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Grenfell Tower Inquiry

Day 105

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(10.00 am)
SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to
    today's hearing.
        As usual, I'm joined by my fellow panel members,
    Ms Thouria Istephan and Mr Ali Akbor.
MS ISTEPHAN: Good morning.
MR AKBOR: Good morning.
SIR MARTIN MOORE-BICK: Today we're going to hear evidence
    from Mr Hamo Gregorian, who is the first of the
    witnesses we're going to hear from the British Board of
    Agrément.
            So my first task is just to check that Mr Gregorian
    is with us and can see me and hear me clearly.
                MR HAMO GREGORIAN (called)
SIR MARTIN MOORE-BICK:Good morning, Mr Gregorian, are you
    there?
THE WITNESS: Good morning, yes.
SIR MARTIN MOORE-BICK: And you can see me and hear me
    all right?
THE WITNESS: Just fine, yes.
SIR MARTIN MOORE-BICK: Very good. Thank you very much
    indeed.
        On the screen in front of you, you should have the
        words of an affirmation which you're going to make. Do
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    you have them there?
THE WITNESS: Yeah.
SIR MARTIN MOORE-BICK: Good. Could I ask you to make the
    affirmation, please, by reading the words on the screen.
            (Witness affirmed)
SIR MARTIN MOORE-BICK: Very good, thank you very much
    indeed.
        Now, there are a couple of things we need to sort
    out before we start putting some questions to you.
        First, can you confirm, please, that you're alone in
    the room from which you're giving evidence?
THE WITNESS: Yes, I am.
SIR MARTIN MOORE-BICK: Thank you.
        Can you confirm that you don't have any documents or
    other materials with you?
THE WITNESS: None whatsoever, no.
SIR MARTIN MOORE-BICK: Very good.
        Finally, could you confirm, please, that your mobile
    phone is in another room and that you don't have any
    other electronic device with you which is capable of
    receiving messages?
THE WITNESS: I confirm that, yes.
SIR MARTIN MOORE-BICK: Thank you very much indeed.
            Now, I hope we shan't have any problems was sound or
        vision, you never quite know, of course, but if we do,
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we'll have a short break while the technical support team iron them out. All right?
THE WITNESS: Okay.
SIR MARTIN MOORE-BICK: We shall have a break during the morning and the afternoon in any event, probably around about 11.15 during the morning and round about 3.15 in the afternoon. If you need any additional break at any time, will you just indicate that and we will try to accommodate you.
THE WITNESS: Thank you.

## SIR MARTIN MOORE-BICK: Very good.

Is there anything you would like to ask me or raise with me before you start answering questions?
THE WITNESS: I can't think of anything, Mr Chairman. SIR MARTIN MOORE-BICK: Good. Well, thank you very much.

In that case, I'm going to invite Mr Millett to put some questions to you.
THE WITNESS: Okay, thank you.

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

Yes, Mr Millett.
Questions from COUNSEL TO THE INQUIRY
MR MILLETT: Mr Chairman, good morning, members of the panel, good morning, and Mr Gregorian, good morning and thank you for attending this public inquiry to give your evidence. We are very grateful to you.

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Before I start, could I just confirm that you can see me and hear me?
A. Yes.
Q. If you have any difficulties in understanding any of the questions I'm going to ask you, or you would like me to put the question in a different way or repeat the question, please tell me and I can do that.

Can I also ask you, please, to keep your voice up so that the transcriber who is on this call can hear you.
Can I also just advise you that if you nod or shake your head, that doesn't go on to the transcript, so you will have to say "yes" or "no" as the case may be.

If you feel you need a break at any time other than those that the Chairman has indicated, please just say and we can take a short further break.

Now, can we please start by looking at your witness statement at $\{\mathrm{BBA} 00011096\}$.

Is that the first page of your witness statement
that you see on the screen there?
A. Yes.
Q. Now, you can see that it's dated 29 October 2020 at the
top right - hand corner of the screen.
A. Yeah.
Q. It's nine pages long.

Can we go to page 9, please. You can see
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    a signature there above the date, and your printed name
    Is that your signature?
A. It is indeed.
Q. Have you read this witness statement recently?
A. Yes.
Q. And can you confirm that the contents of this statement
        are true?
A. Yes.
Q. Have you discussed your statement or your evidence with
        anybody before coming here today?
A. No.
Q. Now, when you were working at the BBA -- and we will
        come to the dates shortly -- you knew an entity called
        Alcoa, didn't you? Alcoa?
A. Yes, I have dealt with Alcoa
Q. Yes. Now, we have been calling it Arconic in this
        Inquiry because it had a change of name after your
        involvement. So I'm going to call it Arconic, so that
        you understand that when I use the word "Arconic", I'm
        referring to Alcoa.
A. Okay.
Q. Is that clear to you?
A. That's fine, yeah.
Q. I'm going to be asking you mainly about the initial
    assessment and the certification of Reynobond ACM
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cladding panels which were certified by the BBA under
certificate $08 / 4510$ dated January 2008, which is the
document we can see -- and we don't need to go to it
now -- at $\{B B A 00000047\}$.
Now, looking back at the history, is it right that
you were the project manager or product assessor who
co-ordinated the assessment for the original issue of
that BBA certificate in 2007?
A. That's correct, yes.
Q. And the project was BBA number $\mathrm{S} 3 / 41014$. Do you
remember that?
A. I believe that was the project number, yes.
Q. Is it right that, for that assessment, the BBA created
a technical dossier or technical file?
A. Sorry, what was the question again?
Q. For that assessment, the BBA created a technical dossier
or technical file.
A. Yes. Yes.
Q. I' II call the contents of that the technical file, and
for reference purposes, for our records, it 's
\{BBA00008042\}.
A. Right.
Q. Now, I'm going to start by asking you some questions
about your background and your training.
You were at the BBA -- is this right? -- between
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2004 and July 2010
A. That's correct, yes
Q. And you retired from the BBA in July 2010. Does that mean you retired from your career or you finished working at the BBA and went somewhere else?
A. I retired from my career. I retired, period.
Q. Right, okay.

Now, can we look at your witness statement, please,
at page 2 \{BBA00011096/2\}, and look at paragraph 4 together. You set out your qualifications there, and we can see them on the screen.

In paragraph 4(c) you refer to the fact that you are a chartered engineer, MIMechE. Is that a reference to you being a chartered engineer in the Institution of Mechanical Engineers?
A. That's correct. A chartered engineer would be a member of an institution, one of which was the Institution of Mechanical Engineers, and I was a member.
Q. Yes, I see.

If we look at paragraph 5, you say:
"My working background has primarily been in the field of design, within the construction industry. I worked for the BBA from January 2004 to July 2010 as Project Manager."
A. That's correct.

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Q. Is it right that you had a lengthy career in design and construction before joining the BBA?
A. Yes. I've had a lot of experience in design and assessment of structures, mainly relating to the construction industry of course. I worked for Taylor Woodrow, as they were then, for about 12 years
Q. What were the dates during which you worked for Taylor Woodrow?
A. I think - I can't - - I worked 12 years and I think I - I was made redundant from there because Taylor Woodrow started slimming down their operation, so I think I was there from $19 \ldots$ maybe $19 \ldots$ late 1988 , possibly, to 2000, something like that.
Q. Right.

When you joined the BBA, did you join it as a project manager?
A. Yes.
Q. And when you joined, did you have any experience from your previous work of cladding projects?
A. Not cladding as such, no.
Q. No.

Now, did you have any experience of construction on the exterior of high-rise buildings at all?
A. I've dealt with structures, mainly steel structures, but I've done analysis work, mainly stress analysis work,
a variety of components, variety of structures.
Q. Right. Well, we'll come back to that in a moment.

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

You say in paragraph 10, at the top of the page:
"Behaviour in relation to fire is not my area of expertise, so compliance of the product with fire regulations would have been checked by a fire expert (e.g. BRE)."

Would you routinely ask a fire expert to check data on behaviour in relation to fire?
A. Yes, on projects I seem to remember we always consulted a fire expert.
Q. Would you routinely ask a fire expert to check any statements that were made by the client about the fire data?
A. The statements would generally come from -- as far as I remember, they would come from the fire expert.
Q. Where a client made statements about what the data represented, would you ask a fire expert to check those statements?
A. Erm ... I can't ...
(Pause)
I can't answer that, to be honest. I'm not sure

Was there any training on fire regulations and fire testing ever done in-house during your time at the BBA?
A. No. Not that I can remember, no.
Q. So when we are looking at going for fire expertise, would it normally be the BRE who would provide that expertise?
A. Erm ... I think that the report could come from BRE, but there are also other organisations which would come up with a report and we would base our statement on that, and BRE was one of the experts we would consult --
Q. I see.
A. -- to arrive at the fire performance.
Q. Now, as at 2007, did you have any experience yourself of fire safety testing of products?
A. No.
Q. Had you any familiarity with, for example, the British Standard 476 suite of tests?

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A. I must have consulted during my employment, but I can't remember anything from it now. So I have no knowledge of $--I$ don't know the details, how the test is done. So, again, it's outside my area of expertise.
Q. Would the same apply in relation to the European tests and classification regime?
A. Yes.
Q. Were you aware -- and I think it would follow that the answer is no, but let's see what you say -- that there was a difference between the UK testing regime, the British Standard 476 suite of tests, on the one hand and the European testing, EN 13501 regime, on the other?
A. I have no knowledge of fire issues, so I really wouldn't know the difference.
Q. Going back to a question I asked you a moment ago, when you said you would go to the BRE as one of the experts that you would consult: who generally was the individual at the BRE that you would normally consult on matters of fire safety and fire compliance?
A. If help was required, as in this case I believe it was, that's what I would do. I would first of all approach my technical manager, who was Brian Haynes. Because of his long-standing relationship or association with the BRE, he's quite knowledgeable on fire issues, so I would probably consult him first.
Q. Right. But when you went outside the BBA, which individual at the BRE would you consult?
A. I think ... again, I can only concentrate on this particular project and my contact with regard to this project was Sarah Colwell.
Q. Yes, I see. Sarah Colwell on this project. Can you remember any names on other projects?
A. No, no.
Q. In your time at the BBA, do you remember whether the BBA or the BBA's customers had a preference for using the UK national standards for surface spread of flame leading to class 0 or the European standards, or no preference?
A. I can't answer that, to be honest. As I said, I have no knowledge of fire at all, so anything -- any issues relating to fire I would consult an expert, if it was required.
Q. I think, in the light of the exchanges we've had so far, we can take the next few questions quite quickly.

When you joined the BBA, did you have any knowledge at all of the Building Regulations?
A. With regard to fire, you mean?
Q. Well, generally, number one.
A. Yes, of course, but not fire. I know very little with regard to fire safety issues.
Q. Does that also mean that, at the end of 2007, when you 13
started discussing the content of the BBA certificate, then in draft, with Arconic, that you had very little knowledge of the requirements of ADB?
A. That's correct.
Q. Can we look at the technical file, please, $\{$ BBA00008042/19\}, please. This is on the technical file. If we go to page 129 \{BBA00008042/129\} -- this is the section $D$, which has the safety information in it at $D$ as you can see there.
A. Yeah.
Q. But if we go to 129 we can see an extract from Approved Document B, namely section 12, "Construction of external walls".

Does the fact that this document was on the technical file indicate that you would have had some familiarity with it at the time it was placed on the technical file?
A. We would include this just for the record, but as I say, I don't ... I never had any details, I never went into details. It was just there as a record.
Q. Who put this document on the technical file?
A. The project manager would normally compile a technical dossier.
Q. And for this project, by which I mean the issue of the Arconic BBA certificate in January of 2008, you were the
project manager, were you?
A. Yes.
Q. Yes, and so did you put this document on the technical file?
A. Yes, I must have, I must have done, yes.
Q. Did anybody tell you to put this document on the technical file, or did you work out for yourself that it was relevant?
A. We -- yes, I decided that it will have been relevant, because it's to do with safety issues, fire safety issues.
Q. Right. Was this the first time that you had encountered Approved Document B?
A. No, I think I may have come across it before, but, as I say, I only had a very limited knowledge of the approved document.
Q. Can you remember -- and I know it's difficult so many years ago -- what it was that prompted you to think that section 12 of Approved Document B was relevant to the task you had?
A. Er ...

## (Pause)

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

Were you ever given any training specifically on the approved documents within the Building Regulations -A. No.
Q. -- and specifically Approved Document B?
A. No.
Q. No.

Can we -- and again, I think we can take this quite quickly, but just to put it in front of you -- look at page 133 \{BBA00008042/133\}, please, still within the technical file. This is an extract from Approved Document B known as diagram 40, as you can see, which is entitled "Provisions for external surfaces or walls".

If you look at the diagrams at the bottom of the screen, you can see that there is "d. ANY BUILDING", and
"e. ANY BUILDING", and with letter d you've got a boundary of less than 1,000 millimetres for a building of 18 metres or more in height, and e, same again, but this time 1,000 millimetres or more.

Can you see that there are parts of these two diagrams which are shaded? Yes?
A. Yes.
Q. So you have one on the left which is fully shaded, and the one on the right, letter e, which is partly shaded.

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    "Any dimension over 18m" is the part that's shaded.
            Then on the right-hand side of the screen, you can
        see, under the rubric "Key to external wall surface
        classification", the second box down, which has the
        corresponding shading, says:
            "Class 0 (national class) or class B-s3, d2 or
        better (European class)."
            Were you familiar with diagram 40, this page of ADB,
        and specifically this part of it that I've just shown
        you?
A. All I knew in this regard was Approved Document B
        allowed the use of materials of limited combustibility
        to be used above }18\mathrm{ metres. That's all I know with
        regard to this. I may have looked at the details as
        shown here, but I can't remember - - I mean, I never went
        into details because, as I say, this wasn't my area.
Q. Right.
A. It was way outside my area of expertise, really.
Q. Yes, I understand. And the reason I'm asking you is --
A. I know very little about the approved document, and that
        I do -- it was within my knowledge, the 18-metre
        restriction was -- I was aware of that.
Q. I'm asking you because this page is on the technical
        file . Did you read this page when considering the
        BBA certificate in 2007?
"Class 0 (national class) or class B-s3, d2 or etter (European class)."
Were you familiar with diagram 40, this page of ADB, and specifically this part of it that I've just shown you?
A. All I knew in this regard was Approved Document B allowed the use of materials of limited combustibility regard to this. I may have looked at the details as shown here, but I can't remember -- I mean, I never went into details because, as I say, this wasn't my area.
Q. Right.
A. It was way outside my area of expertise, really .
Q. Yes, I understand. And the reason I'm asking you is --
A. I know very little about the approved document, and that I do -- it was within my knowledge, the 18 -metre Q. \(m\) mas
Q. I'm asking you because this page is on the technical BBA certificate in 2007?
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[^0]Q. Are there areas you would have the technical skills to assess yourself?
A. My main role within the BBA was $--I$ was assigned to the structural department, and I would just manage projects as normal by consulting various sections, would have the input into the draft certificate which I would make a start on, and I also -- as I say, I looked at the structural aspect. My area of expertise was in structures, strength of materials, structures. That I could make assessments. But on top of that, I would also offer any advice or technical support to any of the departments as required.
Q. Now, I would like to ask you some questions about the reporting lines at the time.

In 2007, did you report to Geoff Gurney?
A. I believe so. I think somewhere around that time, I think the BBA was undergoing some organisational changes, so Geoff Gurney was my section head.
Q. And who did he report to?
A. He reported to the technical manager, Brian Haynes.
Q. He reported to Brian Haynes.

Did Brian Haynes have any expertise in fire regulation? I think you mentioned earlier he did.
A. Yes, he --
Q. -- was that?

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A. I wouldn't call him an expert within the BBA, but I think he's had a long association with BRE and he's gained a lot of knowledge with regard to fire. So certainly he knows -- he knew much more than I did, so ...
Q. And Geoff Gurney, did he have any fire expertise?
A. No. No. Perhaps more than me, because of his longer service.
Q. Did Brian Haynes have input generally to the technical work of the sections in relation specifically to fire?
A. I'm sure he would have -- the draft certificate would circulate in a loop, going between the various sections, and they would make a comment, and eventually the certificate would be looked at by Brian, and I'm sure he would have looked at fire quite carefully.
Q. Who was responsible for the technical sign-off of certificates which were issued as a result of your work?
A. In my case, the section head would sign. Again, as I say, bearing in mind there was an organisational change going on, I'm not sure if Geoff Gurney was our section head, but normally that's what would have happened, the section head would sign off, but only with respect to the particular discipline --
Q. Yes.
A. -- which was structures, in my case.
Q. Specifically at the end of 2007, beginning of 2008, who was the section head, was that Geoff Gurney?
A. Again, I can't remember.
Q. Did Brian Haynes, do you remember, check statements -specifically asking you about 2007, early 2008, at that time -- made in BBA certificates about a product or a system's behaviour in relation to fire?
A. Sorry, the question was: did ... sorry?
Q. Did Brian Haynes check statements which were made in BBA certificates about products --
A. I'm sure that was his sort of main interest in actually -- in fire, so I'm sure he would have looked at fire aspects quite carefully.
Q. And specifically in relation to the Reynobond 55 panel, did Brian Haynes in fact check the statements made about fire performance --
A. Yes, yes.
Q. -- in 2007/2008 and --
A. Yes, yes.
Q. He did.

Can I then go back to the question we were looking at earlier about the BRE. You've given us a little bit of information about that.

Going back, if we can, to page 3 of your statement $\{$ BBA00011096/3\} at paragraph 10 , you have given the

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example of the BRE there at the end of paragraph 10 as an example of an external fire expert that the BBA would consult in relation to matters of fire safety. You I think have also said that the BBA would use other organisations. Did that include Warringtonfire or Exova?
A. Yes, we might have consulted Warrington for some tests and so on, yes.
Q. To the best of your recollection, during your time at the BBA, did the BBA have any formal agreement or consultancy agreements with the BRE or with Warrington?
A. I never got involved in the contractual matters, so I'm guessing there was a contract between the various parties.
Q. You're guessing. Let me be a little bit more focused.

Do you remember whether the BBA paid for example the BRE to check statements about fire performance on certificates?
A. Yes, I'm -- again I'm not sure how -- what the contractual agreement was, so I can't answer that, to be honest.
Q. Okay.

Again focusing on paragraph 10, you say:
" ... compliance of the product with fire regulations would have been checked by a fire expert ..."

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Was that invariably the case? In other words, did the BRE or other external fire expert check every certificate issued by the BBA where performance in relation to fire was stated?
A. The report would come up with a classification of some sort, and we would include that within the body of the certificate.
Q. When you say the report, which report?
A. The test reports.
Q. Yes, I'm sorry, I'm not sure I perhaps made my question clear.

When you say in your statement "compliance of the product with fire regulations would have been checked by a fire expert", did the BRE check every certificate for fire performance?
A. Er - -
Q. Every certificate the BBA issued.
A. I don't think that was the norm. I don't think that was the norm.
Q. You don't think that it was the norm? So on what occasions would the BBA go to the BRE or other external fire expert for assistance?
A. In a case such as this, where there was a query, there was something to be clarified, with regard to the coatings on the panels and so on. Whenever there was

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a problem, we would consult a fire expert like BRE.
Q. I see. But do I take it from what you've told us that when you didn't think there was a problem, you wouldn't need to go to the BRE or other similar external expert?
A. I think we would generally -- again, I can't remember all the projects I've been involved in, but generally the test report would give a classification and we would include a statement accordingly.
Q. Can you give us some sort of idea about what sort of queries or need for clarification would arise which would prompt you to go to the BRE, for example?
A. Yes, in this case, of course, we had to get some information from Alcoa, or Arconic, and bearing in mind this was a confirmation certificate, we had to be absolutely sure as regards the fire performance, so just to make sure, we had to consult BRE.
Q. Was there a particular problem that you perceived in the records leading up to the issue of the certificate, or what you saw on the technical file, which prompted you --
A. Basically, I understand the actual colour, for instance, has got a major bearing on the fire performance, so I needed clarification with regard to that, and of course with regard to the back face of the panel, again, because of my lack of familiarity with fire issue a confirmation certificate include test data or classification data which had come from UEAtc bodies such as the CSTB in France?
A. Exactly, yes.
Q. Yes, I see.

