12:11 13:3,24 14:23 15:2 19:7 25:2 27:20,23 28:18 30:14 33:13 37:10 41:9 42:5,17,21 44:20 47:1,24 50:13 51:16,25 53:4,20 57:9 60:4 61:7,13 63:20 64:16 65:8 67:6,10,15 68:8

89:25 96:15 97:3.7.8.15.23.24 98:19 99:19 100:6.21 102:25 103:6 104:10.11.12 106:8.12.23 107:22.23 111:25 118:10,11 124:9,10,13,15,16 131:10,11,14 132:2,8 133:6 134:1,3,5,10,18 138:1 139:11,17 143:15,18 144:6 148:24 149:1 150:7 151:15 152:12 155:18 159:24 161:3 162:14.19 163:13 164:3,8,14,15,20 165:10,12,16 166:25 167:24 168:22 172:11 173:11,13,17,17 175:14 178:21 179:7 180:11 182:24 184:10 185:13 187:24 188:8 192:21 193:16 195:2 197:19 199:4,18,19 200:1,6,14,17 202:25 203:7,17 207:13 209:5,18 210:1,2,13,18,25 times (3) 1:11 54:1 129:19 today (9) 1:13 19:4 29:2 62:10 97:4 98:12 124:11 189-6 212-1 todays (1) 1:4 together (38) 4:18,20 8:8 9:5,7,25 10:12 11:19 12:10 13:2 16:8.15 48:13 56:21,23,23 72:15 90:18,25 111:14 112:23,25 113-1 5 131-15 132-14 144:18.23 145:5 162:7,9,11,14 164:4,19 171:12 180:18 193:14 told (63) 15:18 18:6 21:1,8 23:11,21 28:23 32:10,24 34:23 35:25 36:21,21 37:1,4 38:2 39:1,15,23 40:21 41:17,19 42:4.5.7.9.13 48:14.24 49:4.10 50:2 56:11 60:19 61:3 81:10 85:18 88:20,25 89:4,10 96:22 103:20 117:20 128:17,19 131:5 133:7 134:10 135:5 137:2 144:16 153:20 155:14 161:24 162:17 168:3 176:2 191:7.25 192:15 196:6 203:4 tomorrow (6) 211:10,14 212:8,14,23 213:5 tonight (1) 211:9 too (7) 13:24 60:19,24 96:2 121:11 212:8,14 took (12) 58:2,4 113:23 144:5 147:21 172:1 176:4.13.18 178:22 202:20 207:7 tool (1) 158:2 toolbox (3) 39:13 40:20,22 topic (11) 52:8 53:7 56:10 70:20 77:21 87:4 97:12 135:13 180:10 200:25 211:6 toppy (1) 129:9 total (1) 171:3 totally (1) 20:6 towards (1) 194:17 tower (75) 25:19,21 26:8,10 27:4 42:21 47:22 48:19 50:15 53:21 54:9 56:19 60:22 61:25 62:11 63:3.12 66:4.19 67:13.19 68:21 70:21 71:6.24 72:24 73:18,23 74:14 75:19 76:5 78:12,15,20 79:13 92:12 117:23 120:14,22,24 121:8 122:19,22,22 123:9,15 129:21.25 130:8 134:19

sorts (2) 183:3 208:12

sotech (2) 105:9 109:18

140:1 144:12 159:24

172:17 173:22 176:11

164:13 168:23 170:2 171:2

177:23 178:19 183:7.14.21 184:1.24 185:18.25 186:9,17 190:18 208:8 209:19 211:1 towers (3) 26:2.5 127:2 trace (1) 108:1 track (1) 74:2 tragedy (1) 207:19 trained (1) 14:7 training (7) 14:8 158:6,10,11 198:7.19 208:21 transcript (1) 2:17 transformation (4) 76:11 77:14 156:24 157:13 transition (7) 193:10,16 194:16,21,25 195:6,9 transitioning (1) 199:5 translation (2) 137:9 150:22 translations (1) 132:3 transmission (2) 157:6 206:7 transport (1) 83:21 transports (1) 82:18 trigger (1) 77:24 trouble (1) 82:16 troubling (3) 198:4,22,25 true (15) 94:13,25 95:3.11.19.24 99:1.21.25 101-1 5 104-11 14 18 155:5 trust (2) 48:8,12 truth (4) 39:22 105:19 143:4 185:15 try (9) 36:20 52:21 61:14,24 68:20 104:6 167:20 196:21 212.3 trying (13) 4:4 44:5 45:14 68:10 84:6 97:14 98:18 104:8,14 141:6 175:19 206:24 209:10 turn (14) 21:20 61:22 70:20 75:24 77:21 80:8 114:8 122:15 159:23 172:11 199:7 200:3,25 211:5 turns (1) 83:1 twice (2) 108:20 176:18 twothirds (1) 41:4 type (6) 75:16,17 93:22 95:7 179:15 209:6 types (2) 36:16 210:17

