# OPUS 2 INTERNATIONAL 

Grenfell Tower Inquiry

Day 27

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(10.00 am)
SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to
    today's hearing.
        Today we're going to hear evidence from another
    former employee of Rydon who was engaged on the
    Grenfell Tower refurbishment.
        I think that's right, isn't it, Ms Grange?
MS GRANGE: Yes. Mr Hughes.
SIR MARTIN MOORE-BICK:Could you see if Mr Hughes is there,
    please.
        MR DAVID HUGHES (affirmed)
SIR MARTIN MOORE-BICK: Thank you very much, Mr Hughes. Sit
    down, make yourself comfortable. All right?
THE WITNESS: Yes, thank you.
SIR MARTIN MOORE-BICK: Good.
        Yes, Ms Grange.
            Questions from COUNSEL TO THE INQUIRY
MS GRANGE: Good morning, Mr Hughes. Thank you very much
    for coming to give evidence today, it's very much
    appreciated.
        Can you give the Inquiry your full name.
A. David Alan Hughes.
Q. So I'm going to be asking you the questions today. If
        you have any difficulty understanding anything I'm
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    asking you, please either ask me to repeat the question
        or put it in a different way.
            Also, if you feel that you need a break at any
        point, please just let us know.
            Also, can you try and keep your voice up, because
        the transcriber is there to your right, and she is
        taking down all your transcript.
    A. Okay.
Q. You have made two witness statements to the Inquiry.
They're in a folder on the desk in front of you, and I'm
going to bring them up on the screen. This is
\{RYD00094213\}. So this is your first witness statement.
It's dated, if we go to page 27 \{RYD00094213/27\}, we can
see there, 26 September 2018.
Is that your signature there?
A. That is, yes.
Q. Are the contents true to the best of your knowledge?
A. Yes, they are.
Q. Thank you.
You have made a second statement, if we can pull
that up now, that's at \{RYD00094349\}. We see it's
a short second statement dated 5 September 2019. You
submitted this in order to correct an error in your
first statement.
Again, is that your signature there?
A. That is, yes.
Q. Great. Are the contents true to the best of your knowledge?
A. Yes, they are.
Q. If we just pick up that error now, so going back to your first statement, \{RYD00094213/14\}, the error you're correcting, I think, is at 61.7 of that paragraph. The date there, 5 May 2018, you say should read 5 May 2016; is that correct?
A. That is correct, yes.
Q. Great, thank you for that.

I want to start with some questions about your background and experience.

At paragraph 2 of your main statement
\{RYD00094213/1\} you say you started work for the Rydon Group over 20 years ago as a site engineer's assistant. Is that right?
A. Yes, that's correct.
Q. You also say you started working full-time at Rydon in November 2001 after getting a degree in civil engineering from Plymouth University. Is that correct?
A. Yes.
Q. Great.

Did that degree include any aspects of fire safety?
A. Not to my recollection, no.

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Q. Okay.

Then at paragraph 5 of your main statement, if we can pull that up, you list out there a number of relevant training courses and relevant certifications that you hold relating to your site-based role.

If we can look over the page \{RYD00094213/2\} at those, we have a list of those; so, for example, site management safety training scheme, temporary works co-ordinator, construction plant competence scheme, we see those set out there.
A. Yes.
Q. Just thinking back, would any of those courses have covered the functional requirements of the Building Regulations?
A. No.
Q. No, okay.

Now, if we can go to paragraph 4 of your witness statement, just back a page \{RYD00094213/1\}, we see there that you say:
"I ran my first project from pre-commencement stage through to handover as a site manager in 2009. I have worked on a number of occupied refurbishment projects as either the main site manager or managing a section of works reporting to a project manager. I have worked on projects with cladding before, albeit not of the size of

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Grenfell Tower. I have managed an occupied refurbishment project of an 11 storey tower in Worthing, but this did not have any aluminium cladding."
Do you see that there?
A. Yes.
Q. Just to ask you a few more questions about this: was the Grenfell Tower project the biggest project you had worked on at that time in terms of a refurbishment project?
A. No, I worked on one -- one of the early ones I worked on was about a \(£ 20\) million refurbishment of a huge estate where I did a lot of work on externals of blocks, but they were generally brick-clad blocks, masonry blocks.
Q. Yes.
You talk there about some projects with cladding which you worked on before.
A. Yeah.
Q. Approximately how many projects had you worked on involving overcladding?
A. One really where I came in contact with aluminium cladding would be one in Clapham, but I didn't do the outside of the building. So I was aware of it, but I was doing the internals, so I worked on the internals of a number of flats there.
Q. Was that the Chalcots Estate?
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A. No, I never worked on Chalcots. 1
Q. No, okay.

Sorry, carry on, so there was that one --
A. There was also another one where I did a small bit of aluminium cladding on a ground-floor nursery, but I had not done anything sort of high-rise cladding.
Q. So does it follow that you hadn't done any cladding for buildings over 18 metres?
A. That's true.
Q. Yes.

You said you had done a low-rise aluminium cladding; can you remember what the cladding comprised of?
A. It was aluminium and behind it was Kooltherm K15 insulation, but it was for a ground-floor nursery.
Q. Was it a solid aluminium panel or do you know whether --
A. I believe it was solid, yes.
Q. Okay.

Do you recall whether, on any of the projects you worked on previously, fire safety advice was sought in relation to the project?
A. On the ones I managed, no, I don't remember. I couldn't tell you on the ones where I wasn't project manager.
That wouldn't have been my role.
Q. On any of the projects that had involved cladding, were you aware that any cavity barriers had been installed
for any of those buildings?
A. I remember cavity barriers being installed on the one where I was on the internals, but I don't remember on the ground-floor nursery.
Q. But if you were on internals, that was not something --
A. Yeah, it wasn't something I was managing at the time, it was something I remember seeing on the building, but I wouldn't personally be managing the subcontractor putting them on.
Q. So was Grenfell the first project you were involved in where you had to be looking at cavity barriers in a serious way?
A. In respect of the cladding, yes.
Q. Yes.
A. But I'm aware of cavity barriers behind masonry in terms of compartmentation behind brickwork.
Q. You talked there about the 11 -storey tower in Worthing and you say it didn't have any aluminium cladding. Just to be clear, did the project involve any overcladding at all?
A. No, no overcladding at all, it was repointing of the masonry brickwork.
Q. Right.

Just turning to your role on the Grenfell project, you describe your role as a site manager. That's at 7
paragraph 22 of your witness statement. Can we just look at that. That's at \{RYD00094213/5\}. You say there:
"My personal involvement in the project was as a Site Manager. Stephen Blake (Steve Blake), the refurbishment director, spoke to me on Monday 19th October 2015 and asked me to help out at the Tower from the next day. I was asked to manage the completion and handover of the cladding and communal M\&E (Mechanical \& Electrical) systems and generally help out where I thought it was needed."

Do you see that there?
A. Yes.
Q. Can you help us, just in general terms, what did managing the completion and handover of the cladding actually involve?
A. Well, the cladding, when I went up there, was already well under progress, so it would have been finishing off the insulation -- well, finishing off the works, basically, to the satisfaction of the people who needed to see it.
Q. Yes.

Then you also say that you were asked to "generally help out where I thought it was needed".

Again, can you just expand on what that involved.
A. Well, essentially it ended up being: I looked after the
ground-floor entrance lobby, so I managed the works
completing that, and I ended up essentially taking over
Simon O'Connor's role, but that wasn't what was agreed
with me at the time. But I saw that one of the things
that was needed was, well, interaction with the client,
so I became the main client go-to.
Q. You say there that wasn't what was agreed with you at
the time.
A. No.
Q. When you talk about"at the time", do you mean at the
time you first started on the project?
A. Yes, that's it, yeah.
Q. So was it up to you to identify where your help was
needed or was that something you were told?
A. It was partly up to me. As I say, Steve said to me, "Go
up there and help out where needed", so it was ... yeah.
Q. Did anyone at Rydon tell you that there were specific
issues that required your help, and if so, what were
those?
A. I don't remember specifically, no, but as I said,
I originally got sent up there, Steve told me I would be
Q. Did you ever get a written job description?
looking after the cladding and I would be helping manage
the M\&E systems as well.

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A. Not for going up there, no, but I know what my job entails .
Q. Yes.

On the other projects you have worked for with
Rydon, had you ever had a written job description?
A. No, but it's part of our group procedures, is

I understand what a site manager entails or what the job entails.
Q. When you say part of your group procedures, does that mean that somewhere there is a written document explaining exactly what a site manager does and doesn't do?
A. Yes, yeah, what a site manager does.
Q. Yes, okay.
A. So that is my job description as far as I'm concerned.
Q. And you read that before you started on the Grenfell project?
A. I've read it, yes.
Q. If we can turn to some minutes, this is \{RYD00060234\}, these are minutes for the progress meeting number 17 that took place on 17 November 2015 which you attended.
A. Yes.
Q. Yes, we can see your name five lines down there.

On page 3 \{RYD00060234/3\}, at the top of the page, at item 2.9, we see there it says:
"Item 3.4: Rydon Management Team - Action ..."
Then it says "SB" -- is that Steve Blake?
A. That is, yes.
Q. "... to publish revised Rydon on-site Management Structure. SB noted that David Hughes' role had expanded to pick up anything not covered by the other site managers."

Do you see that there?
A. Yes, I do.
Q. So at this point on the project -- so this is

November 2015 -- what was envisaged in terms of the expansion of your role?
A. Essentially you would say that I took over the number one site manager role.
Q. Right, yes.
A. So I was the head of the team.
Q. Were you more experienced than the other site managers?
A. I believe I was, yes.
Q. And more senior to them within Rydon?
A. Not in terms of job title, no. They were all site managers; I was site manager as well.
Q. I see.
A. But I have managed other site managers on jobs previously. So the one at Worthing I had a site manager and a site assistant reporting to me.

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Q. Yes.

What did you understand when you joined the project about Rydon's contractual obligations on the Grenfell project? Were you given any information about that?
A. No, but one of the first things I did when I went up there was to read the specification and to try and read as much of the paperwork as I could do.
Q. Okay. So when you say read the specification, was that the NBS specification?
A. Yes. Normally on most jobs I've worked on they're called ERs, or employer's requirements, but on this job they were called the NBS spec.
Q. Yes. Yes.

And did you read any other parts of the contract?
A. In terms of the actual contract documents, I don't remember reading them specifically, but I wouldn't be interested in that; I was interested in what the specification was.
Q. But just to be clear, you didn't have a briefing from anybody, anyone senior to you, about what the scope of the contract was?
A. Well, the scope of the contract was to deliver the specification .
Q. Right, I see, yes.

Now, we've been provided with the contract documents
by Rydon, and I want to ask you some key questions about in general what you knew.

Were you aware of Rydon's responsibility for design on the project --
A. Yes, I was.
Q. -- as well as for the construction? You were.

Were you aware that it was Rydon's obligation to complete the works in a proper and workmanlike manner and in accordance with good building practice?
A. Yes, it is on all contracts.
Q. Were you also aware that Rydon was to complete the works in compliance with the contract documents and other statutory requirements, including the Building Regulations?
A. Yes.
Q. Would you have taken that to have included complying with British and European standards, where appropriate, or appropriate codes of practice?
A. If it's specified in the specification, then yes.
Q. Now, there is just one clause I want to take you to, and it will become evident later why we want to look at this now.

If we can pull up the contract, this is \{RYD00094235/64\}. So this is the JCT design and build contract. If we could just blow up the top of that,

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I want to look at clause 2.2.2, so that's the second paragraph, the one below the one that's struck out. Do you see that there?
A. Yes.
Q. If we just read that, it says:
"The Contractor shall not make any substitution for any materials goods or workmanship specified or described in the Employer's Requirements or (if not specified or described in the Employer's Requirements) as set out in the Contractor's Proposals or in the specifications revised and returned to the Contractor by the Employer in accordance with the Contractor's Design Submission Procedure set out in Schedule 1 without the prior consent (not to be unreasonably withheld or delayed) in writing of the Employer."

That's a slightly long clause, but the key point there is: were you aware that the contractor was not to be making any substitution of materials from that showed in the specification in the employer's requirements without the prior consent in writing of the employer?
A. I've not read the JCT contract, but I am, well, aware of the principle, yes, we are contracted to do what was in the specification.
Q. But were you aware that if you were going to change anything in that specification, say any materials that
had been specified, were you aware that then there was a need to get the prior consent of the employer?
A. No.
Q. No.

Were you also aware in general that Rydon was fully responsible for the design of the works, including the co-ordination and integration of the designs and the interface between different design elements?
A. Yes, because we were the main contractor.
Q. Yes.

So I think it does follow from your answers, but do you agree that, in order to ensure that the work complied with the Building Regulations, someone at Rydon would have to analyse the specification, which formed part of the employer's requirements, together with the drawings provided by the architect?
A. Yes, yeah.
Q. Now, were you aware of someone in Rydon analysing the specification during the project and checking compliance with the Building Regulations?
A. Not with Rydons, but I always understood -- my experience of design and build is that we then subcontract the designs part out to the architect and the other specialist designers.
Q. So take the cladding, who did you think at the time was 15
responsible for making sure that --
A. I thought Harleys were responsible for the cladding, but I also knew that Studio E were the lead designer, so they had a sort of overarching role at the top of the design.
Q. But to your knowledge, nobody else within Rydon was checking that the designs were compliant with the Building Regulations?
A. Not like that, no.
Q. No.

When you were reading the NBS specification -- you said that you went to site and you found a copy of it and had a look at it -- what was the purpose for which you were reading it?
A. To understand what we were down to build. My job is to understand the plans and specification and deliver that to the client.
Q. Yes. Were you also looking at the standards that --
A. I don't necessarily read every word of it. I try and take out what I need to know. So I was -- I'm aware that -- well, aware that every job we're trying to do is to a good standard.
Q. But if there was a specific standard that was specified, for example for the external works which you were responsible for site managing, would you ever go and
have a look at that standard?
A. Further documentation, no.
Q. Now, as we've just discussed, Rydon was under a duty to ensure that the works were carried out in compliance with the contract documents, which included the employer's requirements. I just want to look at some of the other project particulars which form part of the contract.

Can we go to \{TMO10041791/86\}. So these were the project particulars which formed part of the contract between Rydon and the TMO. Do you ever remember looking at these during the time you were the site manager?
A. As I said, I read it, but I would be looking for things specific to my job, so more the materials and everything else. Particulars is -- as I say, they are general stuff, so it wouldn't be something I would particularly be looking at in detail.
Q. Yes, I understand.

Can I just take you to, I think, three references within this, just to ask you about whether you were aware of the general points that were being made in these documents.

Can we go on and look at page 128 \{TMO10041791/128\}. This is under "A32 Management of the Works", and we see at the top of the page under clause 110 it says

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"Supervision" and it says there:
"General: Accept responsibility for coordination, supervision and administration of the Works, including subcontracts."

Do you see that there?
A. Yes.
Q. Was that your understanding when you worked on the project, that that was Rydon's responsibility?
A. Yes, that pretty much sums up my sort of job title as well, that's -- the site manager, that's what I do.
Q. Yes, thanks, that's helpful.

Moving down the page, towards the bottom, we see a heading there, "Building Control". It says there:
"The Contractor will be responsible for providing additional Construction Stage information to Building Control."

Do you see that there?
A. Yes, I do.
Q. Was it in fact part of your role to be providing that construction stage information to Building Control in practice?
A. In practice, no. Generally, from my experience, architects co-ordinate with Building Control, so they provide the drawings, that sort of -- we sort of -- part of their package or design, that's what they do.
Q. I see. We will come on and look at your interactions with Building Control when they visited the site, but just to be clear, you didn't think it was part of your role to be providing construction stage information to them?
A. No, that's not true. If they asked for stuff, I would provide it. But generally, to start with, it's the architect who provide the drawings. But if I'm asked for something, I will try and provide -- do my best to provide it for them.
Q. Yes.

Now, if we go on to page 135 \{TMO10041791/135\}
within this document, in the bottom half of the page there you see a clause 170A, which is headed
"Manufacturer's recommendations/instructions". Do you see that there?
A. Yes, I do.
Q. It says:
"General: Comply with manufacturer's printed recommendations and instructions current on the date of the invitation to tender."

Do you see that there?
A. Yes, I do.
Q. You can see at the end it says:
"Agreement certified products: Comply with
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limitations recommendations and requirements of relevant valid certificates."

Do you see that there --
A. Yes.
Q. -- as well?

Now, in general, was it part of your role to check whether the manufacturer's recommendations and instructions had been complied with on site?
A. Yes, in some respects, yes, it is .
Q. Yes. So you might see it as part of your role to check what the manufacturer's recommendations were, say for the installation of a particular product?
A. Yes. Sometimes, if necessary, I will look at manufacturer's recommendations, yes, to make sure we're installing it correctly.
Q. Yes, and make sure it was installed as per those recommendations.
A. Yes.
Q. Yes.

Was that role something you also expected the clerk of works to be checking --
A. Yes.
Q. -- on this project? Yes. Again, I'm going to ask you a little more about their role on the Grenfell project later.

So taking the cladding system as an example, did you check the instructions, for example, for the installation of the Celotex insulation?
A. I don't remember specifically checking it, but I do remember reading the brochure at one point because one of the first questions I asked was about whether or not it needed silver tape, and I remember checking the sort of product literature for that.
Q. Ah, okay. Great, yes. I'm going to come back and ask you about that specific thing in due course.
A. Yes, I'm sorry.
Q. So you did have recourse to look at the Celotex brochure at that point?
A. I don't think it was the brochure, I don't remember specifically looking -- there was a couple of bits on our system or in our file folder and I went through them.
Q. Yes.

What about the Siderise cavity barriers? Do you remember ever checking the instructions for the installation of those cavity barriers?
A. No, I don't remember that.
Q. Now, staying with this document, these project particulars, if we go on to page 141 \{TMO10041791/141\} of this document, about halfway down, we see at

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paragraph 630 a heading "Quality control" and it states there:
." Procedures: Establish and maintain to ensure that the Works, including the work of subcontractors, comply with specified requirements.
-" Records: Maintain full records, keep copies on site for inspection, and submit copies on request."

Do you see that there?
A. Yes.
Q. Then there is various items identified for then contents of records below it, including, for example, the "Nature and extent of nonconforming work found"; do you see that there?
A. Yes.
Q. Was it any part of your role to ensure that records were kept including the matters set out in this clause, quality control records?
A. It would be part of that, but yeah, we have a quality control sort of inspection regime at Rydons, essentially called snagging.
Q. So the snagging process was the quality control process?
A. Yes.
Q. And it was just that, was it?
A. Yes.
Q. Did Rydon have any written procedures in place to ensure
that these quality control obligations were complied with?
A. As I said, the -- well, it's in -- part of the procedures is snagging procedures.
Q. Right.

Can you help us as to how records were actually kept on site where there had been quality control inspections?
A. As I say, the snags I took were recorded and kept in, well, the snagging folder on -- in the job folder.
Q. And hard copies kept on site?
A. I don't remember hard copies. As I say, I generally scan a snag sheet and then will email it out to the subcontractors as required.
Q. Yes.

Just touching on the point about maintaining and ensuring that the works, including the work of subcontractors, comply with specified requirements: who within Rydon had responsibility for ensuring that the roles and responsibilities of subcontractors were clear and adhered to?
A. I would say we all have a role in doing that. That's what we do: we manage subcontractors --
Q. Yes.
A. -- to do the work for us.

## Q. Yes.

A. They have a responsibility for themselves to do the works accordingly as well.
Q. So you saw that as part of your role as site manager?
A. Yes.
Q. I just want to ask you a couple of questions about what others in Rydon have said about the role of site manager.
A. Okay.
Q. So Gary Martin has said -- if we pull this up, this is \{RYD00094216/2\}. At paragraph 8 he says there:
"During my time on the project Simon O'Connor was senior site manager and Simon Lawrence was contracts manager. Both left during the project and Steve Blake assumed the roles; Steve also brought in David Hughes as site manager to oversee the project."

Do you see that there?
A. Yes, I do.
Q. I think that chimes with an answer you gave earlier, but was that how you saw your role, that you were overseeing the project?
A. That's what my role became; it wasn't what I was told when I went up there. So, as I said, possibly you could say that one of the biggest holes that needed to be filled was the number one role, and I assumed that role.
Q. Did you feel when you got on to site that that number one role hadn't been filled properly?
A. It became clear within a week or so. As I say, part of what I've always done when I go on to a new site, I look for drawings, documents, look at the programme and see what the job entails, essentially.
Q. Yes.
A. And, yeah, from sort of chatting to the other site managers, they all had their roles and responsibilities, and it also -- I don't know whether if it's just the way I am, but very soon I became the client go-between or go to. Claire very quickly started coming to me and I guess that became my role.
Q. Yes.

Just a couple of points. Claire, that was Claire Williams, was it?
A. Claire Williams, yes, sorry.
Q. From the TMO.
A. The client, yes. Claire, the client.
Q. When you say it became clear -- I think you said within a couple of weeks or within a week or so it became clear --
A. Yeah.
Q. -- precisely what was it that became clear to you?
A. Well, just that, yeah, there was a space to be filled or

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an overarching role at the top, so -- and I had fulfilled that role before at Rydon's.
Q. So did you feel that the site managers that were on site needed more direction and supervision?
A. No, they were aware of what they were doing, but they had never been told to sort of run the site, and to my -- I know Gary had run a site previously with another manager underneath him. I wasn't sure that Jason had done so. Also, although I had left Rydons and I said in my thing I had come back to them, I had fulfilled that role previously.
Q. Yes. So you felt that someone was needed to "manage the site "?
A. Yes.
Q. Simon Lawrence has said in his witness statement -- if we can look at this, this is \{RYD00094220/8\}.
Paragraph 44 starts at the bottom there, and he says:
"My role included regular visits to site to guide and support the Site delivery team (Project Manager, Site Managers, etc). The Site Delivery Team is based on site and ensures the day-to-day works are managed safely and correctly to the design."

Do you see that there?
A. Yes.
Q. So, again, would you agree that your role included
ensuring that the works were managed correctly to the design?
A. Yes.
Q. Yes.
A. Always does, as a site manager.
Q. You have confirmed it was part of your role to manage the subcontractors.
A. Yes.
Q. We know that your remit included the exterior and the cladding; that's correct, isn't it?
A. Yes.
Q. Does that mean it was your responsibility to be managing Harley once you got to site?
A. Depends what you consider managing. I don't manage Harleys; I supervise them on site and I help manage sort of the interaction they have with the other subcontractors, the residents as well, but I don't manage Harleys.
Q. I see, yes.

Did you consider it any part of your supervision of Harley to ensure that the works that they were carrying out complied with the Building Regulations?
A. Specifically I would say that they should know the regulations, as specialist subcontractor, they should know them as well. I don't know them as well as they

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do, so I was making sure that their work was to a good standard and the standard that had been, well, accepted -- will be accepted by the client.
Q. I see.
A. Well, the client and Building Control and the clerk of works.
Q. Yes.

So just coming on, then, to your knowledge of the Building Regulations and associated guidance, we know that the contractual obligations of Rydon included ensuring compliance with the Building Regulations, and we know that your role included dealing with Building Control officers on site ; that's correct, isn't it?
A. Yes, and so did the other site managers' roles include this.
Q. Yes, yes.
A. They would show the Building Control officer round their part of the works, or sometimes, if they're not around, I would show them around as well, but ...
Q. How would you describe your knowledge at the time of the Building Regulations?
A. It comes from experience. It's something I've never been taught, so it comes from experience.
Q. Would you have known what the functional requirements
were in the Building Regulations in schedule 1?
A. No.
Q. No. Do you know what --
A. Well, the functional requirements is to create a safe building, is my understanding, so ...
Q. So if anyone had asked you broadly what the functional requirements were that you had to comply with for the Building Regulations, would you have been able to give them an outline?
A. No, in terms of outline, no.
Q. At the time you were working on the project?
A. No. Yeah.
Q. So does it follow that, within Rydon, you have not ever attended any courses or training on the Building Regulations?
A. No, not that I remember. They would always come up in certain sort of safety modules, but not in any great detail.
Q. So you weren't familiar, for example, with part B4, "External fire spread", of the Building Regulations?
A. No.
Q. Were you aware in general that there was a requirement that the walls should adequately resist the spread of fire?
A. In that terms, no, I was not aware. I would say nobody 29
should build an unsafe building, but in terms of specifics, no, I wouldn't be able to give you the words.
Q. Yes.