Now, is it right that some certificates were leaders

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    and some were followers, using the BBA parlance?
A. That's correct, yes.
Q. And is it right that leaders would be submitted to
    a panel of experts to review as well as to the
    certificate holder and others at the BBA?
A. Yes.
Q. Am I right in thinking that the BBA certificate for
    Reynobond that was issued in January }2008\mathrm{ was both
    a confirmation certificate and a leader?
A. I think that was the case, yes.
Q. Would a leader certificate require more attention and
    expertise to assess than a follower?
A. Not necessarily, that just depends on the complexity of
    the product, really.
Q. Now, can I show you the certificate --
A. Oh, sorry. Apologies for that. With the avis tech --
    with the confirmation certificate, the timespan was
    shorter. Instead of nine months, which was the normal
    time given to a normal certificate, with confirmation it
    was shorter, because all data was for all intents and
    purposes acceptable to BBA. So that's all I can say
    with regard to this particular type of certification.
Q. Right.
    Can you just explain as briefly as you can what the
    difference is or was between a leader certificate and
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    a follower certificate?
    A. If a similar product or a system was already given
a BBA certificate, that would be a follower. In the
case of a leader certificate, it would have been the
first time such a thing was being assessed. So, in this
case, I think this was a leader. But, having said that,
I think we had covered similar products. Bearing in
mind this is not a system we have assessed; it's
a product. The panel was the product we were assessing.
Q. And just to confirm something I think you said a moment
ago, is it right, just to be clear, that a leader
certificate would have to be submitted to a panel of
experts to review?
A. Yes.
Q. And those would be outside the BBA; yes?
A. Er ... I think so, yes. Yes. From memory, I think that
was the case.
Q. Now, I'm going to show you the certificate. We will
come back to it in detail, but just to fix it in your
memory. It's \{BBA00000047\}, if we could just have that
up, please.
This is the certificate in its final form, and you
can see the number on the top right-hand corner of the
screen: 08/4510.
A. Yeah.
Q. "Product Sheet 1 - Reynobond Architecture Wall Cladding Panels."

If you go down to the bottom of the screen, you will see that there is a date of issue, and it's
14 January 2008.
So that's the certificate. Just to be clear, do you recognise that document?
A. Yes, I do.
Q. Yes, thank you, and that's the one you project-managed when you were at the BBA?
A. That's correct.
Q. Now, can we have a run-up to that in chronological terms, and we'll start in 2004.

Do you remember that Arconic first made an application to the BBA for assessment in March 2004?
A. I was never -- I can't remember that.
Q. Right.

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

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panel is attached is to be included in the assessment."
Can we take it from that, Mr Gregorian, that you read the application form in some detail at that stage?
A. Yes.
Q. What was your role in drawing up a contract for the subject?
A. Erm ... I think I -- the project manager would draw up a contract, and with the approval of the section head, it would just go through. So I'm -- I do recognise this particular email, yes.
Q. Would you read the technical file thoroughly in the process of drawing up a contract such as this?
A. The technical file was compiled after the project was completed.
Q. I see.

Let's move forward, then, to 2006, because we know that the BBA offered this contract but it wasn't taken up.

Do you remember that in 2006 Arconic again sent an application form to the BBA materially identical to the application they'd made in 2004?
A. Again, I can't remember that.
Q. Let's look at a document, \{MET00053158_P14/100\}, please.

This, Mr Gregorian, is an exhibit from Claude Wehrle's exhibits to his witness statement to the Inquiry. It's
A. Yes, I remember having seen it, yes.
Q. Well, let's look at what's attached to it, because there
is an attachment.
Can we go to page 102 \{MET00053158_P14/102\}, please.
This is an assessment specification which was part of
that document, and you can see at the top it's got a new
reference, S3/41014, and it's dated 22 August 2006.
Just looking at it, do you think this was a document you drew up?
A. Yes, this is a sort of standard format of offering a contract.
Q. Yes. If you look under the items under "General" --
A. Yes.
Q. - - you can see number 1.1:
"Product name: Reynobond 55.
"Product type: Aluminium/polyethylene composite wall

## cladding system."

Note the word "system" there.
Then if we look at section 2.1, "Product range", it says:
"Composite panels made up of a Polyethylene core sandwiched between two pre-painted, 0.5 mm thick, aluminium sheets. Three thicknesses ..."

It goes on to explain what those are and the sizes.
Below that, under "Ancillary items", it says:
"Alcoa aluminium support rails (or similar approved) and fixings.
"Any sub-framing and its attachment to the substrate wall are outside the scope of this assessment as are other miscellaneous construction details."

If this offer had been accepted by Arconic at the time, then it's this assessment specification that we have been looking at which would define the final scope of the product certified?
A. I think it -- at some stage we must have decided to approach this assessment differently, ie to approve just a panel by itself rather than the whole system.
Q. Yes, and I'm going to ask you in detail about that. But generally speaking, just on the face of it, would it be this assessment specification which would define the final scope of the product certified?
A. I really wouldn't -- I can't comment, because, as I say, this was a contract which was offered, but I don't think we were under an obligation to sort of stick to this particular detail. So we were at liberty, I think, to do the assessment in the way the BBA would approach this assessment. I think we were at liberty to divert to some extent from the contract --
Q. Yes.
A. -- as it's stated here. But I'm quite sure it was the panel that was being assessed and the certificate actually makes that clear.
Q. When you look at 1.2, please, same page but at the top of the screen, under "Product type", where you see that it says "system", "composite wall cladding system", what would be or what was indicated by the word "system" there, do you remember?
A. I think, as I say, the intention was to draw attention that these composite wall panels would be used in a cladding system, but it's not meant to be an accurate definition of the product we were assessing.
Q. Were you intending to capture simply the flat product, the panel itself, or the product as fabricated into cassette or rivet - fix, or attached to a fixing system?
A. Our assessment was to ensure that the cladding material, this composite material, could be used in any cladding

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system, be it cassette or riveted. Our assessment stopped at the fixings. Anything beyond that would not be covered by the certificate. I think the certificate makes that clear.
Q. Yes.

Can I then ask you about the avis techniques, if that's the right way of pronouncing it.

Can we please go to $\left\{\mathrm{MET} 00053158 \_\mathrm{P} 13 / 173\right\}$. This is part of the application form sent to you by Mr Wehrle in 2006, and you can see that this is a list of reports that supported the application at that time. In the top two rows you see it says, "Avis technique", can you see that on the left - hand side there?
A. Yes.
Q. In the next cells you can see that these were offered for structural and system for cassettes, structural and system for riveted.

Did you see this document in 2006, do you think?
A. Yes.
Q. What did avis technique structural and system for cassettes and for riveted mean to you at the time?
A. I think CSTB had a different approach with regard to assessment. They would assess different types of cladding system, cassette or riveted, they would assess the whole system. That's the impression I got. And
obviously when you asked for information, that's what they had, that's what they provided. But our job was to extract information with regard to the panel on its own, from the document at the time.
Q. When you saw "structural and system", did you think that included or excluded fire?
A. Sorry, with regard to fire?
Q. Yes. When you saw "Avis technique structural and system" for both cassettes and rivet, did you think that that included or excluded an assessment for fire?
A. I'm only guessing for different fixing systems, they would have their own assessment in relation to fire.
Q. Yes.

Did you look, do you remember, at the CSTB avis technique documents themselves that underlay this part of the application?
A. Yes, I must have seen the avis technique, yes.
Q. Yes.

Can I just show you those, then.
Can we go back to Mr Wehrle's exhibit part 14,
\{MET00053158_P14/8\}. You can see this is technical opinion 2/04-1083, and if you look down a little bit, you can see it says, "REYNOBOND Cassette System".

Let's have it at the same time on the same screen, please, page 64 of the same exhibit run
\{MET00053158_P14/64\}, please. We can see that this is technical assessment 2/04-1083, and this is 1081 on the right - hand side of the screen. We have 1083 on the left, 1081 on the right, and this one is for the riveted system.

When you looked at this application, did you notice that there were two different technical opinions from the CSTB, one for the cassette system and one for riveted system?
A. Yes, basically because their approach to assessment was different. They were assessing the system rather than just the panel on its own.
Q. Yes. Did you read these, do you think, at the time?
A. I think I -- yes, I vaguely remember this, yes.
Q. Yes. And, as you say, there is nothing about these assessments, these technical assessments, about fire safety?
A. I suppose not.
Q. You say you suppose not; do you remember that?
A. Er --
Q. I don't want to take you through it all --
A. I think with regard to fire, I think we were concentrating on the actual panel, and that's why we asked that test results be provided for us to assess the actual panel rather than the system.

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Q. When you say "system", do you mean specifically as
        fabricated as opposed to --
A. I mean the panel and including the substructure.
Q. Right. So that would be the panel as fabricated and the
        substructure?
A. And the substructure, yes. I think that's the
        avis tech -- the CSTB approach. But I think in this
        country, the approach was different, we would just
        approve the actual panel and whether it was suitable to
        be incorporated in a cladding system.
Q. Yes, but just to be very clear, when you say the panel
        and including the substructure, do you mean the panel as
        fabricated, in other words as a rivet or as a cassette,
        and the substructure?
    A. Yes, yes.
Q. You do.
            Now, can I then turn to the discussions you had with
        Arconic starting in November 2006, and can we start in
        this exhibit run, please, and go to page 114
        \{MET00053158_P14/114\}.
This is an internal Arconic document, Mr Gregorian, so you may not have seen it before, and you are unlikely to have seen it at the time.
It 's dated 2 November 2006, and you can see that it's a visit report created by Arconic, and written by
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Colin Southgate, as you can see from the right-hand side of the document at the top, location: Garston, Watford, UK. Were those the BBA offices at the time?
A. Yes.
Q. The date of the visit, 2 November 2006, and you can see who was present: we've got, for the BBA, Bob Keyse, John Albon and you. Do you see that?
A. Yes.
Q. And on the other side, the Arconic people present were Colin Southgate and Andrew Rich.
A. Yeah.
Q. Just pausing on the words next to your name there,
"Eng system dept", is that engineering system
department?
A. Engineering system department, yes.
Q. Do you remember this meeting at all?
A. Erm ...
Q. Late 2006.
A. I can't remember, to be honest. I -- no, can't remember.
Q. All right.
Let's look down at the document then and see how much of it you can help us with.
If you look at item 1, you can see:
"Reason for visit: Exploratory call to [assess]
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Q. Can we go down to point 2, "Details of visit". It says:
"After a general discussion with BK and CS threat to
stop all dealings with BBA unless a satisfactory solution was found re both the above potential approvals. BK had arranged for the BBA persons responsible for each product to be in attendance."

If we scroll down to page 115 \{MET00053158_P14/115\}, please, we can see that there is a meeting $B$, and it says:
"Meeting B $-R B-55$ proposal dated 23.8.06 with Hamo Gregorian.
"BBA confirmed that they would look at the original proposal and try to reduce the cost. They will use CSTB details as a Basis of Validation, but are concerned that UK building Regs are more demanding than French regs!! Also enclosed was fire regulation input - This will not be needed if BBA have latest certs from Warrington research covering PE Cores."

Then it says on the right-hand side,
"[Claude Wehrle]/CS", we think that's Claude Schmidt,

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both of Arconic, "to send full Certs to BBA".
Can you confirm what "CSTB details" means there, when it says, "They will use CSTB details as a Basis of Validation"?
A. Basically the assessment done by CSTB leading to the avis technique.
Q. So that's a reference, is it, to the avis technique documents that Arconic --
A. I think so, mainly, but they might provide other information as well.
Q. Right.

Is it right that the BBA was still looking for
fire safety certification?
A. From this, obviously fire was an important issue and, as I say, I can't remember the actual meeting, but ... were just concentrating on the fire aspect.
Q. Right.

When it says, "[they] are concerned that UK building Regs are more demanding than French regs", looking at the document, it looks as if that's a reference to the BBA having that concern.

Do you remember whether that's right, that the BBA did have a concern at the time that UK Building Regulations were more demanding than French regulations?
A. At some stage I must have consulted possibly

Brian Haynes to make sure that that was the case.
Q. And was that the case specifically in relation to fire?
A. Yes, especially on fire, yes.
Q. Yes.

Now, we'll come back to this document in just a moment.

Do you recall a discussion at that time about reducing the cost of the assessment contract for Arconic?
A. I can't remember that.
Q. Do you remember whether Arconic wanted to reduce the cost of the assessment by providing data rather than conducting more tests? Do you remember that?
A. No. No.
Q. Going back to the document, just underneath where we were, it says:
"I have suggested that it could be better to validate the material RB rather than the whole system.
This way a cross connection can be put together."
It goes on below that:
"BBA - Certification for 4 mm thick $\times$ RB -55 material.
"CTSB - Certification for RB + Systems.
"This way our 2 products materials RLX \& RB
[Reynolux and Reynobond] can be approved on paper which will cover most needs such as the NHBC/NBS

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organizations."
Do you recall this discussion, or at least the gist of the discussion suggested by this note?
A. This was what I was referring to. I think the approach with CSTB and BBA were different in this respect, and I think we were trying to push this idea that the panel could be assessed separately from the rest of the system.
Q. I see. So by "whole system" here in that line, where it says, "it could be better to validate the material RB rather than the whole system", did that mean validating the material rather than the fabricated panel, in other words cassette fixing system or rivet fixing system?
A. That's correct, yes.
Q. I see.

What was the so-called cross-connection that was desired here that's referred to?
A. Sorry, I don't understand the question.
Q. Well, I'm just asking you about that second sentence in that paragraph, where it says, "This way a cross connection can be put together". What was that cross-connection, can you recall?

> (Pause)
A. I can't remember that, no. I'm not sure what two products were, to be honest. No, I can't remember that.

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Q. A little bit earlier in your answers, you said that you
    think you were trying to push this idea that the panel
    could be assessed separately from the rest of the
    system.
            When you say the panel as opposed to the system, can
        you just explain a little bit more what you mean about
        that difference? What was the panel, and what was the
        system?
A. As I say, the approach the BBA adopted was to try and
        assess the panel on its own and whether it is suitable
        to be put on a system. So I think the BBA certificate
        actually makes it clear that the panel could be
        incorporated in a cladding system which would have to be
        designed by a consulting engineer, let's say.
Q. Yes. Now --
A. So anything beyond the actual fixings was not covered by
        the certificate. It's probably a much safer approach
        than the -- covering the whole system.
Q. When you say "to try and assess the panel on its own",
        I just want to be as clear as I can here, do you mean
        the raw panel before it's fabricated into a fixing
        system, rivet or cassette, or do you mean the fabricated
        panel?
A. The actual panel itself would have certain physical
        properties which should be used to design the fabricated
        4 5
        panel. Does that answer your question?
Q. Not really.
        When you're drawing this distinction between the
        panel and the system, I understand what you mean by
        a system, but when you say panel, do you mean the panel
        before it's fabricated for fixing as rivet or cassette,
        or the panel as fabricated for rivet or cassette?
A. No, it would be just the panel as a material.
Q. Right.
        Now, when we come back, then, to this document,
        "This way a cross connection can be put together", what
        did that mean, do you think, or do you remember?
A. Sorry, which paragraph is that?
Q. It's the paragraph in the middle of the screen, which
    says:
            "I have suggested that it could be better to
        validate the material RB rather than the whole system.
        This way a cross connection can be put together."
            What was the cross-connection?
A. I think that must have referred to the two systems and
        the cross-connection would be the fact that it's just
        the panel being assessed. I'm guessing that's what this
        means.
Q. Right.
A. The idea being is to stay away from the CSTB approach,
Q. -- as opposed to --
A. Yes.
Q. Yes, I see.
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Now, just a question going back to the assessment specification which we saw earlier, which defined the scope as being the system, and you said: well, that could change. Would it be normal for such a change to be made, or would it be exceptional?
A. It's not very often we came across something like this, and to the best of my recollection, this is probably the first one l've ever come across. Normally products or systems are quite straightforward, but this was slightly different.
Q. You say it was the first one you'd ever come across.

Did that raise any suspicions in your mind about what

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

First of all, you can see that here it says "I have suggested" - - and that's an Arconic person has suggested -- "that it could be better to validate the material RB rather than the whole system"; you said earlier that it was you or the BBA who was pushing the idea that the panel could be assessed. Can you remember whose idea it was to have the panel, as you define it, assessed as opposed to the system?
A. I can't remember who it was who originated this, but I think the BBA policy was to -- somebody decided that it 's much safer to approve a product than a system, because control over a system is a lot more difficult than control over the quality of a product, of a panel for instance.
Q. Did your understanding that the BBA was only certifying the raw panel, as opposed to the fixing system, rivet or cassette, ever change between the date of this meeting, November 2006, and the date of the issue of the certificate in January 2008?
A. No. As far as I know, we were assessing the panel and its suitability for inclusion in a cladding system.
Q. Can we then go to the bottom of the screen and the conclusion according to this meeting note. It says:
"Very positive meeting and hard tactics may have helped our situation.
"RB proposal will be lower.
"Prepared to work with the CSTB data.
"AAP-M [Arconic] do need BBA for UK market."
Can you help us with what is meant there by "hard tactics"?

Let me ask the question this way: did you detect that Arconic were driving a hard bargain with you?
A. No, I can't remember the details of this meeting at all --
Q. Right.
A. -- obviously, I mean, marketing were involved in this, and it must have emanated from marketing.
Q. Yes, I see.

Before I leave this note, can I just correct one thing. I said that CS stood for Claude Schmidt; in fact, it stands for Colin Southgate, just to correct that for the record.

Do you remember that after this meeting Bob Keyse told you that you could reduce the technical time on the certificate?
A. I must -- that must have happened, I can't remember.
Q. Let's look at a document, $\{$ BBA00008042/623\}, that's the technical file. This is an email chain between you and Bob Keyse at around this time. If we see the bottom of the screen, there is an email from you to Bob Keyse, 2 November.
A. Yeah.
Q. You confirm to him that the technical time can be reduced to 120 hours. Do you remember that?
A. I can't remember it, but that's what I must have said. The reason for that being a different approach to the assessment, and the -- but the fact that the avis technique would provide all the information we need.
Q. Yes.

Do you remember that -- well, if we go to the top of the page, we will see it. The top of the page, second email down, the new cost was, as you can see, $£ 18,015$. So that was a reduced cost, wasn't it?
A. I suppose, yes. Yes.
Q. Yes.

The cost reduction that was agreed and the reduction in technical hours that was agreed, was that as a result of the meeting on 2 November 2006 --
A. It must have been, yes. I can't remember. It must have been.
Q. Right. Was that reduction made because you could use
the CSTB data for some of the aspects of the assessment?
A. That would be my guess, and Bob Keyse would have agreed to that, I guess.
MR MILLETT: Mr Chairman, is that a convenient moment?
SIR MARTIN MOORE-BICK: Yes, I think we've run rather long, but that will do, yes.
MR MILLETT: Mr Chairman, I'm sorry about that, you're quite right.
SIR MARTIN MOORE-BICK: Mr Gregorian, it's time we had a break. I'm sure you'd like one. We will stop now until 11.35, please.

## THE WITNESS: Okay, thank you.

SIR MARTIN MOORE-BICK: I must ask you, please, while we're on the break, not to talk to anyone about your evidence
or anything relating to it. All right?
THE WITNESS: No problem.
SIR MARTIN MOORE-BICK: Thank you very much. We will see you a bit later then. Thank you.
THE WITNESS: Thank you.
(11.21 am)
(A short break)
(11.37 am)

SIR MARTIN MOORE-BICK: Welcome back, everyone. We're going to continue hearing from Mr Gregorian.

I can see you there, Mr Gregorian. Can you see me

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## and hear me all right?

THE WITNESS: Yes.
SIR MARTIN MOORE-BICK: Good. Thank you very much.
If you're ready, Mr Millett, we'll carry on.
MR MILLETT: Yes, Mr Chairman, thank you.
Can we please go back to the note of the meeting at Watford on 2 November 2006 at $\{$ MET00053158_P14/114 \}. I showed you this note before.