U uae (17) 17:19 26:17 28:11,15 77:22 78:23 79:13.15 80:19 87:7 89:20 93:10 118:13.19 130:9 145:20 153:15 uk (96) 6:6 10:4.7.20.21 11:24 12:14.16 13:9.19 14:3,17,20 15:10 21:6,13,15,16,18 24:24 25:10 31:18,22 39:19 40:2,14 41:22 43:5 44:24,25 67:10 79:25 80:20 81:6 87:20,21 93:16 105:4.8.15 114:11 118:2.23 119:21 131:20 139:13,14 140:19,23 141:1,8,22,23 142:2,13 143:19 146:21 147:5,16 152:5,8,16,17,24 159:4,5,11,17 169:20 170:15.17 175:22 176:2.4 177:12 180:8 192:6.8.24 193:15 194:2,15,22 195:13,24 199:4 202:21,22 203:13 207:11.13 208:2,5,17 209:2,11 ultimate (1) 171:16 ultimately (1) 185:10 umicore (10) 51:16,19,25 56:12 57:19 58:13,18,21 59:21 60:2 uncertainty (2) 172:19,25

underneath (4) 8:22 76:3 78:14 136:2 understand (41) 13:20 14:12.14 68:10 70:12 72:9 79:24 82:10 93:18 94:22 97:21 98:16,18 99:12,20 101:6 106:24 109:25 110:15,17 111:11,16,23 112:16 139:13 141:22 143:1 157:17.21 159:3 168:9 174:9 176:22 195:8 197:13.19 198:1.4.7.25 207:16 understanding (17) 32:7 49:13 67:20 68:18 69:4 70:11 97:12 113:9,12 138:8 141:2 147:15 154:22 170:17 172:1 185:14 188-15 understood (11) 37:25 67:9 94:25 98:4,24 100:5 121:7 148:23 192:7 198:15 207:17 undertaking (1) 26:9 unfabricated (1) 113:18 unfortunate (1) 98:14 unfortunately (1) 33:21 unhappy (1) 211:13 unidentified (1) 177:25 united (1) 177:10 unless (10) 10:19 12:2 42:1,4 76:20 128:18 130:15 131:19 163:15 169:25 unlike (2) 85:5 116:18 unlikely (2) 41:21 181:3 unnormal (1) 187:25 unsure (1) 172:24 unthinkingly (1) 10:25 until (4) 29:21 92:16 181:6 213:9 untoward (1) 48:10 untrue (1) 101:4 unusual (3) 6:15 9:20 16:14 unwise (1) 212:3 update (2) 154:3 200:9 updated (6) 32:21 37:2,18,23 39:10 40:22 updating (2) 158:12,13 uptodate (1) 41:22 usable (1) 24:5 used (32) 10:23 26:3 30:8,10 31:25 32:1 50:10 68:14 69:7 93:18 94:4.17 95:1 97:16,22 98:4,24 99:12,21 137:18 139:7 145:12 173:21 185:10 189:4 190:11 191:14,21,24 194:7 197:16 205:12 useful (2) 33:3 59:3 users (1) 207:8 uses (3) 193:25 197:8 198:13 using (15) 34:20 49:15.16 77:11 80:19,22 82:17 85:2,24 87:8 115:4 116:15 120:21 141:4 153:10 usual (4) 1:4 127:18 129:2 183:3 usually (1) 175:4 utilisation (1) 76:8 vague (1) 26:17 vaguely (3) 17:21 159:3,4 valid (5) 163:15,20,21 164:5,21 value (1) 167:24