Now, there's practical guidance which is issued to help in the interpretation of the --
A. Yeah.
Q. -- Building Regulations by way of approved documents.
A. Yeah.
Q. Have you ever heard of the approved documents?
A. I have heard of --
Q. Have you ever read any of the approved documents?
A. The only one I remember reading is -- I think it's part M to do with disabled --
Q. Yes.
A. -- things. So, as I said, the first project I managed was eight disabled flats, so I was looking for some information to do with them at the time, so I read it.
Q. Yes.
A. But they wouldn't be the first documents I would go to. I would go to an NHBC book, which I think is a more practical -- for my job is a more practical document, far more sort of descriptions and more measurements, descends into a bit more detail, which is what I' m after .
Q. So does it follow from your answers that you hadn't read
and you weren't familiar with Approved Document B on fire safety at the time you worked on the Grenfell project?
A. At the time, no, I was not aware.
Q. Were you aware that there was, just in general terms, special guidance for buildings above 18 metres?
A. At the time, no.
Q. So you weren't aware, for example, about guidance surrounding the insulation and --
A. No, at the time I was not aware.
Q. So you weren't aware that there was particular fire performance that insulation over 18 metres was recommended to achieve?
A. No.
Q. Had you ever heard of the phrase "class 0"?
A. Yes.
Q. What did you think that meant?
A. I had heard of it in terms of paint finishes in communal areas. I knew it was -- as I say, as far as I was concerned it was fire resistance.
Q. Had you ever heard of class 0 in connection with a cladding system or a cladding panel?
A. No, but going back to reading the specification, I noted in it that the fire resistance, it said class 0 , so ...
Q. When you say reading the specification --

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A. Yeah.
Q. -- do you mean the NBS specification?
A. The NBS, sorry, yes.
Q. Do you remember which part you were reading --
A. Specifically I think that was in the cladding section.
Q. Right, okay.

Were you familiar at all or did you have any
knowledge about firestopping and cavity barriers?
A. From my experience previously on site as and when it's shown on the drawings.
Q. Had you ever looked at any specific guidance that helped you about, for example, where cavity barriers should be placed in an external wall?
A. Specifically, no, I don't remember looking at it, but to me they would always be shown on drawings.
Q. Yes. So you would rely on the drawings to show you where the barriers needed to be?
A. Where the cavity barriers should be.
Q. Were you aware that the guidance in ADB required cavity barriers to be provided around window openings?
A. No, I wasn't.
Q. Had you ever worked on a project before which had involved cavity barriers around windows?
A. In masonry things, where you have a cavity construction with an outside or inside skin of brick, yes, cavity
barriers go round windows, and on timber frames, as I said before, where they're shown on the drawings, I' ll put them.
Q. But if they're not shown on the drawings?
A. I didn't know, no.
Q. Okay. We'll come back to that in a moment.
So you weren't aware of the guidance in Approved
Document B or, for example, diagram 33 about cavity barriers?
A. Not specifically, no, I was not aware.
Q. Were you aware of guidance suggesting that cavity barriers had to be tightly fitted to a rigid construction and mechanically fixed in position?
A. I would expect them always to be properly fixed.
Q. Yes.
So during your time on the project, were you aware of any other industry guidance that provided commentary on external wall constructions, including for buildings above 18 metres? You said earlier that you might --
A. As I said, NHBC guidelines. That's more of the document I would go to, to fulfil my role and look at if there was any sort of details or queries, that would be my first port of call.
Q. Yes.
Do you have any recollection of reading any specific

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guidance documents, industry guidance documents, about the cladding when you worked on the Grenfell project?
A. No.
Q. So, for example, would BR 135 mean anything to you?
A. No, I never read that.
Q. No. Any BCA, Building Control Alliance, guidance?
A. No.
Q. Or what about the CWCT?
A. No.
Q. No. So nothing about cladding, curtain walling?
A. No, I didn't read any of those documents.
Q. Had you heard of the phrase "limited combustibility" --
A. No.
Q. -- at the time you worked on the project?
A. No.
Q. No, so that wouldn't mean anything to you?
A. No.
Q. Were you aware that industry guidance made it clear that cavity barriers are required around windows?
A. No, I wasn't aware.
Q. Okay.

So just finishing this topic, you talk about this in your statement, about what you would expect in terms of compliance. Can we look at paragraph 21 of your statement, \{RYD00094213/5\}. You say there:
"In terms of compliance with the building regulations from a site manager's point of view, when a drawing is issued to us through any of the design team, if it is a 'construction issue' drawing, then the works shown on the drawing should be compliant with the building regulations. The ongoing and completed works were the subject of inspection by the Royal Borough of Kensington and Chelsea Council ... Building Control surveyors, the two Clerks of Work employed by КСТМО ..."
A. Yes.
Q. We've got that there, yes.

Does that mean that you expect that any construction issue drawing would be compliant with all the relevant Building Regulations?
A. Yes, that would ...
Q. You talked about the drawings that were approved for construction. In the case of the external wall was that Harley's drawings which had been stamped "Approved for construction"?
A. Yes, they were the drawings I was using for the cladding or I was looking at.
Q. Yes.

So did you ever think it was part of your role or anyone else's role within Rydon to be checking if a drawing was in fact compliant with the

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Building Regulations?
A. No, I would expect the designers to ensure that a drawing is correct and compliant. So, as I say, as I said at Grenfell, it was Harleys and it was the architect.
Q. Yes.
A. Because Harley's drawings also came out of the sections or the big sections that the architects had.
Q. Yes.

Now, Simon Lawrence has said in his witness statement -- if we can just look at that, this is \{RYD00094220/10\}. I just want to look at paragraph 51. I just want to look at the very last sentence. It starts five lines up in that paragraph 51. He says:
"Although I have no expertise or qualifications as a designer, my experience as a construction manager meant that if I saw something that was obviously wrong then I would challenge that and I would have expected the rest of the Rydon team, and indeed all of those involved in managing the project, to do the same."

So I just want to check: was that your understanding, in terms of your role, that if you saw something obviously wrong, you were expected to challenge that?
A. Yes. If my knowledge said that it was wrong and my

| experience sort of in the past, I had come across it and | 1 |
| :--- | :--- |
| I thought it was wrong, then I would challenge it, yes. | 2 |
| Q. Okay. | 3 |
| Now, just in terms of your introduction to the | 4 |
| project, if we could go back and look at paragraph 22 of | 5 |
| your witness statement, \{RYD00094213/5\}. We read this | 6 |
| earlier . You made it clear you were being told on | 7 |
| Monday, 19 October that you needed to help out at the | 8 |
| tower from the next day, and you also say a little bit | 9 |
| further on that you were made aware that Simon Lawrence, | 10 |
| the Rydon contracts manager, was leaving Rydon. | 11 |
| So it looks like you were asked to join the project | 12 |
| at very short notice, literally one day's notice; is | 13 |
| that correct? | 14 |
| A. Yes, that is correct. | 15 |
| Q. Do you know why that was? Was it that Mr Lawrence was | 16 |
| leaving unexpectedly, or do you think the suddenness of | 17 |
| your appointment was just due to maybe a lack of | 18 |
| forethought? | 19 |
| A. I don't know in that respect, you would have to ask | 20 |
| Steve, but it's not -- it has happened to me in the past | 21 |
| where I had one day's notice, so ... | 22 |
| Q. So that didn't seem surprising to you? | 23 |
| A. No, it's happened before. | 24 |
| Q. Yes. | 25 | 37

A. Or sometimes you get a call saying, "I need you somewhere else tomorrow", and it's like : okay ...
Q. Now, at paragraph 26 of your witness statement, if we could look on at that, page 6 \{RYD00094213/6\}, you say in that first sentence:
"By the time I first attended site the cladding was well-progressed and I would estimate $75 \%$ to $80 \%$ complete."

Do you see that there?
A. Yes.
Q. Can you help us as to what you mean by complete?
A. As in when I got there, a lot of the cladding panels were already in the building, so the majority of insulation was there, there was a lot done.
Q. Yes. When you say the cladding panels, you mean the column cladding panels on the exterior?
A. On the exterior, yes.
Q. That was already done?
A. Yeah.
Q. How did you estimate the percentage you came up with there, 75 to $80 \%$ ?
A. I must admit, I estimated on the time process, but probably, looking back on what other people have said, possibly that was an overestimation, but I would say certainly over two-thirds was done. It was well
under way
Q. Yes. Yes, that's what I was about to ask you.

So if we just look at a couple of contemporaneous progress reports, I think what we might see is it was more like somewhere between 60 and $70 \%$ complete.
A. Yes. So it was well over two-thirds. Two-thirds to three-quarters is ...
Q. Let me just show you those. If we go to \{RYD00056956\}, this is the site progress report, and it's dated October 15. If we look at the very bottom of that page, there is a table. Do you see that there?
A. Yeah.
Q. And it's got "External façade works", and planned progress: $100 \%$, actual progress: $60 \%$, and it looks like it 's around ten weeks behind schedule. Do you see that?
A. Yes, I do.
Q. Again, was that your understanding when you got to site, that the cladding was progressing slower than had been planned?
A. I was aware it was behind schedule, yes.
Q. We can see it says in the first bullet point below that table:
"External cladding progressing slower than needed due to insolvency."

Do you see that there?
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A. Yes.
Q. Was that Harley's insolvency?
A. Yes, it was.
Q. Yes.

Then there is just another report I was going to take you to, \{RYD00057623/11\}. This is progress report number 16 which reports on progress from 12 September 2015 to 16 October 2015. If we can go on to page 14 \{RYD00057623/14\} we see a table, and you can see there we've got "External works", and it says, "Façade - Grid work, insulation and windows", that's 90\% complete, I think; is that correct? Can you see that?
A. Yes.
Q. Then "Façade - Cladding panels", it seems to be saying $70 \%$ out of 100 , do you see that there?
A. Yes.
Q. And 16 weeks behind, do you see that?
A. Yes, I do.
Q. So I think you have agreed that, based on these reports, perhaps the cladding was not quite as advanced as you said in your witness statement.
A. Yes. I would certainly say it was definitely around two-thirds. So, as I said, it was well under way.
Q. Yes.
A. In places it was finished, with the finished panels on

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    the building.
Q. Yes, I understand.
    Now, in terms of previous fires in residential
        buildings, when you started work on the project, did you
        have in mind that there had been previous fires in
        high-rise buildings in the cladding?
A. When I started on the project, the only one I was aware
        of was Lakanal House, but I must admit, I did not know
        that as a cladding fire. I was aware it was
        a compartmentation failure, that there was failures in
        basically the voids above the ceilings.
Q. Yes.
A. So that I think had come across in a fire safety
        training.
Q. Yes.
A. So I did not know it was a cladding fire .
Q. Yes, that's helpful, yes.
    So had you heard of any other domestic fires in the
        UK in high-rise buildings --
A. No.
Q. -- in the cladding?
A. No.
Q. Or any international high-rise fires?
A. At the time when I started there, no.
Q. No.
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Were you aware that in January 2012 a fire had occurred at Taplow House on the Chalcots Estate project?
A. Yes, I was aware of that, because I had spoken to Steve a couple of times about it, so I was aware there was a bad fire there, and also he told me that cladding panels had worked fine there, there was no issue with them.
Q. Right. He specifically said that to you, did he?
A. Yes.
Q. Can you remember when he said that to you?
A. I used to catch a train home with Steve sometimes and we had conversations afterwards, and yeah, he said that they had warped but they certainly hadn't caught fire .
Q. Yes.

Were you ever made aware of an incident report prepared following the fire which had emphasised the importance of cavity barriers around the windows?
A. No, I wasn't.
Q. Now, if we look at paragraph 24 of your witness statement, if we can go back to that on page 6 \{RYD00094213/6\}, you say this:
"In my first week on site I spoke to Simon Lawrence a number of times, who was the Rydon contracts manager for the project, about the cladding and the M\&E systems. Simon also showed me around the project. Simon left

Rydon on the Friday of the week that I became involved." Do you see that there?
A. Yes, I do.
Q. Can you recall what your discussions about the cladding involved?
A. It was to do with, as I say, the progress of it more. I know I went up the mast climber, I don't know which one, but with Simon to have a look. He introduced me to the installers and I think he also introduced me to Ben Bailey, the supervisor for them. But specifically, no, I don't remember exactly what those conversations were. Obviously I was new to the job at the time and trying to take an awful lot in.
Q. Yes.

Was there anything particular you remember him emphasising about the cladding other than the progress that had been made?
A. More the fact that nobody had any issues with it, that's what I remember, that everyone was happy and, as I say, the standard had been set, so keep to that standard and it would be fine.
Q. When you say no one had any issues, do you mean --
A. I mean Building Control -- I knew Building Control had been up the mast climbers with them, and I knew that the clerk of works made regular trips up the mast climbers

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as well to look.
Q. Was your understanding that he was talking about the quality of the installation?
A. Yeah, I would say the quality.
Q. Did you ask him any questions about the cladding at this time?
A. I would hope I did, but I don't remember specific questions.
Q. Fair enough.
A. I'm trying to glean his knowledge at the time, so, yeah, I wouldn't be able to do that unless I asked questions, but I don't remember specifically what questions they were.
Q. Do you remember him telling you about what products were being used in the construction of the cladding?
A. Talking about the cladding panels, I knew -- I was told they were ACMs, and I knew -- I could see that the insulation was solid insulation.
Q. What did you understand the ACM to mean?
A. Well, whatever it -- I can't remember off the top of my head now, but yeah, it was a sandwich panel, aluminium on the outside and plastic on the inside.
Q. Right, yes, and --
A. Basically it was aluminium composite material.
Q. What did you know about the insulation at that point?
A. That it was solid insulation, that it was Celotex. Q. Yes.
A. As I say, I know it was solid insulation, Celotex.
Q. Did you have any discussions with him about compliance with the Building Regulations, anything along those lines?
A. Specifically, no, I don't remember any specific conversations, as I say, but I would have asked him about Building Control and sort of his visits and his name and sort of contact details .
Q. Yes.
Now, at paragraph 26, just below that, of your witness statement, in the last five lines, I just want to pick up what you say there. You say:
"In order to better understand how the cladding system worked and so that I could form a view as to where we were relative to the programme, I reviewed the drawings, considered the programme of works and I spoke to the cladding installers, Taff (Mark Osbourne(sic)) and Bez (Graham Berry), and Ben Bailey, the project manager from Harley Facades."
Do you see that there?
A. Yes, I do.
Q. Now, can you recall what kind of drawings you considered concerning the cladding at this stage?
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A. Well, it would have been the Harleys drawings.
Q. Yes.
A. So they would have looked there, but I would also look at the architectural drawings as well, so the section drawings -- I would look at all the drawings relevant to the work that I was doing.
Q. Where did you physically find those?
A. They generally were on drawing clips in the site office, or they also are on -- saved on our system as well.
Q. Right.
A. Our sort of management system.
Q. Was it your practice to look at them in hard copy or electronically?
A. Both, like I say.
Q. Yes.
A. Both.
Q. Yes.
Did you ever look at Harley's subcontract and the specification that they had been asked to achieve?
A. No, but I was aware, and, as I say, my understanding was always on previous sites that designers sort of go back -- what I considered back-to-back with us on design and build contracts. So we would pass on the design responsibilities and everything we were contracted to do on to them.
Q. Yes.

I just want to show you one document that formed part of Harley's subcontract, \{ART00000914\}. This is part of the specification. It's Curtins Consulting, so it's the structural engineers that put this together.
A. Yes.
Q. 1 March 2013.

Do you have any recollection of ever looking at this document?
A. I believe I did, but I don't remember any specifics from
it. It's sort of quite a high technical document.
Q. Yes, yes.

Just within that, if we can look on page 11 \{ART00000914/11\} of the document, and at paragraph 7.1.13 it says there:
"The system should comply fully with the recommendations of the BRE [report] ..."

Then there is a BRE report there.
Do you remember noticing that the system they were installing had to comply with certain BRE guidance?
A. No, I don't remember that specific clause.
Q. No.

Then on page 13 \{ART00000914/13\}, 7.2.4, we can see there it says:
"The cladding system shall meet the requirements of 47
rainscreen cladding as specified in ..."
And then it's got the standard for walls with ventilated rainscreens and various other key --
A. Yes. So the section H92 was the section in the NBS specification.
Q. Yes, correct. But did you note that they had to meet the requirements of the standard for walls with ventilated rainscreens, the CWCT 1998 standard?
A. I don't remember seeing that, but I do remember the CWCT bit in the NBS specification. So I don't remember it in this document, but I do remember it in the NBS.
Q. Yes.

So obviously you were there to supervise Harley's work.
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. What documents did you think you needed to read in order to be able to do that effectively ?
A. To do my job effectively, it is the plans and specifications . That's what I work to.
Q. Now, we saw earlier that you also said in paragraph 26 that you spoke with employees of Osborne Berry and Harley.
A. Yes.
Q. Can you recall what you discussed with Osborne Berry? That's Taff, Mark Osborne, and Bez, Grahame Berry. Do
you recall what you discussed with them?
A. Specifically, no, but it would have been in general terms, as in the process they're going to -- as I say, a lot of this -- or sometimes it's: what do they need from me to be able to do their work, ensuring that, yeah, the bits that Rydons managed -- the access, the towers, things like that -- that they were -- all the things. So it was in specific terms -- no, sorry, non-specific terms.
Q. I understand, yes.
A. Sorry.
Q. What about with Ben Bailey of Harley?
A. Very, very similar conversations. As I say, when I went up there, I knew my role was to finish it off, so what did they need from me to finish it off? As I say, then it would be sort of programming, how long do they think it 's going to take them to finish, when can I start offering up the façades to the people who needed to see it, so Building Control and the clerk of works.
Q. Yes.

You said in that paragraph of your witness statement -- the phrase you used was that you had these conversations in order to better understand how the cladding system worked.
A. Yes.

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Q. What were you particularly interested in in terms of how it worked?
A. The building process. So there is a process you go through. So, as I say, in that respect, putting the rails on, fitting the insulation, putting the cladding panels on.
Q. Yes.
A. That's in very simplistic terms, but to me it was a process that they had to go through to get -- finish the product, so --
Q. So the layering process of each product.
A. Yes, the layering process, if you want to describe it like that, yes.
Q. Yes.

Can we just look at an email from Ben Bailey to you. This is at \{RYD00060605\}. So this is Ben Bailey to you, 8 December 2015, so a couple of months after you started on site.
A. Yeah.
Q. And it's headed, "Scratches in Cladding", and he says:
"Dave,
"As per our conversation, I can confirm that light surface scratches will not adversely affect the performance or longevity of the cladding panels where the scratch has not penetrated through to the core."

## Do you see that there?

A. Yes, I do.
Q. Can you recall the conversation that you had? Because he says, "As per our conversation".
A. That came about after one of our inspections up the towers, and I believe it was the first one we did with Building Control and the clerk of works, so it might have been the first time I took them up there.
Q. Yes.
A. They noticed scratches on there and they were right at the top of the building. But they were asking for us to change the panels, and I said, "Well, could we repair them, they're not going to be visible sort of 24 storeys up, a little scratch like that", and Building Control and the clerks would rather they were swapped, so this was Ben sort of saying to me, "Look, we could repair them and it's not going to affect their performance in any way, shape or form".
Q. Yes.
A. It was, as I say, what I saw, little scratches.
Q. During that conversation did you enquire or were you made aware that the cladding was made of ACM containing a combustible polyethylene core?
A. I did not know it was combustible.
Q. So you just thought it was plastic ; is that right?

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A. In general terms, yes, it was, yeah, two sheets of aluminium held together -- sort of glued together with a plastic inside, or -- what was it? -- PE.
Q. Had you heard the phrase "PE" at the time? Was that talked about?
A. I don't believe I knew it was PE, no.
Q. No.
A. More just, yeah, plastic inside.
Q. So you didn't know the middle was polyethylene?
A. I don't remember specifically. I might have been told that was the material, but it didn't sort of register in that respect.
Q. When Mr Bailey mentions the performance here, and he says it won't adversely effect the performance, what did you understand him to mean by performance?
A. That a scratch on the outside is not going to affect its performance, so ...
Q. But performance in terms of what?
A. Well, just more in terms of longevity, but it wouldn't, as I say, get in there, possibly -- I don't know whether aluminium rusts, or -- so, yeah, it would still last as long as it was supposed to, which I believe is around 25 years.
Q. So do you think there was any part of the discussion that focused on fire performance?
A. No, certainly there wasn't any discussing fire performance at that time.
Q. Now, at the time you started work on the project, were you aware of different kinds of cladding panels available in the UK market?
A. My -- well, my -- I remember the one -- I talked about the nursery, that was just a solid aluminium panel, but no, specifically in terms of, like, all the products out there, no, I wasn't aware. But I was aware that it was the same panel being used that was used at Chalcots and Ferrier. So I was aware that this was the same panel that had been fitted to all the other six towers or high-rises that Rydons had done.
Q. How did you know that? Who made you aware of that?
A. I think that came through Steve, and it might also have been through Harleys, because I know also Harleys did the Chalcots Estate.
Q. So prior to this project, had you ever come across metal composite materials with different layers and a different core?
A. I don't remember using them on any jobs previously.
Q. Yes.
A. So ...
Q. Were you aware that panels were also available with fire retardant cores, which were less combustible?

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A. No, I wasn't aware at all . 1
Q. Were you aware at any stage that the rainscreen cladding being installed at the tower included combustible materials?
A. Not at all.
Q. No.

Were you aware at the time of working on the project that if a fire occurred in the building which led to significant flames being ejected from the window, the cladding panels would likely fail because they would melt and fall off the building? Was that something that you were ever made aware of?
A. I had one conversation with Taff about it, but my understanding or what I got in my head was the actual fixings, the lug system where you hooked the panel on, that little bit there would fail just through heat, in the same way that I was told at Chalcots, they warped. So I think it was more of a warping that I expected or the plastic might lose a little bit of strength.
Q. When you say you had one conversation with Taff about it --
A. Yes.
Q. -- were you then just describing the conversation you had with Taff?
A. Yes, that's it, sorry, yes.
Q. So that was about the fixings and whether they would stay on --
A. Yes. It was my understanding, as I say, yeah. But the way it was held on, it kind of hooked over the rail -sorry, I'm doing motions.
Q. Yeah, no, it's fine.
A. It hooked over the rails, but those little bits of metal would possibly fail or warp and that might make them fall off.
Q. Did you ever discuss the fire performance of the cladding panels themselves --
A. No.
Q. -- with anybody?

Kingspan Kooltherm K15, I want to ask you some questions about that now.
A. Okay.
Q. So as part of your role as site manager, were you aware of what materials were being stored on site at any particular time?
A. Yes.
Q. Yes. And at any one time, were quantities of insulation board stored on site for use behind the rainscreen panels?
A. Yes.
Q. Yes.

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Did you have any knowledge at the time, were you aware, of what the lead time was for ordering that insulation?
A. It wouldn't -- as I say, that was Harleys, they were a supply and fit -- or design, supply and fit contractor, so it would be their responsibility to make sure that it was there in a timely manner, so I wasn't, no, really aware of how long it took them to get there, or if I had been told, I don't remember it.
Q. Yes.

Now, we know that Celotex FR5000 was specified for use on the tower in the NBS specification. Do you remember noticing that when you read the NBS spec?
A. Yes.
Q. But we know that what was actually installed was Celotex RS5000.
A. Yes.
Q. Were you aware of that when you worked on the project?
A. Yes, because on our system we had the datasheet for the RS5000 and was told that -- I think I was told that it was a wrong note in the specification. I think it's something like "FR" stands for "flat roofs" or something and "RS" stands for "rainscreen", so I was aware that what we were fitting was what it was designed -- well, it was being used for what it was designed to do.

| Q. When you say you were aware of that, who made you aware |
| :--- |
| of that? |
| A. I don't remember that, I'm afraid. |
| Q. But you do recall -- |
| A. It was one of the conversations I would have had, or one |
| of the many conversations I would have had during the |
| time on the project. But I think it was quite early on, |
| I don't remember ... |
| Q. So you noticed that the insulation was different and the |
| explanation you were given was that was just a -- |
| A. Yes. |
| Q. -- mistake -- |
| A. Yes. |
| Q. -- in the NBS? |
| A. That's it. So -- yeah, specifications or little ... |
| Q. Yes. |
| Let's just look at paragraph 55 of your witness |
| statement now on this topic, \{RYD00094213/10\}. You say |
| there: |
| Ben Bailey and agreed the use of Kingspan, as Harleys |
| Ben $\begin{array}{l}\text { had difficulty obtaining Celotex from their supplier. } \\ \text { As far as I was concerned Kingspan and Celotex are } \\ \text { similar products with similar insulation properties. As } \\ \text { far as Ben and were concerned it was a like for like }\end{array}$ | 57

swap of insulating material. I told Steve Blake and the Clerk of Works, Jon White, of this use of Kingspan insulation material."

So you say that, and I just want to ask you some questions about this.

So was this Kingspan insulation material Kingspan Kooltherm K15 --
A. I think it was, yes.
Q. -- is that what you're talking about? Yes.
A. Yeah, because I'm pretty sure Ben gave me a datasheet for it.
Q. Right, okay, yes. Did you read the datasheet he gave you?
A. Yes, but what I was specifically looking for was the insulating value. I knew why the Celotex was there, I knew it was to try and achieve $50 \%$ better than the Building Regulations in terms of insulating properties, so I was asking Ben: were Celotex and Kingspan similar insulating properties, ie have a very similar U-value.
Q. I see, yes.