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

Do you recall whether Mr Albon was present
throughout the entire meeting which you attended?
A. I can't remember, no.
Q. Specifically, if we could go down, please, to page 115 \{MET00053158_P14/115\}, the next page, you can see that there's meeting $B$ which we've just been examining in detail ; can you confirm, do you know or do you remember whether Mr Albon was present for meeting B?
A. I can't remember, no.
Q. Moving forward in time, there was a further meeting with Arconic on 7 February 2007. That's in the same document run at page 131 \{MET00053158_P14/131\}, where we will find, again, an Arconic internal visit report of

7 February 2007. Now, again, this is not a document that you are likely to have seen before.

You can see that the date of the visit in the title block at the top is, as I say, 7 February 2007, and in the header you can see that it was a visit to the BBA at Garston in Watford, and you can see underneath the line who the people attending were. You've got Colin Southgate and Rich, and Scheidecker as well, and then on the other side you have you, Hamo Gregorian, and also Bob Keyse.

Do you remember this meeting?
A. No, I don't.
Q. If we look under the heading "Reynobond", please, at the second paragraph down, under that heading it says:
"The need of the BBA certification is always more and more important."

That's the first paragraph there.
They say at the end of that paragraph:
"Alucobond is the only ACM supplier with this
approval at the time being, but it will be a real
[ differentiation ] point for the coming month."
Do you remember that being said or words to that effect being said?
A. I think the impression I got was that was generally the case, just talking to colleagues, a BBA certification

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was very important to any prospective or potential certificate holder. So although I can't remember this particular incident, but I think it was generally accepted that the BBA certificate was very important to all manufacturers.
Q. Was that for commercial reasons, marketing reasons?
A. I think so, yes.
Q. If we look in the second paragraph, it says, if you read with me:
"The BBA agrees to make the certification on the product without to be linked to a specific system.
"Possible fixing system will be simply [mentioned] in the certification.
"It means we will have only 1 approval for all our application, instead to make one approval per system
"If people will ask for more details we will use the CSTB specific approvals.
"[ Initially their] quotation was on $24.000 £$ but after [negotiation], CSO obtained to have it for 16.500£.
"Action:
"- sent our french building approvals in english ...
"- sent the documents of our CSTBat approval ...

- sent our technical [ literature ] ..."

And then if you look at the bottom of the action
list:
"- confirm the assessment specification (which product to be certified - also FR?) ..."

Now, do I take it that you have no independent recollection of this meeting?
A. I can't remember this meeting.
Q. No, all right. Let's see how we go with the document.

Looking at that second paragraph I have just read out to you, where it says "The BBA agrees to make the certification on the product without to be linked to a specific system", did that mean, do you remember at all, that you agreed to certify the panel as the product regardless of what fixing system was used to put it on the wall?
A. That's right. I must have discussed it with the marketing people and most probably with Brian Haynes as well.
Q. Now, at this time --
A. That was the approach that we would normally take in a case like this. Instead of the system, we would approve the material, and whether it was suitable for inclusion in a cladding system.
Q. Yes.

Now, at this time, were you aware, do you remember, that RB 55 could be applied in either rivet-fix or

## 55

cassette-fix?
A. Again, bearing in mind it was the material we were assessing, it would have been suitable for both systems.
Q. Yes, suitable for both, certainly; but were you aware that, to be used at all, Reynobond 55 had to be fabricated into a fixing system, either rivet or cassette?
A. That's correct, yes.
Q. Indeed, do you accept that you had seen that fact from the CSTB avis technique approvals that were on the file for the 2006 application?
A. Yes.
Q. Did you realise that in fact the panel itself in its raw form was unusable unless it was fabricated?
A. Well, the fact that the material was suitable for fabrication, we would consider, we would make sure that it could be fabricated for installation in the cladding system.
Q. That wasn't quite my question. Let me try it again.

Were you aware, did you realise, that the panel itself in its raw form couldn't be used at all unless it was fabricated into one or other of those two fixing systems?
A. You mean at this stage?
Q. Yes.
A. That was the whole purpose of the assessment, to make sure that it could be, based on the avis technique and the CSTB data, that it could be fabricated.
Q. When you say it could be fabricated, are you saying that the purpose of the certification by the BBA was to cover the fabricated product, fabricated as a rivet-fix or a cassette-fix?
A. The BBA certificate would cover the suitability of the material for fabrication which would be used in a cladding system.
Q. Right.
A. That is the whole purpose of the BBA certificate, to make sure whether that material was suitable to be fabricated and put in a cladding system.
Q. Yes.

Can we agree that the BBA's purpose was to certify the panel, whether it was used in a rivet system or a cassette system?
A. That's correct, yes.
Q. Why did the BBA agree to do that?
A. It's ... it's a much safer way of certification than -and obviously cheaper, in this case it 's a simpler assessment. So I think it's appropriate to do that, and that was the BBA approach. If you include the cladding system right back to the brickwork, for instance,

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there's too many unknowns which you have to take care of, and we tried to steer away from that.
Q. Just to be clear again - I want to make sure that we are not at cross-purposes -- there are three concepts: there is what I would call the raw panel, ignoring the fixing, ignoring the fabrication into a fixing; there is the fabricated panel, which is fabricated for a particular fixing, rivet or cassette; and there is the system into which you put the fabricated panel. Do you understand what I mean by those three separate concepts?
A. Yes.
Q. So my question is whether the BBA was agreeing to certify the raw panel regardless of whether it was fabricated into a rivet or cassette?
A. The BBA assessment was to make sure that the raw panel material was suitable. Whether it be rivet-fix or cassette-fix, that was immaterial as far as the BBA certificate was concerned. We just concentrated on the suitability of this material to be fabricated and put in a cladding system.
Q. Did you have any thoughts at the time about what Arconic's rationale for having you certify the raw panel, as I would call it, was?
A. To my recollection, there was no objection to that, but they had a different approach to assessment of these
panels to what BBA did.
Q. What was their approach?
A. Their approach was to approve each cladding system on its own, rivet and ... as far as I remember, they would approve the whole system, cladding system, riveted or cassette.
Q. What was the purpose of simply mentioning the possible fixing systems in the certification if all that you were certifying was the raw panel?
A. The drawings that were included were just to draw to the -- draw attention to the fact that the panels -- the main use of the panels was to be included in a cladding system.
Q. Why was that relevant to your certificate?
A. Well, as I say, the intention was to make sure it was suitable, the product was suitable to be included in a cladding system. But I think we make it clear in the -- well, the BBA made it clear that it's the panel that's the object of the assessment.
Q. We'll come back to this topic later when we look at the certificate itself, Mr Gregorian.

Can I ask you whether you remember any discussion of why they wanted approval for both fixing types?
A. Sorry, why CSTB wanted ...?
Q. Yes -- no, why the client, Arconic, wanted it.

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A. I guess that's where the -- that's in compliance with the avis technique, that's --
Q. I see.
A. That's probably why -- you know, they had the avis technique before the BBA certificate, so $I$ suppose that's why they were asking for that.
Q. When you look at the paragraph that we have been looking at, you see four lines down, if we could have the document back on the screen, please
\{MET00053158_P14/131\}, it says, can you see, four lines down in that paragraph:
"If people will ask for more details we will use the CSTB specific approvals."

What did you understand, doing the best you can with your recollection, what CSTB specific approvals were?
A. Sorry, I can't quite locate the line you were referring to.
Q. Okay. It's under the big "Reynobond" title, second paragraph or second block of text under that, and four lines down, it says:
"If people will ask for more details we will use the CSTB specific approvals."

Do you remember what those CSTB specific approvals were?
A. I can't remember, no.

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Q. Specifically, what I'm really trying to get at was
    whether that was a reference to the avis technique
    approvals which didn't deal with fire, so far as we can
    see, or whether that's a reference to CSTB fire tests.
A. Yes, I think the intention there is to try and use the
    avis technique as much as possible, for our purposes,
    for our assessment.
Q. Yes.
        Looking at the line above, it says:
            "It means we will have only 1 approval for all our
        application, instead to make one approval per system."
            Do you know or can you remember Arconic's rationale
        for only wanting one approval instead of one approval
        per system?
A. I can't -- no, I can't comment on that, to be honest.
Q. Can I suggest something to you and see if you can
        comment: was it because it would be cheaper for Arconic
        to have one approval for all the applications as opposed
        to --
A. I'm guessing, yes, that might have been one of the
        considerations.
Q. Right. But you don't know, you're guessing; is that
    your evidence?
A. Me, no, I can't comment on that.
Q. Fair enough.
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Now, we saw from the 2006 file, as I mentioned a moment ago, that the BBA had on its file the CSTB avis technique approvals, didn't it?
A. Yes.
Q. And do you remember I showed you these, there were two separate ones: one for cassette and one for rivet; yes?
A. Yeah.
Q. Why wouldn't it have made sense for the BBA to make its own assessment on each fabricated system, in other words a BBA assessment on rivet and a BBA assessment on cassette, in the same way that the CSTB have done?
A. As I say, we -- BBA philosophy was, I think, from engineering standpoint, the probably more sensible, because the variables in a system were much more complicated than just approving a panel for suitability .
Q. Right.
A. Yeah. So we adopted that approach for assessment of this particular product.
Q. Could the BBA have insisted on assessing cassette and rivet separately in the same way that the CSTB had done under the avis technique approach?
A. No, as I say, I thought, from a quality control point of view, it was a much more sensible approach to assess the product rather than the system.
Q. Right.
Q. -- S3/41014, and it still bears the date 22 August 2006.

Can you just confirm that that in fact was the original date of the 2006 application, and it just hasn't been changed in this document?
A. Yes.
Q. Now, we can see that there is a price, if you look a little bit further down the page, under item V , "The

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Fee". It's $£ 16,527$, and no VAT.
If we turn a little bit up the screen to II, you can see "The Subject":
"Proprietary name: Reynobond - Architecture."
Somebody has written "Architecture" in there in manuscript, and then underneath that:
"Nature of product or process:
Aluminium/polyethylene composite wall cladding ..."
"System" was typed, but then that's been deleted in manuscript and somebody has written in hand, "panels". Do you see that?
A. Yes.
Q. Do you know who wrote that?
A. I can't remember who wrote that, but obviously at some stage we had decided that this is a better approach and the contract was changed accordingly.
Q. I see. Does that change reflect the agreement or arrangement arrived at in Watford in the meeting earlier in February 2007 that we have been discussing?
A. It must have been as a result of that, I suppose, I can't comment on that.
Q. Right.

Now, we know, as I've shown you, the certificate that was eventually issued in January 2008. I want to look a little bit more closely at the assessment that

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    led to that certificate
    Can we turn on in the technical file, please, to
    page 11 {BBA00008042/11}. This is the assessment
    programme sheet. If one looks at the top left - hand side
    of the screen, you can see that, and the product name
    there is "Reynobond 55 Wall Cladding System", as you can
    see in the middle of the page, and again, it still bears
    the date of 22 August 2006.
            Do you recognise this document?
A. Yes,I do.
Q. Did you prepare it?
A. I think so, yes.
Q. Looking at the date of this document, and I know it says
    August 2006, would you have prepared it for the initial
    contract pricing?
A. Er ... yes, I think so, yes.
Q. Right.
            Can we just be clear, do you think you might have
    prepared this at the same time as preparing the offer
    for the contract in 2006 and then just not updated it
    when it came to finalising the contract in 2007?
A. Yes, I suppose -- yes, yes, I --
Q. I don't want to lead you into error by suggesting that,
    but we're trying to work out the dates.
A. Yes, it clearly says "cladding system", but obviously
6 5
    the contract has been changed, and so has the pricing,
    and the number of hours I think must have been changed
    as well accordingly.
Q. Yes, I see.
            Can we then just be clear whether, even though there
    was that change from system to panels that we've
    discussed, you would still have followed the assessment
    programme set out in this document when doing your
    assessment for the certificate that was ultimately
    issued?
A. As soon as it was established that we were assessing the
    cladding panels, I would assess the product accordingly.
Q. Right.
    Let's look at item 4.1, about a third of the way
    down the screen, "Safety". Then under "Assessment/test
    work", it says:
    "Strength and stability:
    "Behaviour under wind loads.
    "Resistance to hard and soft body impacts.
    "Behaviour under thermal actions.
    "Fire:
    "Behaviour under fire."
    Do you see that?
A. Yes.
Q. If you look at the columns to the right of that, we can
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see that the assessment for strength and stability is 25 hours, "Assess CSTB data". Do you see that?
A. Yes.
Q. But for fire it's five hours, "Consult BMH".

Why would more hours be needed to be devoted to strength and stability rather than fire?
A. That's my area of expertise generally, and there's a lot of details to look at, so ... bearing in mind this is an estimate of hours, it's not meant to be -- there's no way you can estimate these things accurately. And the CSTB data, again, that presents a challenge as well. So I think 25 hours was sort of sensible.
Q. Why would more hours be given to strength and stability rather than fire?
A. There's quite a few things you need to check when it comes to -- I mean, I would -- by calculation or analysis, I would have to confirm that the product was good enough for wind load and so on in the UK.
Q. Would the same degree of care and analysis not be required to confirm whether the product was good enough for fire in the UK?
A. With fire, it's just a matter of looking at test data and checking against compliance with our Building Regulations, so there's no -- as far as I know, there's no analytical method to confirm one way or the

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other.
Q. But you do, I think, accept that you would need to look at the test data for fire?
A. Yes, yes, of course, yes.
Q. Who would decide how many hours would be required for each of these safety elements?
A. I think I would probably consult with my section head, and bearing in mind he had a lot more experience than I, we would come up with -- you can see the hours go in steps of five, so it's not meant to be very accurate at all, it's just an estimate.
Q. In the far right column, we can see the steps, and for strength and stability it says "Assess CSTB data". Is that referring to the CSTB avis technique documents we saw on the technical file?
A. Yes, some information would have come from avis technique.
Q. Yes, I see. And for fire, as we've seen, it says
"Consult BMH". Is that Brian Haynes?
A. Yes.
Q. Why did it say consult Brian Haynes?
A. Well, because of the issue regarding the perhaps lack of information that we had in the CSTB documents.
Q. Right.
A. Or, rather, basically because I wasn't sure how to
assess fire aspects, I had to consult Brian Haynes.
Q. What precise question or query led you to think that you needed Brian Haynes' input?
A. As I say, Brian was the -- was my main port of call with regard to assessment of fire, and just to confirm that the material with the appropriate coating was suitable, so I had to confirm that with Brian. There was no way I could assess it myself, so I had to consult Brian.
Q. Did you know yourself what test data or classifications you were looking for in order to be able to assess this product for fire safety?
A. No.
Q. I see. So would it follow from that that, even in respect of that question, you would have to consult Brian Haynes?
A. Exactly, yes.
Q. I see. Did you consult Brian Haynes as a matter of fact?
A. I did. I referred the matter to Brian, who then consulted BRE for their advice.
Q. Do you know what he did? Do you know what Brian Haynes did?
A. I remember - - strangely enough, I remember the conversation he had with Sarah Colwell. Because I didn't get a response from Sarah in writing, I asked

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Brian to contact her and, as I say, because of his long association with BRE, he was advised that -- as to the classification of this material, and we included the appropriate statement in the certificate.
Q. Were you party to that conversation?
A. I -- actually, yes, I was -- strangely enough, I do remember being in the room while he was talking to Sarah.
Q. So was there a meeting between --
A. It wasn't a meeting, he was talking on the telephone. I remember that. And soon after that, he signed off the certificate .
Q. Right.

Can I just see if we can explore this a little bit more.

First of all, when was the conversation between Brian Haynes and Sarah Colwell?
A. After I must have consulted -- talked to -- after I talked to Brian, I think he -- and I mentioned the fact that I'm not getting a response from BRE, he immediately got on the phone and spoke to Sarah. That's my recollection.
Q. So, in terms of timing, you said earlier that it was soon after the conversation that he signed off the certificate ; that was January 2008. By reference to
that, when do you think this conversation took place?
A. I can't remember.
Q. Right.

Now, you say you were in the same room as
Brian Haynes and he telephoned Sarah Colwell; is that right?
A. That's correct, yes.
Q. Could you hear both sides of the conversation or only Brian Haynes' side?
A. No, just Brian.
Q. I see.
A. It wasn't a long conversation, but Brian was advised
that -- as to the suitability of the -- this particular material for fire performance.
Q. Right.

Do you know whether Sarah Colwell had in front of her the draft certificate or any test data relating to fire for Reynobond 55?
A. No, I wouldn't know that. Obviously we must have supplied some information with regard to the product.
SIR MARTIN MOORE-BICK: Forgive my interrupting, Mr Millett.
Mr Gregorian, just help me with this: you said
a moment ago that you couldn't get any response from
BRE. Do you remember saying that?
A. Yes.

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SIR MARTIN MOORE-BICK: I took it from that that you had contacted BRE yourself to ask for their assistance.
A. That's correct, yes.

SIR MARTIN MOORE-BICK: Would I be right in assuming that you sent some form of information to the BRE in order to obtain their assistance?
A. Exactly, yes.

SIR MARTIN MOORE-BICK: Can you tell us what it was, please?
A. Documents, appropriate documents, maybe test data and so on. Anything to do with -- anything that was necessary to make a fire assessment. I can't tell you exactly what it was, but it was all the information that Sarah would need to make an assessment.
SIR MARTIN MOORE-BICK: Right. Well, some of that information was presumably test reports, was it?
A. Yes, I'm sure, yes, there must have been some test reports.
SIR MARTIN MOORE-BICK: Right. Can you remember in what form you sent them or how you sent them?
A. Most probably by email.

SIR MARTIN MOORE-BICK: Right. Thank you very much.
Yes, Mr Millett, carry on. Thank you.
MR MILLETT: Yes.
A. Thank you.
Q. We are going to come to some of that later on, I think,

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    when we explore the precise documents in a bit of
    detail.
        Can I just understand this conversation. Did
    Mr Haynes report to you what Sarah Colwell had told him
    after the conversation had ended?
A. He didn't, he just ... basically he just approved or
    rather checked and okayed the particular statement
    relating to fire.
Q. Yes. I see.
A. I have no details as to what conversation went on.
    I have no idea. All I know is that I distinctly
    remember him talking to Sarah.
Q. And to be clear, am I right in thinking that the data in
    the CSTB avis technique documents were not considered at
    all to the best of your knowledge, either by
    Sarah Colwell or Brian Haynes, in relation to any claim
    about the fire performance of Reynobond 55?
A. I think it would be safe to assume that there was no --
    not enough information in the avis technique, but that's
    probably why we had to check with fire experts.
Q. Yes.
    Now, just covering this off, can we go to your
    witness statement, please, at page 4 {BBA00011096/4}.
    I just want to look at something you say in your
    statement at paragraph 5(d). You say, in response to
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[^1]Brian Haynes actually word those statements for the certificate, or did the wording come from Sarah Colwell?
A. No, the wording didn't come from Sarah Colwell. We just -- we put the wording in, and if the classification was in accordance with what the fire expert had advised, Brian would okay it, he would sign it off.
Q. Do you remember whether Brian Haynes checked his wording with Sarah Colwell after he had put it in the certificate but before it was signed off?
A. Not to my knowledge. I mean, as I say, all Brian would want to know was whether this particular material classification is what the statement says.
Q. I see. So just to be as clear as we can, on fire safety, can we take it that the precise language of the wording of the certificate was Brian Haynes', based on what he had understood the advice from Sarah Colwell was?
A. The statement wasn't Brian Haynes' in entirety.
Q. No, in relation to --
A. These are -- yeah. These statements are quite standard format in BBA certificates, so where a classification was involved, he would most probably check that the classification was compliant with Building Regulations, but the wording doesn't come from -- didn't come from Brian.

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Q. We will come to the certificate shortly. I'm just trying to get an understanding of the role Sarah Colwell played in the precise wording of the certificate.

In relation to matters of fire safety, was it Brian Haynes who actually drafted the language, based on what he understood from Sarah Colwell's advice?
A. The draft would most probably have come from a similar certificate, and, as I say, there's a standard format that we use. Brian would have checked that the statement was correct, and he would have ... I was most probably with him when he actually signed off the certificate.

## Q. Yes.

Now, were you responsible for drafting the technical content other than fire and selecting the diagrams and images in the certificate?
A. Yes, I normally would decide what goes on the certificate.
Q. Did the BBA have stock phrases or generic statements that could be slotted in, used from other certificates ?
A. Yes, yes, yes, that was common procedure.
Q. Common procedure.