85:16 209:24 wednesday (1) 1:1 88:15 118:21 126:21 150:15 151:8 21:24 22:3 33:19.20 valued (3) 103:20 107:12,17 variant (5) 21:9 23:6 39:6 42:14 136:14 variants (2) 21:16 171:15 various (9) 4:23 12:12 109:4 113:24.24 174:12 177:13 210:16,16 189:12 190:7,16 ve (2) 167:16 168:1 vein (1) 98:21 193:1 194:20 195:5 ventilated (1) 83:20 197:11.14 198:10

versa (1) 82:19 version (16) 28:24 29:12 30:17.25 32:11.16.16.18.22.22 34:21 89:22 92:1.19 150:22 180:25 via (1) 93:9 vice (1) 82:19 video (2) 78:12,13 vince (5) 201:8,14,17,25 204-4 virtue (2) 48:15 65:17 visit (8) 176:22 177:9 178:15,23,25 179:4,9 180:1 visited (2) 79:9 175:22 vm (1) 125:24 voice (1) 149:24 volume (1) 60:15 volunteered (1) 129:24 vonthron (5) 34:5 132:6,16,18 188:21

w (1) 80:18 wahler (13) 188:2.3.10.21 189:11,22 190:6 191:1,11 192:12,17,20 193:7 waiting (2) 119:10 120:18 wales (2) 197:12 209:22 wall (1) 163:5 wanting (1) 157:24 wants (5) 109:25 110:15 111:11.17 113:9 warning (5) 77:25 116:19,24 118:23 130:24 warranties (1) 99:3 warranty (6) 15:16 16:13,14 99:3,7 160:6 asnt (44) 13:25 14:7 18:4 40:10 44:19 52:14,21 61:14 64:23 95:19.24 96:13 99:6 103:25 105:16,20,22 113:5 118:6,18 124:21,21 125:3 129:8 143:19 152:5 154:5,22 160:24 161:4,20 162:21 163:17 164:4,5,10 170:22 173:11 175:1 184:8 194:25 198:16 203:2 204:2 wates (1) 114:11 way (46) 7:10 9:19 16:16 35:16 36:20 37:23 40:17

41:4 44:2 52:22 53:1 58:3

68:20 72:9 95:16 96:20

97:18 98:9.11.19 100:7

118:8 119:10.15.24 124:6

103:2,17 104:9 115:3

129:10 144:23 148:6

151:19 152:1,2 161:1,9

162:24 167:5 169:16 182:2 186:12 192:4 196:19 198:15 vebsite (11) 34:14,23,24 35:4,5,7,11,13,17,17 39:8 wed (6) 4:15 26:23 47:25.25 week (8) 38:21 80:18 87:6 veeks (2) 200:16 203:24 wehrle (57) 15:15 16:2 18:16 39:14,22 40:25 42:15 79:4 80:14 87:6,11,13 88:10,14 89:19 90:8 91:25 92:5 93:5 107:11 108:2 117:9 118:21 131:22,24 136:25 138:22 141:25 143:16.21 149:11 151:13 155:10 158:15 161:25 163:24 188:20.24 191:1,13,25 192:12,15,20

wehrles (8) 38:6 41:16 79:20 87:17 135:10.16 155:20 189:21 welcome (7) 1:3 55:19 56:8 80:25 115:23 166:10.22 went (3) 42:11 72:14 176:5 werent (17) 6:4 19:1 39:23 41:20 61:19 63:20 107:12 111:6 126:11 132:1 141:7 152:9 173:12 179:2 183:21 184-1 186-4 weve (22) 26:16 27:20 86:23 91:25 100:17 103:13 108:1 116:19 120:25 121:25 122:6,15 129:13,23 139:2 142:6 143:12 149:21 150:24 164:17 168:20 174:6 whatever (1) 148:16 whats (3) 57:10 101:5 165:20 whereas (1) 52:7 whereby (1) 179:8 whilst (2) 193:21 194:16 white (1) 82:25 whole (10) 16:8 66:6 83:6 93:6 125:15 191:10 205:13 23 206:9 207:7 wholly (1) 38:24 whom (9) 47:17 89:1 91:17 92:11 146:2 150:9 157:18 185:7 197:10 whomever (1) 198:3 whose (1) 91:19 widely (1) 153:6 wider (1) 194:8 widespread (2) 20:14 133:13 willing (1) 105:7