What exactly did Ben Bailey say to you about this swap?
A. That it was like-for-like. I'm pretty certain he gave me a datasheet which said the U-value was the same or very, very similar.
Q. Did you ever discuss fire performance of the K15 --
A. No.
Q. -- with Ben Bailey?
A. No.
Q. Or with anybody else about the K15?
A. Never discussed fire performance of the insulation, no.
Q. Do you remember what quantity of insulation was said to be involved in this swap at the time?
A. No, but I thought it would be kind of carrying on to finish it off, because I knew, as he said, he was having supply issues, so ...
Q. Do you remember who Harley ordered that insulation from?
A. No, I don't.
Q. No.
A. That wouldn't be something I would be aware of or need to know.
Q. Now, was that K15 already on site when you had this discussion, or was he saying --
A. No, I believe he was asking my permission to use it going forward.
Q. So that would be to order it --
A. Yes.
Q. -- and then bring it on to site in the future?
A. Yes.
Q. Were you aware that quantities of Kingspan K15 had

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previously been ordered before you arrived at site?
A. Not aware at all, no. And I never saw it on the building before in my sort of time going up the mast climbers.
Q. When Mr Bailey had that discussion with you, did he give you the impression that this was the first time this swap had occurred?
A. Certainly, that's why I thought he was asking permission.
Q. Can we just look at some of those purchase orders previously just to make this point good. So this is at \{SIG00000012\}, this is a Harley purchase order. It's dated 26 May 2015, we can see that on the top right-hand side. Do you see that there?
A. Yeah.
Q. It's to SIG, the company, SIG Insulation, Maidstone, and then we can see in the main description it says:
"Kingspan K15 Insulation Board 1200x2400x80mm (96 Sheets )."

You can see that. Then underneath it says:
"Delivery by vehicle with Moffet 04/06/15.
"Site has restricted entrance ..."
Do you see that there?
A. Yes, I do.
Q. We can see it's in the context of Grenfell Tower,
because on page 3 \{SIG00000012/3\} of this purchase order, if you just scan --
A. It says here at the bottom, it says "Ship to ".
Q. Yes, it does, and to be clear, there is a site plan given of Grenfell Tower just a few pages later.

So that's the first purchase order we've seen, which was some time before you arrived on site in May 2015.

If we can look at another one, this is
\{SIG00000013/2\}, and if we look at the bottom of the page -- sorry, actually this is the email chain that leads to this, that's right. So if we look at the bottom of page 2, this is Gill Walker to Ben Bailey, 26 May 2015, and she says, "Hi Ben". She is at SIG, we can see that from the bottom:
"The delivery we arranged for the 3rd will now go on the 10th, Celotex have pushed out the lead time on this product!!"

Then if we go up to the top of page 2 we see Ben Bailey's response. He says:
"Are you joking?! Is K15 held in stock at the same thickness? Is the delivery for this week still on?" Do you see that there?
A. Yes, I do.
Q. Then bottom of page 1 \{SIG00000013/1\}, she says:
"Yes delivery for this week is okay, they have
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production problems apparently!!! K15 80 mm is not stocked but has a 3-5 day lead time."

Do you see that there?
A. Yes, I do.
Q. Then at the top of page 1 , he says:
"As discussed please see [purchase order] attached for the K15 order (this quantity should be taken off the total [purchase order] on the Cellotex ( sic) order issued on 25/03/15)."

Do you see that there?
A. Yes.
Q. That was the purchase that we looked at.

So I take it from your answers before you had no knowledge of any of this happening before you were on site?
A. No knowledge at all, and I do not remember seeing it on the building at all.
Q. That was my next question: do you remember ever seeing Kingspan --
A. No.
Q. -- Kooltherm K15?
A. No, but a lot of the boards up on the thing were unbranded as well, so yeah, I didn't notice it .
Q. Ah, right. What percentage of the boards would you say were unbranded?
A. I don't know, off the top of my head.
Q. But you remember --
A. Yeah.
Q. -- some of them being unbranded?
A. Yeah.
Q. But presumably when you got to site, I think you said earlier, a lot of the cladding panels were on there.
A. Yes, so there was a good chance it was already behind panels which had already been fitted.
Q. Yes.

There is another order of K15 I just want to take you to. This is at \{CCF00000019\}. This is on 10 September 2015. We can see this is an order to a different company, CCF, and it appears to be 49 units of Kingspan K15 rainscreen board. Do you see that there?
A. Yes.
Q. Harley Façades, and deliver to Grenfell Tower in the middle.
A. Yeah.
Q. Again, you didn't have any knowledge of this order when you started?
A. No, as I said, prior to that conversation I had with Ben, I thought everything on that building was Celotex.
Q. Now, I think you have made clear that the basis on which

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you considered them to be like-for-like products, similar products, was because of their U-value properties.
A. Yes.
Q. Is that right?
A. Yes, and also from experiences. I've done lots of sort of this board in masonry cavities and it's always either Kingspan or Celotex. As far as I'm concerned, they were very -- I know them as solid insulation boards and they are very, very similar, as I said, and proved almost by the same thickness was the same $U$-value, so it does the same job.
Q. Did you look at any K15 literature at this time?
A. I remember Ben giving me the datasheet to basically prove that the U-value was the same. That's what I was after.
Q. Do you recall looking at the fire performance --
A. No, I don't.
Q. -- on that datasheet? That wasn't something you looked at?
A. No.
Q. Did you know that Kingspan is a phenolic foam whereas the RS5000 is a poly --
A. No, as I said, I knew it was solid insulation.
Q. Yes.

Did you ever consider the fire safety performance of K15?
A. Specifically, no. But every job I've ever done has had that product, be it Celotex or Kingspan, in some quantity, be it in the walls, be it in roofs, be it under screeds.
Q. Did you consult any of those who had specified the

Celotex in the first place? For example, did you
consult Studio E over the swap?
A. No, I did not.
Q. Exova, did you talk to Exova?
A. No.
Q. Did you talk directly or anybody you know of talk
directly to Kingspan themselves about it?
A. Not that I know of, unless Ben spoke to them.
Q. Did you ever request a copy of the BBA certificate for the Kingspan material?
A. I don't know.
Q. So you don't remember ever seeing a BBA certificate?
A. No.
Q. I think it follows from your answers, but I want to ask you nevertheless: did you ever ask yourself whether the K15 product was of limited combustibility at any point in the project?
A. I've never ever heard insulation described in terms of

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combustible or non-combustible, it 's always just been solid or quilt insulation, that's how I know them.
Q. Do you remember looking at an LABC certificate --
A. No, I don't.
Q. -- for Kingspan? No.

Now, going back to paragraph 55 of your statement, on page 10 \{RYD00094213/10\}, you say in the last sentence that you told Steve Blake and Jon White of the use of this Kingspan insulation material. Can you remember when you told them that?
A. I believe it was soon afterwards, after I had had the conversation with Ben.
Q. Yes.
A. Just to let them know that, yeah, there would be a different material on there, and I explained to Steve the reasons why, to do with supply issues, and I might have said the same to Jon. I remember having a conversation; I don't remember the specifics of it.
Q. And you don't remember them saying to you, "Well, actually, it 's already been used, we know that"?
A. No, as I said, I wasn't aware it was on the building before I essentially said yes or agreed with Ben.
Q. Did they ever ask to see any information about the K15?
A. Not that I remember, no.
Q. We've already discussed, and I showed you that specific
clause, do you remember, 2.2.2 of the contract, that said that Rydon shouldn't substitute any materials without the prior written consent of the --
A. Yes.
Q. -- employer, the TMO. Was the TMO ever consulted about the intention to use the K15?
A. No, unless Jon told them, but Jon was working for the TMO.
Q. I see.

I think it follows, but did you ever submit reasons for the proposed substitution?
A. No, I did nothing in writing on this, no.
Q. Did you provide Jon White with any documentation about the K15?
A. I don't remember doing so, no.
Q. Yes.

Did you ever tell Building Control at any time that some of the insulation was K15?
A. I don't remember, no.
Q. So you don't remember whether Building Control ever were provided with any specification or written material about K15 on the project?
A. Certainly I never gave them, so I would presume that, no, they never did get any.
Q. We will come back to look at Building Control later .

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Why did you not think to tell Building Control that you were going to be using a different insulation product?
A. Because, like I said, going back to my knowledge at the time, it was very, very similar. It's almost whoever -whichever -- Celotex or Kingspan, whichever one gets specified by the designer is what goes on the building. As I say, they are so similar to me from my knowledge and experience that I didn't see it as an issue.
MS GRANGE: Mr Chairman, I just have one or two questions on this topic. If I could finish this topic and then we could break.

SIR MARTIN MOORE-BICK: Yes, that's all right, thank you. MS GRANGE: Thank you.

If we could go to paragraph 57 of your witness statement and look at \{RYD00094213/11\}. So at paragraph 57 you say there:
"I was involved in the choice of plasterboard to the walls of the entrance atrium. I discussed this with Mark Dixon of SDP who suggested Duraline instead of Fireline plasterboard as Duraline was more resistant to impact, but still had the same fire rating. This change of plasterboard was approved by the architect ."

Do you see that there?
A. Yes.
Q. We can see that from an email. If we go to the email,
this is \{SEA00013533\}. If we look at the bottom of page 1, there is an email from you to Neil Crawford of 9 November at 9.40. You say:

## "Hi Neil

"Thanks for visiting site on Friday, it was good to [meet] you."

Then if we go over \{SEA00013533/2\}, you confirm with him then:
"Following walkround, I'd like to confirm the following agreements ..."

If we look at point 4 we can see it says there:
"Duraline board to communal entrance lobby with a skim finish."

Do you see that there?
A. Yes.
Q. We can see that, in this case, you did seek approval from the architect before changing the materials installed on site.

Can you explain why, if you did that for this material, you didn't do it in relation to the K15 swap for the Celotex?
A. Because specifically I was discussing with Neil at the time and it was part of the walk-round, the conversations we had about the finish to the lobby area. No, I can't explain why I didn't.

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Q. Okay.
A. Sorry, I can't explain in relation to the K15 why ...
Q. Yes, thank you.
A. It just goes back to experience that they were very similar, in my mind. It was almost a similar, approved. MS GRANGE: Thank you.

Mr Chairman, I think that's a good moment.
SIR MARTIN MOORE-BICK: Right.
Well, Mr Hughes, we are going to have a short break now and give everyone a chance to stretch their legs and so on.

While you are out of the room, please don't talk to anyone about your evidence or anything related to it, and we will come back at 11.35, please.
THE WITNESS: Okay.
SIR MARTIN MOORE-BICK: If you would like to go with the usher, she will look after you.
(Pause)
Right, 11.35, please. Thank you.
(11.17 am)
(A short break)
(11.35 am)

SIR MARTIN MOORE-BICK: All right, Mr Hughes?
THE WITNESS: Yes, thank you.
SIR MARTIN MOORE-BICK: Are you ready to carry on?

THE WITNESS: Yes, I am.
SIR MARTIN MOORE-BICK: Thank you, Ms Grange.
MS GRANGE: Thank you.
Just a couple of follow-up questions on the K15 before I move to a different topic.
A. Okay.
Q. I think you said in your evidence that you believed
"Mr Bailey was asking my permission to use it "; do you remember --
A. Or permission to change it .
Q. Yes, yes.

Who actually gave that permission? Did you
understand that to be part of your role as site manager or did you ask --
A. I wouldn't say "permission" is the right word; more agreement to use it, but ...
Q. But you talked about speaking to Mr Blake about this .
A. Yes.
Q. Steve Blake. Were you asking him if he was content for the change and for his permission, or did you understand that you could give that permission, you were just informing Steve Blake of what had happened?
A. I guess in that respect, I would say that I am taking -I was giving permission, yes. He was asking if he could use it and I was saying yes, as long as it complied with

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the U-values and it was a similar product.
Q. Yes, that's helpful.

Turning to a different topic now, I want to ask you about the window infill panels.
A. Okay.
Q. Principally I want to ask you about the white window infill panels, do you remember --
A. Yes.
Q. -- between the main windows on the tower.

Now, can you confirm that the window frame installations were carried out by Harley and Osborne Berry?
A. That's correct, yes.
Q. Yes, and this included the aluminium window panel system, including those window infill panels, didn't it?
A. Yes.
Q. And it also included the section of the windows which housed the extractor fan for the kitchens?
A. Yes.
Q. Can we just look at a Harley drawing on this topic, \{HAR00003953\}. This is a drawing dated 3 March, and we can see it's marked "Approved for construction", and it's had various revisions, we can see at the bottom there. I just want to ask you: what we see -- it 's not very clear, but I think we can find it -- is that those
two panels we were just talking about are marked P1 and P 2 on this drawing. If we zoom into the middle hatched section in the top left -hand corner, we see P1 for the main big infill panel, and then P2 for the little panel. Can you see that there?
A. Yes, I do.
Q. Would you have understood what you were looking at this drawing that that was referring you to the Harley specification, to their own specification notes?
A. Yeah, all the little notes on there would refer you back to a specification or part of a specification.
Q. Did you yourself ever make any investigations as to which materials made up the P1 and P2 panels?
A. No, I did not.
Q. So you didn't review Harley's specification notes for these two panels?
A. No, but I would like to state, when I took over or when I went up to Grenfell, as far as I'm concerned pretty much all of the windows had been fitted.
Q. Yes.
Can we just look at those specification notes. This is \{HAR00017762\}. If we look on the left -hand side of that page, we can see, six items down, we get the "Glazing - P1 - panels", and below that we see the "Glazing - P2 - panels". Can you see those?

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A. Yes, I do.
Q. Yes, in the middle of the page. For P1 panels we can see that the outer is a 1.5 -millimetre aluminium skin, and the core is a 25 -millimetre styrofoam; do you see that there?
A. I do.
Q. Then for the P2 panel, we can see it's got a 25-millimetre Kingspan TP10 rigid insulation, do you see that there, in the core?
A. Yes.
Q. Looking at this now, is your recollection that you didn't see this at the time of the project?
A. I would have read this, but I don't remember noting that, and as I said before, I would expect it, by the time it got to me, to be compliant with Building Regulations.
Q. Yes.
Did you know what styrofoam was at the time?
A. I had heard of it, sort of like egg cup kind of thing, I guess. But, yeah, I had heard of it.
Q. Did you know that it was a trading name for extruded polystyrene insulation?
A. No, I did not.
Q. Does that mean that you didn't know when you were on site that those window infill panels had extruded
polystyrene inside?
A. Specifically like that, no.
Q. So you didn't ever raise any concerns about the use of styrofoam or extruded polystyrene in these locations?
A. No, because, as I said, by the time it got to me, I was sure it was compliant with Building Regulations.
Q. Had someone said to you, "In those panels, by the way, we've got extruded polystyrene", maybe someone, you know, chatting on site says it to you, what would you have made of that? Would it have concerned you?
A. If it complied with this and they were telling me it complied with what's on that piece of paper, I would have made nothing of it .
Q. Yes.

Now, the P2 panel, we just saw that the specification is for the Kingspan TP10 rigid insulation. Now, if we can look at a purchase order, just before you came on to site. If we look at \{HAR00002477\}, this is Ben Bailey on 11 September 2015 to ACP Panel Systems, and he attaches a purchase order. He says:
"Please see [purchase order] attached to replace the one placed under Harley Curtain Wall Ltd (now in administration )."

I just want to look at the purchase order which was attached to that, \{HAR00000445\}, dated 10 September. So

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that's the purchase order, and if we look at -- so it says:
"Please supply panels as per the attached schedule."
Do you see that in the middle? If we look at page 6 \{HAR00000445/6\}, we can see a schedule, and at the top we see "Panel Spec: (P2)", that it's got a core of 25-millimetre Kingspan TP10 rigid insulation; do you see that there?
A. Yes.
Q. Do you know -- I know you came on site in October, so a month or so after this -- whether TP10 rigid insulation was ever delivered to site and present on site?
A. I don't remember seeing it, no, specifically noting it, no.
Q. So the Inquiry's experts found from their site inspections after the fire that the panels used at the P2 location, where the extract fan is, didn't have a Kingspan TP10 core but had a styrofoam core and were extruded polystyrene.
A. Okay.
Q. Were you aware of that --
A. No.
Q. -- on the project?
A. As I said, they had all been fitted by the time I
started on the project.
Q. I see. So you can't help us as to how --
A. No.
Q. -- we go from Kingspan TP10 to the styrofoam in that location?
A. No, I can't.
Q. And you didn't ever check the fire performance of the P1 or the P2 panels?
A. No.
Q. No.

I want to move on now to a new, a longer topic which is about site inspections.
A. Okay.
Q. Would you agree that there is a difference between
supervising works and periodically inspecting works?
A. Yes, I would.
Q. Would you agree that in the case of the cladding elements of the construction, they're quickly concealed as work progresses on site?
A. Yes.
Q. So would you agree that it was important to have regular supervision of such works to ensure that the works were being conducted properly?
A. Not always, no, because it's about a process that we can't watch at all times. So you watch them at the 77
start, and then you have to, at a certain point, start to have an element of trust that people are going to do what they are contracted to do.
Q. Yes.
A. So if they've started off well and you're happy with that standard, and all you can see you sort of -- during supervision, you see they're maintaining that standard, I don't see that regular supervision, in terms of me seeing every single bit of insulation or firebreak behind there, is absolutely necessary.
Q. How did it work out on the Grenfell project? What was the distinction, or was there a distinction between --
A. Well, to me a periodic inspection would on a weekly thing, would be like a regular clerk of works, I would call that a periodic inspection because it's on a weekly or two-weekly basis.
Q. Yes.
A. Supervision is on a day to day and just managing or -as I say, supervising the works, managing the works, very similar. But to me also, periodic inspection would probably come under snagging; it is done after a certain period when something is ready.
Q. Yes.

Did you yourself have a period of time on site where you would say you were supervising, like when you
initially got to site, and then you went to more of a periodic inspection regime?
A. Sorry, in which respect are you talking about here?
Q. The cladding in particular.
A. Cladding. As I say, I was always supervising Harley's work. They're managing it, they're putting it on the building; I'm kind of supervising ... it's very similar -- sort of managing, supervising, to me are very, very similar terms. To me, it would be the same thing. If somebody says, "I'm supervising" or "I'm managing", very similar terms.
Q. Do you agree that a design and build contractor needs to have in place a rigid site supervision regime to ensure that all construction carried out by itself or its subcontractors is compliant with the relevant designs, drawings, specifications, et cetera?
A. It would certainly help, yes.
Q. Can we look at something that's said in the Rydon company witness statement. So we have had a witness statement on behalf of the Rydon company itself. If we can look at \{RYD00094236/23\}. If we could look at paragraph 35 under ( g ) there, which is under the heading "Monitoring during the Works". It says:
"[Rydon]'s role in refurbishment projects is that of main contractor. Typically this means it is also

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appointed as Principal Contractor for the purposes of the CDM Regulations. This means that it has significant experience of discharging its duties in respect of the planning, managing and monitoring of the construction phase, liaising with its subcontractors. This expertise and experience is encapsulated in the systems and procedures which [Rydon] used and continues to use to monitor the work of its subcontractors, which are in turn built on [Rydon]'s ISO 9001 accredited project management system ..."

Do you see that there?
A. Yes, I do.
Q. Now, were you familiar yourself when you worked on the project with Rydon's ISO 9001 project management system?
A. I know they got 9001, and, yes, I would say I was familiar with it. Didn't know every bit of detail of it, but I'm certainly familiar with it.
Q. What practical effect did that have for you on site? What were you aware of in terms of procedures that you had to comply with?
A. As I said before, snagging inspections.
Q. Snagging inspections?
A. Yes.
Q. Yes.
A. As I say, it's also parties -- as I say, call it
supervision/managing, but if I see anything wrong, then I would note it and tell them not to do it --
Q. Yes.
A. -- or make them change it.
Q. Were you aware of any written policies or procedures which reflected these 9001 project management systems?
A. Sorry, I don't understand how you mean or what you mean.
Q. Were you given any written policies or procedures about project management systems?
A. A lot of it is on the RMS, so that is almost like our project management system, I think, as you say. I do know my way round that. So I would go through it and that would give us the processes and the various forms that I would need to use to fulfil my duties.
Q. So you would have specifically looked at policies and procedures on that RMS, would you?
A. Not all of them, no, not all the words, but I knew how to operate within the RMS or how the RMS system worked. But a lot of the time, as I say, looking for a snag sheet, we have a standard snagging inspection sheet.
Q. Yes.
A. I know where to find that.
Q. Yes. I understand about the snagging process and the inspection sheet, we will look at that.
A. Okay.

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Q. Were you aware of anything else that you had to be doing on site to comply with that project management system?
A. Sorry, I don't -- in what respect?
Q. I understand you're --
A. Okay, I am familiar with our RMS system, yes.
Q. Okay.

Can we look at paragraph 86 of your statement now, \{RYD00094213/19\}. I just want to look at the first sentence. You say:
"I was involved in the snagging, inspection and handover of all of the exterior of the building."

Do you see that there?
A. Yeah.
Q. Now, by the time you came on board, Grenfell was between 60 and $70 \%$ complete.
A. Yeah.
Q. We've seen that.

Who was responsible for doing the snagging, inspection and handover of the exterior of the building prior to you coming on to site?
A. I'm not sure who was -- I knew -- I think it was Danny Osgood was -- or looked after it for a while, but I don't know all the people who --
Q. So you didn't take over from somebody performing that role?
A. Not specifically, no.
Q. So did you feel at the time that it was a new role that you were performing to be carrying out the snagging?
A. No, I saw it more as managing the Harley, so managing -as I say, external manager, I would class it as.
Q. Yes.

Now, in the paragraphs that follow, you have explained stage by stage what the snagging inspection and handover of the exterior would look like.
A. Yeah.
Q. You have explained the process. And what I'm going to do is take you through that step by step and ask you some questions about it over the course of quite a few questions. So we will keep coming back to look at this part of your statement --
A. Okay.
Q. -- as we go through the process that you followed.

Just focusing, then, on step 1 to start with at paragraph 86.1, you say there:
"I initially took John Hoban, Jon White and Ben Bailey up the mast climbers on the 11th November 2015 to discuss what they required to see. We went up the west and north elevations. At the time we went up, the works were nearing completion but there were a number of panels not fitted yet, giving them an opportunity to

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look at the fitting of the rails, insulation and fire breaks. They had a couple of minor concerns about scratches and scuffs to the cladding panels. We also discussed the process of striking the mast climbers and making good the cladding where the mast climber struts were fixed to the building."
A. Yes.
Q. Do you see that there?

So I just want to ask you a few questions.
So this was, if we go back to the previous page, on 11 November 2015 where you took them up.

Now, was that the first occasion since you had commenced working on site that you had inspected the cladding yourself?
A. No, it wasn't the first time I had been up the mast climbers.
Q. Were you aware that there had been a Building Control inspection in May 2015 prior to this?
A. Yes, I had been told that Building Control had been up the mast climbers prior to my starting on the project.
Q. Were you told anything about what had occurred on that Building Control visit?
A. Only that there were no issues, he had flagged no concerns.
Q. Right.

So how much previous inspection had you done prior to this 11 November 2015 visit?
A. I had been up and looked at it a lot and, as I say, it was me getting to know what was on the building as well, and essentially, as I said, it had already been started, so we say two-thirds of it was already up there.
Q. Yes.
A. But what I understood my role was to make sure that
a similar standard was done.
Q. Yes.
A. If the client, if the clerk of works and

Building Control were happy with the standard that was up there, to hand over the building and to get it sort of passed at the end, I would need to maintain that standard.
Q. Yes.

Can you remember which areas you inspected? Did you go up all four façades?
A. I inspect -- I wouldn't say I was inspecting it; I was going up there, I was talking to the things, I was also just familiarising myself. Sometimes it was specifically you would go up there with -- to sort of answer a query from Taff or Bez about -- yeah, and it was just, as I say, it was for me understanding the processes and everything else and just know what they

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needed off me as well.
Q. Yes.
A. And if there had been any issues that I thought -- or areas that I thought were issues.
Q. You said it's not an inspection, but did you go and look from the outside and the inside?
A. No.
Q. No.
A. At the time I never went into the flats, until sort of quite late in the project.
Q. Yes, so you were just going up on the --
A. Yeah, I was, as I said --
Q. -- exterior?
A. As I said, my role at the start was to do the cladding, so ...
Q. Did you identify any defects or issues with the cladding prior to this Building Control visit?
A. No, not with the cladding, but I go back to what I told you earlier : one thing I did notice, that the gaps -the joins on the insulation boards weren't taped. I asked Taff and Bez this question and they said that they didn't need to, and that's when I went back and referred to the Celotex -- or had a look at the Celotex brochure to see if I could see anywhere specifically it said that the joins had to be taped. And I'm talking
about the joins between insulation boards.
Q. Yes.
A. It was noticeable that the join from where the insulation board went to the cavity barrier, that wasn't taped.
Q. Right.
A. So I asked why sort of the joins in the insulation --
Q. What did you -- sorry, carry on.
A. I asked why the joins in the insulation board weren't taped, and they said they didn't need to be.
Q. When you went and looked at the Celotex --
A. Yeah.
Q. -- datasheet, what did that tell you about whether joins needed to be taped?
A. I could see nothing on there anywhere that said it needed to be taped. So where I taped -- I mean, a silver foil tape, so it would look similar to -- it's like a silver -- adhesive silver foil tape.
Q. Did you notice that the edges weren't ever taped?
A. I did notice that, yes.
Q. Was that something you checked as well?
A. Yes, I did check that.
Q. And what did you conclude from checking?
A. I concluded that there was no need to do it.
Q. Right.