Who decides whether it's appropriate to copy across phrases from other certificates? Would that be you or would it be Brian Haynes when it comes to fire safety?
A. No, I would draft a certificate based on a similar product, for instance, just to make sure that -- well, I would try and make sure they were relevant, and then circulate it within the different sections.
Q. Well, let's turn to the certificate in detail now. Can we go to \{BBA00000047\}. I showed you this earlier on in your examination but we now need to look at the detail.

On the first page, you can see that there is a dark blue header as I showed you, "Product Sheet 1 Reynobond Architecture Wall Cladding Panels", and then you can see underneath "Product scope and summary of certificate ", it says:
"This Certificate of Confirmation relates to Reynobond Architecture Wall Cladding Panels, aluminium/polyethylene composite panels used to provide a decorative/protective facade over the external walls of buildings."

Then there's an image on that right-hand side.
First question is: was that title, "Reynobond Architecture Wall Cladding Panels", chosen to indicate that it was certifying the product, in other words the panels?
A. It was just -- the picture would be supplied by the certificate holder, and the intention there is to make sure that the cladding material could be used in
a cladding system such as this. There's no other way that you can depict a panel. A panel wouldn't make any sense. So unless you put a picture in there, you wouldn't know what the function of it was.
Q. We'll come back to this page shortly, but can we go to page 3 \{BBA00000047/3\}, please. At the top there you will see, in the dark blue band, the word "General", and underneath it you see it says this :
"This Certificate relates to Reynobond Architecture Wall Cladding Panels comprising an aluminium/polyethylene composite material, fixed to an aluminium sub-frame, to provide a decorative/protective rainscreen façade over the external walls of buildings."

As we saw on the front.

## Then it says:

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

Does that mean the metal rails that the cladding is fixed to?
A. That's correct, yes. It's not covered by the certificate. That's correct.
Q. Yes. What about other elements of the façade build-up, such as the insulation and the cavity barriers, they're presumably --

## A. No, they're not covered at all. <br> Q. -- outside -- no.

Now, if you go down to the next blue header
"Technical Specification", you can see "Description", and underneath that it says:
"1.1. The Reynobond Architecture Wall Cladding Panels comprise two 0.5 mm thick aluminium alloy sheets ..."

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

If we skip down to subsection 1.4, it says this, if you just read with me:
"Plain edged panels are riveted directly to the aluminium sub-frame. Flanged panels are hung from the sub-frame using $T$-slots fitting onto pintle on the sub-frame. Flange widths can vary to suit the design requirements (see Figure 1)."

There is a little footnote, as you can see,

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

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

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

Do you remember where those diagrams came from?
A. They must have come from the CSTB documents.
Q. So not from Arconic; is that right?
A. They might have come from Arconic, but normally I would imagine CSTB would include some details of this nature in their certificates.
Q. Do you recall how figure 1 came to be on this certificate?
A. It was considered appropriate to include these just to show what can be done with this cladding material -with this panel material.
Q. Was it you who decided that figure 1 should be inserted in this certificate?
A. We -- it is quite normal, accepted practice within BBA
Q. So what this certificate is clearly excluding -- is this right? -- is the subframe.
A. That's correct. Anything to do with the fixing to the subframe and the subframe to the brickwork, substructure, is irrelevant. These are just details to show how the material could be used in a cladding system.
Q. Yes, anything to do with the fixing to the subframe and the subframe to the brickwork, the substructure, you say

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

Do you remember whether you drafted those parts of this certificate?
A. That would have been based on the contract.
Q. Right. Based on the contract?
A. Yes.
Q. But was it you, I'm asking whether --
A. Yes, yes, I must have done that, yes.
Q. Can we go to your statement, please, at page 4
\{BBA00011096/4\}, and I would like to go back to where we were, which was the question at question (d):
"In particular, what consideration the BBA gave to ..."

And you have seen (i). I would like to go to (ii).
The question is what consideration the BBA gave to:
"ii . the fact that CSTB issued separate certificates for cassette and for face fixed (riveted) fixings?"

Your answer there is:
"In normal operation, both types were considered suitable for incorporation in a cladding system. For behaviour in relation to fire, consideration would have been by a fire expert. (see answer to 5di above)."

If we look at the bottom of the page, I just want to look at question 7 :
"What products did Certificate 08/4510 cover? In particular, please address the variants:
"a. core type-standard (PE) or fire retardant (FR)."
Then over the page $\{B B A 00011096 / 5\}$, looking at (b), which is what I want to focus on:
"b. fixing method - face fixed (riveted) or cassette."

Your answer is, "Both."
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Looking at that answer there, can I take it from that that, as far as you were concerned, the certificate covered Reynobond both in its fabricated form in rivet, and in its fabricated form as cassette?
A. The certificate would cover -- the material could be used either as face-fixed or riveted, and both were considered suitable. So, in other words, the material could be used to -- any of these two configurations.
Q. And the certificate covered the product in use in those two situations?
A. Yes, yes.
Q. Yes. So you agree then, I think, that the reader of the certificate would expect that any technical claim made in the certificate would apply equally to the panel fabricated into a cassette as to the panel fabricated into a rivet?
A. Yes.
Q. Yes. Thank you.

So can we agree that when the certificate says "product" or uses the word "product", it means product in both forms of fixing system, as opposed to the subframe and the other fixing --
A. Again, the product has got certain fire resistance properties which were covered. But all this is saying is that both fixing methods were suitable as regards the
material use.
Q. Yes, I understand.

Can we then stick with your statement and go back to the question I showed you you'd answered a second or two ago on the previous page, please $\{B B A 00011096 / 4\}$.
I read it out, but I skipped over it. Question 7(a):
"What products did [the] Certificate ... cover? In particular, please address the variants:
"a. core type - standard (PE) or fire retardant (FR)."

Your answer is at paragraph 23, if we just go to that on page 5 \{BBA00011096/5\} at the top. Do you see it says:
"Samples of the products covered are described in sections 6.1 and 6.2 of the Certificate."

Also -- let's cover these off while we can -- if you look at (c), coating type:
"Duragloss (PE), PVDF (FR)."
And coating colour:
"Grey/green (PE), metallic grey (FR)."
So that's what you say in your statement.
Let's look at the statements in the certificate
itself now, please. Can we go back to the certificate $\{$ BBA00000047/2\}. The blue header at the top says
"Regulations", as we can see there, and it says:
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"In the opinion of the BBA, Reynobond Architecture
Wall Cladding Panels, if used in accordance with the
provisions of this Certificate, will meet or contribute
to meeting the relevant requirements of the following
Building Regulations."
Then if you go down to the second item down, B4(1),
do you see, "External fire spread"? Can you see that?
A. Yes.
Q. It says next to "Comment":
"The panels are judged to meet the Class 0
requirements. See sections 6.1 to 6.6 of this
Certificate."
Now, first, do you remember who drafted or formulated those words, "The panels are judged to meet the Class 0 requirements"?
A. I think this was standard format of expressing classification of products.
Q. Right. So is that an example of you, as it were, cutting and pasting or copying across --
A. Yes, yes, 1 think so, yes.
Q. So, just to be crystal clear, this isn't a form of words that had come from Brian Haynes or perhaps suggested by Sarah Colwell?
A. No, it's something that I would put forward for comment to the appropriate department.

## Q. Yes, I see

Now, let's go to page 5 \{BBA00000047/5\}, please, and look in detail at section 6. I' ll read to you sections 6.1 to 6.3 , to start with. In fact, it's probably best to read the whole thing. Forgive me, this may take a moment or two, but it's important you see the whole thing, I think.

It's under the rubric, "Behaviour in relation to fire ", and it says:
"6.1. A standard sample of the product, with a grey/green Duragloss 5000 coating, when tested for reaction to fire, achieved a classification of $\mathrm{B}-\mathrm{s} 2$, d0 in accordance with EN 13501-1:2002. A fire retardant sample of the product, with a gold-coloured Duragloss finish, when tested for reaction to fire, achieved a classification $B-s 1, d 0$ in accordance with EN 13501:2002.
"6.2. A fire retardant sample of the product, with a metallic grey PVDF finish, when tested in accordance with BS 476-6:1989, achieved a fire propagation index
(I) of 0 and, when tested in accordance with

BS 476-7:1997, achieved a Class 1 surface spread of flame.
"6.3. As a consequence of sections 6.1 and 6.2 , the products may be regarded as having a Class 0 surface in

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relation to the Approved Document B of The Building Regulations ... and a 'low risk' material as defined in ... The Building (Scotland) Regulations ... The unexposed side of the products may also be regarded as having a class 0 surface.
"6.4. These performances may not be achieved by other colours of the product and the designations of a particular colour should be confirmed by ..."

And then it sets out various tests in various different subordinate jurisdictions.

Then 6.5:
"6.5. For resistance to fire, the performance of a wall incorporating the product, can only be determined by tests from a suitably accredited laboratory, and is not covered by this Certificate.
"6.6. Cavity barriers should be incorporated behind the cladding, as required by the national Building Regulations, but should not block essential ventilation pathways. Particular attention should be paid to preventing the spread of fire from within a building breaching the cladding system through window and door openings."

Now, I just want to look at some of those statements. I've read you the entirety of section 6 so that you have it in your mind.

Can we start with the statement at section 6.2 ,
please, "A fire retardant sample of the product, with a metallic grey PVDF finish".

Can we go to page 163 of the technical file, that's
\{BBA00008042/163\}. This is the Warringtonfire test report number 132316, as you can see, done under part 7 of BS 476. If we look at the second page of that report at page 165 \{BBA00008042/165\}, you can see paragraph 3 ,
there is a description of the test specimens there, and in the second paragraph it says:
"The product was 'Reynobond 55 FR (colour reference "RAL 9006 Metallic grey")', a composite coated aluminium panel having an overall thickness of $4 \mathrm{~mm} .$. comprising a 3 mm thick Fire Retardant Core ..."

If you skip to the next paragraph:
"The decorative (test face) aluminium sheet was coated on the exposed face with a 5 micron thick epoxy primer and a 20 micron thick PVDF coating."

If we look at the next page of this report at page 167 \{BBA00008042/167\} -- there are blank pages in between, I'm afraid -- at the very bottom of page 167 you see the "Test Results and Classification", and in the capitals in bold at the bottom of the page, it says this:
"IN ACCORDANCE WITH THE CLASS DEFINITIONS GIVEN IN

BS 476: PART 7: 1997, THE SPECIMENS TESTED ARE CLASSIFIED AS CLASS 1."

Now, if we go on to page 169 \{BBA00008042/169\}, this is the second issue of this report and it's dated 12 September 2003, as you can see, and if we look at the test that goes with it, this is the part 6 test, this is in the technical file, page 177 \{BBA00008042/177\}. We can see that it's a Warringtonfire test report number 132317, this time under part 6 of BS 476.

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\text { If we go down to page } 179\{\mathrm{BBA} 00008042 / 179\}
$$ paragraph 3, you can see again the description. It's in the same format, second paragraph:

"The product was 'Reynobond 55 FR (colour reference 'RAL 9006 Metallic grey') ..."

Et cetera, and the same decorative (inaudible), and it says again it comprises a 3 -millimetres thick fire retardant core.

So this is a test on the same product as the one we were just looking at but done under part 6 .

We have the test results at page 181
$\{$ BBA00008042/181\}, and at the bottom of that page we can see the test results there, and there they are set out.

For completeness, if we can go to page 183 \{BBA00008042/183\} and see the date of issue: 12 September 2003.

Now, those are the FR tests from 2003 done under BS 476-6 and 7.

Can we now go back, please, to page 5 of the BBA certificate, $\{$ BBA00000047/5\}, and look again at section 6.2. It says there -- I've read it before, I' II just show it to you again:
"A fire retardant sample of the product, with a metallic grey PVDF finish, when tested in accordance with BS 476-6:1989, achieved a fire propagation index
(I) of 0 and, when tested in accordance with

BS 476-7:1997, achieved a Class 1 surface spread of flame."

Is it right that the two tests I've just taken you through quite quickly are tests of the specimen mentioned in section 6.2 of the BBA certificate?
A. Again, I'm not familiar with the ... I'm guessing at some stage the fire expert would have looked at this, but it's really --I can't go into detail as regards the statements. I think whatever we have said in paragraph 6.2 must have been a statement of fact.
Q. Yes. Now - -
A. So --
Q. Sorry, do you want to continue? I'm so sorry, I spoke across you. Do you want to say something more? Have you finished your answer?

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## (Pause)

SIR MARTIN MOORE-BICK: I suggest you carry on, Mr Millett. MR MILLETT: Right.

Mr Gregorian, we've seen no summary reports stating
that these two tests amount to a class 0 result. Do you know why that is?
A. No, I have no knowledge of -- as I've mentioned before,

I would rely on the assessment by fire experts.
Q. Right.

Maybe you can't help with this in the light of that answer, but was it your experience at the time, late 2007, that there would normally be a summary report which would consider the test data that I've just shown you and say whether the material met the requirements of class 0 ?
A. Sorry, if there's a summary report?
Q. Would it be normal for there to be, in your experience at the time, a summary report saying class 0 as a result of these tests?
A. I can't remember. I can't remember.
Q. Do you remember whether you or somebody else, anybody, looked at the data from these two FR test reports and decided that they met the criteria for class 0 ?
A. Yes, as I say, a fire expert would have looked at this document and come to this conclusion, and we would
include it in the certificate as appropriate
Q. And you would have understood, would you, at the time, that these results together amounted to achieving a class 0 result?
A. I wouldn't know about that. I don't know how the assessments are done. I would just include the appropriate statement.
Q. Right.
A. And make sure that the technical manager also approved the statement.
Q. Yes. Again, bearing in mind your last answer, at least looking at the scheme of section 6 , were you clear in your mind at the time that section 6.2 and the results identified in it only applied to Reynobond with an FR core and not to Reynobond with a PE core?
A. That's what the statement seems to suggest, yes.
Q. Yes, but were you clear in your mind that that's what it meant?
A. I would take this --
Q. Right.
A. -- as relevant to fire retardant sample of the product, yes, that's all I can conclude. This is a statement of fact.
Q. Yes.
A. That's all it is.
Q. Did you know at the time -- let me ask it this way: did you have any understanding at the time about whether Reynobond 55 with a PE core had been tested under BS 476-6 and 7?
A. I can't remember.
Q. Did you understand at the time that the statements in paragraph 6.2 did not apply to Reynobond 55 with a PE core?
A. Again, this is a detail that I can't comment on.
Q. Let's then look at section 6.1, just above it. Again, I've read this to you, but I' ll just read you the precise words again:
"A standard sample of the product, with a grey/green Duragloss 5000 coating, when tested for reaction to fire, achieved a classification of $\mathrm{B}-\mathrm{s} 2, \mathrm{~d} 0$ in accordance with EN 13501-1:2002. A fire retardant sample of the product, with a gold-coloured Duragloss finish, when tested for reaction to fire, achieved a classification B-s1, d0 in accordance with EN 13501:2002."

Did you understand at the time, or intend by the wording, that "standard sample" referred to Reynobond with a PE core?
A. No, I have no ... the details are quite alien to me, to be honest.
Q. You say that; did you not draft this part of the report, or did somebody else draft this part of the certificate?
A. I would put it in this format, but the actual classifications and so on don't mean very much to me.
Q. Did you not understand that when you were writing a standard sample of the product, even as a formula from another document, you were referring to the non-FR standard PE version of the product?
A. That's right, that's what the statement seems to suggest, yes.
Q. You say it seems to suggest that. I'm just trying to get inside your mind at the time this document was produced.

When you wrote "a standard sample of the product", did you understand that you were referring to the PE core as opposed to the FR core?
A. Yes.
Q. Yes.

Can we look at the technical file, please, at page 147 \{BBA00008042/147\}. This is what we've called test 5A or classification 5A, and just looking at it with me, it's a reaction to fire classification report number RA05-0005A under 13501-1. At the bottom of the page you can see that its date of issue is 7 January 2005, and just a little above that, the commercial brand

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

## A. Yes.

Q. If you go to page 149 \{BBA00008042/149\}, please, you can see that there is a product description under paragraph 2 on that page, and you can see that it's described as a:
"Composite panel consisting of a low density polyethylene core thermally bonded (using a 70 [micron] thick polyethylene film) between two precoated aluminium sheets.
"Tested system: riveted on metallic substructure."
Then underneath that, at the bottom of the next block of text, it says:
"Finishing coat: DURAGLOSS 5000.
"Colour: grey/green."
Then if we go down to page 153 \{BBA00008042/153\}, we can see the classification, $\mathrm{B}-\mathrm{s} 2, \mathrm{~d} 0$, and below that you can see there's a date: 7 January 2005, and the signatures at the bottom from the CSTB.

But a little bit above that, under "Field of application", you can see it says:
"This classification is valid for the following product parameters."

Then the second bullet point there says:
"Only for the system riveted on any metallic

## substructure."

Now, my first question is: is this document familiar to you?
A. I must have looked at it at some stage, but I can't remember the details.
Q. Right, okay. It was on the technical file and we know from other evidence we'll come to that you were sent it by Arconic in 2007, so I'm going to assume you were familiar with it.

Can we go back, then, to section 6.1 of the BBA certificate at of that document $\{$ BBA $00000047 / 5\}$, and can we have that up on the screen at the same time as test 5 A , classification 5 A . Put the two up together. That's $\{B B A 00008042 / 147\}$, if we can have that, please, at the same time.

Just looking at those side by side, does the certificate at section 6.1 record classification $5 A$ ?
A. Erm ...

## (Pause)

Q. Let me see if I can help.

If you go to page 153 \{BBA00008042/153\}, as I showed you, where you've got the actual classification in there -- and I appreciate this is a long time ago, so you need to see the documents -- you can see the classification report 5 A has the classification

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## $B-s 2, d 0$.

A. Yes.
Q. If you cast your eye to the left - hand side of the screen under 6.1, you can see it says that the standard sample of the product when tested for reaction to fire achieved a classification of $B-s 2, d 0--$
A. Yes.
Q. - - under EN 13501.

Looking at those two documents now together, can you confirm or tell us that at section 6.1, the reference to the classification there is a reference to this classification in this classification report?
A. Yes, I can confirm that, yes.
Q. Yes, and that pertains, doesn't it, to PE-cored Reynobond -- yes?
A. Yeah.
Q. In riveted system and only in riveted system; yes?
A. Again, this was a document provided by CSTB, so that is how they would assess fire performance.
Q. Yes. My question was that it pertains not only to PE-cored Reynobond but to PE Reynobond in the riveted system; yes?
A. Yes. But as far as our assessment was concerned, it's quite immaterial or irrelevant how the fixing was done. As far as we -- the BBA was concerned, it was the
product we were assessing, so whether it's riveted or cassette-fixed was to some extent irrelevant.
Q. I would like to come back to that answer in a few moments, if I can.

Can I just back up a little bit, and let's see together -- because it will help your recollection,
I think - - how you came to see this document.
Can we go, please, to \{MET00053158_P15/90\}. This is an exhibit to Mr Wehrle's statement, and this is an email from you to Mr Wehrle on 15 May 2007. You tell him that good progress is being made in relation to the assessment but you need further information, and you set out four paragraphs there. The first one says:
"Reaction to Fire test data for the standard PE panel. If not available, you will need to arrange for the tests to be done, as for the FR product. Please note that the French classification, as described in the Avis-Technique, is not recognized in the UK. Fire test reports for the FR product already submitted with your application."

Then if you look up the screen, you can see that he sends you, on 25 May 2007, the classification report 5A, and take it from me that that is what he sends you:
"Hello Hamo,
"Please find enclosed the fire reaction certificate

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for our product Reynobond PE."
Then if you look a little bit above that, please, if you go to page 96 \{MET00053158_P15/96\}, I think you will need, you go back to him and you say in response to him, also on the same day, 25 May:
"Claude
"The document is acceptable. Thank you.
"I look forward to receiving your response to items 2, 3 and 4 of my email below."

So you asked him for the test data for PE, and he sent you classification report 5A that I've shown you.

When he sent it to you, did you study it?
A. Again, not having enough knowledge, there was no point in me -- all I was interested in was the classification. I couldn't study it in detail. I would just look at the classification .
Q. So when you told him that the document was acceptable, acceptable for what?
A. Acceptable for our purposes.
Q. Which were?
A. Which were to assess the fire performance of the product.
Q. I see.