willmott (1) 114:12 wilson (3) 65:20 126:22 176:20 win (1) 206:10 wind (1) 5:6 window (1) 66:9 wingrove (8) 79:23 80:8 81:4,5,6,19 83:14 87:9 wise (1) 181:6 wish (2) 210:19 211:3 withdrawn (2) 161:21 165:12 withheld (1) 155:18 withhold (2) 154:16,21 witness (60) 1:8.18.21 2:3.6.10.22 3:7.8 8:13 12:8 15:3 17:14 25:15 38:6 41:11 43:1 48:18 53:3,16 55:14,23 56:1,3,22 58:7 60:12 70:23 74:3 80:5 100:9,17 101:8 104:4,19 115:17 116:1,4,6 121:20 127:11 138:15.17 153:9 162:22 166:5.14.18 178:16 184:19 186:19 193:2 201:1 207:4 211:8,12 212:10,16 213:3,6

won (1) 181:24

187:7,11

206:12

wonder (4) 85:20 86:9

wont (2) 147:23 149:19 worded (3) 97:18 98:14

100:6 wording (9) 16:25 90:22 96:2 97:16 98:8,10,14 99:15 100:22 work (16) 9:5 24:1 48:1 152:3.18 161:22 166:3 49:11 50:6 61:4 90:5 95:5 168:3 208:4 106:18 148:6 170:7 181:19 yours (2) 7:18 86:9 182:4 201:5 204:8 205:5

yourself (21) 24:9 33:1 67:24 worked (17) 25:23 34:6 73:10 76:15 85:20 90:20 48:13 61:4 95:3,5 105:9,10 116:23 118:11,12 143:3 106:3 146:2 163:8 169:12 144:2 145:6 153:1 186:8 175:16 183:16 185:15,20 198:4.12.23.25 210:18 212:7

161:1

youve (8) 15:25 19:4 74:17

85:18 92:17 93:1 95:16

yves (3) 15:16 16:10,15

orking (23) 5:2 8:23 9:1 24:3.15.23 47:7.18 48:4 54:20 59:13 73:24 91:16 93:21 94:1 105:5 106:7

110:24 114:17 115:1 152:13 164:20 209:8 works (2) 66:5 67:4 world (3) 28:4.9 82:24 worry (2) 32:25 137:7 worst (1) 82:21 worth (1) 38:9 wouldnt (87) 11:10,25 13:12,23 14:18 17:9,10 20:5 24:17 25:4 31:15 32:4.7 36:9.17.25 41:25 42:4 44:19 49:19 52:13.16 64:5.9.20 65:3 79:8.10 82:12,12 83:23 85:12 90:17 91:18 94:18 96:17 97:2,4 99:6,17 100:6 103:1,13,17 104:1 107:16.19.23.24 112:23.25 113:22 114:1.22 119:8 123:20.21.24.25 124:12,20,22 125:2,4 141:18 146:14,18,25 148:5.15 149:2 155:18 159:13 161:13,17 164:19 167:5,25 168:16 172:21 173:23 179:19 182:18 185-13 195-21 203-18 200.8 write (6) 16:4 97:25 98:22 100:7 178:25 186:4 writes (2) 58:21,22 writing (5) 97:24 99:16 100:23 180:3,7 written (12) 21:24 60:17

98:1.21.21 99:17 103:1.17

104:1 111:24 113:12

161:24 162:19 164:23

wrote (8) 94:11 97:6,7 98:23

99:16 100:21 101:1 102:25

wrong (8) 47:1 160:24

175:8 185:12,25

196:17

yeah (26) 5:4 9:22 26:23 47:5 51:13 52:16 73:11 92:9 99:14 100:19 119:6 121:24 129:18 141:13 144:5.9 146:24 147:13 158:16 159:21 162:13 165:20 173:3 177:18 182:17 198:16 year (15) 15:15 19:14 20:12 25:14 36:22,22 57:7 76:1 108:20,20 135:15 172:13 176:18 180:13 199:8 years (9) 19:1,8 59:4 164:8 185:16 187:15.20 190:17 195:23 yellow (1) 132:2 yesterday (18) 1:24,25 2:13.17.18 13:18.20 17:4 33:12 40:20,21 50:3 128:19 137:2 142:9 156:2 160:16.17 vet (3) 84:22 120:13 167:3 youd (2) 87:17 161:24 youll (2) 35:11 42:22 youre (21) 2:1,1 31:9 55:2 56:2 58:9 94:24 101:1 104:16 108:3 113:16 116:8 140-18 144-23 151-17