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Now, had you identified any issues with the cavity barriers prior to that visit on 11 November 2015?
A. No.
Q. Did you keep any record of what you had seen on site up to that point?
A. No.
Q. Now, you say at paragraph 61.2 of your statement, if we just look at that, this is on page 13 \{RYD00094213/13\}, you say there:
"I requested that John Hoban visit site to inspect the cladding on 11th November 2015 to discuss what he required to see to sign it off."

Do you see that there?
A. Yes.
Q. So this was a visit at your request --
A. Yes.
Q. -- is that right, not at theirs?
A. Yeah.
Q. Was that the pattern that was then followed with Building Control visits? Were they at your request or their request?
A. Mostly at my request.
Q. In your experience, was it usual for you to have to take the initiative of arranging the site visits by Building Control?
A. Yes, because I would be telling him that it was ready to inspect. It was finished and I needed him to go up there and say essentially, "Yes, I'm happy". Because, at the height of it, I needed to know that he was happy with it so I could start to strike the mast climbers. Because the worst thing would be that he said he wasn't happy with it and we had to start putting them back up.
Q. Yes.

Now, just looking at a document, if we can go to \{RYD00056059\}, this is an email that you send to John Hoban on 30 October 2015, so not long after your arrival, about ten days after you started work on site, and you say:
"Hi John
"Thanks for calling me back today.
"As discussed, it would be great if you could make a site visit on Tuesday afternoon whilst my director, Steve Blake, is on site. I'd like Steve to be involved in our chat about the outstanding structural information you require off us to satisfy building control, so we can achieve final sign off ."
A. Yeah.
Q. Do you see that there?
A. Yes, I do.
Q. So is it right that this email followed a call that you

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had had with John Hoban?
A. Yes, it did.
Q. During that call, is it right that you talked about outstanding structural information which Building Control required?
A. Yes, because, as I say, it was something Steve asked me to do, was to make contact with him, as part of my sort of job, and to just ask him if there was anything outstanding. Obviously me and Steve were picking up from where Simon and Simon had left off, so it was if there was any information he needed. This was --
Q. And what exactly -- sorry?
A. -- essentially the start of the process of handing the building over.
Q. What exactly did he say? What was the outstanding structural information?
A. That he hadn't received the structural calculations and he needed them.
Q. Were you surprised at that, that this is your first contact with the Building Control officer and you find that he's not yet had all the necessary structural information?
A. No, at the time I didn't feel surprised by it.
Q. Wasn't this a bit late in the day to be considering something so fundamental as the structural calculations?
A. You could say, but I don't know if he had had it and just hadn't reviewed it and didn't know where it was. I just -- he -- as I say, very similar to what I always do, ask them if there's anything they need off me.
Q. But this didn't strike you as unusual or --
A. No.
Q. -- concerning?
A. Unfortunately it didn't, no.
Q. Do you agree that Rydon, in its co-ordination role, should have sent those calculations to the Building Control officer by that time?
A. From my understanding, Studio E were the ones sort of managing the Building Control process, so it would be something that they would have sent to him.
Q. So you would have expected them to have sent that --
A. Yes.
Q. -- by that time?
A. I knew that Studio E were managing the Building Control process or Building Regulations process.
Q. Did it give you any cause for concern that the project might thus far not be being run in an orderly way?
A. No.
Q. When you sent this email to John Hoban, asking him to make the site visit the following week, did you know that Mr Hoban's previous site visit had been on

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15 August 2015, and that that visit was only the second visit that he had made since the beginning of the year?
A. No, I did not know that.
Q. Was there ever any discussion at any stage on site amongst the Rydon team about the lack of attendance by Mr Hoban on site?
A. No, like I said earlier, I had been told that Building Control had been to site a number of times as and when necessary, and was fine with the work so far.
Q. Yes.

Was the frequency of site visits by Building Control on the project in line with your previous experience on other projects?
A. No, I would expect Building Control to appear at least on a monthly basis, I thought they're called frequency visits.
Q. Yes.
A. Normally if you haven't called them in for something to inspect something, then they will turn up on a frequency visit.
Q. Yes.

Did you ever ask RBKC Building Control about that and say, "I would normally expect you to be here monthly"?
A. No, as I said, I wasn't aware that it had been so
infrequent.
Q. Now, if we can look at Rydon's progress report going through to mid-November, \{RYD00057876\}. This is Rydon's progress report 17 , and we see at the bottom that it's reporting on progress between 17 October 2015 and 13 November 2015. Do you see that?
A. Yes.
Q. Then if we go to page 5 \{RYD00057876/5\} of the document, it shows the progress of the façade works, and what it says there is initially grid work, insulation and windows is $97 \%$ complete. Do you see that there?
A. Yes.
Q. Then the façade cladding panels, $85 \%$ complete, and it says west elevation due to be snagged, you can see that for both those, and then it also says the crown detail was $100 \%$ complete all round in the box below. Do you see that there?
A. Yes, I do.
Q. Now, during your inspection with John Hoban and Jon White on 11 November, you have said in your statement that you went up the west and north elevations, we looked at that before; can you remember which levels on these elevations did you inspect? How high up did you go?
A. We would have gone to the top.

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Q. Yes. And would you systemically inspect every level? How would it work?
A. When we did the inspection with them -- sorry, I'm getting confused which one I'm talking about here. Is this the first --
Q. This is the 11 November one.
A. -- or the second one?
Q. The first one.
A. The first one?
Q. The 11 November --
A. We went to the top and worked our way down.
Q. Yes. Would you have done that for both the west and the north face for all the levels?
A. Yes.
Q. Yes.
A. As far as I remember, we went right to the top of both mast climbers.
Q. You also said in that part of your statement that there were a number of panels not fitted yet --
A. Yes.
Q. -- at that point. Can you remember where those were? Were they in a particular bit of the building?
A. No, I can't.
Q. Would you agree that on this occasion John Hoban and Jon White would only see a small area of the insulation
and cavity barriers on this visit --
A. Yes.
Q. -- ie those without panels fitted yet?
A. Yes.
Q. Was there ever an inspection from the inside as well?
A. As far as I'm aware, not at that point.
Q. Yes.

Can you recall whether John Hoban would have seen any branding on the insulation to show that it was Celotex?
A. As I said, there was quite a few unbranded boards, but I don't remember.
Q. Yes.

Do you ever remember discussing the type of insulation with --
A. No, I don't.
Q. -- John Hoban?

Was any K15 installed at that point in the area you looked at?
A. I don't remember seeing it.
Q. No.
A. I would like to say I would have noted it if I did, but ...
Q. Did Mr Hoban inspect the cavity barriers at that time?
A. That's why I took him up there at that point, because

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from my point of view, trying to hand the building over, if I had presented it to him completely finished and he had, "I've never seen the cavity barriers", then I'd have to stop that inspection, take some off so he could see them. So the idea was to take him up there so he could see parts of the building which were still in progress so he could see the cavity barriers and the insulation behind.
Q. Yes.
A. That was part of that first inspection to make sure that, yeah, we wouldn't have to take any steps backwards.
Q. Can you recall whether he would have seen both vertical and horizontal cavity barriers during that inspection?
A. Certainly horizontal. I can't confirm vertical .
Q. Yes. What about the area around the windows without cladding panels installed? Would he have seen some windows without the ACM panels kind of boxed around the windows?
A. Trying to remember now, I don't know.
Q. Yes.
A. I think possibly he ... where the windows butted up to the columns, that was -- the columns were one of the last panels to go on, so they concentrated on the bits -- the flat bits between the windows first and the
columns were one of the last pieces to go on. So I can't confirm, but I would say that possibly.
Q. Yes.

Did Mr Hoban raise any concerns during his --
A. No, as I said, from the emails you have seen, the main concern was to do with scratches on the panels and the performance in terms of longevity at the panels.
Q. I appreciate you say that was the main concern. Were there any others you can recall?
A. No, otherwise I probably would have noted it and me and Ben would have -- I would have asked Ben for confirmation.
Q. Let's just go back to your witness statement where you are explaining what the process was that was followed. If we can go back to page 20 \{RYD00094213/20\} of your main statement, and look at the next part of what you say. You say there then:
"Harleys would snag their own work prior to offering it to Rydon. Ben Bailey did the snagging and sent the sheets to me. I did one of the pre-handover snags of the finished exterior on the north elevation as Ben Bailey could not make it to site."

Do you see that there?
A. Yes, I do.
Q. Now, I just want to look at what Ben Bailey has said

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about Harley's own process of inspection before the cladding panels were fitted. If we go to \{HAR00010060/4\}, this is paragraph 13 of his statement. I'm going to take you to several bits of this, but I think it would be helpful, and in fairness to you, for you just to read this paragraph to yourself just for a moment.
A. Okay.
Q. It goes over the page \{HAR00010060/5\}, so signal when you have got to the end of the page.
(Pause)
A. Okay, I've got to the bottom.
Q. Yes.

## (Pause)

A. Okay, I've read it.
Q. So if we just go back to that first part of the paragraph \{HAR00010060/4\}, and picking up four lines down, you say:
"I remember that before the panels were installed I went up the mast climber and conducted a visual check of the windows, the insulation, the cavity barriers and the cladding rails in most areas over each level of existing flats in the building ..."

Then he says:
"I recall doing this on the North, East and West
elevations (not the South - over the main entrance) before Building Control inspection visits at the request of Rydon to check the work was ready to be inspected."

Do you see that there?
A. Yes, I do.
Q. So he's saying that, at Rydon's request, Harley would inspect the insulation, cavity barriers and cladding rails before the Building Control check. Is that your understanding of what happened?
A. Yes, that's what should happen, subcontractors should inspect their own work and they should give us confirmation that it is ready for us to inspect it as well.
Q. Yes.
A. So, yeah, first and foremost they have a responsibility to ensure that their own work is up to standard and complies with the plans and specification.
Q. Yes. Then over the page \{HAR00010060/5\}, once he has explained what that check would involve, he says:
"I then took Building Control up to see the work." Do you see that there?
A. Yes.
Q. In the second-to-last sentence he also talks about Building Control, taking them up to see what was installed.

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Was that your understanding? He talks there about Building Control going up to see what had been installed prior to the cladding panels being installed; was your understanding that Building Control would be taken up before the panels were inspected?
A. I don't know whether he's getting confused with Building Control and the clerk of works here. From my statement, from what I remember, we only went up twice with Building Control up the mast climbers, and those are the ones I said in my statement. So I took them up once when there were still some unfinished panels, and I took them up once with the clerk of works at the same time to do what I would consider to be a handover inspection.
Q. Yes.
A. But the clerk of works went up more often than Building Control did.
Q. Yes.

Is it right that Rydon itself wouldn't systematically check the insulation, cavity barriers and cladding rails before the Building Control check?
A. As I said to you earlier, I wouldn't necessarily check, I have no records of me checking, but it's making sure on visual checks that I was going up there and the standard had been set and maintaining the same standard.

So nothing, in all my times I went up there, did I see anything which dropped below that standard.
Q. Yes, and how often were you going up there?
A. Very hard to say. When I first started up there, I went up there quite often, getting to know them, getting to know to trust the installers that the standard was being maintained.

A little bit towards the end, I started going up there less and less. I was taking more responsibilities . I also trusted that they were doing things correctly. So towards the end, it more came up I started to go up there when there were specific issues with how to install the panels safely.
Q. Yes.
A. So we had a couple of issues with mast climbers stopping panels being fitted easily and safely, and I started to go up there more often. That was a lot more on the south elevation.
Q. Right, yes.

Just to be clear, did you ever see it as part of your role to be going up and checking prior to Building Control coming on site and satisfying yourself that the cladding rails, the cavity barriers and the insulation had been installed correctly?
A. I would satisfy myself that the standard was similar to
what was already been up there and, as far as I was aware, was the standard that Building Control -- or, no, not Building Control, more the clerk of works at that time, was happy with.
Q. Yes.
A. So in terms of formal inspection, no, but every time I went up there, I was looking to make sure that it was the standard that was acceptable.
Q. But in terms of formal inspection, was it your understanding that Harley was doing that itself --
A. Yes.
Q. -- in relation to its own work?
A. Yeah, they have a responsibility to make sure their own work is to the plans and specification --
Q. Yes.
A. -- and the standard required.
Q. What about after the Building Control visit? Would you or anyone else at Rydon ever do a formal check after that?
A. Well, Building Control, same with any inspection, is -if they raise any snags or any concerns, then you have to go back up afterwards, or once that work has been remedied, rectified, you have to go back up there and get that work signed off before you could take the mast climbers down.
Q. But that would only be if Building Control flagged
anything; is that right? anything; is that right?
A. Yeah, Building Control, and very similar process for the clerk of works as well.
Q. Yes.
A. That to me is what I would call a client inspection, the clerk of works. Client inspection, Building Control inspection, we pretty much did that the same time on the first couple of mast climbers.
Q. Yes.

Now, Ben Bailey states -- and we saw that in his statement at paragraph 13 \{HAR00010060/4\} -- that there was no checklist or specification to inspect the areas against when Harley was checking its own work prior to these Building Control inspections. Do you agree with that?
A. Not that I saw a checklist, but the snag list he gave to me to sort of say -- well, his inspection sheet he gave to me had things like EPM, cladding rails, so as far as I'm concerned, he'd given it to me saying they had done everything accordingly.
Q. But Rydon didn't provide Harley with a checklist or a --
A. No.
Q. -- list of things that needed to be checked --
A. No.

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Q. -- before Building Control would come on?
A. No.
Q. Given that you were relying -- I mean, do you accept you were relying to a significant extent on the Harley checks, the Harley inspections, before Building Control came along?
A. Yes, I do, because they designed the system as well.
Q. Yes.
A. So ...
Q. Given that you are relying to a significant extent on Harley's own inspections of the works, wouldn't it have been sensible for you to have provided Harley with some criteria for the inspections to carry out?
A. You could say that, yes, but you could say that the drawings are the criteria, plans and specifications are the criteria that they have to build to.
Q. Just check against all of the drawings.
A. Yeah.
Q. So, for example, for the cavity barriers, you didn't think of ever providing a specific list of things that it was important to check about the cavity barriers when these inspections were being carried out?
A. No, but visually I was looking that they were in the right place, so they were horizontally and vertically ; that they were clipped, very much like what Ben says,
where they were clipped and the clips were turned out so they were held securely in place; and that they were taped against the insulation, and then all my checks, in all my times I went up there, I never saw anything which said that they weren't.
Q. Were you confident at the time that Harley were comprehensively and systematically checking the windows, the insulation and the cavity barriers before the --
A. Yes, I believed they were competent. As I say, in my assessment of them, which I get in the first couple of weeks sort of dealing with them, and the work I had seen, I assessed they were competent and they were doing it right.
Q. We saw in Ben Bailey's witness statement, back on the previous part of paragraph 13 \{HAR00010060/4\}, where he says in the middle of that paragraph that he recalls doing the checks that he did on the north, east and west elevations but not the south before Building Control inspection visits at the request of Rydon. Do you see that there?
A. Yes, I do.
Q. Were you aware that the south elevation had not been inspected by Harley?
A. I think I talk about it in my statement, where Ben didn't turn up on time. Very much similar to -- I'm 105
trying to explain is -- I would expect Harleys to give me some sheets saying that they had done their work properly and that they had fitted it in accordance with the plans and specifications. I then go up and check that I'm happy with that, and I then would say to Building Control and the clerk of works, "I'm happy, I have gone up there and had a look at it, so please can you come up and have a look at it ".

So I think the one he is talking about on the south is the one that I say that I had done essentially you could say his job, I went up and checked it before he did, because I was -- as I say, I wanted to get the things done, I wanted to get Building Control and the clerk of works up there so I could start the process of striking the mast climbers. So that's what I think he's talking about, the same thing I talk about, where I went up and did one of their inspections for them.
Q. Was that of the whole of the south elevation?
A. That would be basically a finished elevation, so all the panels up there.
Q. I know you say finished, what I'm trying to get at is the inspections that occur before the panels go on, so of the cavity barriers, the insulation, et cetera.
A. Yeah.
Q. Do you remember doing that for the south elevation?
A. Not -- as I said, specifically not a formal inspection, but it was done part of my trips up there, and certainly in the south elevation I went up there quite a few times because there was an issue where the mast climbers were stopping us fitting the panels safely. So we had to do some alterations to the mast climbers to be able to fit the panels safely.
Q. Right. Just to be absolutely clear about my question, you don't recall doing a formal inspection of the south elevation in terms of what was underneath the panels?
A. No. No.
Q. Now, at paragraph 52 of Mr Bailey's witness statement, I want to show you that as well, this is at \{HAR00010060/15\}, he says --
SIR MARTIN MOORE-BICK: Sorry, Ms Grange. Give me a moment here.

I think everyone is getting a bit sort of carried away and moving quite quickly, and I think the shorthand writer is having trouble keeping up, that's all.
MS GRANGE: Let's both try and speak more slowly?
A. Okay, I' ll speak slower.
Q. I'm just as much at fault as you are, but yes.

So here it's said:
"I was never provided with the criteria for either Building Control inspections or those of the Clerk of

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Works, nor was I issued with any reports they produced." Do you see that there?
A. Yes.
Q. Bottom of the page, paragraph 52.
A. Yeah.
Q. He says:
"I assumed however that both Building Control and the Clerk of Works would be checking cavity barriers, both their location and quality of installation ."

Do you see that?
A. Yes.
Q. Do you agree that Harley were never provided with any criteria for either the Building Control inspections or those of the clerk of works?
A. In terms of criteria, yes, I agree, they weren't specifically said we were looking at that, but Harleys had responsibility -- design responsibility, so they knew that building and what should have gone on there better than anyone. They designed the system which went on the building, so ... but, sorry ...
(Pause)
I don't -- as I say, Building Control never gave us any inspection sheet. He went up and it was these panels. We went up with Building Control and the clerk at the same time on the first two mast towers that

I explained in my statement, and in that respect the clerk of works basically took the notes, because they were talking to themselves at the same time, so we came up with one list which you could say was a definitive clerk of works/Building Control inspection. And Ben came up at the same time. There wasn't that many issues on there, so I don't -- I don't remember giving them a list, but we then went back up with the clerk and checked the bits which were on the list, and they had all been done. That's why -- as I say, I would never have struck the mast climbers without making sure that Building Control and the clerk of works were happy that everything had been done.
Q. Yes.

Did you ever raise it as a concern within Rydon that you weren't providing subcontractors with criteria for Building Control inspections or inspections by clerk of works?
A. No, because it's not something I've ever done before.
Q. Yes. Okay.

Now, I want to look at this point at an email between two Building Control officers that you wouldn't have seen at the time, but I want to just ask you about it. This is at \{RBK00001122\}.

Now, this is an email from John Hoban to John Allen
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within RBKC Building Control, and what it appears to be is John Hoban reporting back to John Allen about what he has done on 12 January 2016. Do you see that there?
A. Yes, I do.
Q. So we're moving a little bit forward in time here. Under the heading "Grenfell Tower", he says this :
"Checking new external cladding to existing tower block, identifying defects (controllable under the building regulations) on new panels, brief introduction on fire breaks/fire cavity barriers, including location of where cavity barriers on cladding panels should be provided for the particular project."

Do you see that there?
A. Yes, I do.
Q. So I think he's reporting back, and I want to ask you about, in particular, this brief introduction he talks about:
"... brief introduction on fire breaks/fire cavity barriers, including location of where cavity barriers on cladding panels should be provided for the particular project."

Do you know who gave Mr Hoban that introduction about that topic?
A. No. Is it possible to see my statement around that time? Because I'm getting a bit confused with visits .
Q. Yes. I' ll find the reference for you in just a moment. Yes, I'll take you back to that.
A. As I say, I don't remember -- I remember the ones before Christmas, but without reading my statement again specifically, I need to see what I did after Christmas with John.
Q. Right, okay.

Do you yourself have any memory of giving Mr Hoban an introduction to, for example, the location of where cavity barriers would be?
A. I don't understand why he calls it an introduction when we had already been up the tower before Christmas and looked at it.
Q. Yes.

Do you ever remember, even prior to this, talking to Mr Hoban about where cavity barriers were to be placed in the system?
A. Specifically, no, I don't remember a conversation in that respect.
Q. So, yes, I think you mentioned this visit at 61.5 of your witness statement. Let's go to that. This is page 14 \{RYD00094213/14\} of your main statement. You say:
"I arranged for John Hoban to visit site on 12th January 2016 at 9am to go up the mast climbers again.

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I followed up the meeting with an email confirming a conversation about fire stopping to penetrations through walls and floors. We didn't strike any of the mast climbers until each elevation from the 4th to 23 rd floor had been approved by the Clerk of Works, Jon White."

Do you see that there?
A. Yes, I do.
Q. Now, I'm going to come back to that follow-up about firestopping and penetrations, because I want to take you to some documents on that.
A. Okay.
Q. You don't mention any discussion there about cavity barriers, so, I mean, I think we can take it from your evidence that you don't think you briefed Mr Hoban about that?
A. No, but I believe, and I've not stated there, that Ben Bailey would have come up with me, or it might have been -- we would always have gone up with one of the installers as well. We always had to have one of the installers driving the mast climbers. So I wasn't qualified and hadn't been trained to drive the mast climber, so every time I went up, it would be with someone from Harleys or from the installers.
Q. Yes.

Were you aware at the time of this visit, and indeed
on your first visit on 11 November 2015, that the design
didn't provide for cavity barriers around the windows?
A. No.
Q. You weren't aware of that?
A. Well, I was aware that it wasn't on the drawings.
Q. Yes.
A. So -- but I didn't -- wasn't aware of a need to put them on a cladding system like that. But I knew -- as I say, I know from the drawings they weren't shown, so ...
Q. Did you notice that when you were looking at the drawings? Did you say to yourself, "Oh, I note we haven't got cavity barriers around the windows", did that strike you at all?
A. No, it did not strike me.
Q. Did you ever discuss that, the lack of cavity barriers round the windows, with anyone else at Rydon?
A. No.
Q. Or with anyone else at Harley?
A. I don't remember any conversations like that.
Q. Or with Studio E?
A. No.
Q. What about with Building Control? Did you ever have any conversations with Building Control about there being no cavity barriers around the windows?
A. No. As I said before, I never had any conversations

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with anyone about it because, as far as I was concerned, it was in accordance with the drawings, so ...
Q. Did you know that there was a difference between the horizontal cavity barriers that had been specified on the project and the vertical cavity barriers that had been specified?
A. Yes.
Q. Can you describe what the difference was for us?
A. To me the difference was the horizontal ones sat back about 25 millimetres from the back of the cladding panel to allow for vertical ventilation, the horizontal -- or, sorry, the vertical cavity barriers should have butted up to the back of the panel, because there was no need for horizontal ventilation. It was all about vertical ventilation.
Q. Were you aware that the horizontal had an intumescent strip that would activate to close the cavity --
A. Yes.
Q. -- but the vertical was a solid block of material which wouldn't intumesce?
A. Yes.
Q. Did you ever check the vertical cavity barriers on site, do you remember?
A. Not specifically, no.
Q. And do you ever remember showing Building Control the
vertical cavity barriers on site?
A. I -- well, as I said, I don't remember if they were visible when I took Building Control up, so no, I don't specifically remember.
Q. Did you ever see any examples of horizontal cavity barriers fitted in the vertical position?
A. No.
Q. Can we just look at a photograph on this. This is from Dr Lane's Phase 1 report, this is \{BLAS0000008/48\}.
I want to look -- this is figure 8.52 , and we can see
this is the cavity barrier labelled RH25, and it's
installed in the vertical orientation, isn't it?
A. Yes.
Q. Can you see that? Am I right that the green strip would be where the intumescent strip was?
A. I believe you're right, yes.
Q. So that's also been installed with the intumescent strip facing into the concrete, into the building.
A. Yes.
Q. Did you ever notice workmanship like that on site, with them being installed horizontal in the vertical position or indeed with the intumescent strip facing the wrong way?
A. No.
Q. If you had seen cavity barriers installed in that way,

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what would you have done about it?
A. I would have asked them -- well, I hope I would have asked them to change it and make it right.
Q. Yes.