If we go back to page 153 \{BBA00008042/153\}, please,
of the technical file. I showed you this, but I want to
show it to you, again. This is under the "Field of application".

Did you notice that it said, "Only for the system riveted on any metallic substructure"?
A. Yes.
Q. You did?
A. Yes.
Q. Did that tell you that the fire classification result contained in classification report 5A that Mr Wehrle had sent you at your request was valid only for Reynobond that was 4 millimetres thick and for the riveted variant?
A. Again, I must have discussed this with somebody, most probably Brian Haynes, to see whether the data supplied was sufficient for our purposes. As I say, other than that, I couldn't do any assessment at all. I mean ...
Q. Did you notice that the fire classification report he was sending you applied only to rivet?
A. Yes, but, as I say, because we were assessing the product, the fact that it 's riveted I thought was immaterial, was irrelevant.
Q. Well, you say that. Let's take that in stages.

Did you ask yourself how, if the classification report Mr Wehrle had sent you only covered the rivet system, it could apply validly to the cassette system?

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A. That is all the information we had from CSTB, so ...
Q. Going back to section 6.1 of the certificate , please, $\{$ BBA00000047/5\}. You can see what's said there, and I've read it to you now twice, but you can see it doesn't refer to the fact that classification 5 A was of the rivet system only.

Cutting to the heart of the point, the question is: why not? Why doesn't it say --
A. Sorry, which paragraph was that?
Q. 6.1.
A. 6.1. Yeah.
Q. You say:
"A standard sample of the product ... achieved a classification of $B-s 2, d 0 \ldots$..

The question is: why doesn't it say a standard sample of the product in rivet fixing?
A. Again, because it was -- as far as the fire performance was concerned, it was irrelevant in what context -- it was just the actual surface, the spread of flame, I think, I believe these things refer to, and it was irrelevant how they were fixed. As I say, the information we got from CSTB was a riveted one, but I believe, maybe as a result of my discussion with Brian, we decided that's suitable irrespective of the fixing methods.
Q. Given that the CSTB had provided test data on the product in riveted form and to be used only in that fabrication, why did you consider that drawing the distinction between rivet and cassette in this subsection of the certificate was irrelevant?
A. Because, as I say, we were -- it was covering the panel material, not the fixing method. And with regard to resistance to fire, I would suggest it would have been irrelevant as to what fixing method was used.
Q. Well, that may be true in relation to resistance to fire, but of course this is about reaction to fire, isn't it?
A. Again, that shows my ignorance of this particular subject. I have no -- I have very little knowledge of fire issues.
Q. Right.

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

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felt the fixing method was irrelevant.
Q. You knew at the time you drafted this certificate that there were two fixing methods, because they're clearly spelt out in the certificate, aren't they, fixing and cassette; yes? You nodded, but you say yes?
A. Yes.
Q. Did you therefore realise that there should also have been an equivalent test and classification report for the cassette-fixing system?
A. I think the BBA certificate makes it clear. The fact that we've included some details as to how it could be fixed to a substructure is just to show what the product can be used -- in what context it could be used, nothing more.
Q. Did you discuss with a fire expert whether you could safely ignore the distinction between rivet and cassette when identifying the standard sample's fire performance, as you do in section 6.1?
A. Not - - I can't remember any conversation with regard to advice from a fire expert, but I must have discussed it with Brian. I didn't make this decision, that the fixing method was relevant with regard to fire performance.
Q. Who did?
A. I can't remember. I mean, I must have been advised by
Q. You say, "I must have been advised by somebody"; can you tell us who that would have been?
A. I can't, to be honest. As I mentioned, I've got very little knowledge of fire issues, and I must have consulted with somebody, and they must have thought: yes, we could use this data to assess the panel product.
MR MILLETT: Mr Chairman, is that a convenient moment? SIR MARTIN MOORE-BICK: Yes, Mr Millett, I think it is.

We're going to take to break now, Mr Gregorian, so we can all get some lunch, you included. We will come back, please, at 2 o'clock.

During the break, please take care not to discuss your evidence or anything relating to it with anyone else.
THE WITNESS: Certainly.
SIR MARTIN MOORE-BICK: Thank you very much. See you at 2 o'clock then.
THE WITNESS: Yes.
SIR MARTIN MOORE-BICK: Thank you.
(1.00 pm)

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(The short adjournment)
(2.00 pm)

SIR MARTIN MOORE-BICK: Good afternoon, everyone, welcome back. We're going to continue hearing evidence from Mr Gregorian at this point.

So, Mr Gregorian, are you there, and can you hear me and see me?
THE WITNESS: Yes, I can hear you and see you.
SIR MARTIN MOORE-BICK: Good, thank you very much indeed.
Are you ready to carry on?
THE WITNESS: Yeah.
SIR MARTIN MOORE-BICK: Good. In that case, I'll invite
Mr Millett to put some more questions to you.
When you're ready, Mr Millett.
MR MILLETT: Yes, Mr Chairman, thank you very much.
Before I continue with my questions, there is something I just ought to make clear to those watching, and that is Mr Haynes. As we understand it, Mr Haynes was very seriously ill in the months leading up to the end of last year and sadly passed away in the last few months, and so has been unable to come to give evidence to the Inquiry.

So, Mr Chairman, I hope that that clarifies any questions that people might have about why Mr Haynes is not able to come to give evidence.

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SIR MARTIN MOORE-BICK: Thank you very much. I think it is
    helpful to know that.
MR MILLETT: Mr Gregorian, can we now go to your witness
    statement at page 6 \{BBA00011096/6\}, please. I would
    like to look at Inquiry question 14 on that page. In
    doing this, I'm picking up from where we left off before
    the lunch break.
        You can see there that question 14 is:
        "Did you consider the field of application of the
    product(s) certified in Certificate 08/4510?"
        Your answer is at 33, and you say:
            "The fields of application considered would have
    been those in the CSTB certificate and as set out in the
    application form."
            Is it your evidence, so that we're clear, that you
    did consider the field of application set out in
    classification 5A that we've seen?
A. Well, the CSTB would define what the field of
    application was, and as members of UEAtc, the CSTB's
    definition were acceptable to BBA.
Q. Yes. The question is: did you consider the field of
    application, and the answer in your statement is, "The
    fields of application considered would have been those
    in the CSTB certificate". My question is: did you
    actually consider, did you actually think about, the
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    field of application of the product as set out --
    A. I must have thought about, yes.
Q. Yes. The reason I ask is because the BBA certificate
doesn't say anything about the European result $B$ being
limited to rivet form, does it?
A. No, because, as I've mentioned before, the fixing method
was considered irrelevant because we were assessing the
panel material.
Q. Yes. You have told us that, but just to be clear, you
agree, I think, that the certificate also doesn't say
that a reader of it should check the field of
application with Arconic, does it?
A. No, I can't remember a statement such as that, no.
Q. Do you know why it doesn't?
A. Erm ...
(Pause)

We've just followed the format of the certificate and ... I'm not sure if that would have been ... as I say, bearing in mind, as I say, it 's the material we're considering, I'm not sure if the application would be relevant. It's just a comment. I'm just saying that the BBA certificate had a certain format, and I'm just assuming that field of application was not meant to be in the certificate. I can't comment on that beyond that.
Q. How would a reader of this certificate know that the European class B was relevant only to the rivet fix of the product?
A. Well, I think we do say somewhere in the certificate that it 's got to be -- the whole certificate has got to be read in entirety, so whoever was looking at that should have had some knowledge as to how -- technical knowledge as to how the product could be used. I think that's the impression we do get -- you try and get in the BBA certificate.
Q. There is nothing in the certificate which tells us that the class B fire classification stated in it relates only to Reynobond 55 in rivet-fix.
A. No, no.
Q. No, so my question is: how would a reader know that?
A. Again, it's the material, the panel material we were considering, and the method of fixing was considered irrelevant. So they could -- based on the details given in the certificate, they could form, fabricate a particular panel size, and providing all the criteria were met, they would install.
Q. Can we go back to the certificate, then, please, at \{BBA00000047/5\}. Look at section 6.1 on that page. It says:
"A standard sample of the product ... achieved

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a classification of $\mathrm{B}-\mathrm{s} 2, \mathrm{~d} 0 \ldots$..."
How would anybody reading that section know that it was only a standard sample of the product in rivet form as opposed to in cassette form that had achieved that classification?
A. No, again, as soon as you mention a fixing method, people would assume that you can only use that particular panel with a rivet form, but, as I say, the fixing method was considered irrelevant because we were assessing the panel material.
Q. Going back to page $3\{$ BBA00000047/3\}, then, please, look at paragraph 1.1, the second line:
"The panels are available either plain edged (riveted system) or flanged (cassette system) to suit architectural requirements (see Figure 1)."

If the difference between riveted system and cassette system was irrelevant and you were only certifying the raw panel, what was the point of inserting that sentence and going to the trouble of inserting figure 1 ?
A. That's just an example. It's meant to be an example of what panels are currently available. There's -- you could choose -- consulting engineers could choose any dimension, any panel size, and this is just meant to be an example of what was available.
Q. Why was the certificate telling the reader, by example, what was available?
A. That must have been the standard format of the certificate. I really wouldn't know, you know. Again, it 's a format that the BBA had adopted for a long time for panels such as this.
Q. Why does the certificate not tell the reader that in either of these systems as fabricated, the fabricated panel falls outside the scope of the certificate?

## (Pause)

A. I think there is some reference to this, isn't there, somewhere in the -- perhaps the back page of the certificate? I think ... I seem to remember there's something to say that the ... it 's just the panel material we are assessing, especially with regard to fire .
Q. Well, take it from me that there's nothing in this certificate which tells the reader that the fabricated systems, fabricated for rivet or fabricated for cassette, fall outside the scope of the certificate. My question is: why is that, if it was irrelevant?
A. I can't answer that.
Q. If you look down at paragraph 1.4, you can see there's a footnote relating to the subframe, which is very clearly identified as "Not covered by this Certificate".

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If you were intending to exclude from the cover of this certificate the riveted system and the cassette system as identified in figure 1, why didn't you make it clear, as you had with the subframe?
(Pause)
A. With hindsight, we could have amplified that aspect a bit more clearly in the certificate.
Q. Going back to paragraph 6.1, please, on page 5 \{BBA00000047/5\}, when it says:
"The standard sample of the product ... when tested for reaction to fire, achieved a classification of B-s2, d0 ..."

Do you accept that a reader of that sentence would be led to think that what had achieved a classification of $B-s 2, d 0$ was the product in both rivet and cassette fabrications?
A. Well, we -- in this particular section, we just state facts, this particular panel was tested to this, and that's all that's saying. There's no reference to the fixing method at all. So if I were reading this, I would take it as that is how the material behaves in fire.
Q. What material, Mr Gregorian?
A. The material tested.
Q. What was tested was the material in a rivet form, wasn't
it?
A. No, but I think, as far as I remember, a sample has been tested. There is no reference to whether it was fixed or -- whether it was rivet-fixed or cassette-fixed.

So, again, I have to emphasise, I don't know much about fire, so -- or very little, I know very little about fire, so I can't constructively comment as to why this particular statement appears as it is. But I'm quite sure that the product we were assessing had nothing to do with the fixing method, it was just basically making sure that the panel was suitable for inclusion in a cladding system.
Q. The product you were assessing, you say, had nothing to do with the fixing method; if that's the case, can you explain what figure 1 is doing in the certificate?
A. Again, it was normal practice for some details to be included. You had to give the certificate holder some indication of his product, how he was going to use it, and that was one way of doing it. We always included some detail irrespective of whether they're covered by the certificate -- irrespective of whether, yes, they were covered by the certificate or not. I think we do make it clear in the certificate that -- what is covered.
Q. Do you accept that the reader of this certificate, when

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seeing the words, "A standard sample of the product", would think that both rivet and cassette versions were covered by the classification $\mathrm{B}-\mathrm{s} 2, \mathrm{~d} 0$ ?
A. If I were reading this, that's the conclusion I would have come to.
Q. And do you accept that that was a wrong conclusion?
A. No, I think in the context of the assessment subject, which was the actual panel material, I would assume that the fixing method was irrelevant. That's what I would conclude from reading that statement.
Q. Do you accept -- I'll try this one more time -- as a matter of fact that when a reader is told that
a standard sample of the product achieved
a classification of $B-s 2, d 0$ in circumstances where it was only the riveted version of that product which had achieved that standard, the reader would be misled?
A. This statement points to a sample, it actually refers to a sample. A sample could be any suitable dimension for a test facility. So, again, the way I would read this is it's irrelevant how it's fixed to the substructure. That's how I would interpret it .
Q. You see, given that the test itself, the classification B-s2, d0, was only on the rivet-fix, do you accept that the reader would not realise that and might be misled into thinking that it applied to both fixings?
A. It would be right to assume that it would apply to both fixing types. He wouldn't be wrong. But, as I say, if I were reading this, I wouldn't take notice of how the panels were fixed to the substructure.
Q. Well, with great respect, Mr Gregorian, he would be wrong because, as I've shown you, the classification of B was only achieved on the rivet form and not the cassette form.
A. That's true, but as far as our assessment was concerned, it was considered irrelevant.
Q. Can we then look at 6.2:
"A fire retardant sample of the product ..."
I've read that to you.
Can we have at the same time on the screen technical file page 155 \{BBA00008042/155\}. This is
a classification report from the CSTB in relation to the FR product --
A. Yes.
Q. -- which was on the file. You can see that the date of that is 19 October 2006, and you can see from the middle of the page that it relates to Reynobond FR.

If we go to page 157 in that document \{BBA00008042/157\}, keeping the left-hand side of the screen where it is, you can see that the product description there in the third line down is:

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"Tested system: riveted on metal substructure."
So you have the FR on rivet.
If you go to the final page of this report, page 161 \{BBA00008042/161\}, you can see the classification: $B-s 1, d 0$. Again, underneath it, under "Field of application", paragraph 4.3, it tells you that:
"This classification is valid for the following product parameters:
"- A thickness of 4 mm ."
And then underneath that:
"This classification is valid for the following end use conditions:
"- Riveted system on metal substructure."
Is this the test that is referred to in
paragraph 6.2 of the certificate?
A. Yes, this is the CSTB data we would have received and it would have been perfectly acceptable to the BBA.
Q. I'm so sorry, I've taken you to 6.2. I mean the second half of 6.1, I apologise, where it says:
"A fire retardant sample of the product, with
a gold-coloured Duragloss finish ... achieved
a classification B-s1, d0 ..."
Am I right in thinking that it's the test on the right - hand side of the screen --
A. Yes.

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Q. - - which is the basis of the claim for fire performance
    in that second sentence of paragraph 6.1?
A. Yes.
Q. Yes.
            Now, let's look and see how this document came to be
        on the technical file. I think I can take this quite
        shortly.
            Do you recall that this was requested by Mandy Osman
        in November 2007?
A. Yes, I know Mandy, worked with her, yes.
Q. Let's go to {MET00055859/2}, please, and just trace the
        emails through. This is an email, second email down,
        from Mandy Osman to the BBA. You can see she writes to
        Claude Wehrle on 22 November 2007. She encloses a copy
        of the proposed certificate and asks for his written
        approval. She then says at the bottom:
            "As this Certificate is the first of a type to be
        put into the 'new' format, we shall circulate the draft
        to the regulatory authorities and our Technical
        Assessors for their comments. You will be sent a
        further copy then for your approval."
            If you go up to the first email on this page, you
        can see it 's a response from Claude Wehrle to
        Mandy Osman and to you, and he says:
            "Hello,
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## "I've [got] some remarks ..."

This email, which is 23 November, has some text in blue and red. The red is Claude Wehrle's, and there are some comments in green.

If we scroll up to the very bottom of page 1 in this email chain $\{$ MET00055859/1\}, we can see that at the very bottom of the page, you say, the same day,
23 November 2007
"Claude
"Please see my response below (in green)."
Do you see that?
A. Yes.
Q. Can we take it that the green text on page 2 is yours?
A. Yes, yes
Q. If we go back to the top of page 2 \{MET00055859/2\}, then, let's look at the email from Claude Wehrle to which you have responded.

## You can see:

"On 1. Description
"... instead of 'A duragloss coating ... a PVDF coating' can you write 'A Duragloss or PVdF coating protects the exposed face in many different colors to outside exposure. The unexposed face is protected with a polyester primer.'"

And you have added, is this right:
"Text will be amended as advised." Yes?
A. Yes.
Q. Then on 1.3 Mr Wehrle writes:
"Can you add the 2 dimensions $2000 \times 3000$ and
$2000 \times 4000$."
Again, you have said in response in green:
"Text will be amended as advised."
That's you again, is it?
A. Yes.
Q. Then on 6.1 he says:
"Can you add the results of our fire certification
for Reynobond FR (B-s1, d0).
"Test report send to Hamo some month ago."
And then you say in green:
"I do not appear to have received this report.
Please resend.'
If we scroll up to the bottom of page 1
\{MET00055859/1\}, second email from the bottom, you can see there that in response to this email from you, with your green comments in it, Claude Wehrle comes back to you and says:
"Hello Hamo.
"Please find enclosed the document for our Reynobond FR certification."

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If you look at the attachment - - you can't see the attachment to that, but in fact the attachment is the certificate of 2006 we've just been looking at for rivet in FR.

At the top of page 1, second email down, a little
bit later the same day, you say:
"Claude
"The report is fine.
"I' II add appropriate statement to section 6.1."
Can we take it from the email run I've shown you that it was Claude Wehrle who asked you specifically to include the European classification for FR-cored Reynobond?
A. We would do that -- we would have to do that. We need
to put the information in the certificate, so ...
Q. Yes. He wants you to add the results, you say
"I haven't had the report", he sends it to you and you tell him it's fine. I'm just asking you really to summarise that and to agree with me that it was Claude Wehrle who asked you specifically to include that European classification for FR-cored Reynobond?
A. Yes, that's -- yes, I suppose so, yes.
Q. We don't see that you asked him, having received the report he sends you, whether there was an equivalent test for FR-cored Reynobond 55 in a cassette-fix. Do

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    you think you did ask him for that?
A. I can't remember.
Q. It doesn't appear that you did, and my question would
    be: on the basis that you didn't, why didn't you?
A. Erm ...
                    (Pause)
            I can't answer. I can't answer that. I mean,
        I don't know the details, I can't remember what went on
        during our communication.
Q. So far -- I'm sorry, do you want to --
A. No, sorry.
SIR MARTIN MOORE-BICK: On you go, Mr Millett.
MR MILLETT: Yes.
            So far, everything we have been looking at by way of
        reports from CSTB have been classification reports.
        We've seen test 5A for the PE rivet and we've seen the
        2006 test for FR in rivet. We've seen no underlying
        test data on which those classifications are based.
            Do I take it from that that you never asked Arconic
        for the underlying test data?
A. I think our assessment was based on whatever information
        they supplied.
Q. Did you realise that under the contract that Arconic had
    with the BBA, Arconic was obliged to send all relevant
    test data to you?
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    A. They must have done.
    Q. Well, you say they must have done --
A. I can't $--I$ mean, for fire assessment we would require
documentation and Arconic would have had to supply that,
and our assessment would have been based on the
BS 476-6/7 test and whatever other information CSTB or
Arconic would provide.
Q. Did you notice that you -- I'm sorry, I started asking
my question, I think, before you had finished your
answer. Maybe not.
Did you notice that although you had classification
reports, Arconic had not provided you with the
underlying test data on which those classification
reports were based?
A. Sorry, can you repeat the question? I can't quite hear.
Q. Did you notice that you didn't have any underlying test
data which supported the classification reports I've
shown you?
A. I think that there is a good chance the CSTB document,
the avis technique, would have had some information.
And whether the Warrington fire test was done previously
to that, I can't remember, I couldn't comment.
Q. Specifically in relation to the test data underlying the
classification reports for fire that we've seen, did you
notice that Arconic had not sent you that underlying
fire test data?
A. I suppose from the communication I can only conclude that they hadn't, so I had to chase.
Q. So can we take it that you accepted -- the BBA accepted -- the classification reports from the CSTB as the basis of your certification of Reynobond 55 as having Euroclass B without looking at the underlying test data?
A. I think that's quite --it's normal procedure actually between UEAtc members.
Q. It's normal procedure, is it?
A. It is, yes, yes.
Q. I see.