> **15 (3)** 9:24 126:21 127:20 **156 (4)** 80:6,13 86:24 87:2 157 (2) 79:21 85:1 **16 (5)** 58:23 74:4 121:22 190:17.25 17 (4) 127:12 169:24 189:19 190:8 18 (8) 59:8 67:3 74:8 75:1,1 121:25 145:12 184:20 18102013 (1) 75:7

189 (1) 27:15

z (1) 51:8 zcm (46) 49:8,12,16,23,25 50:7,10 51:1,2,3,14,17,20 52:3,6,12,14,19 53:19,22 54:1,7,11 55:1 56:10,13 57:11.14.19.20 59:14 17 23 60:9 15 24 61:4 74:12 121:11,17 122:3,7,8 126:6,12,13 zinc (38) 48:25

2 (10) 46:22 54:15 56:18

168:25 170:19.22

2008 (2) 142:18 164:16

18:2,9,13,21 19:1,1

2010 (8) 28:24 30:17 31:14

32:16,22 33:5 37:18,22

15:9 17:5 19:7.7.11.16.22

32:11.16.21 33:6 37:17.21

38:14,16 39:15 40:13 41:9

20:2.8.12.22 21:25 23:7

2012 (29) 25:13 26:6 27:4

28:16,25 30:25 31:14

42:21,22 48:20 50:13

57:23 58:20.23 77:22

2013 (64) 44:11 46:23,25

61:18,22 62:1,4,4,7

71:22,23 73:21

77-12 22 23 78-18

47:1,24 50:14 57:6 58:10

63:6.24 65:18 69:9 70:24

74:7,8,15,18 75:18 76:1,2

79:12 14 23 80:14 86:20

184:7 185:10 187:16 188:6

194:20 199:7,15,25 200:20

189:19 190:8 192:14

78-9 21 79-7

2011 (16) 7:13 9:11 10:5

20 (2) 78:21 90:12

2009 (8) 17:13,25

62:7 73:1 125:10 131:23

49:1,1,5,8,12,16,22,23,24 50:3,4,6,10,24 51:5,11,17,20,21,24 52:3 56:13 57:15 58:12 59-2 18 18 22 60-3 3 61:9.19 125:23.24.24 126:5,6

0 (29) 5:23.23 36:13 67:7,12,16,24 68:9,12,13,24 69:5 139:14 141:11,24 142:3,8,15 145:1 146:22 147:6.12 154:11 159:20 165:1,22 192:9.24 209:3 084510 (2) 160:9 163:5

89:14,18 101:15 102:20 105:14 106:20 108:15,17,18 110:4,6 1 (8) 37:7 62:7 73:1 74:7 112:8 117:20 121:6.16 167:7 180:14 181:16 214:3 122:12 131:9,14 133:6 10 (14) 1:1 8:16 47:16 63:1 134:4 144:14 145:20 70:25 78:4 79:20 80:14 156:20 183:12 185:9 86:25 109:6 110:20 187:16 212:14,23 213:9 2014 (47) 40:7.10 57:6.6 100 (3) 17:16 26:15 181:7 62:18 122:18,19,21 123:18 1000 (1) 1:2 127:20 128:2 135:13,23 **105 (1)** 115:20 136:13 137:6 138:20,23 107 (3) 189:20 190:15.24 139:24 144:11 150:6 151:4 108 (1) 189:10 153:14 155:22 156:16 11 (12) 41:13 58:9 158:1 160:1,2 166:24,25 71:4,22,23 73:21 109:10 168:20 172:12 173:18 110:21 125:12 193:4 176:14 180:12 181:11