Can you explain why this might have been found on site?
A. I can't explain, no.
Q. Could it be, perhaps, because there wasn't a regular and systematic inspection of the cavity barrier installation?
A. It could be.
Q. Now, just sticking generally with the topic of inspections, but I want to ask about the insulation. Can we go to \{RBK00052478\}. This is a document which records some of the site notes made by RBKC Building Control, and what I want to do is go to page 3 \{RBK00052478/3\} and look in the middle of the page. These are notes from a site visit carried out by John Allen of RBKC Building Control on 24 March 2016. Do you see that there?
A. Yes.
Q. Do you remember a visit where you had Mr Allen instead of Mr Hoban?
A. Yes, I do.
Q. I think you mention it --
A. I asked for John to come in -- sorry, I asked for John Hoban to attend site and then John Allen turned up.
Q. Yes. I think it's in your witness statement at paragraph 61.6 \{RYD00094213/14\} for the transcript. On the second line down he has put this:
"Ensure thermal insulation completely fills voids." Do you see that?
A. Yes.
Q. We know that you emailed Ben Bailey of Harley the same day, on 24 March 2016, if we can look at that. This is \{RYD00072239\}. If we look at the top of that page, this is you to Ben Bailey, and you say:
"I've just had a visit from Building Control and he's flagged a couple of issues with Harleys' work, as follows ..."

You have got:
"Ensure thermal insulation completely fills voids mainly gaps insulation around columns."

Do you see that there?
A. Yes.
Q. Can you just explain for us what the problem was?
A. I think round the columns some of the boards weren't cut as neatly as they could do to fill the void or fill right back to the building, so he had flagged it up.
Q. Do you know whether Mr Allen was made aware of the type

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of insulation that was used in this visit?
A. It's not part of the conversation I remember, and this would apply only to the bottom four floors at this time, because by this time we had struck all the mast climbers and we were doing the bottom four floors off cherry-pickers.
Q. Right.
A. So I didn't take Mr Allen up in a cherry-picker, so it would have been what he would have seen from the ground.
Q. That makes sense.

We talked about Harley snagging their own work earlier, and I just want to take you to an example of a snagging sheet from Harley that they were using at this time. Can we go to \{RYD00059235\}. I think this is an example of a snagging sheet. We can see it says, "Grenfell Tower - External Handover", then towards the bottom we can see it was conducted on 25 November 2015 and it says, "Façade handover ... WEST", do you see above that?
A. Yes.
Q. And checked by Ben Bailey, do you see that there?
A. Yes.
Q. If we can go to page 4 \{RYD00059235/4\} of the document, we have got a section for the cladding, and we can see the snagging comments for the cladding insulation and
cavity barriers?
A. Yes.
Q. Now, I think we've established it before, but when you -- did you receive these sheets, these snag sheets?
A. Yes, this is exactly what I requested off Ben. This is proof to me that Harleys are inspecting their work.
Q. On receipt of these sheets, would you ever go and have a look at the snags he has identified to check that they had been remedied?
A. I was aware of the snags because I also told Ben that this was not what I needed, I needed a completed snag sheet, and he needed to do everything on it and then give me one which was completed so it would be ready for me to go and do my inspection, and then also then after that, following that, take up Building Control and the clerk of works.
Q. I thought you said earlier that you didn't necessarily do a formal inspection before Building Control came.
A. It wouldn't be necessarily -- sorry, not necessarily formal inspection, but if Harleys told me that their work was complete, I would go up and make sure that it was complete.
Q. Yes, I see.
A. As I say, they had a duty to finish their work correctly first.

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Q. Did you ever find snags that they had overlooked or issues that they had overlooked when you went back up?
A. No, but the best -- no, but as I said, I also did one of their snags at the end, the one on the south, and that would be an example of things I was looking at and ...
Q. Did you ever have any cause for concern about the thoroughness of the inspections of Ben Bailey for Harleys?
A. In terms of -- I had concern that he gave me a sheet saying it was ready and it wasn't, because it still had on there two nos, and I'm pretty certain I made this clear to him in an email once that he needs to be giving me completed snag sheets so it's ready for me to go up and have a look.
Q. Yes.
A. In very much the same way that that's what Building Control and the clerk of works expected off us, so I would hope, and the way I wanted it to run, that Harleys would give me a completed snag sheet saying, "It's all done, we have inspected it and we have carried out our duties and done everything accordingly", I would go up there, and by that time I wouldn't expect to see anything, apart from a couple of little bits. I do remember pointing out a little bit of black trim or mastic which needed to be taken off before I took

Building Control up. But they were, by that time, very minor snags that literally were done with the installer at the time, because, as I said, I always went up with an installer in the mast climber.
Q. Yes.
A. And they nearly always had tools in there that I would come down -- as I say, we would almost snag it as we came down, just cleaning a little bit here, taking it -or finishing off bits there.
Q. Yes.

You referred to an email that you sent, can we look at what I think might be that: \{HAR00006955\}. This is an email you sent to Mr Bailey on 24 November 2015.

Now, do you want to just remind yourself, is this the email you were referring to --
A. Yes.
Q. -- earlier, where you raised a number of snagging issues with Mr Ben Bailey? Some of them appear to include, if we look at the second paragraph:
"Snagsheets have been sent to me with items not closed off - I can't present these to the [clerk of works] to enable him to start his inspections snagsheets need to be completed and signed off before I receive them.
"Snagsheets need to be amended with references to

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photos which aren't there omitted.
"Snagsheets need to be given to Bez $\mathcal{E}$ Taff onsite or electronically - they're the ones doing the work, not me."

Do you see that there?
So at this point, is it fair to say that you were not happy with the snagging process that Harley had adopted?
A. Yes, it is fair to say I wasn't happy.
Q. Were the problems you identified in this email ever rectified? Did it get better?
A. Yes, I would say it got better.
Q. How quickly did it get better?
A. Well, some of those snags are only sort of half -- well, minor work -- I would consider those -- they are snags, they are minor bits of works which need to be finished off before you can consider that elevation or that part of the cladding fully finished. So I remember -- as I say, I believe this was the first one we did and it was about -- as I say, it was partly me setting the standard that I expected from Harleys.
Q. Yes.

Now, if we could just look back at paragraph 86.2 of your statement at page 20 \{RYD00094213/20\}, and if we go to the third sentence, you say:
"I did one of the pre-handover snags of the finished exterior on the north elevation as Ben Bailey could not make it to site."

Do you see that there?
A. Yes. Yes. I'm trying to think whether --
Q. Do you think that was the north --
A. I think actually now, reading this again, that might be the south elevation.
Q. Right.
A. I don't remember -- I don't know whether you have a copy. It was -- I took a copy of a drawing, so the elevation, and marked on there, I think it was about 15 to 20 points, bits I wasn't happy. I don't know whether you have a copy of that.
Q. Not instantly, but --
A. No, we could show on there -- I would hope to show that that was the elevation -- it might say on there what elevation it was.
Q. Right.
A. But I remember it being the last elevation, which was the south elevation, so I do believe I might have that wrong in my statement.
Q. Right, okay.

SIR MARTIN MOORE-BICK: Do you remember whether it was the elevation that had the entrance to the tower?

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A. Yes, it was that one.

MS GRANGE: Yes, which would be the south, yes.
Just moving on to look at the remaining parts of your inspection process, so step 3 below that, you said:
"I went and viewed all of the finished elevations before offering those to John Hoban, of RBKC Building Control, and Jon White, the Clerk of Works."

Did you have any form of method statement for those inspections?
A. No. No method statement.
Q. Just to be clear, did you have any experience of inspecting cladding works before you undertook this task?
A. Only the cladding works that I've stated previously were in the jobs that I did, but to me at that stage that's my site manager role, is to inspect and finish finished areas.
Q. Did you have any training in this aspect of your role?
A. Specific training, no, but 20 years of experience of what I expected a finished building to look like.
Q. Yes.
A. And that should be in accordance with the plans and specifications.
Q. Can you just help us as to exactly how you carried out these final finished elevations inspections?
A. Like I think I explained to you earlier, you could say that I almost, in fairness, was jumping on the back of the Harleys inspections. They were giving me finished products and that's what their inspection sheets were showing, so I would go up the building, but I would do it with an installer, who had a little bucket of tools to finish things off. So by that time -- and we also knew about the cladding panels, any scratches, so I wouldn't expect to see any panels up there with scratches.

So I don't think there is -- I have a formal inspection sheet saying I've done it, but what I've done is gone up the building and come back down with an installer, and said, "Right, not quite happy with that little bit", and we just finish it off there and then and come back down. So by the time I got to the bottom, I was happy that those elevations were ready for the clerk of works and Building Control to inspect.
Q. Yes.

Were you aware at the time that Rydon had a quality control checklist?
A. Yes.
Q. Can we just have a look at that. It's \{RYD00042087\}. So this is a, I think, two-page checklist. So if we can see there the first page, you have got to tick if

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certain works have been completed to a satisfactory standard. Do you see that there?
A. Yes.
Q. Then can we just look at page 2 \{RYD00042987/2\}, so you have got a checklist there which is by room, and the work to be done and de-snag check to be signed and dated, and then who it's to be completed by. Do you see that there?
A. Yes, I do.
Q. Did you use this checklist for your inspections of the cladding works?
A. On this project, no, I didn't. I have used these before. I remember being on the first project that they were brought out in, and the idea behind them was to make sure that the subcontractor was doing their works in accordance. But they also were designed that the subcontractor was to take responsibility for them in some way, so a Harley snag sheet would take precedence over this.
Q. Right, I see.

Did anyone at Rydon, for example Mr Blake, ever check your work, like check what you were doing in terms of your inspections?
A. He asked me whether I was doing my job and going up there and snagging it and doing the bits I was supposed
to, yes.
Q. Did Mr Blake or anyone else at Rydon ever inspect the works for themselves?
A. No, because I wouldn't expect that to be his role as such, to actually go out on an inspection. I would expect Steve, if he saw something wrong with something I was doing, or anyone, anything anyone was doing, to tell me, and I would go out there and fix it, and he certainly did that in terms of sort of things he saw which possibly you could say were unsafe, he made me go and make sure people were doing things right, but in terms of a formal inspection, no.
Q. Did anyone ever raise concerns about the thoroughness of inspections that had been carried out?
A. No. I believe we had been quite thorough, making sure that subcontractors are doing their work, and they're giving me sheets telling me they've done it all. Like I say, they have a responsibility to make sure their work is correct in the first place. I go up there, I check, I do not have any sheets proving that I checked, but by the simple fact that when I took Building Control and clerk of works up there, it came back with very minor issues.
Q. Yes.

If we go back to your step-by-step process that you
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have got at paragraph 86.4 on page 20 \{RYD00094213/20\} of your statement, this is after -- so you have said in 86.3 that you have viewed all of the finished elevations before offering them to Building Control and the clerk of works, and then you say:
"On the first proper handover inspection John Hoban and Jon White came up together and Jon White did a snag list ."

Do you see that there?
A. Yes.
Q. Can you recall when the first proper handover inspection was? We're currently somewhat unclear as to when that might have been.
A. That was the second time I took John Hoban up the mast climbers. So in my witness statement, the second time I took him up there was the formal -- I would say the formal inspection. I told him, "We are ready, it is all up there for you, please come and have a look", and, as I think I said earlier, the clerk went up there with Building Control and the clerk was the one who wrote the list, because --
Q. So early January 2016, could that be --
A. Yes, I believe it was.
Q. Was the cladding complete by that stage?
A. Yes. Sorry, when I say complete, it was complete from
the 4th floor up to the 23 rd floor.
Q. Yes. So taking that 4 th floor to the 23 rd floor, would Building Control have had any opportunity at that inspection to look behind the cladding panels to see the insulation and cavity barriers, or would that all have been covered up?
A. On that visit, no, they would not have been able to see it, but that was the point of the first visit a couple of weeks prior, to make sure that he could see it. As
I explained to you, the last thing that I wanted on that handover inspection, the second one we did, was for John to say, "I've not seen behind it, please take some panels off so I can see ". That's why I took him up the first time. You could say it was a pre-inspection visit to make sure that he was happy with the insulation and the cavity barriers, what he could see at the time.
Q. What did you understand the role of Building Control to be during their inspections?
A. That if they see anything wrong, they would tell us.
Q. Do you agree that it's not the role of Building Control to quality control the works carried out by Rydon and Harley?
A. I don't know semantics of it, but I would always expect Building Control, if they didn't see the quality was right, to say something.

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Q. Right.
A. Whether you say they have responsibility, I don't understand that, but I would always expect them, if they saw something substandard in their opinion, to tell us.
Q. Do you agree that, in a design and build contract, the contractor can't rely solely on Building Control to raise issues that it might have missed?
A. Yes, I do agree.
Q. Was that what you were doing in practice? I mean, how much reliance were you placing on Building Control to pick up things you might have missed?
A. Me, on, what, these inspections? None.
Q. Yes.
A. I was taking them up there thinking it was completely finished and hoping that he would say, "Yes, I agree with you, it is finished and I'm happy, carry on, please strike the mast climbers".
Q. So did you understand he was, on that "is it finished" check, looking at any questions of compliance with the Building Regulations at all, or was it -- what did you understand him to be looking for on that visit?
A. I thought every visit they do they are looking at compliance with Building Regulations, that's their role.
Q. Yes.

Now, just moving on to your step 5. 86.4 we have
just discussed:
"On the first proper handover inspection John Hoban and Jon White came up together and Jon White did a snag list ."

Then you say at 86.5:
"Then Harleys would rectify the snags and Jon White would inspect again to check they were done. John Hoban did not want to view the completed snags as they were mainly scratches."

## Do you see that there?

A. Yes.
Q. So did you rely on Jon White to check that the snags had been rectified?
A. Yes, because that's part of the handover process, anything on a client inspection sheet, they need to check that has been done.
Q. Why did Rydon not check for itself as well?
A. We did.
Q. You did?
A. Yes.
Q. When was that?
A. Prior to taking Jon White up there.
Q. I see. So before 86.4, before the first proper handover inspection, you say you would have checked?
A. Yes. That's how the snagging process works, is, as

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I said, for Harleys to do their own snags, they present it to me, I then check it, I check I'm happy that I can present it to the people who need to approve our work or Rydon's work, which is Building Control and the clerk of works. So then any snags which come out of those two lists, I then give back to Harleys because it's them doing the work.
Q. Yes.
A. They rectify the snags. I then check the snags are done, and then I re -- or I give the finished product back to -- or, as I say, I asked John Hoban -- or Jon, sorry -- I'm getting confused with Johns here -Jon White to come back and inspect that the snags are done. And as I said before, I would never have struck those mast climbers unless I knew that I had that assurance that Jon White was happy that all the snags had been done.
Q. Yes.

Were you aware of what the obligations were between the TMO and John Rowan and Partners, the clerk of works? Were you aware of what they had been contracted to do by the TMO?
A. Not at all.
Q. So you weren't --
A. Sorry, I knew that they were clerk of works and I would
expect that to be what a clerk of works does. I have a clerk of works on every job.
Q. Would that expect that to include checking for compliance with the Building Regulations?
A. I would say it's more checking compliance with the plans and specifications as per my role is.
Q. Yes.

Now, I just want to look at your witness statement at paragraph 97, so something you say further on. This is at \{RYD00094213/22\}. This is the meeting that you said you had there. You say:
"I had a meeting on 12th January 2016 with Jon White and Tony Batty [the clerk of works] which was also attended by Andrew Malcolm of Artelia and Matt Smith of Max Fordham. The purpose of this meeting was to go through the Clerk of Works reports to date and correlate all of the outstanding issues on to one definitive list ."

Do you see that there?
A. Yes.
Q. Who was that list then provided to, after that list had been compiled?
A. Well, Andrew Malcolm took or sort of chaired the meeting, he was the one who provided the minutes afterwards, with all the items, and then I would have
gone through with the relevant subcontractors to get all the outstanding items finished. I know quite a few of them, certainly Tony Batty's items, would have been JSW, because it would have been M\&E snags or bits which were outstanding.
Q. So were you responsible for resolving the outstanding issues?
A. I was -- well, responsible for managing the process, ie telling the subcontractors, "This is still outstanding, the clerks are not happy with it, please sort it out or give me the information that they're asking for ", then I would have given it back to the clerks.
Q. Yes.
A. So this meeting -- the idea of this meeting was -- it was all part of the handover process. The clerks were never going to sign off a building unless everything had been done and all their reports, including the ones prior to my involvement. So this was a meeting to go through all of the reports prior to my involvement, get all the outstanding items on there, items they were still not happy had been resolved satisfactorily, and get them all on to one definitive list so then I could work my way through them and resolve them and rectify them.
Q. Yes.
A. Or get the responsible parties to do the work.
Q. Now, I want to show you something that Mr Neil Reed of Artelia has said about that meeting. If we can go to his witness statement, this is at \{ART00006663/15\}. Mr Reed says:
"On 12 January 2016, Andrew Malcolm, my assistant EA, attended a clerk of the works reports review meeting, at which JRP [John Rowan and Partners], Silcock Dawson, Rydon and Max Fordham were present. During this meeting, the [clerk of works] Reports were reviewed for outstanding points. Those points were then identified and responsibility was allocated to an individual present at the meeting to address them. A number of outstanding issues on fire stopping and fire sealing were identified and were the responsibility, in each case, of Dave Hughes of Rydon. Jon White also raised a number of issues at the meeting relating to fireproofing. Apart from the instruction of a quotation for fireproof painting, those issues were the responsibility of Dave Hughes. Once again, as would be expected for a project of this nature, outstanding issues were identified and arrangements were made for them to be addressed before completion. In any event, as I explain in paragraphs 112 and 113 below, both Silcock Dawson and [John Rowan and Partners] later

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formally signed off on Rydon's works for the purposes of certifying practical completion."

Do you see that there?
A. Yes.
Q. So if we can go back one page, I want to ask you about some of these outstanding issues. It's said there:
"A number of outstanding issues were identified on fire stopping and fire sealing ..."

Do you recall what those issues were?
A. One of the issues was to do with the fire sealing of the communal pipes through the floors in the heating cupboards on each lobby.
Q. Yes.
A. So from the 4 th floor up to the 24 th floor, there was a new heating cupboard where all the new communal pipework came up, and to do that, they drilled holes through the floor. As I say, the clerks weren't happy what had been done, or it wasn't $100 \%$ in accordance with the specification, what had been specified, so they were raising a concern with it.

So, as I say, I don't agree it was my responsibility, but I went through the process of managing and getting the subcontractors or whoever needed to do the works --
Q. Yes.

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A. -- to get them signed off, and like he said, the clerks -- we did what was required and to the satisfaction of the clerk of works.
Q. Yes. That was my next question: did you agree that these were your responsibility in each case?
A. I would say he is saying their Rydon's responsibilities as a main contractor, and I was the one sitting in the meeting, so they're saying, yes, you're the one who needs to ... thing. Whether or not I'm responsible for it, I'm not the one doing the work, I'm managing the work.
Q. Yes.
A. So I'm responsible for, yeah, making sure the job is done or getting the relevant subcontractors to do what was needed.
Q. Yes.
There's also reference there to fireproofing two lines below that:
"Jon White also raised a number of issues at the meeting relating to fireproofing."
Do you see that?
A. Yes.
Q. Do you know what that's referring to as distinct from --
A. I think fireproofing is to do with the intumescent paint to the steelwork. To me, that's fireproofing, is to --
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almost painting steel in a sort of intumescent fireproof or fire paint.
Q. Yes.
A. Fire sealing was to do with penetrations through holes -- or penetrations through floors, sorry, or walls.
Q. Yes.

The meeting minutes of that we can just have a look at, \{ART00006688\}. We can see at the top it says,
"[Clerk of works] COW Reports Review Meeting Minutes" dated 12 January 2016. Do you see that there?
A. Yes.
Q. We can see you're in attendance, together with the clerk of works and some others.

If we look at page 5 \{ART00006688/5\} of the minutes, at the bottom of the page, fourth line from the bottom, it says there:
"Fire proofing - all around the site (new and existing) needs to be done as per the Fire Strategy."

Then your initials are next to this.
A. Yes.
Q. What fire strategy is being referred to there?
A. As far as I was concerned, it was the fire strategy drawings.
Q. Right, yes. And the fireproofing is as per your
description just now, is it?
A. Yes. To me, that's what fireproofing is, yes, more a coating of materials.
MS GRANGE: I see.
Mr Chairman, I'm about to start a related topic, which is a little bit more on the clerk of works, but I think if I start the next bit I'm going to --
SIR MARTIN MOORE-BICK: I think it might be better to have
a break now, mightn't it?
MS GRANGE: Exactly.
SIR MARTIN MOORE-BICK: How are you getting on? Quite steadily?
MS GRANGE: We are getting on fine, yes.
SIR MARTIN MOORE-BICK: Mr Hughes, we will have another break now so we can all get some lunch. Please don't talk to anyone about your evidence or anything to do with the refurbishment while you're out of the room.
THE WITNESS: Okay, thank you.
SIR MARTIN MOORE-BICK: And we will resume at 2 o'clock, please. All right?

THE WITNESS: Okay, thank you.
SIR MARTIN MOORE-BICK: Thank you very much. If you would like to go with the usher.
(Pause)
2 o'clock, then, please. Thank you.
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## (1.00 pm)

## (The short adjournment)

( 2.00 pm )
SIR MARTIN MOORE-BICK: All right, Mr Hughes?
THE WITNESS: Yes, thank you.
SIR MARTIN MOORE-BICK: Ready to continue?
THE WITNESS: Yes.
SIR MARTIN MOORE-BICK: Yes, Ms Grange.
MS GRANGE: Thank you.
I just want to start by correcting something I said earlier this morning about John Hoban's site visits. I put it to you that John Hoban's visit in October 2015 was only the third of that year. We have checked the point, and while there are only two visits officially recorded in the RBKC system, their electronic system, we think there may have been more based on other material.

Now, we have not yet had Mr Hoban's evidence, and he will be asked about this in more than detail, but what I want to do is just ask you whether you had any concerns during your time on site about the frequency of site visits from Building Control.
A. During my time, no concerns at all about frequency. It would be what I expected.
Q. Yes.

Now, another topic we discussed this morning was

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    about the taping of joins and joints on the insulation
    boards. Do you remember?
A. Yes.
Q. You said to me that:
    "... the joins on the insulation boards weren't
    taped. I asked Taff and Bez this question and they said
    that they didn't need to, and that's when I went back
    and referred to the Celotex -- or had a look at the
    Celotex brochure ..."
    Then you carried on, and you said that you could see
        nothing in the Celotex brochure that it needed to be
        taped.
            Now, I just want to look at the Celotex rainscreen
        cladding guide, first of all. This is at {CELO0000013}.
        Do you recall whether it was this document that you
        looked at?
A. That wasn't the document I looked at.
Q. No, okay.
A. It was more of a datasheet.
Q. This is the rainscreen cladding specification guide
dated 27 August 2014, and if we go to the page 14
    {CLG00000013/14} and look on the right-hand column, if
    we could blow up the top of that page, above the heading
    "Selection of fasteners" on that right-hand column, it
    says:
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"In all cases, the joints of the insulation boards should be taped with a self-adhesive aluminium rainscreen foil tape with a minimum width of 75 mm ."

Do you see that there?
A. Yes, I do.
Q. But you hadn't looked at this guide?
A. No.
Q. So you didn't find anything in the literature you looked at?
A. No, I didn't see that, and I never read that guide. I'm pretty sure it was a product brochure sheet or the product datasheet I read.
Q. Right, yes.

Can I also have a look at the Harley method statement for cladding installation. This is \{RYD00044095\}. So we see the Harley method statement for Grenfell Tower, and it says, " Activity: Installing Column Cladding". Do you see that on that first page?
A. Yes.
Q. I want to look at something on page 3 \{RYD00044095/3\}.

Point 9 at the top, there is a series of numbered points, and it says this:
"When all the brackets have been installed on the cladding rails, operatives will install the vertical firebreaks in the same position as the internal party
walls (marked up drawing attached), making sure that the joints are butted tightly together and the joints taped with adhesive backed foil ' 0 ' tape. Joints against the existing concrete should be sealed with suitable intumescent mastic."

Do you see that there?
A. Yes.
Q. Had you read that Harley method statement when you were considering the point about taping of joints?
A. I know I read a method statement for Harleys, because they had a number of them. This one specifically for the cladding, I don't know whether I read the earlier one, but I certainly read a Harley one and I didn't note that.
Q. Actually, if we look at the next paragraph, paragraph number 10, I think this is actually clearer about the insulation. It says:
"Operatives will then fit the 100 mm thick insulation around the brackets and firebreaks, taping joints with a class 0 adhesive foil tape where necessary."

Do you see that there?
A. Yes.
Q. So that's very clearly saying it's part of the Harley method statement that Osborne Berry ought to be taping with a class 0 foil tape around the joints .