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

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

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

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

If we look at the document on its face, just the first page of it I think will probably do for this purpose, is this a document you've ever seen before?
A. I must have come across it, I suppose, I can't remember.
Q. Right. Let's look at page 3 \{ARC00000536/3\}. You can see that it bears the date of test of 2 December 2004, and a little bit lower down it refers to the commercial brand as "REYNOBOND 55 PE Cassette system". Do you see that?
A. Yes.
Q. At the bottom of the page, we can see, right at the bottom, that there is a date, 7 January 2005, and signed by the CSTB there.

If we go to page 7 \{ARC00000536/7\}, we can look at the results for specimen $1--$ and there was only one specimen -- and there are the results set out for the product Reynobond 55 PE. You have got the FIGRA, the THR and the SMOGRA figures set out across the page, and then under "Comments", if you look at the bold text at the very end of that little block of text, it says:
"The tests were stopped after 850 seconds; the results are not usable but give an idea of the fire

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

Did you notice, regardless of whether it was relevant, that there wasn't one that you had for cassette, whether in PE or in FR?
(Pause)
A. Again, from memory, I might have considered this, but, as I say, because we were assessing the panel, not --
with the exclusion of the fixing system, we didn't chase for anything else, we just used whatever CSTB had provided.
Q. Let me try it this way: did you ever have a conversation with Mr Wehrle along the lines of, "Well, look, Claude, we've got your CSTB reports avis technique for rivet and cassette, but we've only got rivet tests for fire; do you have any cassette tests for fire?" Did you ever have a conversation along those lines?
A. No, I can't remember having such a conversation, but again, because it was irrelevant, I didn't feel the need
Q. If the distinction between the two was irrelevant, as
you tell us, did you wonder why there were two separate reports done by the CSTB under avis technique, one for cassette and one for rivet?
A. You ask for information from CSTB and they provide whatever they have, so ...
Q. Yes, I appreciate that, but did you ever ask yourself: I wonder why there are two separate reports, one for cassette and one for rivet, if the distinction between them for your purposes was irrelevant?
A. Yes, I think -- yes, that's what I assumed, because again, we were assessing the product and either of these reports would have been -- could have been used for our assessment.
Q. When you say, "That's what I assumed", what did you assume?
A. Well, I assumed whatever information they'd provided was sufficient for us to make an assessment.
Q. Do I take it from that that you, as a matter of fact, never asked Mr Wehrle why you had received test data for the rivet-fix but no test data for the cassette-fix?
A. That's correct, I didn't ask him for anything else.
Q. And that's because you thought that the distinction between them was irrelevant, even though you had clear separate CSTB avis technique reports for cassette and rivet respectively?

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## A. That's correct, yes.

Q. Now, can we look at Brian Haynes' witness statement, please. That's $\{B B A 00010784 / 11\}$, paragraph 45 . You can see a question in bold from the Inquiry at the top of the screen, top of page 11. The question goes as follows:
"What information on fire performance was Alcoa asked to provide to the BBA prior to the certification in 08/4510? Did you or anyone at the BBA ask Alcoa for all relevant test data in respect of Reynobond Architecture Wall Panels? If not, why not?"

The answer he gives is at paragraph 45, and he says this:
"From evidence on the file, Alcoa was asked, by the Product Assessor, to provide evidence for the reaction to fire performance for the standard panel, as was already available for the FR grade product.
"In making this request BBA assumed that all relevant data would be supplied."

Did you expect -- this is my question to you, Mr Gregorian -- that when the BBA asked for evidence of the reaction to fire of PE panels, you would have expected Arconic to provide you all relevant data?
A. Yes, ideally that's what should have happened, but I think we made assessments with whatever data were
available .
Q. You say, "Ideally that's what should have happened"; why was that an ideal? Why should it not have happened as a matter of course?
A. Well, there's -- the idea is to ask for information from the client, but you don't always get what you want, so we think of other ways of assessing the product.

Sorry, you were reading this paragraph, but I can't see it on the screen.
Q. Oh, I'm sorry, and I'm slightly surprised about that because it's still on my screen. Can you not see paragraph 45 and 46 of Mr Haynes' statement?
A. Oh, yes, yes.
Q. Would you like me to read it to you again?
A. Yes, if you would, yes.
Q. The answer to the question that you can see in bold is:
"From evidence on the file, Alcoa was asked, by the Product Assessor, to provide evidence for the reaction to fire performance for the standard panel, as was already available for the FR grade product.
"In making this request BBA assumed that all relevant data would be supplied."

> So that was what I was asking you about.
A. Yes. Yes, that's what we normally expect the client to provide, but they provided whatever they had.
Q. Would you therefore have expected all the relevant data to have included the fire test data that I've just shown you in relation to the cassette version in early 2005, namely test 5B?
A. Erm ...

## (Pause)

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

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A. No, as far as I know, no.

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Q. Did anybody at the BBA at the time ever perceive that, in fact, in proceeding on that assumption, there was a great deal of risk?
A. No, as far as I know, no.
Q. Were you aware in general terms at the time of any understanding or belief in the UK construction industry or perhaps the European construction industry that rivet - fix ACM would perform worse in fire tests than cassette-fix?
A. I wasn't aware of that. I don't know.
Q. Can we then look at Arconic's claims for class 0 for PE. It's a slightly different topic, but very much the same documents.

Can we begin in the technical file, please, at page 83, $\{$ BBA00008042/83\}. Now, this is a brochure from Reynobond which is on the technical file. It's called "Discover new perspectives".

Looking at the front page, is this a document you recall, do you think?
A. No, I can't remember, but it's quite normal for some promotional literature to be included in the technical dossier.
Q. Right. Can we look at page 104 \{BBA00008042/104\}.

I'm afraid this is going to have to be expanded considerably, but in the bottom right-hand corner of the
Q. We've taken that to mean November 2005.

Do you remember looking at this document on the technical file when you were preparing this certificate?
A. No, I can't remember, no.
Q. Would it be typical for you or, to your knowledge,
anybody else at the BBA to review this sort of literature as part of the assessment of a certificate?
A. No, we wouldn't review every single document that was supplied.
Q. No, but would you typically review this kind of literature? Would you use it as part of your assessment?
A. No. No, I -- no, I don't think so.
Q. Let's just look at it, page 101 \{BBA00008042/101\}, and see how far we go.

At that page you can see that there is a list of fire certificates, and at the fourth line down, if we could have that expanded, you can see that there is a block of four UK entries there. Can you see that? A. Yes.
Q. The first two relate to PE, and the second two relate to

FR.
If we track across, we can see Warringtonfire documents 132316 and 132317 for FR. Those are the reports from 2003 which I think we looked at before.

If you go up a little bit to the PE results above, we can see that Arconic are saying in this document that PE-cored ACM has a class 0 rating; yes?
A. Yeah.
Q. If you track across, you can see that, to support that, the Warringtonfire documents 70707 and 70708 are referred to.

Now, I've shown you that because it's on your file.
Were you aware at the time of Arconic's claim that ACM or Reynobond 55 with a PE core had class 0 ?
A. Sorry, the question is?
Q. Were you aware at the time you were preparing the certificate that Arconic claimed in its product literature -- and this is an example of it on your file -- that Reynobond 55 in PE had class 0 ?
A. Again, not being familiar with the details, I must have consulted a fire expert for this. I vaguely remember this document, but I haven't gone into detail at all.
Q. No, all right. Let me try it a different way.

This is a document which we can see, because we can read it, and it was on your file, by which Arconic claim
that Reynobond 55 in PE, in other words the standard, had actually got class 0 .

My question is: were you aware at the time that
Arconic had claimed and was claiming that PE-cored
Reynobond 55 was class 0 ?
A. I can't remember.
Q. We've got the documents referred to, certificate 70707 and 70708 , and indeed a summary report. There is no evidence that we've seen that those certificates were actually ever sent to the BBA.

Can you help with that? Do you think they ever were sent to the BBA?
A. I remember seeing some documents from Warrington, but, as I say, I can't remember having seen this particular report at all.
Q. Right.

Did you - - and I think the answer is no, but do I take it from your evidence so far that you didn't notice that this brochure indicated that there might be more documents relevant to UK national classification that you didn't have?
A. The Warrington report I think we had, and I think we -for all I know, the fire expert would have consulted these particular documents for their assessment.
Q. Yes, the FR you would have had, but the PE Warrington

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documents, the two 70707 and 70708 , we can't see that you did have. My question is: did you notice that this brochure was saying that those documents existed but you didn't have the reports?
A. No, I didn't notice, no, no.
Q. Did you have any document in your possession which showed that Reynobond 55 in PE had actually been tested under BS 476-6 and 7 and achieved a class 0 classification ?
A. Sorry, what was your question again?
Q. Did you have any documents in your possession which showed that Reynobond 55 in PE had undergone the BSI test at 476 and had achieved a class 0 classification?
A. No, I -- no, I don't know, I just ...
Q. Did you know - - and I can take this shortly, I think - that in fact the certificates 70707 and 70708 related to a product called Reynobond RB 160 PE, not Reynobond 55?
A. I can't remember the details. I can't remember at all.
Q. Taking it from me that those two sets of tests, 70707 and 70708 , were dated 9 May $1997--$ take that from me - would you be surprised to see that classification still being referred to in a brochure seven years later, or eight years later?
A. Sorry, I don't understand the question.
Q. Let me try it a different way.

Did you have any rule or thumb or policy perhaps within the BBA about how old test data could be to form the basis of a certificate ?
A. I'm not aware of such a thing, but I'm guessing any test data which might be used to some extent to assess fire performance would have been useful. But I believe there is a time limit, but I have no idea as to what that time limit is.
Q. Very well.

Can we then turn to the certificate again, the BBA certificate $\{$ BBA $00000047 / 5\}$, and look at section 6.3. We have been through quite a lot of material, and it's quite technical and it's a long time ago, so let me try to help you by summarising where I think we've got to so far, Mr Gregorian.

At this stage, we've covered three things.
Do you agree, then, first, that the BBA had
a European classification for rivet-fix PE core ACM in grey/green showing it to be class B? You nodded. That's a yes?
A. Sorry, which paragraph are you --
Q. Just looking at 6.1 and 6.2.
A. Yeah.
Q. Summarising what they tell us and what we have been through.

First of all, you have been sent a European
classification report for rivet-fix PE-cored ACM in
a grey/green colour saying it's class $B$; yes?
Class B-s2, d0.
A. Yeah.
Q. Secondly, you have had a European classification for rivet - fix FR core in gold, also class B, 2006.
A. Yes.
Q. Yes.
A. I'm not sure where you're reading the rivet --
Q. I'm not reading, I'm just summarising where we've got to.

> Let's start again.

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

We've also seen a European classification for rivet - fix FR in a gold colour, also class $B$, that's class $B-s 1, d 0$.
A. Yeah.
Q. Both of those are referred to in 6.1.

We've also got, looking at 6.2, a set of results from September 2003 under BS 476 achieving UK national class 0 for FR core in a metallic grey; yes?
A. Yeah.
Q. Yes. So that's, in a nutshell, what 6.1 and 6.2 are referring to.

Can we now look at 6.3 , and I want to look at this very carefully with you. At 6.3 it says:
"As a consequence of sections 6.1 and 6.2 , the products may be regarded as having a Class 0 surface in relation to the Approved Document B of The
Building Regulations 2000 (as amended) (England and Wales) .."

I don't need to go on.
If we skip to page 1 of the certificate
\{BBA00000047/1\}, which I said I would come back to, let's go to it now, and look under "Key factors assessed" there, third item down, "Behaviour in relation to fire", it says:
"In relation to the Building Regulations for reaction to fire, the panels may be regarded as having a Class 0 surface in England and Wales ..."

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

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My first question to you is: what do those words mean, the words "the panels may be regarded as having a class 0 surface"?
A. I think, again, I've got to emphasise that this is a wording that Brian looked at and approved. Generally the impression I get is "may be" means they are. It's not -- it's not possibly; it 's they can be regarded as a low-risk material. That's how I would read it.
Q. Well, how did you understand it at the time?
A. I think, yes, that's always the impression I get. When they say "may be", it means they can be classed as a material with low risk.
Q. Did you write that statement? Did you draft the words "may be regarded as having a Class 0 surface"?
A. Again, this is a fairly standard sort of statement, but I must have discussed it with Brian, who would have approved the statement. I cannot -- I have no knowledge of what is low risk, what is incombustible or whatever, so I'm sure I would have okayed this particular statement by discussing it with Brian.
Q. You say that this was a fairly standard sort of statement; is this a wording, "may be regarded as having a Class 0 surface", a phrase you took from somewhere else?
A. Yes, there's a good chance there was a similar product

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24 A. I can't comment on that, I can't remember the details.
which I have actually included, but again, it 's something that they -- not only for fire, but all the other sections that would look at it, they would edit as appropriate.
Q. Is there --
A. -- draft certificate isn't final. There are so many different sort of drafts. Eventually we get to the correct answer.
Q. When you chose the words you used here in the initial draft, why didn't you simply say, "The panels have a class 0 surface"?
A. I think the class $0--$ it is quite clear that it has a class 0 , but all this is saying is that it can be regarded as a low risk material, and as to the logic behind that, I wouldn't have a clue. I don't know. I don't know why a class 0 surface is called a low risk material; I've no idea.
Q. Is there any reason why you chose to use the words "the panels may be regarded as having a Class 0 surface", as opposed to using the words, "the panels have a class 0 surface"?
A. I think because of the assessment we were carrying out, bearing in mind the front face was different to the back face of the panel, eventually we came to the conclusion that, irrespective of the differences between the two

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faces, it can still be regarded as a class 0 surface, as per what -- bearing in mind, it's a composite material, it 's even probably more complicated than going to get homogeneous material to assess. So this is the conclusion, despite all the various tests and so on, the conclusion was it may be regarded as a class 0 surface ...
Q. Let's go back to page $5\{$ BBA $00000047 / 5\}$, and look at the use of the expression in that part of the certificate, you say, in 6.3, as I've shown you:
"As a consequence of sections 6.1 and 6.2, the products may be regarded as having a Class 0 surface ..."

What was it about sections 6.1 and 6.2 that led to the consequence that the products may be regarded as having a class 0 surface?
A. Again, I have no knowledge of how the conclusions were drawn, all I know is that they've got - there are two or three different samples which were tested, and the conclusion has been stated in 6.3.
Q. Was it not clear to you at the time that, although FR had indeed passed BS 476 tests and achieved class 0, PE had not?
Q. You refer in an earlier answer to there being expert
input on this, and you say Brian Haynes looked at and approved this wording. Did Brian Haynes himself obtain any expert guidance from outside the BBA on that wording that we're looking at?
A. Yes, I believe - I think Sarah Colwell was the only consultant he actually communicated with. Whether he had -- Brian Haynes was always in touch with BRE with regard to fire, so if it had been discussed in my absence, I wouldn't know.
Q. Did Brian Haynes, to your knowledge, take notes of his discussions with the BRE on these occasions he was in touch with them?
A. No, no, he had his own office, as technical manager, but he was constantly in communication with BRE, as far as I know.
Q. And, as far as you know, did he make notes of those constant communications? Did he record the advice that was given on each occasion?
A. No. With regard to this particular product or generally?
Q. Let's start with this particular product.
A. No. The only conversation I seem to remember is with Sarah Colwell with regard to the fire assessment of this product --
Q. Yes, we will come to that in just a moment.

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

## A. No, he wouldn't, no.

Q. So can you tell us how that advice would then be recorded within the BRE other than in Brian Haynes' own memory? Or perhaps it wouldn't be?
A. As far as I know, there were no written records of them. I mean, obviously I didn't get a response from BRE, so I asked Brian to look into it.
Q. Right.

Was there ever a time in your time at the BRE when external fire expertise advice of this nature, coming from Sarah Colwell or perhaps other experts, was required to be formalised, memorialised in writing?
A. That's the general method. We always insist on written ... when you write an email to a consultant, you expect a result. But in this case, it was rather unusual not to have a response, and that's why I talked to Brian. That's why I remember some of the details, because it was unusual in that respect.
Q. Right. Well, let's pursue this a bit more.

Can we go to technical file, page 505 , please,
that's $\{B B A 00008042 / 505\}$, and we can go to the bottom of
the page. We can see an email to Sarah Colwell from you on 29 November 2007, copied to Brian Haynes, subject: "Reaction to Fire, Rainscreen Cladding".

We need to go over to page 507 \{BBA00008042/507\} to see the rest of it. It says:
"Dear Sarah
"We are currently assessing a composite panel,
comprising two aluminium sheets bonded to a polyethylene
core, for use in back ventilated and drained rainscreen cladding systems.
"The panel is coated on both faces with a 6 micron thick polyester primer. The exposed face is additionally protected by a 30 micron thick Duragloss or PVDF coating.
"Based on testing and classification to EN 13501-1 and BS 476-6 \& 7, the exposed face has been assessed as having a Class 0 surface in relation to Approved Document $B$ of the Building Regulations.
"As I'm sure you are aware, for buildings other than dwellings, the Regulations also require classification of the surface facing the cavity (Clause 12.9).
"No test data for the back face exists. However, as it has a much thinner coating and therefore less 'energy content' than the exposed face, we think it is not unreasonable to assume a Class 0 rating for the back

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

First, do you accept as a matter of fact that the PE standard of Reynobond 55 had not been tested under BS 476 and did not have class 0 , only FR did?
A. Sorry, your question again, please?
Q. Looking five lines down you say:
"Based on testing and classification to EN 13501-1 and BS 476-6 \& 7, the exposed face has been assessed as having a Class 0 surface in relation to Approved Document B ..."

Do you accept that BS 476-6 and 7 only applied to the FR version of Reynobond 55 and not the PE version?
A. Again, I can't remember the details but I'm guessing that that was the case.
Q. Yes. I mean, you had not seen, at the time you wrote this email, any test data under BS 476-6 and 7 which related to the PE core, only the FR core.
A. We do say something about the PE version in the certificate , don't we?
Q. Can you just answer my question. I'll try it once more: do you accept that, as a matter of fact, you didn't have any test data under BS 476-6 and 7 relating to the PE core version of Reynobond 55, only the FR?
A. Yes, I would accept.
Q. So when you told Sarah Colwell that the exposed face had been assessed as having a class 0 surface, that was true only in respect of FR; it wasn't true, was it, in respect of the PE, the standard?
A. That must have been the case. I can't remember, I mean...
Q. Why didn't you make that clear to Sarah Colwell at the time?
A. Erm ... I think I must have -- I say I must have; the intention here is to assess a particular panel with the particular coatings. Now, I'm not sure if this material was fire retardant type or the PE type. All I'm asking in this email is if she could have a look as to how we can assess this and provide the appropriate statement in the certificate. That's all.
Q. I'm just trying to understand how you come to make the statement to Sarah Colwell that you do in the sentence we're examining.

First of all, do you accept that when you tell her that the exposed face has been assessed as having a class 0 surface, that was true only in respect of the FR but not true in respect of the --
A. The FR or the standard version would have been defined by the PVDF coating or any other coating. I mean, the intention is to see with this particular coating what

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would be her assessment. I would have no knowledge of what a fire retardant version was, what a PE version was. Basically this is the information we had and, as far as I remember, I let Sarah have the necessary information to make an assessment.
Q. When you said, "Based on testing and classification to EN 13501", which is the European Standard, did you think that classification of rivet PE as class $B$, as we've seen, contributed in some way to the product's claim to have class 0 ?
A. Again, the fixing method was considered irrelevant here.
Q. Let's look and see what Brian Haynes says about this. Can we go to his witness statement, please, at page 6 $\{$ BBA00010784/6\}, paragraph 28. He is talking about the European tests, he is referring to the European standards, and in the fourth line in that paragraph, can you see, Mr Gregorian, he says:
"They were published as part of a much wider process of Standards Harmonisation and, at the time of the assessment in question, they were not widely recognised by users in the UK. They could not be used to definitively establish Class 0 performance as defined in UK Building Regulations. However, they could be used to classify performance in relation to EN 13501-1 (Harmonised European Classification Standard) which was
equally acceptable under Building Regulations Approved Document B."