203:12 213:10

1120 (1) 55:16

1135 (2) 55:13,18

113:2 117:4,20 138:18

13501 (5) 22:20 24:4 137:14

135011 (3) 19:18 85:5

1350112002 (1) 160:22

14 (4) 9:12 60:13 151:1

14000 (2) 170:3,11

135011a12013 (1) 135:19

150:17 183:12 205:4

132 (2) 193:3,19

1337 (1) 160:2

135 (1) 135:17

199:11.24

116:18

136 (1) 135:24

137 (1) 136:5

207:4

12 (5) 44:17 66:2 100:9 2015 (4) 201:11 202:20 201:2.20 204:11 208:7 120 (3) 123:16 124:2 125:14 2017 (4) 44:17 190:17,25 **1200 (1)** 189:6 208:8 **123 (1)** 125:14 2018 (1) 205:7 1260 (1) 133:12 2021 (2) 1:1 213:10 13 (23) 12:9 53:16 54:5 205 (3) 115:13,18,22 89:14,18 90:1 100:17 21 (3) 3:10 30:16 65:15 101:1.15 102:20 104:7.17

22 (4) 79:14 127:19 129:3 105:14 106:20 107:1 110:6 167:10 2250 (1) 170:19 23 (2) 160:2 166:25

24 (6) 62:7.18 63:6 65:18 127:19 129:3 **25 (1)** 178:17 **26 (2)** 53:24 78:9

28 (7) 53:23 127:4,15,21 128:13.14 168:20

28000 (1) 171:4 29 (3) 25:16 38:16 69:15

3 (16) 30:13.17 37:8 46:6 63:11 74:23 123:13 137:6 138:20 150:6 151:4 155:23 162:22,24 200:3 214:5 **30 (1)** 15:15 30000 (1) 171:4 3040 (1) 54:11

30year (2) 16:13,17 31 (8) 7:5 9:16 15:4 135:23 138:23 139:24 150:23 181:11 316 (1) 166:7

32 (1) 101:9 327 (1) 66:17

Opus 2 Official Court Reporters

undergoing (1) 167:23

underlie (1) 5:22

	I	I		I	I	I
33 (1) 78:10						
330 (3) 166:2,6,9 34 (3) 17:16 26:15 41:13						
36 (2) 156:15 157:24						
37 (5) 53:17,18,19 176:8,9						
371 (1) 53:22						
372 (1) 53:23						
373 (1) 53:24 378 (1) 28:24						
38 (5) 54:6,7 131:23						
132:13,15						
381 (1) 54:11						
382 (1) 54:12						
383 (1) 54:13 388 (1) 28:25						
39 (4) 132:14,21 193:18						
203:12						
3a (8) 22:1,8,11 79:22 81:13						
85:10 86:14 116:21						
3as (3) 79:25 86:5 126:3						
4						
4 (14) 19:23 58:8 60:13						
70:24 135:16 157:25						
169:20,21 170:20,22 199:15,16,25 205:3						
40 (1) 17:3						
430 (1) 213:8						
44 (1) 100:11						
47 (1) 12:10						
48 (1) 169:23 482 (1) 138:18						
483 (2) 139:21 151:2						
49 (1) 207:5						
5						
5 (12) 3:9 21:25 30:13,24						
59:4 74:4 76:2 121:20						
127:11 160:16 169:20,21						
5000 (4) 60:16 125:17,25						
160:20						
501 (1) 150:17 55 (38) 9:13,18 19:21 21:9						
23:1,2,6,16 40:3 41:23						
42:6 53:20 54:8 67:16,23						
68:24 69:7 76:10 113:18						
118:22 129:25 130:13,18 134:19 135:20 142:7						
144:13,20 145:9 146:3						
159:5,10 165:17 178:6						
185:17 197:16 199:12						
200:2 56 (1) 54:12						
5712 (1) 90:12						
6						
6 (2) 43:2 44:23						
61 (2) 160:17 161:23 65 (2) 184:21 185:12						
7						
7 (5) 122:21 123:18 126:17						
128:2 155:20 7000odd (2) 170:5 171:1						
72 (1) 65:14						
73 (1) 66:24						
78 (1) 54:13						
8						
8 (2) 162:24,25						
80 (1) 53:22						
800 (1) 133:12						
82 (1) 186:19						
881 (1) 178:17 8826 (1) 121:14						
9						
9 (3) 19:22 79:23 80:9						
917 (1) 125:22						
931 (2) 25:16,23 96 (6) 7:4 9:16 15:5 38:7						
39:22 41:1						
963 (2) 101:12,14						
964 (2) 101:9,16						
9641 (1) 101:20 9642 (1) 104:25						
JUTA (1) 104.23	ı	1	i	ı	1	1