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A. I would say that they didn't do number 9 but they did do number 10, because they taped the joints between the boards and the firebreaks or the cavity barriers, so that was taped.
Q. But you don't think they did number 10 ?
A. No. They didn't do number 9 but they did do number 10.
Q. I see. I thought you said to us earlier that you checked and the joins in the insulation boards didn't need to be taped.
A. I'm talking about joins between boards. The join between the boards and the cavity barriers were to be taped, that's what I was told, and everywhere I saw, that was done. So I'm only talking about where two insulation boards butt up against each other. They were the joins I was talking about that I checked. But I was told and everywhere I saw, where a board butted up with a cavity break, that was to be taped and that --
Q. Right.
A. Everywhere I looked, I saw that.
Q. So you didn't understand from anything in this method statement that the joins of the insulation boards themselves should be taped to one another?
A. As I say, I didn't read this, or -- I'm sure I read a method statement, and there were a number of them, because this is specifically for the cladding on the
column panels, I think I must have read one of the earlier ones. Well, if it says there, then they should have been doing it .
Q. Can you explain why you wouldn't have read this method statement if you were supervising this aspect of the works?
A. I can't, no. I'm ...
Q. Okay.

Just a couple of other points from this morning.
You mentioned that the FR in FR5000 stood, you
thought, for flat roof.
A. Mm-hm.
Q. Do you remember saying that?
A. Yes.
Q. Can you recall, how did you come to that view?
A. I don't remember, but it's something I have
a recollection of.
Q. Right. So you don't know who told you that the FR stood for that?
A. Specifically -- I don't know if that was from before the fire or after the fire, but as I say, I knew that the boards being fitted at Grenfell were RS5000.
Q. Yes. Okay. I see.

Now, I think a couple of times this morning you said that when you started on the project you looked at any 145
relevant NHBC guidance; do you remember that?
A. No, I didn't say I looked at it, I said that would be the document I would go to if I had any queries.
Q. Yes, I see.
A. I wouldn't go to Building Regulations, that's too high-level for me, so I would deal with the NHBC guidance.
Q. Do you have a recollection of ever looking at any NHBC guidance on this project?
A. No, I don't, not specifically on this project, but it would surprise me if I hadn't, because certain things, that's where I would look.
Q. Yes.

Let me just show you a piece of NHBC guidance and see if that triggers any recollection. So if we can go to \{NHB00001317\}. So this is a NHBC workbook on cladding systems from 2015. Do you have a recollection of looking at that?
A. Never seen it .
Q. No.

Can we look at page 24 \{NHB00001317/24\} of this workbook, and I want to look at the second paragraph down on that page. It says there:
"In buildings of over 18 m in height, insulation and filler materials in walls is required to be of limited
combustibility for the entire envelope."
Pausing there, I think you confirmed this morning that wasn't something you were aware of at the time of working on the project.
A. No, I wasn't aware.
Q. Then it says:
"Kingspan Kooltherm K15 rigid insulation is
currently the subject of debate and further investigation after its suitability for use in certain construction types of buildings over 18 m has been called into question."

I wanted to ask you about that: were you ever aware that the use of Kingspan K15 in buildings over 18 metres had been called into question?
A. Not aware at all.
Q. Or the subject of debate?
A. No.
Q. No.

Then before I pick up on where I was at this morning, we want to take you to a photograph of the tower, which I believe was October 2015. If we can go to \{RYD00055130\}. This is, we believe, either the east or the west façade. We know it's either the east or west because that has only two columns down the middle. Do you remember? And the north or south has three. So

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we can't be clear which of the two it is, east or west, but we've zoomed in, and with the help of the operator I think we can zoom in to some of the branding on the insulation. I don't know whether you can see that. It's not terribly clear, but we think that that is some Kingspan K15 that you can see in the middle of this page. Do you see that?
A. Yes.
Q. It has a blue logo going diagonally across the page. Do you see that?
A. Yes.
Q. Just to be clear, it's your evidence, is it, that you weren't aware of any K15 being used on the building prior to you approving it in late December 2015, early 2016; is that right?
A. I confirm that, yes.
Q. Yes, okay.
A. Sorry, when were these photos taken?
Q. We believe October 2015.
A. Because I believe I took that photo. As I say, the first week I was there, I took a photo of each elevation.
Q. Yes.
A. And that would be basically what state the building was in when I went to site.
Q. Yes, okay. Thank you.
So just picking up where I left off, I was about to turn to look a little bit more at your relationship with John Rowan and Partners, the clerk of works on the project. I want to go to some minutes of a progress meeting in September 2015, so just before you joined site. This is at \{ART00006666\}.
So we can see there this is progress meeting 15 , held on 18 September 2015. If we go to item 7.4 on page 7 \{ART00006666/7\}, if we can zoom in, it says there:
"Quality Control - Rydon is not responding to the CoW's observations and comments Re quality, etc. Issues are not being resolved and responses are not being provided. Rydon to remedy as part of the Design Meeting process covered off earlier in the meeting."

## Do you see that there?

A. Yes.
Q. Now, when you were preparing to join the project, did you read any of these progress minutes?
A. No. Well, I had one day preparation.
Q. But you didn't read them, say, in the couple of weeks afterwards when you were first there?
A. I do -- when I get on site, I do read as much as I can do to try and get a bit of a history on it, but I don't

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specifically read in old site meeting minutes.
Q. But were you made aware of anybody else of concerns expressed by the clerk of works that their observations were not being listened to by Rydon?
A. Yes, the clerks made it aware to me, I believe, in a meeting, and that was part of the reason for that meeting in January that we discussed earlier --
Q. Yes.
A. -- of going back to through the old reports and getting all the outstanding issues into one list and resolving them.
Q. Right.

Can you tell us any more about the nature of their concerns about quality? Were you given any details?
A. I would say it is because the same things were appearing on reports on a number of times.
Q. Yes.
A. We could say they're not being resolved. I would like to think that if something appears on a report once, I would try and sort it out and make sure it doesn't happen again.
Q. Can you recall what kind of things they were raising about the cladding?
A. Cladding, no, but it would be -- if they were outstanding, it would have been what was discussed in
A. Yes.
Q. So looking at that, can you explain why it was that Rydon was failing to respond to the issues raised in the clerk of works reports?
A. I don't want to comment on what happened before, but I do know afterwards that I started to respond to their reports and, as I say, tried to close out the snags or any defects or any issues they had as quick as possible.
Q. We can see three lines up from the bottom that the concern seems to be about "outcome certainty is managed Re all things compliance and quality ". Were you aware that they were concerned about the compliance of the works?
A. Well, that's their job, is to ensure that, as I say, to me, it complies with the plans and specification. That's what I would say they're assessing their works on, so yes. And as I say, also note the last statement, where it says if it wasn't resolved, we wouldn't have got PC. So my job and what I did over the next nine months was to ensure that the clerk of works, all the issues were resolved.
Q. Can we look at an inspection report that Jon White produces in December 2015, this is at \{RYD00063728\}. So with regard to, on page 1 , resources -- so this is dated 10 December 2015, and I just want then to look at --
there's a whole section headed "Resources", and I want to look in the comments box there. So it says this :
"One of [the] site managers Jason, who is the longest site manager, is away for approximately 4 weeks. Also Jack the trainee foreman is not in, and Chris is also not in. Rydons need to get additional supervision, otherwise site safety could be compromised. Also the contract manager Steve Blake has not been on site all week."

Do you see that there?
A. Yes.
Q. Now, do you recall receiving this inspection report?
A. Yes, I would have received it. I was there on site and it would have been sent to me.
Q. Did it concern you that so many site supervisors and site managers were absent at this time?
A. Not overly, no. I felt we had the site under control.
Q. So you didn't think that these concerns about presence on site were justified?
A. There was obviously -- when I first started, there was Chris, Jason and Gary and Jack, who supervised, and myself, so you could say there was four site managers and one assistant, we went down to two site managers and one assistant in the time before Christmas. So, no, I wouldn't say that that was concerning. If I had been 153
on site on my own, then yes, I probably would have been concerned, it would have been too much for me, but --
Q. Okay.
A. As I say, we knew that Jason was going away. I don't specifically know why Chris wasn't there that day. It might have been just a day off, I don't remember. But I know that Jason went away for four weeks over
Christmas because he had a lot of leave to use up, so we were aware and we could manage Jason. I don't remember why Chris wasn't there.
Q. So that's Jason North?
A. Jason North, yes.
Q. And Chris?
A. Holt.
Q. Chris Holt, yes.

How did you plan at this point to ensure that adequate supervision was carried out?
A. How do you mean? Sorry, I don't understand that question.
Q. Well, did you think that there needed to be any changes in the light of this concern being flagged by the clerk of works?
A. I knew Jason was planned leave, so no, and as I say,

I can't remember whether I picked up his work, he was mainly looking after the bottom four floors at the time.

Chris was looking after the internals, so as I say, it doesn't say anything about -- so I would say that it would be me and Gary who were still on site. Gary was looking after the communals. Gary could pick up Chris’ work and I could pick up Jason's work.
Q. Okay.
A. So I don't think that's the same as if another site manager -- so we don't always, when a site manager has a holiday, ensure that somebody else comes in.
Q. Yes.
A. So, no, I don't -- I'm not concerned by that at all .
Q. Okay.
A. But I would say it was -- the clerk of works, it was within his remit to report if he thought it was under-resourced, but I don't agree that it was.
Q. No, okay.

Now, on page 2 \{RYD00063728/2\} of this report, we can see that he has given a score for health and safety, if we look at the top of the page. It's headed "Performance indicators", and there is a 7 for workmanship, a 7 for quality, but then only a 5 for health and safety. Do you see that there?
A. Yes.
Q. We can see from the key below that between 4 and 5 demonstrates:

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"... inconsistency in achieving/meeting the required quality standards. Inconsistencies in performance evident. Responsive rather than pro-active approach to quality issues evident."

Do you see that there?
A. Yes.
Q. Now, in the light of that, did you take any steps after this to improve your process of inspection and supervision?
A. Not specifically, but I would hope that Jon, if he had any concerns, that he would raise them with me on site before he left. That was something I always tried to ensure with the clerk of works, that they didn't leave site without telling me what their concerns were. Part of the process of obviously managing their expectations and managing their view that they weren't being listened to was to ensure that he told me what the issues were and that I listened to him and dealt with it.

So I don't specifically remember that 5 score. I don't know whether I consider it fair or not. But, as I say, I would expect him to tell me specifically what it was, and if it was purely related to the fact that he didn't think we had enough supervision, then I disagree with it.
Q. Okay. But you don't recall a separate conversation with
him about this?
A. I had lots of conversations with him. That's one of the main parts of my job, is to talk to people. So, I'm sorry, I don't remember specific conversations like that, no.
Q. You don't recall a conversation where they were talking about potentially health and safety not being consistently dealt with?
A. Well, it also talks about four things about quality issues, but in health and safety, no, I don't remember. It might be that he had seen something and, as I said, I would expect to see it.

I didn't always walk around with the clerks, but by this time I would say that I probably had assumed the number one role on site, so I would hope that they would come and tell me what their concerns were, because sometimes you don't get the report for another three, four days, or possibly the next week, so if it is a serious issue, they should tell me there and then.

But I don't remember what that one was, and I don't know whether it says anywhere else in there whether there was a specific health and safety issue that he was giving us a 5 for.
Q. In your experience, did Rydon ever appoint its own clerk of works to carry out inspections on projects?

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A. Never been my experience for that, no. That's what our site manager role is.
Q. I see, so that's why you don't --
A. Part of our role is to manage it.
Q. Yes.

Just to pick up a few more questions about information provided to Building Control, can we just look at paragraph 72 of your witness statement. This is on page 17 \{RYD00094213/17\}. You just say there:
"I also relied upon the advice received from and approval given by the RBKC Building Control surveyors, John Hoban and Paul Hanson."

Now, I want to ask about the information that was shared with them.

When you started on site, did you ever enquire as to what information Building Control had been provided with about the external cladding system?
A. About the external cladding system, no.
Q. Did they ever indicate to you at any time during your dealings with them that they didn't have the information that they required in terms of the external cladding?
A. No.
Q. Now, in paragraph 58.4 of your statement -- this is on page 12 \{RYD00094213/12\} -- this is in the context of the alterations to the community room layout to
accommodate the AOV, and in the last few lines you say:
"I definitely sent a drawing to the architect for
his approval and showed this alteration to John Hoban, RBKC Building Control surveyor, during one of his visits."

Do you see that?
A. Yes, I do.
Q. Now, when Building Control were on site, did you regularly show them drawings during their site visits?
A. No.
Q. Did you ever give Building Control drawings to take away with them?
A. Not to my recollection, no.
Q. So it would follow from that, would it, that there was no record of what information or drawings had been provided to Building Control by you and Rydon?
A. As I say, any drawing that I provided, it would probably be done by email, so the record would be on email, but I would say that the record is what they were given to -- when they were -- the application was put in, so ...
Q. At any stage during any of their site visits, were any concerns raised with you about compliance with the Building Regulations?
A. Well, I would say that any, say, any snag or any issue

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he raised, specifically, like I say, towards the end, was always about compliance with Building Regulations.
It was ensuring -- as I say, that's what my understanding is, that's their role, to come and basically say, yes, you have built in compliance with it, or compliance with the drawings that they were given.
Q. Yes.

I want to look in a little more detail at the visit that Building Control did on 7 January 2016, because we've got some minutes of this .

Now, you refer to this meeting at paragraph 61.4 of your statement on page 13 \{RYD00094213/13\}, if we can just have a look at that. You say there:
"Steve Blake and I had a meeting on site with the two senior building control surveyors, John Hoban and Paul Hanson ... on 7th January 2016, also in attendance was Neil Crawford, the architect from Studio E ... The purpose of the meeting was to discuss what would be required to achieve Building Control completion prior to handover to the client. We initially met in the site office for the first part of the meeting and then walked the relevant parts of the building. I took the minutes of this meeting [and you exhibit them] ... and distributed them to all attendees and requested
a response from John Hoban and Paul Hanson if they had any comments."

Do you see that there?
A. Yes.
Q. Then you go on and say that you distributed those minutes to the client team.

You mention in the last few lines of that paragraph of your statement that there is a typographical mistake in the minutes about the existing riser cupboards, and you have explained what that mistake is .

Can we look at those minutes, \{RBK00003856\}. So this is, these are minutes of the meeting that was held there with John Hoban, Paul Hanson, Neil Crawford.

You can take it from me, we have looked through these minutes and they contain no information about the external façade. Is that because you didn't discuss the external façade with RBKC Building Control at this meeting?
A. I don't remember discussing it in detail, but as I say, it was a lot to do with concerns and making sure and everything else, so if they had no concerns on it then it probably wouldn't have been noted in the minutes.
Q. Yes.
A. I honestly don't remember if we did discuss it in that meeting.

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Q. Okay, yes. Well, we can't see anything from these minutes.
A. No.
Q. As we just saw, you said in your witness statement that you distributed the minutes and requested comments, but what you don't do is mention whether or not you received a response to those comments, and I just want to look at the comments you did get.
A. Okay.
Q. So if we can turn to \{RYD00063791\}, this is an email from you, if we could look at the top of the page, to John Hoban, and you say, on 12 January 2016:

## "Hi John

"Following your visit to site and our discussion, your only comment on the minutes was that there was no mention of fire stopping to penetrations through walls $\mathcal{E}$ floors .
"Please could you confirm this is correct?"
Do you see that there?
A. Yes.
Q. So is it right that there was a discussion about firestopping to penetrations through walls and floors but that hadn't been put in the minutes?
A. Yes. Well, it must have been because that's what he wrote. I believe obviously that was around the time
that John came back to site, so I would have verbally asked him if he had any issues with those meeting minutes I distributed the week before, and he must have said that yes, the only thing was there was no mention. So that's why I was confirming that, apart from that, he was happy with the minutes.
Q. Looking at your statement at paragraph 61.5 on page 14 \{RYD00094213/14\}, you say there:
"I arranged for John Hoban to visit site on 12th January 2016 ... to go up the mast climbers again. I followed up the meeting with an email confirming a conversation about fire stopping to penetrations through walls and floors."

We just wanted to be absolutely clear when that conversation was had. Do you mean that the conversation was had during the meeting on 7 January, or that it was had on 12 January?
A. The conversation about firestopping -- well, sorry, firestopping and penetrations were obviously talked about on the meeting the week before, so the 7th, and I hadn't made a note on the minutes, because, as I say, it was a walk-round meeting, so I was walking around, trying to make notes in my book as we went around. There was a number of people talking. I tried my best to get an accurate recollection of those minutes down

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and, as I say, wrote them -- I'm pretty certain I wrote the minutes the next day to make sure that it was fresh in my memory, but I must have missed that bit, and that was his recollection, so his comment back was, "You have made no note of it ", so I was confirming back.

So the actual conversation about firestopping and penetrations would have been had on the walk-round. That should have been noted in the minutes and it wasn't, but I was asking him to confirm verbally on his visit the next week, and that's what he said.
Q. I follow.
A. So I confirmed it back to him.
Q. Thank you.

Can we look at something Mr Hanson said as well in his reply to the minutes. This is at \{RBK00003863\}. So this is his response at the top of the page, if we can zoom in on that, and he says:
"Dear Dave
"I have reviewed the minutes and confirm they are accurate regarding my reference (means of escape). In addition John Hoban (RBKC building control) did also mention about fire stopping particularly above door frames."

Do you see that there?
A. Yes, I do, yes.

| Q. Now, can you recall now for us, what was the discussion | 1 |
| :--- | ---: |
| that was had about firestopping? | 2 |
| A. It was -- if I remember correctly, it was about | 3 |
| firestopping to the front doors above the new flats that | 4 |
| we were building. | 5 |
| Q. Right. | 6 |
| A. So we built nine new flats in there. | 7 |
| Q. Yes. | 8 |
| A. At that time there was only eight of them because we | 9 |
| didn't build number 6 until later, but it was regarding | 10 |
| that. | 11 |
| Q. Yes. Yes. | 12 |
| A. Just to give you -- we did a thorough walk-round of that | 13 |
| building with them at the time to make sure that we had | 14 |
| gone over everything that we might need or was | 15 |
| outstanding, and that was supposed to be an accurate | 16 |
| record of that meeting. I obviously missed the part | 17 |
| about the thing, but, as I say, it was me trying to take | 18 |
| notes as I walk around involved in the meeting as well. | 19 |
| Q. Can you recall whether there was any issues raised about | 20 |
| firestopping to the windows? | 21 |
| A. No, I can't recall, and I say, if it was, I would have | 22 |
| hoped I would have written it down. | 23 |
| Q. Yes. | 24 |
| A. Obviously I missed the bit about fire stopping | 25 |

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penetration, but I would hope that if we had the thing, that they would also have noted them --
Q. Yes.
A. -- from my conversation with John or from Paul that we had. So I can only say that no, there wasn't.
Q. We can see here Mr Hanson is saying particularly above door frames, which is what you have confirmed, but the reason I'm putting that to you is because this has been suggested by Mr Hoban, and I want to look at his witness statement. This is at \{RBK00050416/9\}, right at the bottom. So Mr Hoban is asked the question:
"Did you ever raise concerns about the compliance of the windows at any stage during the project?"

Do you see that? Then if you go over
\{RBK00050416/10\} we get the response:
"Possibly. During site visits I would make physical note[s] in my A3 notebook and raise any concerns with the site manager or the person escorting me. I have been informed RBKC cannot locate my notebook."

Then he says this:
"Additionally, email from David Hughes on 12.01.16 at 1620 states that raised the issue of fire stopping during a site visit. This could relate to the windows but without sight of my notes I cannot be sure."

So you can see Mr Hoban suggested it might have been
the windows but he can't be sure. We just want to get your recollection of whether that issue about firestopping had anything to do with windows.
A. My recollection of the firestopping is as I said: it was to do with the front doors to the new flats. As I say, I don't believe it was anything to do with the windows.
Q. Yes.

Did you ever amend your minutes in the light of the comments that you got about firestopping and penetrations?
A. No, because I had -- the only note I got was from Building Control that that was the only error on them. So that was -- the email was a note that there was an error, so no, I did not.
Q. Why would you not amend the minutes once you got those comments back?
A. I would like to think -- as I say, I would like to say I did, but I didn't. I didn't have time, I don't know.
Q. What we can see is that just over four months later you shared these meeting minutes with Claire Williams and Janice Wray of the TMO. This is \{TMO10045169\}. It's an email dated 25 May 2016. If we zoom in on that top email, you say there in the first line:
"Following our FRA meeting yesterday, please see confirmation e-mail below from Paul Hanson regarding

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acceptance of minutes from design team meeting held back in January."

Do you see that there?
A. Yes.
Q. We have checked and the minutes that you attached to this email were unamended, so they hadn't got anything in about firestopping being raised by Building Control.

On what basis did you take Paul Hanson's response that you have set out below as acceptance of the minutes? Wasn't he actually raising a point that had been missed in the minutes?
A. Yes, regarding that point that I had missed the thing, but I would say that it was -- I was specifically replying about an issue about fire alarms at this point, or heat detectors on the first floor.
Q. I see. So that's why you are saying he accepted that bit of the minutes?
A. Penetrations and firestopping has no relevance to what I was sending it to in this point.
Q. I see.

Just the last point on this, if we can look at some Artelia meeting minutes from progress meeting 19, this is on \{ART00005321\}. So these are meeting minutes, progress meeting 19, 26 January 2016, and we can see that you're present.

Then on page 5 \{ART00005321/5\} at the bottom of the page, it's point 3.10.1, it says, "DH", so that's you, yes, David Hughes?
A. Yes.
Q. "... confirmed that the Approved Building Control

Inspector had confirmed in writings details found with
Building Control Meeting Minutes issued on 08/01/16."
Do you see that there?
A. Yes.
Q. Again, it wasn't entirely correct that he had confirmed the meeting minutes because they had actually raised an issue that hadn't been covered in them, hadn't they?
A. I agree with what you're saying, yes, they weren't $100 \%$ correct, but I also had a record of what the issue was, so it was that one thing about firestopping and no mention of it.
Q. Yes, then if we look at --
A. So I would say from that that the rest of the minutes
are correct, but yes, I do agree with your statement, they aren't $100 \%$ accurate.
Q. Yes.

Then if we look at point 3.10.2, it says this:
"SB [Steve Blake] noted that the Inspector had identified areas of existing Fire Compartmentation which needed addressing. It was discussed and agreed that

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although these works are not required under the current contract it may be beneficial to the TMO to carry out these works to improve the condition of the building. SB to draw up a proposal identifying scope, cost and programme implications of undertaking this additional work to be issued to CW [Claire Williams] and Artelia .
[Claire Williams] will then review the necessity of these works ..."

Can you help us as to what that was referring to, existing fire compartmentation issues?
A. It was referring to the existing riser cupboards, either side of the lift, the ones where I talk about in the meeting minutes not -- or made my mistake about the chipboard. If you took those chipboard off there, that's where the old riser pipes used to rise for the original heating system and water distribution system and the electric system as well. Over the years, people had come and added, I think, telecom and telephone bits down it, so not all of them were firestopped between floors, there was some firestopping missing. So part of our process at the end was we went round and firestopped those holes.

The only hole that we didn't firestop was impossible to do so, was on the left -hand side of the lifts . As you looked at the lifts, the cupboard on the left -hand
side, one of the first parts of that was the main electrical busbar for the building which rose through all 24 storeys of the building. As I say, the only way to firestop that would have been to turn the whole building off.
Q. Right, yes, thank you.
A. Other than that, it was mainly -- from what I remember, it was mainly the right-hand side. You could take the chipboard off and you could see holes which hadn't been fire proofed.
Q. Yes, thank you, that's really helpful.

So I now want to ask you some questions about Exova and fire engineering in terms of the project.

Now, is it right that you were the fire co-ordinator on the project when you were --
A. Yes.
Q. Yes. We can see that from Rydon's project fire plan for Grenfell Tower dated May 2016. If we look at that, this is \{CST00000033\} on the first page. So this is the construction project fire plan and you're down there as the fire co-ordinator; yes?
A. Yes.
Q. Did you receive any training for the purposes of carrying out that role?
A. I have been on a fire safety training course, yes, but

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specifically it's about managing fire risk during the construction phase.
Q. Yes. So you're not looking at fire safety beyond that?
A. No, no, I haven't -- as I said before, I had never read the Building Regulations and it was never part of the training course I went on. It's about making sure essentially that there is enough fire extinguishers on site, they're the right ones for the work you're doing, people know where they are, there is a plan in place and everyone at induction stage is aware of the site fire procedures.
Q. You say at paragraph 107 of your witness statement, if we can look at that on page 24 \{RYD00094213/24\}, you say there that, as part of your duties, you took on responsibility for reviewing the project fire risk assessment. Do you see that there?
A. Yes.
Q. You say:
"The first review I carried out was in February 2016 and then on a monthly basis after that."
A. Yes.
Q. You describe the project fire risk assessment immediately above that at paragraph 106, and you say it 's part of Rydon Group's environment and quality procedures. Do you see that there?
A. Yes.
Q. You say in the third sentence there:
" Its main focus is how to carry out the contracted
works within the site, residential properties, communal
and public spaces, and comply with the current
regulations."
Do you see that there?
A. Yes.
Q. Just to pull up this project fire risk assessment, it
can be found at \{RYD00077583\}. It's dated
February 2016, and it names you on page 2
\{RYD00077583/2\} as the responsible person for the
project. We can just look at that. Yes, so we see that
there.
Now, at paragraph 69 of your witness statement, if
we could go and look at page 16 \{RYD00094213/16\} of your
statement, you say this:
"I read the Exova outline fire safety strategy
report, dated 7th November 2013, when it was sent to me
by Matt Smith from Max Fordham. It was sent to me to
help answer a query about the difference in the numbers
of smoke/heat alarms between the flats on the 1st floor
and on the 3rd floor. I liaised with Matt Smith
regarding the specification of the mechanical and
electrical systems ..."
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When you started work on the project, were you told what Exova's role was?
A. No.
Q. What did you know about Exova's involvement in the project?
A. At that time, I didn't think they are. My understanding the whole time I was at the project was that the Exova document, this fire strategy, was a tender document and, as I say, my understanding was it had been superseded by the fire strategy drawings from the architect.