Now, can we look at page 12, please, of the same statement $\{$ BBA00010784/12\}, paragraph 53, under question 16. At the bottom of that page, Mr Gregorian, you can see a lengthy question set out by the Inquiry:
"Did the 2008 certificate for Reynobond Architectural Wall Panels $(08 / 4510)$ indicate that all such panels achieved national Class 0? If not, why not?
"Please explain with particular reference to the contents of the certificate including: (i) 'KEY FACTORS ASSESSED' on page 1 ; (ii) section 13.1 on page 8: 'This certificate relates only to the product/system that is named and described on the front page'; and (iii) section 6.2 the tests to National Class 0 provided to the BBA."

The answer he gives is over the page on page 13 \{BBA00010784/13\}, and he says at paragraph 53:
"The Certificate did not state that all panels achieved national Class 0 . The Certificate makes clear that not all colours were covered and it states that some products were tested and classified to EN 13501-1. As stated above, the Certificate goes on to state that the EN classified panels would be suitable in class 0 situations."

Now, looking at your understanding at the time, did you understand yourself that the European test results could not be used to establish the British Standard class 0?
A. I never got involved in European Standards and especially with regard to fire, I have no knowledge of this at all.
Q. Was it any part of your thinking that because PE had achieved a class $B$ in rivet, it could be treated as if it had class 0?
A. I can't comment on that, it's way outside my area of expertise.
Q. Right.

I think you told us earlier that you did look at diagram 40 of Approved Document B, which we looked at earlier on in your examination. Did you realise when you were drafting this part of the report that European class $B$ did not equate automatically with national class 0 ?
A. No, I've got no knowledge of that at all. All I knew, that under Approved Document B it was acceptable to have material of limited combustibility above 18 metres. That's all I know. As regards classifications, as to what constitutes a material of low combustibility, I just wouldn't know.
Q. Did you know that the tests for limited combustibility, whether under the European system or the British system, the BS system, were completely different tests from the tests of surface spread of flame and the other tests leading to class 0 ?
A. Again, I have no knowledge of this at all. I would have consulted the fire expert.
Q. Why was it necessary to say anything at all about class 0 for the purposes of the PE standard version of Reynobond 55?
A. Because I believe that was the requirement of the approved document, basically you need to have certain classifications to be able to make an assessment on the product.
Q. But we saw diagram 40 and it said you could either use class B or national class 0 . Given that you had class B for rivet, why was it necessary to say anything at all about class 0 ?
A. I can't comment on that. I don't know. I can't remember, I mean ...
Q. Did Arconic ask you to put class 0 somewhere in this certificate?
A. They may have done, but we would definitely have checked the validity of that statement.
Q. Why didn't you simply say that because the standard PE

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in rivet had achieved class $B$, it satisfied diagram 40 for use above 18 metres?
A. I can't comment on that, I wouldn't know.
Q. Can you see how somebody reading this certificate might have been misled into thinking that standard PE either had class 0 , which it didn't, or could be regarded as having class 0 , but on a basis which you can't understand or explain?
A. The certificate obviously has come to the conclusion -or the fire expert, with the approval of Brian Haynes, they must have come to the conclusion that they can be regarded as class 0 . But also the certificate refers to the appropriate section for amplification on this.
Q. Now, we will come back to Sarah Colwell's response to the email I've shown you after the break, which I'm going to ask the Chairman to give us in a second.

Can I just ask you one question before we do, and that is: do you remember whether the wording "may be regarded as having a Class 0 classification " came from Sarah Colwell?
A. There's a good chance Brian Haynes would have initiated this. I -- and obviously they must have discussed the issue between themselves and agreed that this was an appropriate statement.
Q. I think you're speculating. You say there's a good
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chance, but doing the best you can -- and I know after
13 years it's difficult - - do you remember whether that phraseology was either specifically suggested by
Sarah Colwell or actually approved by Sarah Colwell herself?
A. I can't make a comment on that. I don't know. I really don't know.
MR MILLETT: Very well, thank you very much.
Mr Chairman, is that a convenient moment?
SIR MARTIN MOORE-BICK: Yes, I think it is, thank you very much.

Well, Mr Gregorian, we will have a short break at
this point. We will come back to resume at 3.35 ,
please. In the meantime, please make sure not to talk about your evidence to anyone else. All right?
THE WITNESS: Okay, thank you.
SIR MARTIN MOORE-BICK: Good. See you a bit later on.
THE WITNESS: Yes.
SIR MARTIN MOORE-BICK: Thank you very much, good. (3.20 pm)
(A short break)
( 3.40 pm )
SIR MARTIN MOORE-BICK: Welcome back, everyone. I apologise
for the slight delay, but we are now ready to continue.
So I' II just check that Mr Gregorian is there and
can hear me and see me.
THE WITNESS: Yes.
SIR MARTIN MOORE-BICK: Very good, Mr Gregorian, and you're,
I hope, ready to carry on, are you?
THE WITNESS: I am, yes.
SIR MARTIN MOORE-BICK: Thank you very much.
In that case, I' II invite Mr Millett to put some
more questions to you.
THE WITNESS: Thank you.
MR MILLETT: Thank you very much, Mr Chairman.
Can we go back to the BBA certificate, please, and
I would like to look at section 6.3 \{BBA $00000047 / 5\}$. If
you look at 6.3, in the last sentence there it says:
"The unexposed side of the products may also be regarded as having a class 0 surface."

I want to look to see with you what supported that statement.

Can we start by looking at the technical file, please, at page 535 \{BBA00008042/535\}. This is an email from you to Claude Wehrle on 22 October, if we look at the second half of the email run on the screen, and you say:

## "Dear Claude

"A copy of our proposed draft Certificate is
attached."

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## Then you say in the third paragraph:

"With regard to Reaction to Fire, in accordance with the requirements of UK Building Regulations, we also need classification of the reverse (unexposed) side of the panel. In Section 6.3, we have assumed, and stated that 'the unexposed side of the products may also be regarded as having a class 0 surface'. However, we will still need documentary evidence showing that this is indeed the case. The Warrington test report makes no specific reference to the performance of the reverse side."

Is it right that you understood that Arconic had to provide separate documentation showing the performance of the reverse side of the panel?
A. Ideally, yes, on the particular product we were covering.
Q. In the paragraph there you refer to the Warrington test report. Was that the 2003 Warrington test report that we've seen on FR?
A. I can't remember.
Q. Okay. Now, if we go to page 499 \{BBA00008042/499\} we can see the response, the same technical file. This is
his email of 5 December 2007, and he says:
"Hello Hamo,
"After having checked with our paint laboratory and

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the different certificate we have today, I give you those two information in order to qualify the back face of our Reynobond panels.
"1- The only difference between front and back side is the thickness of the coating witch is 6 [microns] instead of 35 [microns]. So we have $14.2 \mathrm{~g} / \mathrm{m} 2$ coating weight on the back face for $47.2 \mathrm{~g} / \mathrm{m} 2$ on the front side.
"2- Like you can see in the attached 'reaction to fire classification report No. RA07-0182', our coated o [aluminium] used for the skins of Reynobond are classified as A1 (non combustible).
"Can you please now let me know if you have all the required information to close our certification process?"

You can see that there is an attachment to this email at the top there, "Reynolux A1 - RA07-0182". Can we go to that. That's on the technical file in a different part of it, page 139 \{BBA00008042/139\}. As one might expect, given the title in the attachment, it relates to Reynolux. Can you see that in the middle of the page there?
A. Yes.
Q. That's a totally different product from Reynobond 55, isn't it?
A. It is, yes.
Q. Can you explain how a classification for a completely different product could be acceptable as the basis for a claim for class 0 on the back side of Reynobond 55?
A. Again, I've got to emphasise that I have very little knowledge of fire issues, but I would imagine the substrate on which the paint has been applied, being metal, that wouldn't catch fire, so the only fire issue would have been the actual coating, which in this case was much less than the front face coating, I think 6 microns against 35 microns, I seem to remember.
Q. You're being asked to extrapolate, are you, from the results on Reynolux to a thicker surface on Reynobond?
A. I wasn't involved in decisions regarding that, so --
Q. I see.
A. - that's why I consulted fire experts for that.

To be honest, I find it quite logical to assume that is the case, but again, I had to have confirmation from a fire expert.
Q. You say we had to have confirmation from a fire expert; indeed, we've seen your email to Sarah Colwell of 29 November 2007, at least in part. Can we go back to that. That's in the technical file at page 507 \{BBA00008042/507\}. We have looked at half of this, let 's look at the rest of it.

I was showing you this before the break, and you

## say, just below halfway down:

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

If we see at page 505 \{BBA00008042/505\} her response, it's in the second email from the top on that page, also dated 29 November, and she says:
"Hamo
"We would need to see the test data to be able to make any meaningful comment on the potential product performance. If you would like us to complete a review we would be happy to look at this for you and provide a proposal if necessary for any additional work or formal assessment."

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

## "Sarah

"I was not able to contact you by telephone, hence e-mail.
"The attached documents are classification reports for the 'standard' and 'fire retardant' versions.
"Testing to BS 476-6 \& 7 has also been undertaken but only hard copy of the reports exist.
"Please let me know if this is sufficient for your purposes.
"If you need to have a chat, please give me a call when you are free.
"I'm not in this afternoon but I am in the office until 12:00 and the rest of the week."

Do you remember whether you actually had the chat to which you refer?
A. With Sarah?
Q. Yes, with Sarah Colwell.
A. No, I couldn't get hold of her.
Q. Having been told by Warrington that the only solution was to get tests done, why did you approach Sarah Colwell?
A. To see whether our assumption was correct, bearing in mind I must have discussed it with Brian regarding this, and we were seeking confirmation from Sarah.
Q. Right.

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

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this request?
A. As far as I remember, they -- well, there was no response from her, because of her busy work schedule, so that's why I contacted Brian to have a chat with her.
Q. Now, we can see from this email, before we leave it, that you sent her -- can you look at the attachment line -- the two European tests for Reynobond 55: first of all, the test for PE, which had a Euroclass B-s2, d0, that was classification 5A we looked at earlier; and also Reynobond FR at B-s1, d0, which was the 2006 test.
A. Yeah.
Q. You didn't send her the 2003 BS 476-6 and 7 tests that had been done by Warringtonfire for FR, did you?
A. Where I say only hard copy exists --
Q. That's what you're referring to, is it?
A. Yes, so --
Q. Why didn't you send her those?
A. Well, as I say, I was expecting a response, and I didn't receive a written response, but based on $--I$ think based on the actual specification that was supplied by Arconic, or Alcoa, I'm guessing she was able to assess the fire performance of the back face based on what she had, so --
Q. Can we go to -- I'm so sorry, I keep thinking you have finished your answer.

Can we go to your statement, please, at page 4
$\{B B A 00011096 / 4\}$. You can see Inquiry question 6 in bold:
"What information on fire performance was Alcoa asked to provide to the BBA prior to the certification in $08 / 4510$ ? Did you or anyone at the BBA ask Alcoa for all relevant test data in respect of Reynobond Architecture Wall Panels? If not, why not?"

You answer at paragraph 22, can you see? You say:
"From the correspondence available, and to the best of my recollection, Alcoa provided information relating to the front face of the panels which had a PVDF coating of thickness 35 microns. The back face of the panels had a polyester primer coating of 6 microns. On the advice of BRE's fire expert, our Technical Manager accepted that, in fire, the back face of the panels would perform at least as well as the front face."

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

Are you able to shed any further light on when that advice was given?
A. When, sorry?
Q. On when that advice was given? Are you able to tell us when that advice was given?

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A. What advice is that, sorry?
Q. The advice that we see in the last sentence of your paragraph 22 :
"On the advice of BRE's fire expert, our Technical Manager accepted that, in fire, the back face of the panels would perform at least as well as the front face."
A. Yeah, this is the conversation I was referring to, the telephone conversation with Sarah.
Q. I see. So that's the conversation that Brian Haynes had with Sarah Colwell that you listened in on but couldn't hear what she was saying?
A. That's correct. Again, I don't know what Sarah said. It was a short conversation between Brian and Sarah, and I sort of got the approval from Brian soon afterwards.
Q. And when Brian Haynes reported to you what Sarah Colwell had told him, is the totality, all of the advice that he got from her, reflected in that last sentence in paragraph 22?
A. Yes, I would imagine that was the conclusion that Brian came to, based on the advice given by Sarah.
Q. Did Sarah Colwell, to the best of your knowledge, explain to Brian Haynes, or did Brian Haynes tell you why it was technically acceptable to use the Reynolux classification to draw any conclusions about the fire
A. That's correct.
Q. Is it right that the particular colours are valid, in other words covered by the certificate, only if they are on the stated core type, so grey/green only certified if it's on PE-cored Reynobond?
A. That's correct, yes.
Q. Was it your understanding that particular colours are only valid for particular coatings, so the certificate would only cover metallic grey Duragloss finish when applied to PE-cored Reynobond?
A. That's correct, yes.
Q. And is it right, therefore, that you intended that the reader should understand that every other colour and every other combination outside what we've discussed had to be tested?
A. That's correct.
Q. What was the technical justification for that colour limitation?
A. From my conversation with Brian, the impression I got was fire performance is very much a function of the actual colour. It's very sensitive to the actual colour. As to why that is, I wouldn't know. Possibly something to do with the energy contained within the paint coating, I don't know.
Q. Did the BBA --
A. Sorry.

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Q. Did you want to finish your answer?
A. No, I'm okay.
Q. You were about to say something else and I started the
    next question.
        All right, I'll ask the next question.
        Did the BBA expect that that colour limitation would
    be rigorously adhered to by customers?
A. The certificate covers that product, and that product
    only, with that particular coating. As to what -- how
    the certificate is used, that's really beyond our
    control, really.
Q. Did the BBA ever hear that this colour restriction in
    the certificate was routinely ignored in the UK market?
A. I cannot comment on that, I don't know.
Q. So you never heard any intelligence or rumours that UK
    customers were ignoring this colour restriction?
A. No, no.
Q. Did you ever hear that customers couldn't understand why
    the difference in colour would make a difference?
A. Erm ... I can't comment on that. I mean, the ... it's
    a fact that we were aware of. But as far as the
    certificate is concerned, it covers this particular
    product. If the client or the installer wants to put
    a different product in his cladding system, that would
    be out of our control. It wouldn't be covered by the
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        certificate. That's what we are saying, I think, in
        here.
    Q. Can you explain why the certificate doesn't say on its
front page that it certifies Reynobond cladding wall
panels in these three colours in these three forms?
A. Yes.
Q. And nothing else?
A. That's it.
Q. But why doesn't it say that on the front page?
A. This is just a standard format of the certificate. I'm
not sure why not. But specifically those statements are
relevant to the behaviour in relation to fire, so it
seems logical to me that it would be in the fire
section.
Q. I follow.
Can we go to page 471 of the technical file
$\{$ BBA00008042/471\}. At the bottom of the page we see
an email from Claude Wehrle to you on 12 December 2007,
subject, "Reynobond certification":
"Hello Hamo,
"Sorry to disturb, but coming back to our call from
yesterday ...
"Could I have an official document from the BBA that
certify that we have the BBA approval for Reynobond in
PVdF finish and in Duragloss 5000 finish?"

You respond to him a little bit further up the screen, if we can, the same page, the same day, you say: "Claude
"As requested, please find attached letter.
"Hard copy to follow.
"I hope it proves helpful."
You can see that the attachment is an approved letter in pdf. We can see that on page 473
\{BBA00008042/473\}, if we go two pages down, and it's a letter signed by Brian Haynes and addressed to Claude Wehrle at Arconic, dated 12 December 2007. It's entitled "Reynobond Architecture Wall Cladding Panels with Duragloss 5000 or PVDF Coating", and he says:
"I am writing to confirm that all technical work relating to the assessment of the above product has now been successfully completed.
"The Certificate is currently being finalised for issue and will be forwarded to you in due course.
"We hope this letter is helpful in the mean time."
Do you know whether this letter was intended for Claude Wehrle to use officially, perhaps to send out to clients?
A. No, as far as I know, they couldn't use this -- they shouldn't use this as proof of technical approval by the BBA. They would have to wait until the certificate was

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formally issued.
Q. Now, we can see that --
A. Whether they had used this to -- in a particular project or not, I just wouldn't know. I don't think BBA generally would know about these things. But all we are saying here, bearing in mind the client is anxious to get his approval, this is a fairly standard sort of letter which Brian Haynes has signed obviously here, just to reassure the client as to what stage the assessment is, just to keep him happy, really.
Q. We can see there is no mention of particular colours being certified here or of core types or finishes.

My question is: if colours and core types were such an important scope limitation, why was that not spelt out by Mr Haynes in this letter?
A. I don't know. I wouldn't know. I mean ... as I say, the certificate mentions in the appropriate section what is covered, especially with regard to fire. Otherwise the title here would have been much longer than it is now.
Q. Can we go back to the certificate, please, at page 3 \{BBA00000047/3\}. I would like to look at section 1.1 or paragraph 1.1 with you again. We've read this a number of times, but you can see in the middle it says, at the end of the line:
"A Duragloss or PVDF coating available in various
colours protects the exposed face."
So you refer there to "various colours".
Do you recall that in fact it was Claude Wehrle who had proposed that wording and you had added it without any objection? We see that from the red and green email run. Do you remember that?
A. Yes. I would guess this was how the CSTB document was worded.
Q. But we see what Claude Wehrle intended by these words, that you had agreed to add at his suggestion, as we saw from the red and green email earlier.

Can we go to his witness statement at page 12 \{MET00053190/12\}, paragraph 42. It's a long paragraph, so we need to pick it up about halfway down. It's on the screen in front of you about three-quarters of the way down, and it says:
"If the certificate ..."
Do you see?
A. "If the certificate states 'Coloris ..."
Q. Yes, exactly:
"If the certificate states 'Coloris: Divers' [that's French, I think] ('Colour: Various'), the testing may relate to all colours in the range, or if a specific colour is stated on the certificate, it will only relate

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

My question, Mr Gregorian, for you is: did you understand that Mr Wehrle wanted the certificate to relate to all the colours in the range or only to the colours specifically stated?
A. He may have ideally wanted that, to cover all colours, but I don't think we would accept that, so that's why we have clearly stated in this certificate as to what colours were covered.
Q. Do you accept that the reader might understand from section 1.1 that we have just been looking at on page 3 of the certificate $\{B B A 00000047 / 3\}$ that all colours in the range were certified, were covered by the certificate, either with a Duragloss or a PVDF coating?
A. Erm ... I'm not sure, I haven't got the statement in front of me. Can we see it on the screen?
Q. Of course, $\{$ BBA00000047/3\}. We can see it again then. It says, as I've shown you, in the fourth line:
"A Duragloss or PVDF coating available in various colours protects the exposed face."

My question is: do you accept that a reader of that might understand that all colours in the range are covered by the certificate?
A. No, I think we have made that clear. I think obviously that is true, they have these systems, these different panels with different coatings and so on, but they wouldn't be covered, because we have made that clear in the appropriate section as to what is covered, and the only ones we have covered -- obviously if -- again, we say if a different colour is involved, obviously they will have to go back to the certificate holder for confirmation as regards fire performance.
Q. Do you accept that by adding what Mr Wehrle had asked you to, namely the reference to various colours there, you were introducing an ambiguity in the certificate, on the one hand between saying that various colours were covered, but on the other only the colours specifically identified were covered?
A. The fact that there's a statement here as regards the different products that were on offer by Alcoa doesn't necessarily mean that it's covered, it merely states what the manufacturer can provide. That's the best way I can explain.
Q. Can we then look on and see how the draft was circulated.

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

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meant that there was a review process.
Can we go, please, to $\{$ BBA00010784/5\}. This is Mr Haynes' witness statement, and I want to show you paragraph 21.

At paragraph 21, Mr Haynes says:
"Leaders were submitted for comment to other BBA staff and to external experts. The experts to whom the draft was circulated would depend on the nature of the product. I exhibit Document BH1 forming part of this statement which sets out those parties to whom the draft of this certificate was sent, both internal and external, as follows."

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

The BBA section head, the second bullet point on that list, I think we established earlier was Geoff Gurney; is that right?
A. That's correct.
Q. Would this document also have gone to John Albon?
A. John would most probably have looked at the durability aspect, because that's how he would get involved in things like this.
Q. Right.
A. Most probably he would have at some stage been consulted
with regard to durability.
Q. Right. Was he on the panel, if I can put it that way, for review of leader certificates such as this?
A. Yes.
Q. Which section was John Albon in at the time, do you recall?
A. Erm ... I think durability was his main area of activity. I can't remember the -- what the section was called, to be honest. I think just durability.
Q. Would I be right in thinking that Brian Haynes would have had the ultimate sign -off --
A. Yes.
Q. -- on the wording of the certificate?
A. Yeah.
Q. Yes, I see.