As I say, when I've done jobs right from the start we have lots of documents at the start of projects which to me are tender documents, and from those documents that's what you build up and sort of build your design from. So I -- my understanding was that the fire strategy drawings overruled that and it was just a tender document.
Q. Yes.

Did you know that Exova hadn't been instructed directly by Rydon?
A. I knew that they were -- essentially had been instructed by Studio E, but that was only from reading that report. Before that -- I don't think prior to that report Exova had come up in any conversations, I don't believe.
Q. So was that your understanding, that they had entered
into a contract with Studio E?
A. My understanding, as I said, was it was a tender document that the architects needed to formulate their fire strategy drawings.
Q. Did you ever think about who their client was, Exova's client?
A. No, not really . As I say, I thought it was the architects .
Q. Let's just turn up that outline fire safety strategy dated 7 November 2013 which you say there that you read. It 's at \{EXO00001107\}. We can see there it's issue number 3, 7 November 2013. So you must have been sent this no earlier than October 2015, when you came on to the project.

Were you concerned when you were sent it that this fire strategy had not been updated between November 2013 and the time when you were involved in the project?
A. Not at all because, as I said, I thought it was a tender document and that -- 2013 was just before the tender period.
Q. I see. So you weren't concerned that this tender document was now quite out of date, potentially?
A. No, not at all. As I said, I thought it was superseded. As I say, I worked -- the plans and specification, that the fire strategy plans were what I was working to, and

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they were the most relevant documents.
Q. Did you read the whole report?
A. I believe I did, yes.
Q. Can we look at page 9 \{EXO00001107/9\}. This is section 3.1.4. This is "Compliance with B4 (external fire spread)", and we can see it says there:
" It is considered that the proposed changes will have no adverse effect on the building in relation to external fire spread but this will be confirmed by an analysis in a future issue of this report."

Do you remember reading that at the time?
A. Yes, I do remember reading it.
Q. Did you notice that there was a promised analysis in a future issue of the report?
A. I do remember reading it and, as I said, I didn't think it was an issue because it was done prior to drawings, it was at tender stage, so the Harleys drawings would supersede that. I don't remember whether it gave me any comfort or not, I just remember reading it but not really paying much attention to it because I wasn't looking at the document in that respect, I was looking for other information from it.
Q. Did you ever ask anybody whether that analysis had ever been carried out?
A. No.

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Q. Were you at all concerned that this strategy hadn't fully addressed the external cladding?
A. No.
Q. Can you explain why that was the case?
A. Because the architect and Harleys had done the design, so I would expect them to know and make sure the design was compliant with Building Regulations, so ...
Q. Did you think to yourself when you read this about what the proposed changes were that would have no adverse effect?
A. No.
Q. No.
A. No.
Q. Did you notice -- can we go to page 4 \{EXO00001107/4\} of the document -- that the description that's provided there -- so this is a description that's given right in the introduction of the refurbishment of what it comprises -- did you notice when you read it that it didn't include the overcladding works?
A. No.
Q. Did you ever contact anyone in Exova to discuss the cladding works?
A. No.
Q. Can we just look at a couple of emails on this topic. So these are some emails from November 2015.
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Can we look at \{TMO10044122\}. So these are emails between Matt Smith and Andy Bridges, but they copy you in. Do you see that?
A. Yes.
Q. I just want to start with the email at the bottom of the first page, sent by Matt Smith, and he says to Andy Bridges, copying you in:
"Afternoon Andy
"I'm not confident the Fire Strategy document that
I have is the most up to date - you'd be best advised getting a copy from Rydon."

Do you see that there?
A. Yes.
Q. Then if we look at the top of the page, to the response, the response is:
"Good to meet you today, I will get the lighting tech subs over in the next day or so, with regard to the fire strategy document Dave has already sent it over, fyi the reference is Issue no. 3, dated $07 / 11 / 13$."

Do you see that?
A. Yes.
Q. Did you check when you received these emails whether the document you had was the most up-to-date?
A. No, but it was the only one we had.
Q. So it didn't concern you that, two years after the third
issue of this outline fire safety strategy, there had been no update?
A. No, as I said, my understanding was, and the understanding I had all the way through the project, that it was a tender document. It was there to sort of help the architects with designing their fire strategy drawings, and, yeah, nobody ever said to me that it needs to be updated.
Q. Can we look at another set of emails. This is in April 2016. If we go to \{TMO10013128/2\}, at the foot of the page, I want to start with that, is an email from Claire Williams to you dated 27 April 2016 at 12.43. Do you see that there?
A. Yes.
Q. She starts off:
"Dave
"We are putting together protocols for what happens in the case of the detection system being activated, so I need a couple of answers to the below ..."

Do you see that there? Then at item 1 \{TMO10013128/3\} she says this:
"Can I please have a copy of the latest fire strategy document? I have an original version, but want to make sure it has not changed, drawings would be useful."

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Then I think what you have done -- is this right? -is in blue you have answered her comments.
A. Yes, I do, yes.
Q. We know that because you say that in some emails further up. You say:
"Exova Fire Strategy attached (not updated from tender as far as I'm aware) \& fire strategy drawings attached (to be updated to as builts ?)."

Do you see that there?
A. Yes.
Q. You say there:
"Exova Fire Strategy attached (not updated from tender as far as I'm aware) ..."

So you don't seem certain at the time of responding to this email whether or not it had been updated.

Did you ever check with anyone else at Rydon to establish whether it had been updated?
A. No, but I don't know who I -- well, the only person who would check was Steve, but no, I never did.
Q. Did it occur to you to take any steps to discuss, say with Steve Blake, the commission of an updated fire strategy from Exova or another fire consultant?
A. No, I go back to my understanding. My understanding was that it was a tender document and the fire strategy drawings superseded that, the strategy, so ... nobody
asked me ever to get it updated. Otherwise, if they had, I would have.
Q. I mean, you can see from this that it doesn't look like the TMO themselves have requested an update, does it?
A. No, no, nobody did.
Q. Did you ever discuss the points you're responding to here in blue with Mr Ashton?
A. I think you have a record of my only correspondence with Mr Ashton, which was to do with a smoke alarm in the hub room.
Q. Yes.
A. I believe that is the only correspondence I had with him.
Q. I think you say in your statement that you had dealings with him by phone and email.
A. Yeah, yeah.
Q. So did you ever discuss on the telephone with him that the fire strategy document wasn't --
A. No, I didn't, but it goes back to the -- he wrote the -and as far as I'm concerned, he was answering questions regarding the tender document. It was his report, he was answering questions regarding that.
Q. If we can look at Ms Williams' response to your email, \{RYD00075983\}, she says this:
"Dave
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"This still has the old TMO office - I think the fire strategy stuff may have been superseded on this basis."

Do you see that there?
A. Yes.
Q. So I think it follows from your answers, but at this point, when she says it's been superseded, you didn't consider discussing with anyone the request of an updated document --
A. No.
Q. -- from Exova?

Can we look at some clerk of works review meeting
minutes. This is \{ART00006688\}. Now, we looked at this document before, I think, 12 January 2016, and on page 5 \{ART00006688/5\}, three lines from the bottom, it says this -- we looked before at what it said about fireproofing, but I want to ask you now about this comment. It says:
"Fire strategy needs to be updated as per on site discussions."

Then your initials are there on the right-hand side in the column. Do you see that there?
A. Yes, I do.
Q. Now, what fire strategy is being referred to there, do you know?
A. As I say, my understanding was it was the fire strategy drawings, and I'm pretty certain after this meeting that the architect updated the drawings and I sent them over.
Q. I see. So this wasn't a reference to issue 3 of Exova's fire safety strategy for the building?
A. If it was, it's not how I took it. I took it to be the fire strategy drawings, and I'm pretty certain that they were updated and sort of -- yeah, a week or so later, because this was very soon -- in and around the time that we had the meeting with the Building Control and the architect on site, and, as I say, it got -- this fire strategy got discussed at that meeting as well, so -- and the architect updated these drawings and things.

So my understanding -- and I'm pretty certain that's how it got closed out, this -- was that the fire strategy drawings were updated.
Q. Can we just look at paragraph 70 of your statement at page 16 \{RYD00094213/16\}. You say there:
"During the period of my involvement there were a couple of times that Terry Ashton of Exova was consulted regarding specific advice on fire safety. Generally it was to do with queries raised in relation to the original fire safety strategy report. I personally corresponded with him about internal fire safety

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matters, by email and phone. My understanding was that he would answer any queries relating to the original fire safety strategy report."

Do you see that there?
A. Yes.
Q. On what basis did you understand Mr Ashton would be answering any queries relating to the original fire safety strategy report?
A. Well, I kind of got it from, I think it was Matt Smith, who said if you have any -- because I think I phoned Matt about the things, and he said, " If you have any queries about the report, ask Terry Ashton", and I don't remember whether the architect told me that as well.
Q. Right.
A. But I think it might have been, in fairness, from that earlier email you saw where Matt Smith and Andy Bridges from RJE were talking about it, and he said, "Any queries, go back to Terry about it ", so that's what I did.
Q. At any time when you were going back and forth to Mr Ashton, did you ever ask him whether Exova had considered the cladding or otherwise analysed the impact of the refurbishment on the external spread of flame?
A. No, I did not.
Q. In your experience, based on -- you have obviously
worked for Rydon for a long time --
A. Yes.
Q. -- did Rydon normally engage a fire engineer when carrying out major construction or refurbishment works?
A. My experience -- as I say, I have no experience of them doing it, but that doesn't say that on the larger buildings I've done, there hasn't been a fire strategy document. But, as I say, I have no recollection of ever seeing one on a Rydon site.

But I don't know if you're specifically talking about, yeah, the high-rise buildings or the other new-build buildings I've done for Rydon.
Q. I now want to ask you some questions about Carl Stokes, the fire risk assessor.
A. Okay.
Q. If you look at paragraph 71, it's on this page, you say:
"I liaised with Carl Stokes, Fire Risk Assessor for KCTMO, mainly answering his queries following his fire risk assessment inspections."

Do you see that there?
A. Yes, I do.
Q. What was your understanding of Carl Stokes' role relating to the refurbishment?
A. Well, my understanding was he had no role in the refurbishment; he was the client 's, so KCTMO's, fire

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risk assessor.
Q. Yes.

Now, at paragraph 102 \{RYD00094213/23\} of your statement, can we have a look at that, you tell us that you walked round the tower with Carl Stokes on 4 February 2016, and you say:
"The main purpose of this meeting was to look at areas impacted by the planned opening of the entrance atrium and the alteration to residents' access route into the Tower."

Do you see that there?
A. Yes.
Q. But was that visit also to carry out a pre-assessment of the building works prior to handover?
A. It was kind of that effect. The reason we called Carl down, and I think it was done through Claire, was we wanted to open the entrance lobby, and part of the sort of requisite from the client was to get some kind of completion certificate. We had asked Building Control to give us a completion certificate for the area, so they were -- the client or KCTMO expected that then it would be safe for the residents to come through the area.

Building Control, when I asked them, said, "No, we won't give you a completion certificate until the whole
building is done, that is more a fire risk assessment thing", so then we asked the client to send their fire risk assessor down to assess the new entrance route and sort of the new access/egress route for the residents, but he would say yes, it's safe for them to come through.
Q. Yes.
A. Because we needed to get them through that entrance lobby to be able to finish off the second floor where the old entrance was, or where the old access bridge was, because the old access was where the last flat was going to go. So until we could get them coming through the new lobby, we couldn't finish off our works.
Q. Right, thank you, that's helpful.

Can we just look at a couple of emails relevant to this. \{RYD00066527\}. This is an email from Steve Blake to Matt Smith and you're copied in, 1 February 2016:
"Hello Matt,
"I have arranged to meet Carl Stokes to carry out a pre assessment of the building works prior to handover."

Do you see that there?
A. Yes.
Q. Yes.

Did you also understand that this visit was going to enable Mr Stokes to prepare his record of significant

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findings and action plan which he then subsequently prepared in April 2016?
A. That's just to me a grand name for his fire risk assessment. That's what it was.
Q. Yes.

Let's have a look at an email briefly on this, \{RYD00065985\}. This is Steve Blake and I think it's to Carl Stokes, we can see he says, "Morning Carl", and you're copied in. He says:
"Could we meet at Grenfell next Thursday ...
"We are rapidly reaching the conclusion of the project and would appreciate the opportunity to ensure we have covered all formalities in respect of a [ fire risk assessment]."

Do you see that there?
A. Yes.
Q. Now, Mr Stokes' record of significant findings and action plan is dated 26 April 2016. Let's just turn that up. It's at \{RYD00094315/2\}. This is what it looked like. Do you remember seeing this on the project?
A. Yes.
Q. Yes.

What was your understanding of the purpose of this document?
A. It was his fire risk assessment, so it was the client 's fire risk assessment. He was working for KCTMO.
Q. Was it to satisfy the TMO that fire safety issues had been resolved?
A. Yes, that's the idea of a fire risk assessment, the purpose of it.
Q. Yes.

Now, we can see that you asked Mr Stokes to visit the site again just before this assessment was prepared on 7 March 2016 if we can go to paragraph 102 of your statement on page 23 \{RYD00094213/23\}. So we see that in the last line:
"On 7th March 2016 I requested that he visit the site again."

Do you see that there?
A. Yes.
Q. We can see this in your email to him of 7 March, \{RYD00070161\}. If we could blow the top up, this is an email from you to him, and you say this in the third paragraph there:
"I'd like to get you back to site this week to update the Grenfell FRA to satisfy the client so we open the main entrance lobby for residents, however
I understand that the client needs to agree this as you'll need to visit again once all systems are fully

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commissioned."
Do you see that there?
A. Yes.
Q. What did you mean by "to satisfy the client" there?
A. Satisfy the client that the entrance lobby was safe to open. So I think the one on 4 February we talked about earlier was like a pre-visit, "This is what I'm going to need off you", so then we obviously in the month after that done a load of work in terms of -- as I say, if I remember correctly, I think we opened the entrance lobby on 17 March, so we were very close to being ready, and we were trying to get everyone's approval that it was ready to let residents through.
Q. What I want to ask you about now is some comments Mr Stokes has made about what he was told about the cladding.
A. Yeah, okay.
Q. So I want to look at his witness statement. This is at \{CST00003063/42\}, and I want to look at paragraph 120. He says this:
"When inspecting the Tower in April 2016, I spoke to various people, including representatives from Rydon, however I cannot now remember exactly who I spoke to on this occasion. As I had noted the isolated test cladding panel when visiting the Tower in 2014, and in
particular the timber battens that were being used at that time, I asked about how the cladding had eventually been fixed to the Tower. As can be seen from my handwritten notes, following discussions with representatives of Rydon, I recorded 'OK FR No Timber' and 'Cladding external Non Combustible Metal Fixings signed off by B/C'. I do not remember the precise conversations I had, however my understanding on leaving the Tower after my inspection was that the actual cladding was compliant with the Buildings Regulations and that the obvious presenting issue (the timber battens) had been dealt with as metal fixings were now being used. In addition, as far as I was concerned, if the cladding itself and the system by which it was fixed to the building had been passed by Building Control, the system and component parts would have been compliant with the requirements of the Building Regulations and ADB. That is what I meant by reference to the 'new fire rated cladding' in the April and June 2016 FRAs [fire risk assessments]."

Do you see that there?
A. Yes.
Q. Now, Mr Stokes is referring there to initially these notes that he made, "OK FR No Timber" and "Cladding external Non Combustible Metal Fixings signed off by

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## B/C".

Do you recall any discussions you had with Mr Stokes during his visits in April 2016 about those topics?
A. Specifically, no, I don't remember, but if he says we did, we did. But the same as him, my understanding was that it had been passed by Building Control and the system and component parts were compliant with Building Regulations. So if I confirmed it to him, that's because that's what my understanding was.
Q. Do you have a specific recollection, though, of discussing the fixings?
A. No, but he says that -- yeah, it says no timber, and I would have definitely confirmed to him that there was no timber in the system and that metal fixings were being used. I don't remember specifically going into fire rating or anything like that. But same as him, my understanding was that that system was compliant.
Q. He says in the last part of that paragraph that, as far as he is concerned, if the cladding itself and the system by which it was fixed to the building had been passed by Building Control, the system and component parts would have been compliant with the requirements of the Building Regulations.

Did you ever have any discussion with him about whether the cladding had been passed by
Building Control?
A. Not specifically, but at the time he's talking about, I've struck every single mast climber around the building and we had 20 floors of finished cladding there, so I would say that was signed off by Building Control. But specifically in terms of, yeah, actually Building Control saying, "Yes, it's compliant", no, I have no recollection of saying that to him.
Q. He says that:
"... my understanding on leaving the Tower after my inspection was that the actual cladding was compliant with the Buildings Regulations ..."
Did you ever have that specific discussion with Mr Stokes?
A. I don't remember having that specific thing.
Q. Would it have been you that he was having these discussions --
A. It would have been me if I had, yes, because I was the one at that point who mainly dealt with Carl when he came on site.
Q. What about Mr Stokes asking you what the nature of the cladding materials at Grenfell were?
A. I don't remember specific conversations, I'm sorry, I don't.
Q. So you can't remember a conversation where you might
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have referred to fire rated cladding --
A. No.
Q. -- or talking about the fire performance of the cladding?
A. No.
Q. Is that that you can't recall having those conversations or that you actually think you didn't have those conversations with him?
A. I don't know. As I said to you earlier, I have a lot of conversations with an awful lot of people, that's my job, or it's a big part of my job, so I'm afraid I don't remember the specifics of every single conversation.
Q. Yes.
A. But if he said that he took it from that thing, that it would have been with me, I can confirm that.
Q. Yes. Just one last set of questions on this topic, and then we might pause for a break.
So I want to take you to an email thread that you weren't copied in to, but I want to see if it triggers any recollection for you. This is at \{CST00002764\} and this is an email thread of 24 April 2017.
Now, the genesis of this email chain is that the LFB had sent the TMO a letter, just so you understand, dated 6 April 2017 about external cladding and glazing following the Shepherds Court fire .
A. Okay.
Q. So the TMO had got a letter about that fire, and I want to pick this up at the bottom of page 1. So Janice Wray, we can see, at 9.34 asks Carl Stokes, she says:
"Carl
"My understanding is that we do not have any blocks with external cladding of this nature. Are you able to confirm please?
"I need to write back to the Director of Housing and I think you are probably best placed to advise me on the construction of our blocks."

Do you see that?
A. Yes.
Q. Then if we look at his response to that, we can see that he says on 24 April 2017 at 12.20:
"As far as I know that is correct.
"Grenfell was clad but the cladding complied with the requirements of the Building Regulations, lots of questions asked of Rydons and answers received back from them."

Do you see that there?
A. Yes.
Q. Now, do you remember Mr Stokes contacting you at this time, at any time in 2017 or April 2017, and asking you

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questions about the cladding?
A. No, I had no correspondence with Carl after I left Grenfell .
Q. Would you say that the exchanges you had had with Mr Stokes in 2016 resembled "lots of questions asked of Rydons and answers received back from them"?
A. Well, there was lots of queries in the fire risk assessment, so you could say that was lots of questions.
Q. Yes.
A. But I also would have expected that he would have talked to the earlier site team as well. He had been down to Grenfell prior to my involvement a number of times, I knew that.
Q. So he may have spoken to people before you got to site?
A. He may have asked lots of questions then as well. So, over the duration, he did ask lots of questions, but ...
MS GRANGE: Mr Chairman, I think that's a good moment for a break.
SIR MARTIN MOORE-BICK: Yes, so do I, thank you.
We will have a short break now, Mr Hughes.
If we say 3.25 , will that be all right for you? MS GRANGE: That's fine, yes.
SIR MARTIN MOORE-BICK: Please remember not to talk to anyone else about your evidence or anything to do with the refurbishment, and if you would like to go with the
usher, we will resume at 3.25 .
THE WITNESS: Thank you.
SIR MARTIN MOORE-BICK: Thank you very much.
(Pause)
Right, 3.25 , then, thank you very much.
(3.11 pm)
(A short break)
( 3.25 pm )
SIR MARTIN MOORE-BICK: Right, Mr Hughes, are you ready to carry on?
THE WITNESS: Yes, I am.
SIR MARTIN MOORE-BICK: Good, thank you.
Yes, Ms Grange.
MS GRANGE: Thank you.
Just a follow-up question on Building Control. Can we look at your witness statement on page 12
\{RYD00094213/12\} at the bottom of the page. If we look at the bottom of the page, 61.1. We went through this in detail previously, you say:
"On 30th October 2015 was my first contact with RBKC Building Control when I requested a site visit from John Hoban on 2nd November 2015, so Steve and I could discuss the project with him."
A. Yes.
Q. Do you see that there?

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Then over the page $\{$ RYD00094213/13\} at 61.2 , you say:
"I requested that John Hoban visit site to inspect the cladding on 11th November 2015 ..."

Do you see that there?
A. Yes.
Q. Going back to 61.1 \{RYD00094213/12\}, was there
a separate visit from John Hoban on 2 November 2015, ie before the one on 11 November 2015?
A. Yes, I believe he turned up the day after, I believe he turned up on 3 November. He didn't turn up when Steve and I was there, but he turned up the next day.
Q. I see. So did you meet him on that day?
A. Yes.
Q. When you say he didn't turn up when Steve --
A. No, so I requested he turn up on the 2 nd -- sorry, I got my -- but I remember him coming to site the day after .
Q. Yes.

Can we look at a document, \{RBK00003041/4\}. There, in the middle of the page, these are some notes we've got from RBKC's system. It says, 2 November 2015:
"Cladding inspection and meeting with new project manager."

So is what you're saying that that didn't happen on the 2 nd but it happened on the 3rd?
A. Sorry, my recollection is wrong then, he must have turned -- I didn't think he met with me and Steve, so he might have not turned up when -- Steve might have left site at that point, so then that was one-- and yes, he's saying that he met with me, although, as I say, I was never the project manager.
Q. Can you help us as to what was discussed at that meeting?
A. No, I'm afraid I can't.
Q. No.
A. I can't remember. It would have been sort of an introduction, have a quick walk round with him and just check whether he was okay.
Q. And you can't remember whether the cladding system specifically was discussed?
A. No, specifically no.
Q. Okay.

Moving on, then, just a few questions about fire doors. Can we go to a document \{RYD00078593\}. I want to look at an email at the bottom of page 1 and on to page 2 \{RYD00078593/2\}. You there send Mike Brown of Rydon -- you are attaching the "Grenfell Tower Significant Findings and Action Plan April 2016", and you say:
"Mike
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"Client FRA \& Rydon comments as discussed.
"Biggest thing is to prove FD30 to riser cupboards." Do you see that there?
A. Yes.
Q. Can you help us as to what that meant?
A. It was the riser cupboards, or, I described them earlier, the cupboards on the existing lobby. So from the 4 th all the way up to the 24 th floor, it was proving that those doors were FD30s. There was no markings on them because I think they had been painted, so we were trying to find sort of records from who we got them from that we had been supplied FD30 doors.
Q. If we can then look at your email to Steve Blake on page 1 , you say there at point 1 :

## "Hi Steve

"Non fire rated doors doesn't make sense for following reasons:
"1. We fitted smoke seals into doors."
Can you help us as to what doors you're referring to there?
A. Same doors, so talking about the -- on each of those riser cupboards, from the 4 th through to the 23 rd -sorry, not the 24 th -- there was two doors. So I'm talking about those doors and the new riser cupboards, the ones that Rydons built.
Q. After the numbered points, there is a sentence that says:
"John Hoban stated on last walk around that doors including cupboards off protected lobbies must be fire rated."

Do you see that there?
A. Yes.
Q. Now, can you help us: did Rydon ever carry out any works to the stairway doors, the doors between the stairs and the lobbies, on levels 4 to 23 ?
A. The only works we did was paint them.
Q. Right, okay. So did you fit any smoke seals to these doors?
A. No, we didn't, that was done by the client's
contractors -- or, sorry, KCTMO's contractors.
Q. Which contractors were they?
A. I don't know, it was done prior to my time, but I know there was some records, emails on the system about it because the contractors had left it in a right mess and all the residents thought it was to do with us, but it wasn't. Sorry, by "us" I mean Rydons.
Q. I see. So Rydon didn't do any work at all --
A. No.
Q. -- to any of those stair doors?
A. Apart from painting them.

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Q. Okay.

I now want to ask you some questions about the health and safety file.

Now, we've looked at the question of fire risk assessment, and can we call up again the record of significant findings and action plan dated
26 April 2016. This is at \{RYD00094315/3\}. I want to look at the first item in the third column. So here what we see is on "Identified risk or hazard", third column on the left, it says:
"When the construction/refurbishment work is completed on this building all information as required by the Building Regulations must be handed over to the TMO by the contractors before they hand over the areas now under their control."

Do you see that there?
A. Yes.
Q. If you look in the next column along on the right, under item 2 it says:
"All the Regulation 38 information as required by the Building Regulations."
A. Yes.
Q. Do you see that? It's marked as a high priority in the second red column.

Were you aware at the time of the requirements of
regulation 38 of the Building Regulations to provide fire safety information to the responsible person?
A. No, but I was aware that we had to hand over a health and safety file and O\&M file to the client at the end of the job.
Q. So you didn't know what your separate duties might be under regulation 38 ?
A. No.
Q. If it was anyone's responsibility, was that your responsibility within Rydon to ensure that fire safety information was passed to the client?
A. No, I wouldn't say it was, I would say it's the whole team's responsibility to pass it on.
Q. Right.
A. But as -- well, I think we talked about it, we employed a specialist to do the O\&M for us, provided all the information to him.
Q. Within Rydon, were you responsible for overseeing the production of the operation and maintenance, O\&M, manual?
A. No, but I helped a lot with it. I don't know if you're aware, but we contracted a company called
All Group Holdings to do the O\&M file and health and safety file for him. It was part of his contract to obtain the information and compile it in a way that the

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client wanted. But my agreement was -- there was an awful lot of things we had on our files . So, like, snagging sheets had to go into it. There were certain things he wouldn't get from anyone else apart from Rydons. So I sent over the documents that we had in our system, and I also said that, " If you struggle with any contractors, let us know as soon as you can and we will give them a little gee up as well".
Q. I think you began that answer, when I asked you were you responsible, with a "No, but I helped a lot with it ".
A. Yes.
Q. If not your responsibility, who else within Rydon was responsible for making sure --
A. Since this is a contract, in my mind it would be for the contracts manager to do that.
Q. I see. So that would be Steve Blake by this time?
A. Yes.
Q. Now, as you have explained already, we know that All Group Holdings were asked to provide and produce an O\&M manual and a health and safety file for Grenfell Tower. What steps did you take to ensure that the file was properly completed?
A. When -- as I say, it took a long time to do it, I think over about four months it took to compile the thing and get all the information together, and I know at one
point I got one of the drafts and I had a quick look through it. At the time, I didn't note any issues with it, but I never saw the finished file. It was handed to Claire Williams by Steve Butler, I think, from All Group Holdings, and, as I say, at the time she had the principal design or principal designer --
Q. I see. How were All Group Holdings going to collate the information that it needed, did you know?
A. Well, in line with the -- I'm pretty certain they had the contract document which set out what needed to go in it . We set out the -- well, we sent them, so they could give us a quote, the relevant section of the -- sorry, the NBS specification, I was about to say the ERs, but the NBS specification, the relevant sections that he needed to find out what he needed to get off the contractors.
Q. I see. So you expected All Group Holdings to then liaise with the subcontractors to get that information?
A. Yes, yeah. I did have a couple of meetings with them along the way, sort of checking on progress, so I certainly was involved in the meeting with him and Claire as well. Obviously ultimately we were trying to satisfy Claire that she had all the information that she needed.
Q. At the end of the process, did you take steps to satisfy 205
yourself that the O\&M manual that was presented to the TMO was the complete manual?
A. I never saw the completed manual. It got handed to Claire, I think, by thumb drive.
Q. Do you know why you never saw it?
A. Just never got a copy of it, or it never went on our systems, so ...
Q. Did you understand that there were requirements in the CDM regulations for the preparation of a health and safety file?
A. Yes, as I said, I am aware that one of our sort of contractual obligations is to supply an O\&M file and a health and safety file at the end of a contract.
Q. Did you know what that file had to contain?
A. Well, anything relevant or as set out in -- sorry, I keep calling them the ERs, as set out in the specification.
Q. I see. So you didn't look at a particular document or guidance to help you as to what it should contain?
A. No, I would expect what was in the specification was -would be what was required.
Q. Now, two copies of the health and safety file have been provided to the Inquiry, one from Rydon and one from the TMO. The Rydon version has a section 4, health and safety file, but this section contains no information,
whereas the TMO version contains an index that we'll look at in a moment.

Can you help us as to why there might be two versions of the health and safety file that are different, one from Rydon --
A. As I said, I got an earlier draft of it and that would be the one which was on our systems, so that would be the one that I had a look at, but I believe the O\&M files actually got handed to Claire after practical completion and it was given to her on a thumb drive, but I never got a separate thumb drive so I could copy it on to our system.
Q. Can we look at \{MET00065979\}. This is an email of 23 May 2016. So this is from Steve Blake to Neil Reed, and you're copied in. It says:
"We are all working towards a partial possession/handover date 27/5/16 which is 4 days away ..."

Then you can see towards the bottom, just before the end of the email:
"The $0+\mathrm{M}$ drop box(sic) link will be provided later today."

Do you see that?
A. Yes.
Q. Is it possible that, because partial possession and

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handover was contemplated, there was an earlier draft but incomplete version of the O\&M manual, and then later a second full version after full practical completion? Is that possibly the reason why we see two different --
A. Possibly. I don't know if that's absolutely correct or whether it was just -- as I say, we started work on it back in I believe April sort of time, and we had a partial copy from Steve Butler.
Q. Can we look at a document which is the contents page for the health and safety file. This is \{TMO10013708\}. So this is the contents page for the health and safety file which was included in the building manual.

Can you remember seeing this before?
A. As I said, I only looked at the draft version, which would have been probably, as you say, around about March time, so no, and I didn't look at it in great detail.
Q. No.

We can see from an email on 27 June 2016 that you were copied in to this contents page.
A. Yeah.
Q. Can you see that it includes cross-references to other parts of the building manual?
A. Yes.
Q. Do you see that there?
A. Yes.
Q. Did you ever check those cross-references?
A. No.
Q. Were you aware of guidance supporting the
CDM Regulations which explains what a health and safety file should and shouldn't include?
A. Specifically as to exactly what it should include, no,
I am not aware, but I am aware that it is a contractual obligation to supply it.
Q. If we look there at B1 under "Architectural Design", it says, "Architects As Built Drawings", and then it says:
"Please refer to the Drawings located in the
Building Manual - Part 2 - Section 2.1.2.2."
Do you see that?
A. Yes, I do, yeah.
Q. Then if we can look at \{TMOM00000001\}, this is the contents page for the building manual, and if we go to page 9 \{TMOM00000001/9\}, which is section 2 , what we see is there is no 2.1.2.2. It's not there and it's not over the page, if you look over the page
\{TMOM00000001/10\}. So that cross-reference appears to be wrong.
Did you notice that at the time?
A. No, I did not.
Q. Did you ever check points like that to check that it --
A. No, I remember looking at it very briefly but not going

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over it in great detail.
Q. Now, in its investigations we have discovered that the Rydon version of the O\&M manual was edited on 14 June 2017, that's the night of the fire. We can look at the metadata.

If we can go to \{BLARP20000006/208\}. If we can blow up that top box, this is figure 17.1, and what we can see is that the metadata for the manual has been accessed, and it says "Created: 14/07/2017". Do you see that there?
A. Yes.
Q. Were you aware of the O\&M manual being accessed or edited that day?
A. I was in the office on the day of the fire, so I was outside Steve Blake's office, and on the day of the fire I -- as I say, it is very blurry that day, but I know I had a meeting with the health and safety department where I was asked to get the relevant documents and we transferred them to a new part of our system. So I think Simon O'Connor talked about this, there is an M drive, but there's also on Rydons a filing system called the RWay system, which was a newer system, and that's what the majority of the company worked off at the time.

So the meeting I had, health and safety team asked
me to sort of get the relevant documents, and one of the first ones I got was the O\&M file and I copied it across to the RWay system. I don't know if that is the reason why it looks like there's a new creation.
Q. Yes, that helps.

Did you do anything with the contents of the file?
A. No.
Q. No, you just saved it over on to --
A. Well, yeah, just copied it over from one part of our system, the old part of our filing system, to the new part of our filing system.
Q. Yes, that's helpful.

So just one last question on this topic. If we can go to \{ART00005362\}, these are some meeting minutes from 23 February 2016, progress meeting 20 , and we can see you're present.

If we can go to item 2.20 on page 4 \{ART00005362/4\}, we can see that there's an action there about fire protection works to start with:
"... nothing further is to be progressed other than the remedial works required of the CoW in relation to Rydon's own works."

Then if we keep going down:
"Carl Stokes will produce a report in the form of the Fire Risk Assessment ..."

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At the end:
"NR requested that this be included in the H\&S File (CDM) on Completion as formal recognition of a fire risk shortfall and potential 'residual risk' arising from the building in its previous form."

Do you see that?
A. Yes.
Q. Do you know whether the health and safety file was ever updated to include this?
A. No, I don't, but I also think that what Carl Stokes is talking about is what we talked about earlier, which is the holes through the existing riser cupboards which we fire proofed.
Q. Yes.
A. So there was no -- and we also did something very similar down in the main electrical cupboard as well, fire proofed some existing holes. So where we saw issues with compartmentation, we fixed them.
Q. Yes.

I now just want to ask you a few brief questions about the smoke control system and the related interface panels.

So in your statement you say that you ran a tour for the local Fire Brigade on 26 July 2016 at which you showed them the operation of the human mechanical
interface, HMI, panel for the smoke extract system and the automatic opening vents in the lobby areas. You discuss this at paragraphs 92 and 93 of your witness statement on pages 21 \{RYD00094213/21\} and 22 \{RYD00094213/22\}. So that's where you say that you ran familiarisation tours. You talk about the TMO in 91 and then the tour for the Fire Brigade on 26 July 2016 in 92.

Now, is this HMI, human mechanical interface panel, the main control panel for the smoke extract system in the lobby?
A. Yes, the one in the lobby, yes.
Q. Can you remember how you demonstrated the operation of that HMI panel and the AOVs for the Fire Brigade?
A. No, I don't remember specifically, but I knew it was a fairly simple system that I obviously had -- well, I got to learn how it worked through -- with -- sorry, with JSW and PSB, so it was quite a simple one. I think I just showed the Fire Brigade the very simple thing, and there was a little instruction manual to the side and it sort of explained that. Because -- as I say, to the side there was a little instruction manual which related the numbers on the panel to the levels that the AOVs were on in the building, so the floor levels.
Q. Right, yes, I see, and was the smoke extract system and

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the AOVs working during the tours that you did?
A. Yes.
Q. Were the LFB provided with instructions as to the operation of that smoke extract system, to your knowledge?
A. To my knowledge, no.
Q. If we can look at paragraph 118 of your witness statement on page 26 \{RYD00094213/26\}, you say at this point:
"I was involved in the 'End of Defects' (EOD) inspection at the end of May 2017, about two weeks before the fire. It was arranged with Claire Williams and was booked for two full days. On 30th May 2017, I walked round with Claire Williams, Tom Bishop, Rydon site agent, and on the 1st June 2017, Gary Martin, site manager, joined us."

Do you see that there?
A. Yes.
Q. Then you tell us in 119 :
"The reason for an EOD [end of defects inspection] is to revisit all of the building works at the end of the 12 month defect period, to see if any work is defective and requires repairing, with the aim of creating one definitive list of defects. When all defects have been rectified, inspected and approved or
signed off by the client's representative, then responsibility for any further issues is the client's." Do you see that there?
A. Yes, I do.
Q. Then looking at paragraph 121 of the statement, \{RYD00094213/27\}, you say in the first few lines there:
"It was during the walk-round of the communal lobbies on the upper floors on 1st June 2017 that I noticed that the environmental function of the smoke extract system was not working."

Do you see that there?
A. Yes.
Q. When you realised that, did you think to yourself: well, if the environmental aspect of that system is not working, then there might be a problem with the smoke control aspect of that system?
A. Yes, I did think that.
Q. You also say that you went -- this is in the next few lines:
"I checked the main control panel, with Claire Williams present, and noticed that it did not appear to be showing that any vents were open."

Do you see that there?
A. Yes.
Q. Is that the same HMI panel that you demonstrated --

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A. Yes.
Q. -- to the Fire Brigade and others? Yes.

Had the HMI panel previously shown, if it was working, that the vents were open?
A. If the vents were open it would show on the panel.
Q. Yes. So you could see that on this occasion, and you say that Claire Williams of the TMO told you that a company that was going to take over maintenance of the smoke extract system had come to look at it two weeks previously and had set the system off; do you see that there?
A. Yes.
Q. What was Claire Williams' reaction to this discovery that the environmental system wasn't working and that none of the vents were showing as open on the panel?
A. What I remember is Claire was also shocked because I don't think it was Claire that had called them in. My understanding was KCTMO -- as I said -- sorry, go back a stage. In the defects, once that building is handed over and we've proved we've done everything or all the outstanding defects which have occurred in the last year, then it's KCTMO's responsibility. KCTMO, from my understanding, were starting to line up contractors to carry on the maintenance and servicing of Grenfell.
Q. Yes.
A. So I think somebody jumped the gun trying to get them in, but I do remember Claire being -- sort of saying that she was shocked because it wasn't her who called them in.
Q. Did she seem to understand the potential significance of the system not working in terms of the smoke control system?
A. I understand that Claire would be, yeah, rightly worried. But also, it's come to light afterwards that it might not have been such a big thing anyway, because it was a really hot day when we done that walk-around, and the environmental system also had a shut-off system on it, which if the air outside is hotter than the air inside, then it wouldn't work, it wouldn't basically bring in hotter air. The idea was to keep the lobby areas cooler. So if it was hotter outside than it was inside, it wouldn't bring the air in, and it was a really hot day that we done our -- sort of the two days we did the walk-around were hot days, so --
Q. Right. Did you have that thought at the time, that that might be the reason?
A. I didn't have that thought at the time. My worry at the time was that it didn't look to be working. I would expect it -- I think I -- I don't know whether -- it's hard to explain, but it didn't work on every floor at

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every time, so it went through a rotation --
Q. Sorry, do you want to just slow down a little bit. I think we got to -- you said it wasn't going to work on every floor at every time; is that right?
A. Yes, okay. It worked on a rotation system, so it would do, if I remember, every five floors at a time, and then it would work for 15 minutes, then it would move up a rotation.
Q. Yes.
A. So, yeah, and like I said, it only worked -- it also had a temperature sensor outside that if the air outside was hotter than the air inside, it wouldn't work, because all you'd be doing was bringing hotter air in, and that wasn't the purpose of the system. But I think, like I say -- I think I also say that I wasn't sure because, in terms of me walking round, we were also that day going in and out of flats looking at any defects inside the flats, but I might have happened to miss the rotation.
Q. Did you explain to Ms Williams at this time the relationship between the environmental system and the smoke control system?
A. At the time, I don't think I did, but I would hope that Claire was aware of what we had done, because obviously we had done the work a year earlier and it was part of
our specification.
Q. Now, you go on in your statement to explain that you were sufficiently concerned that you reported the malfunction to JS Wright's aftercare department. That's right, isn't it, you phoned it through to JS Wright's aftercare team? Can you recall, what was JS Wright's response when you did that?
A. Same as every time I phoned them up, that they would get it organised as quick as possible.
Q. Yes.
A. And I'm pretty certain they asked me to send over an email and I sent over an email and sent some photos.
Q. Yes. We can see that. If we go to \{RYD00094213/64\}, there is an email you sent on 1 June to their aftercare department, where we can see you're saying:
"Further to my e-mails about defects at Grenfell, the environmental mode on the AOV system is not working.
I walked all 24 floors on Tuesday and it was not operating on any floor."

Do you see that? We can see from the attachments that you are sending photos.

Do you know whether JS Wright followed up on the defect report?
A. I now know they didn't, but at the time I had no reason to suspect that they wouldn't because JSW had the best

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aftercare department that I have ever worked with. In fact, there was a couple of times in the year previously that I'd gone up there and phoned through a defect and somebody had arrived an hour later.
Q. Did you ever check whether they had attended to the matter or somebody else had attended to the matter?
A. No, I didn't.
Q. Did you ever contact Claire Williams again to emphasise the importance of this issue?
A. No, I didn't.
Q. Did Claire Williams subsequently contact you about the system?
A. No, she didn't.
Q. Now, we know that that was, I think, your last visit to Grenfell Tower, wasn't it?
A. Yes.
Q. 1 June 2017.

Can we turn to a document, \{RYD00086541\}. I think
this was your weekly defect update report for Grenfell Tower.

I want to look -- I know it's quite a small font here, but look at line 6 in the main text. There is a line that says, "AOV system not working properly" that you can see in the description. Do you see that there?
A. Yes, I can.
Q. You have got "Service By: JS Wright" in the next column. It's created on 1 June 2017, and then you have got a target complete date of 29 June 2017. Do you see that there?
A. Yes.
Q. Can you explain why that target complete date was 28 days after the defect had been logged?
A. No. This -- as I say, this document is dealt with by our Rydon's aftercare department and they're obviously given response times as per the contract. I don't understand why it was given a date that thing -- that long.
Q. Did you not think that it needed to be dealt with more urgently than in 28 days?
A. I never saw this document, and, as I said, every other one I had ever phoned through to JSW was dealt with very rapidly.
Q. Okay.

Final topic for my questions, Mr Hughes. I just want to ask you about snagging of broken and draughty windows.

To what extent were you made aware during your time on the project, or indeed after when you went back to Grenfell Tower, that there were complaints being made about gaps around the windows?

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A. I did visit a couple of flats and felt a bit draughty in a few places.
Q. So you agree that you did receive some complaints about draughty windows?
A. Yes, and I visited a couple of flats as well, as I say, afterwards and during the works as well.
Q. Can we look at just two emails on this. So if we go to \{HAR00017538\}. This is someone called Emma Kelly of Rydon to you. Sorry, to be fair, it's to Ben Bailey and Ray Bailey but copying you in. She says:
"It has been noted that there is a large number of defects relating to windows open on our system, some of which have been open as long as August. This is not acceptable and we are not receiving any response from our chaser emails/calls. We must ensure that defect are closed out within the target rectification time provided."

Do you see that there?
A. Yes, I do.
Q. Were you concerned at this point about the quality of the window installation?
A. The quality of the window itself, no, I wasn't, but I asked -- Emma I think phoned me and said sort of, "Can you possibly give the Baileys sort of a chase because we have got this outstanding and things ". I said to copy
me into it. I don't remember, but I think I also asked Steve because Steve had the better relationship to Harleys to say they need to come and sort this out.
Q. Did any of the concerns that were raised about the quality of the window installation ever trigger in you a thought about whether the fire safety of those windows might be adequate?
A. No, they didn't.
Q. Can we look at another document. This is a bit later. So that was January 2017, I want to look at May 2017. This is \{RYD00086363/2\}. There is an email from Lee Chapman to Ben Bailey dated 14 May. We can see it's about flat 195.

We can see about four paragraphs down it's said:
"Under the window sill in the kitchen I can get my fingers underneath, probably about a 10 mm gap, then a 5 mm gap up the side.
"In the living room, there are 3 windows."
And again, there's talk of gaps:
"... around $3-4 \mathrm{~mm}$, which gets very drafty ( sic ) in windy weather, there is now a finishing stripe and it is not sealed."

Et cetera.
So we get a sense of that.
Then there are various chasers about this .
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Were you made aware of this at the time, that there were complaints about draughts and gaps around windows?
A. I was aware of a couple of them, yes.
Q. Again, the same question: were you not concerned about the quality of the installation of the windows upon being made aware of this kind of complaint?
A. It did raise some concerns with me, but I was concerned at the time that it was -- I keep using my hands to try and illustrate, but it was an issue with the support underneath, because none of the issues were ever around the sort of top and sides, so I thought if there was gaps round there we would also be getting reports of water coming in as well, and we never had one report of a leaky window at all.

So my understanding -- or what I had in my head, that there was an issue at the bottom with how the metal plate which held the windows up wasn't possibly properly sealed -- as I say, I don't remember actually seeing how it was done on site, because, like I say, a lot of the windows were in and insulation underneath them. I never saw actually how that was finished. So whether or not -- I had in my mind that there was an issue with the sealing behind that metal plate or the metal bracket the window sat on.

Like I say, it was always at the bottom of the
windows; it was never the top and the side. So it was never a waterproofing issue, otherwise we would have been getting reports of leaky windows as well.
Q. Okay.
A. So that's the thought process which went through my head at the time.
Q. Were you ever concerned that issues such as poorly installed windows might provide a route for fire spread around the windows?
A. No, I didn't have any concerns.
Q. Did you ever investigate these issues personally?
A. I went into a couple of flats and I did feel the draughts, and my remedy was to mastic up the gaps from the inside, because at that stage -- as I say, while we had the mast climbers up, nobody ever came to me with an issue, so the issues didn't start appearing until after the mast climbers had finished or had been dropped, so it was impossible to get back to the outside and see what my suspicions -- whether they were true. So I just dealt with the issue that there was at the time, which was the draughts, and sealed up all around the uPVC.
MS GRANGE: Thank you, Mr Hughes.
Mr Chairman, I have come to the end of my questions.
SIR MARTIN MOORE-BICK: Good, thank you.

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MS GRANGE: But we obviously need to take the customary break to see if there are any final questions.
SIR MARTIN MOORE-BICK: Yes.
Well, as you heard, Mr Hughes, those are all the questions Ms Grange has for you, but we have to have a pause now just to make sure that there are no further questions that might need to be put to you. So we are going to break now until 4.15 .

Will that be all right?
MS GRANGE: Yes, that should be fine.
SIR MARTIN MOORE-BICK: And we will come back then and see if there are any more questions.
THE WITNESS: Okay, thank you.
SIR MARTIN MOORE-BICK: Would you like to go with the usher. Thank you.
(Pause)
Right, we will say 4.15 .
MS GRANGE: Thank you.
( 4.03 pm )
(A short break)
( 4.15 pm )
SIR MARTIN MOORE-BICK: Right, ready to carry on, Mr Hughes? THE WITNESS: Yes.
SIR MARTIN MOORE-BICK: I think just a few more questions. MS GRANGE: Yes, just a few.

Going back to that 2 November 2015 Building Control visit --
A. Yes.
Q. -- do you remember we looked at that just before, when we restarted last time? Can you remember whether Mr Hoban actually went up the hoist and looked at any of the elevations at that point?
A. No, he didn't. The first time I took him up the mast climbers was on that first one we discussed, so --
Q. 11 November 2015?
A. Yes.
Q. So not on 2 November 2015?
A. No.
Q. Okay.
A. As I say, I hadn't agreed with him to take him up there, and it takes an awful long time to go up there and come back down, so it was something that I had prebooked with him, that he would need to give us some time to do it .
Q. I understand.

On fire risk assessment and fire risk assessors, did you generally have experience of fire risk assessors considering the cladding or external façade of a building?
A. No, I didn't, because that's probably the first time that I've really had interaction with a client's fire

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risk assessor.
Q. What was your understanding about why Mr Stokes was asking about the cladding? Did he give you any reason --
A. It was part of the communal part of the building or the outside of the building so he was, well, I guess, informing the client of their risks.
Q. Did he seem to you to have a particular interest in the cladding?
A. No, he didn't seem to. I always thought he was more interested on the inside of the building and how it interacted with residents.
MS GRANGE: Mr Chairman, those were all the follow-up questions I had. That's it.
SIR MARTIN MOORE-BICK: Well, it was a few questions, Mr Hughes, wasn't it?

Thank you very much, Ms Grange.
Well, that's all the questions we have for you.
THE WITNESS: Okay.
SIR MARTIN MOORE-BICK: It just remains for me to thank you for coming to give your evidence. It has been very helpful to hear you, and you are now free to go.
THE WITNESS: Okay, thank you very much.
SIR MARTIN MOORE-BICK: Thank you very much.
THE WITNESS: Thank you.
: That's correct
SIR MARTIN MOORE-BICK: 10 o'clock tomorrow, then, please.
Thank you.
( 4.19 pm )
(The hearing adjourned until 10 am on Tuesday, 28 July 2020)

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MR DAVID HUGHES (affirmed) $\qquad$ ... 1

Questions from COUNSEL TO THE INQUIRY ......... 1 .... 1
(The witness withdrew)
SIR MARTIN MOORE-BICK: Thank you very much, Ms Grange.
That's all for the day, I imagine?
MS GRANGE: Yes. Tomorrow Mr Millett will be taking
Mr Blake.
SIR MARTIN MOORE-BICK: Good. And that will be at
10 o' clock?
MS GRANGE: That's correct
SIR MARTIN MOORE-BICK: 10 o'clock tomorrow, then, please.
Thank you.
( 4.19 pm )
(The hearing adjourned until 10 am on Tuesday, 28 July 2020)

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