Now, in this list here, we can see who is there, but we can't see anybody in this list from BRE or from Warrington who would have seen this draft in its final form and signed-off statements about fire performance. Is that because nobody from the BRE or Warrington or any other fire expert external to BBA did so?
A. Yes, I'm not aware that - I mean, this was obviously a standard list of different parties that would have a look and the BRE wasn't in it, so I wouldn't know. I wouldn't know about that.
Q. Can we go to the technical file again, please, and look at page 319 \{BBA00008042/319\}. This is a document which has the word "Draft 1" at the top, and you can see this looks like the very first draft of the BBA certificate. It hasn't even got a number on at that stage. But at the very top, somebody has written in manuscript,
"Circulation". Does that tell us that this draft was circulated for commentary within the BBA?
A. Obviously there would be some circulation because the section head would -- each individual section head would have to look at this --
Q. I see.
A. -- to assess the product from their own perspective. Circulation, as it's written here, it could very well mean circulation to the various parties which Brian Haynes has actually drawn up.
Q. How wide would the circulation of a draft 1 version of a certificate like this be?
A. Sorry, how long?
Q. How wide would the circulation of draft 1 of a certificate such as this be?
A. Normally a draft would go to various departments who would look at this and then pass on to the -- you know, between - - it would just go between the various departments, various sections.
Q. Would the circulation be narrower than the final list of people we saw in Brian Haynes' statement a minute ago?
A. I believe with confirmation certificates there was less of a problem in this respect. But for normal certification, it would definitely go into a loop, several times, many times sometimes, before it was finalised.
Q. Can we have this version side by side, please, with the issued version. I want to compare the front pages of each of them. If you keep draft 1 up on the screen, please, and let's have the final version as issued which is $\{B B A 00000047\}$. There it is.

Let's just compare "Behaviour in relation to fire". On the left-hand side, in draft 1, do you see where it says:
"In relation to the Building Regulations for reaction to fire, the panels may be regarded as having a Class 1 surface in England and Wales ..."

Then when you look across to the final version, it says:
... the panels may be regarded as having a Class 0 surface in England and Wales ..."

Now, the technical file doesn't contain any record of any external commentator suggesting that change, or indeed when it might have been made.

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First of all, do you know when that change was made?
A. No, I can't comment on this. But bearing in mind the certificate actually has stamped on it "For comment only", and there would be a lot of drafts, including things that would have to be finalised, and, as I say, after consultation with BRE, it was decided that class 0 was the appropriate one. But as to when this happened, I just couldn't tell you.
Q. Do you know who decided to make that change?
A. Erm ... this must have been after discussion with Brian Haynes.
Q. But was it his decision, did he decide to make that change from class 1 to class 0 ?
A. I believe so, yes, I believe -- I certainly didn't make the decision.
Q. Do you know on what basis, from your own knowledge, the change was made from class 1 to class 0 ?
A. Based on the advice from BRE.
Q. Was the BRE asked to advise on what the classification of the panels should be?
A. I think that the idea was to confirm that the panels could be considered as class 0 . For all I know, Brian may have actually seen the class 1 classification and changed it to class 0 . I can't remember that.
Q. Do you know when that advice was given by the BRE to
A. Sorry, what was the question again? Sorry, I can't hear.
Q. Do you know when the BRE gave the advice to change the classification on the certificate from class $1--$
A. Oh, no, I wouldn't know. No, I wouldn't know.
Q. Right.

I have one or two more topics to cover with you,
Mr Gregorian. The next one is surveillance.
Are you aware or were you familiar with the fact that the BBA terms and conditions required the certificate holder to allow the BBA to conduct surveillance?
A. The accepted arrangement within the UEAtc was the original certification body would conduct all surveillance, and they would be expected to inform the BBA if there were major non-conformances.

Having said that, I think something l've probably missed in my witness statement, every three years we would go through each certificate to make sure there were -- if there were any problems, and one of the questions we would ask CSTB was whether there were any non-conformances, and I think that process is still going on now. Every three years we would review a certificate.
Q. Can we go to the technical file, please,
$\{B B A 00008042 / 121\}$. This is a document headed "Request for Surveillance Visit". At the bottom you can see that it's dated 21 April 2008. We can have that on the screen. There is a signature next to it, project manager. It looks like your signature.
A. Yes, it is, yes.
Q. The other signature is head of approvals,

Brian Chamberlain; yes?
A. Yes.
Q. In the table you can see details of locations to be visited, if we can just scroll back up, please, and visit frequency. Location: Merxheim, visits per annum: zero.

At the bottom of that section, there is a note, and it says:
"1) Unless technically justified, each location should receive at least two visits per annum.
"2) Please identify if the visit is to be combined with an existing visit arrangement."

Then at the very bottom of the table it says:
"If no surveillance required provide reason."
Somebody has put:
"Surveillance by CSTB, France."
Does that mean that the BBA was going to rely on the

CSTB to conduct surveillance at Merxheim?
A. Yes, yes. As I say, within UEAtc rules, the original certification body would -- well, they were supposed to carry out any surveillance and inform -- they were expected to inform the BBA if there were any major non-conformances.
Q. Can we - -
A. That was the accepted procedure within the UEAtc rules.
Q. Can we then go, please, to page 123 of the technical file $\{$ BBA $00008042 / 123\}$. Your email, bottom of the page,
17 May 2007 to Laurent Plagnol:

## "Dear Laurent

"We are currently assessing the above product with a view to issuing an Agrément Certificate."

You set out the applicant's details, and then you say.
"As part of our assessment, we would normally carry out a factory inspection against a Quality Plan.
However, we understand that there is currently a scheme in operation by which regular surveillance by CSTB is carried out. In view of this, we should be grateful if you would kindly confirm that factory production control relating to the product has been satisfactorily maintained and that once the Certificate is issued you will inform the BBA if:

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"a) any major non-compliances are identified.
"b) the factory visits are discontinued.
"Your prompt response would be much appreciated."
Above that, you can see that Laurent Plagnol
responds on 21 May:
"Dear Hamo,
"I confirm you [sic] that any major non-compliances are identified.
"The factory audits are continued (the next audit will be schedule the 14th of June 2007).
"Best regards.
"Laurent PLAGNOL."
Is that, as we've seen from the emails there, the agreement to set up regular audits by the CSTB?
A. Yes, it's quite a standard way of asking CSTB if everything is okay.
Q. Was it your understanding or expectation, therefore, that the CSTB would conduct surveillance twice a year and report back to the BBA?
A. Yes, that's within the UEAtc rules. We were perfectly entitled to assume that CSTB would carry out surveillance.
Q. There was no audit, was there, and certainly no evidence we've seen that there was --
A. No, no, that wasn't required.
Q. So did the BBA have any quality plan with Arconic when it was originally assessing the Reynobond 55 product and issuing the certificate?
A. I can't remember, to be honest, no, I don't know.
Q. So when --
A. Sorry, when the CSTB certificate is given to the BBA, all quality issues were the responsibility of the original issuing body, CSTB. So whether a quality plan was not relevant here, I can't remember, but certainly there was no direct control by the BBA over the manufacture of the product.
Q. Is the effect of this that when it came to issuing the certificate, you hadn't had any quality plan or surveillance report from the CSTB?
A. No, I don't remember having any such thing, because it wasn't the normal thing to do. I mean, obviously there's nothing on file regarding a quality plan. But something like this email would probably be sufficient for our purposes.
Q. Was the arrangement, therefore, that the CSTB would effectively report only major non-conformities and nothing else?
A. That's right.
Q. Now, you were at the BBA for more than two years after January 2008, when the certificate for Reynobond 55 was

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issued. In that time, I think it 's right, isn't it, that the BBA did not receive any surveillance reports?
A. That's correct, yes.
Q. Did that surprise you?
A. No. Whether they were expected to provide surveillance reports or not, I don't know. But, as I say, after three years, in 2011 I believe, there was a review, but I'd left the BBA by then, and, as I say, during the review things like quality control issues would have been addressed.
Q. Yes, thank you.

I've just got one more short topic.
Can we go, please, to $\{$ META00002052/55\}. This is a letter from the BBA dated 15 January 2008 and sent to Claude Wehrle, and if you go to page 2 \{META00002052/56\}, you can see that it's signed by GG Lines, section head, technical writing and publications.

We haven't heard anything about Mr Lines so far in your evidence. What was his role at this time?
A. Geoff was the head of technical writing.
Q. Right.
A. I worked very closely with him.
Q. Did he have any role to play in the technical drafting of the BBA certificate itself ?
A. No, the originator of the draft certificate would be me, and then he would be in charge of circulating it to various departments, getting comments and including them, and eventually I would have a look at the draft certificate, and he had no input into the technical aspects. He would basically be in charge of the -- just producing the certificate.
Q. If we go back to page 1 \{META00002052/55\}, we can see the heading, you can see the certificate is referred to there, and in the first paragraph he says:
"I am pleased to inform you that Agrément Certificate No 08/4510 (First issue) has been awarded to the above product and a copy of the Certificate, bearing the number and our Chief Executive's signature, is enclosed."

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

Would you have been aware of this letter at the time?
A. This is a standard letter which I must have seen several times.
Q. I see.
A. This is towards the end of the -- you know, once the certificate is signed by the chief executive, that's the

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letter that would go to the client.
Q. Under "Conditions" there on that page, you can see that the letter says:
"We must draw your attention to the Conditions of Certification in the Certificate and point out that if modifications are made to the specification or conditions of use of the certificated product during the period of validity of the Agrément Certificate, the BBA must be informed without delay. Failure to do so could invalidate the Certificate."

Was that standard wording?
A. Yes, I believe so.
Q. So was it the position of the BBA that the certificate holder would have to tell the BBA if there were any modifications or if the conditions for use were different?
A. That's correct, yes.
Q. Would you have expected that to have included changes to or updates in the fire classification of Reynobond 55?
A. I think it would apply to the certificate as a whole. Any material change would have had to be conveyed to the BBA.
Q. If, for example, the European fire classification for PE rivet had been downgraded to a class E or a class C, would you have expected that fact to have been
communicated to the BBA?
A. That's what we are asking the client to do, and I'm not sure if that sort of scenario has happened before,
but ... it's -- that particular clause actually just
confirms that any change from what we have assessed would have to be conveyed to the BBA. I think that's a logical thing to do, isn't it?
Q. Would you have expected Arconic to have told the BBA if it became aware that any of its statements in the certificate were incorrect, misleading or required updating?
A. Arconic would have had to do that, just to make sure that the certificate is valid for their product.

## MR MILLETT: Yes, thank you.

Mr Chairman, I've come to the end of my prepared questions.
SIR MARTIN MOORE-BICK: Right.
MR MILLETT: May I ask, therefore, that this be the time for
the appropriate break. I'm sorry that it 's just
one minute before 4.30, but it would be convenient now
to take the break, look at any further questions and then release the witness, if possible.
SIR MARTIN MOORE-BICK: Yes.
Well, Mr Gregorian, we need to have a short break at this stage so that Mr Millett can check that he's asked

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you all the questions he needs to ask you, and also to enable others who are following the proceedings to consider whether they think there are other questions that need to be asked.

So we will have a short break until 4.45 , please, and at that point we will see if there are any further questions for you.
THE WITNESS: Okay, thank you.
SIR MARTIN MOORE-BICK: As before, please, no talking to
anyone about your evidence or anything relating to it while you're out of the room, so to speak.
THE WITNESS: Sure.
SIR MARTIN MOORE-BICK: All right. See you later on then.
Thank you very much.
( 4.30 pm )

> (A short break)
( 4.45 pm )
SIR MARTIN MOORE-BICK: Welcome back, everyone. We will see now whether there are any further questions for Mr Gregorian.

Are you there, Mr Gregorian? Can you see me and hear me all right?
THE WITNESS: Yes, I can.
SIR MARTIN MOORE-BICK: Good, thank you very much.
Well, we will find out now whether Mr Millett has
any more questions for you.

## Mr Millett?

MR MILLETT: Yes, thank you, Mr Chairman.
Mr Gregorian, I have two documents to put to you, if I may. The first one is $\{$ BBA00010701/1\}. This is an email which is sent by John Albon on 20 November 2007 to Brian Haynes, copied to you, and it follows on from the discussions on that day about comparing the front side and the back side and whether it's safe to conclude that the back side is class 0 . That is the context.

If you look at the text of the email, it says:
"I would be amazed if the coating isn't Class 0 , but can 't see what we are gaining by not asking them to prove it. It also seems unfair to other Certificate holders should have commissioned the necessary test.
"Could we compromise by proceeding to issue, but asking them to provide the confirmatory data retrospectively?"

Now, in that email, first of all, did you understand the "them" there to be a reference to Arconic?
A. Yes. Yes, that's -- yeah, I suppose that's true, yes.
Q. Do you know what happened to that question or proposal by John Albon, whether there was a request sent back to Arconic to ask them to provide the confirmatory data retrospectively?

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A. I can't remember ... I can't remember that at all, no.
Q. Can we look at $\{$ BBA00010711\}, please. This is an email the same day, which isn't part of the same email string, but you write to Brian Haynes, copied to John Albon, and say:
"Thanks Brian [in response to a different document].
"I' II get Alcoa to have the test done.
"One less thing to do for the coil coated sheet."
Did you get Alcoa to have the test done, do you think?
A. I think in the correspondence we have seen before we did ask for additional tests, or test results, but in the end, because that wasn't forthcoming, we decided to go a different route with regard to assessment, mainly the extraction idea, which we used.
Q. Why not simply insist that Arconic do the test as you had agreed that you would get them to do?
A. I can't remember the exact context in which this was agreed, but I think it was considered acceptable to use an extrapolation of some kind. Bearing in mind Alcoa would want the certificate as soon as possible, we agreed that was a sort of reasonable decision to make.
Q. Well, let me just pursue this a little bit more, if I may.

You say, "I' II get Alcoa to have the test done".

> Did you go back to Arconic/Alcoa --
> A. Yes.
> Q. -- to Mr Wehrle and say, "Do the test, please"?
> A. Yes, I think there was a correspondence which spelt out the requirement -- our requirements. But in the end, as I say, we decided that it was just adequate for us to do some sort of extrapolation.
> Q. Did Mr Wehrle refuse to do the test?
> A. Erm ... again, it looks like they were reluctant to do a test.
> Q. Why did you allow him to get away with expressing reluctance to do a test? You'd told Mr Haynes that you would get Alcoa to have the test done; why didn't you insist?
> A. As I say, after discussion with Brian, we decided an easier option, a cheaper option for the client, it was just appropriate just to use some kind of extrapolation, based on advice given by BRE.
> Q. Well, do you remember whether Alcoa actually told you that they were not going to do the test, despite your request?
> A. No, I can't remember that. No.
> Q. Can you remember why you settled for an extrapolation rather than insisting that Alcoa do the test that you had told Mr Haynes you were going to get them to do?

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A. I guess it must have been as a result of my discussion with Brian, whether we could go a different route.
Q. Which is why I asked the question: did Arconic refuse to do what you asked them?
A. I suppose so. It's not so much that they refused, but they had whatever test that was available, and, as I say, we decided that was probably adequate for us to make an assessment --
Q. Why did you --
A. -- with BRE.
Q. Right.

Did you settle for an extrapolation rather than insisting that Arconic produce a test you had asked for, for commercial reasons?
A. I think technically it was a sound decision and, as I say, I have very little knowledge of fire, as I've said before, but I think the impression I got, with talking to Brian and so on, was that it wasn't unreasonable to assess the product in this way. It wasn't just merely for commercial reasons, it was just to -- just ... it 's an easier and simpler method of doing this, and perfectly acceptable, as far as I know. MR MILLETT: Yes. Thank you very much indeed, Mr Gregorian.

Well, I have come to the end of my questions now, and it remains only for me to thank you very much for
coming to the Inquiry to give your evidence, we are most grateful to you. So thank you very much indeed.
THE WITNESS: Thank you. I hope I have been of some help.
SIR MARTIN MOORE-BICK: You have indeed, Mr Gregorian, and
it 's right that I should thank you on behalf of the panel for the time you have given us and for the evidence you have given us. We have found it very useful and we are very grateful to you for coming along to talk to us.

So I think that's everything we need to ask you, and you are now free to go.
THE WITNESS: Thank you very much.
SIR MARTIN MOORE-BICK: Thank you very much indeed.
(The witness withdrew)
SIR MARTIN MOORE-BICK: That's the end of our proceedings
for today. We will resume at 10 o'clock on Monday of next week.

Thank you.
( 4.55 pm )
(The hearing adjourned until 10 am on Monday, 15 March 2021)

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[^0]:    A. Yes, I must have. I must have read this, yes.
    Q. Did you understand what was meant or signified by the
    shaded area, "Class 0 (national class) or class B-s3, d2
    or better (European class)"?
    A. Again, I can only repeat what I've said, I just ...
    Q. Yes. I mean, did anything, when you saw this, give you
    pause to question it?
    A. Yes, I really can't go into detail at this stage because
    I have very little knowledge of fire. All I know is
    limited -- materials of limited combustibility could be
    used above 18 metres, but as to whether the panels in
    question were of limited combustibility, that I would
    leave to the fire expert.
    Q. Yes.
    A. I have very -- at the moment, I can't -- I mean, these
    details don't mean very much to me. But I know that at
    the time I was aware of this 18 -metre restriction.
    Q. I understand. Let me just try two questions on you with
    the caveat you've given.
    The first is, you say you knew that there was
    a restriction above 18 metres, save in relation to
    materials of limited combustibility; did you understand
    or think at the time that there was a difference between
    the concept of limited combustibility on the one hand
    and the concept of "Class 0 (national class) or
    A. Yes, I must have. I must have read this, yes.
    Q. Did you understand what was meant or signified by the shaded area, "Class 0 (national class) or class B-s3, d2 or better (European class)"?
    A. Again, I can only repeat what I've said, I just ...
    Q. Yes. I mean, did anything, when you saw this, give you pause to question it?
    A. Yes, I really can't go into detail at this stage because I have very little knowledge of fire. All I know is imited -- materials of limited combustibility could be question were of limited combustibility, that I would leave to the fire expert.
    Q. Yes.
    A. I have very -- at the moment, I can't -- I mean, these details don't mean very much to me. But I know that at the time I was aware of this 18 -metre restriction.
    Q. I understand. Let me just try two questions on you with the caveat you've given.

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

[^1]:    the question:
    "In particular, what consideration the BBA gave to:
    " $i$. the fire performance information therein ..."
    Your response is at paragraph 20 and you say:
    "Fire safety is a specialist area. It would have
    been normal for an internal or external fire expert to
    confirm compliance with UK Building Regulations. The
    statement in the certificate would have been based on
    the advice given by the fire expert."
    Am I right in thinking that, on this occasion, in
    relation to this certificate, ultimately that was
    Sarah Colwell?
    A. Erm - -
    Q. That fire expert was Sarah Colwell?
    A. Yes, I think it's -- yes, yes. Yes. Through Brian, our assessment of fire would have come from a fire expert, and in this case it was Sarah, Sarah Colwell.
    Q. Yes. Now, you say "Through Brian"; did Brian Haynes himself perform any assessment on the fire safety of Reynobond 55 with Sarah Colwell's help?
    A. No, I think he must have been advised by Sarah, based on what Sarah had in front of her as regards test data and so on.
    Q. You say that the statement in the certificate would have been based on the advice given by the fire expert; did
    the question:
    "In particular, what consideration the BBA gave to:
    "i. the fire performance information therein ..."
    Your response is at paragraph 20 and you say:
    "Fire safety is a specialist area. It would have been normal for an internal or external fire expert to confirm compliance with UK Building Regulations. The the advice given by the fire expert."

    Am I right in thinking that, on this occasion, in relation to this certificate, ultimately that was Sarah Colwell?
    A. Erm - -
    Q. That fire expert was Sarah Colwell?
    A. Yes, I think it's -- yes, yes. Yes. Through Brian, our

