Wednesday, 6 March 2013

(10.00 am)

(Proceedings delayed)

(10.47 am)

THE CORONER: Yes, good morning. Where are we?

MR MAXWELL-SCOTT: We are ready to proceed with the second half of my questions to Mr Walker in relation to fire risk assessments. Once that is concluded, I suggest that would be an appropriate moment to take another break and see what representations may be made.

THE CORONER: All right. Is everyone content with that? Thank you very much. Yes, please, could we invite the jury to come in. Mr Walker, do come and sit down. I'm sorry you've been kept waiting so long. Do help yourself to a glass of water, and if you could switch on the microphones, please, that would be helpful.

(In the presence of the Jury)

THE CORONER: Members of the jury, good morning. My apologies for having kept you waiting for so long. We're going to continue with Mr Walker's expert evidence. So Mr Maxwell-Scott, if you'd like to take over the questions, please.

DAVID WALKER (continued)

Questions by MR MAXWELL-SCOTT (continued)

MR MAXWELL-SCOTT: Good morning, Mr Walker.

A. Good morning.

Q. The point we had reached is we had finished your expert evidence to my questions in relation to the first of the two main topics you were asked to address, the first one being Building Regulations and Building Control issues. So we now turn to the second main topic, which is fire risk assessments, focussing in particular on the fire risk assessments after the Fire Safety Order came into force.

A. Right.

Q. I know that in your report you've tended to describe the Fire Safety Order as the RRO, but just so that the members of the jury can follow it, we'll stick, if possible, to the phrase "Fire Safety Order" in your evidence.

A. Okay.

Q. You start to give your expert opinion on this topic at page 24 of your report.

A. Yes.

Q. Is it right that fire risk assessments of blocks of flats were not commonplace before the Fire Safety Order came into force in October 2006?

A. Yes, that's correct.

Q. And that before that order came into force, local authorities had limited experience of undertaking fire risk assessments?
A. Yes, my experience is that the knowledge and the frequency of them being undertaken was very limited.
Q. Is it right that whilst formal fire risk assessments were not commonplace for blocks of flats before 1 October 2006, local authorities were nonetheless carrying out general inspections of their property portfolio, which would have included some consideration of fire safety issues?
A. Yes, that's correct. The maintenance schedules that local authorities operated included upgrades of buildings, which included fire works as well.
Q. If we look, then, at the introduction of the Fire Safety Order. I'm looking now at page 26 of your report. The Fire Safety Order was made in June 2005, originally due to come into force on 1 April 2006 but in fact came into force on 1 October 2006; is that right?
A. Correct.
Q. Is it right that in your experience, very few organisations started their planning until the Fire Safety Order had in fact come into force?
A. Correct.
Q. Can you help us with what sort of planning would be

required, in principle, by a housing provider such as a local authority to begin a programme of fire risk assessments? I'm assuming it is rather more complicated than simply sending people out the next day and telling them to get on with it?

A. Yes, first of all they would have to review a -- their policy of how they were going to undertake that and to -- for housing providers who have many buildings to do a risk analysis of their property portfolio. So they would need to make sure that the high priority buildings, those with greater risks, whether through the age of them, the height of them or the number of occupants in these buildings, were perhaps brought forward in that programme.

Also the -- somebody called a "responsible person" has to be put in charge of the process, so effectively a person that will take charge of organising and making sure that those buildings do comply with the RRO -- sorry --

Q. The Fire Safety Order.

A. The Fire Safety Order. The process that they would put in place is making sure that any fire risk assessments that were undertaken were undertaken by a competent person doing that.

Q. Just pausing there to break some of these points down,

firstly, is it right that one would have to decide upon a strategy and a policy setting out who would be responsible for organising fire risk assessments?

A. Yes, yes.

Q. Is it right that the Fire Safety Order does not apply to domestic premises but does apply to the communal parts of blocks of flats?

A. Correct, yes.

Q. So would it be necessary to identify which residential blocks of flats in a property portfolio had communal areas and were therefore caught by the Fire Safety Order?

A. Yes, that's right.

Q. Would it be necessary to develop some form of standard documents to be used when conducting fire risk assessments?

A. Yes, it's far easier to try and promote consistency by having a standard document, and standard documents were available and are available, although very limited back in 2006. These have been developed since, but there were standard documents available.

Q. Let me ask you then about if one had taken those steps and begun to think: "Which blocks of flats shall we start with?" Because one has to start somewhere with a programme of fire risk assessments. Firstly this:

does the Fire Safety Order itself say anything about the desirability of prioritising and how to prioritise which premises to fire-risk-assess first?

A. Yes, is the answer to that. I can't recall exactly what it says in there but it highlights that the -- you should prioritise high-risk buildings.

Q. Just on this point of detail, I'm looking at the bottom of page 26 of your report. In fact, here you say:

"One would need to have a strategy prioritising the blocks to be assessed first. There isn't a provision in the fire safety record requiring owners to prioritise high-risk buildings but it was generally accepted by the fire service that it would be desirable to deal with high-risk blocks first."

A. Sorry, yes, that's correct. That is correct.

Q. If I ask you then about points that you make on page 27 of your report. Firstly, in your experience, what sort of progress had housing providers made with their fire risk assessment programmes by July 2009?

A. It was very mixed. The programme was taken seriously by some housing providers, and some had taken action straight away, but there are many gaps in that, and it wasn't until the fire at Lakanal House that people then started to take things more seriously and put things in place.

Q. In paragraph 3.4.18 of your report, you say:

"It is difficult to estimate what percentage of blocks of flats, both nationally and in London, had suitable and sufficient risk assessments by July 2009, but in my opinion it is likely to have been a low percentage."

A. That's correct. My experience is that we have been involved -- we, Ridge and Partners, have been involved in undertaking a lot of fire risk assessments following that period and a lot have been undertaken for the first time during that period, so a very low percentage, in my view.

Q. So your practice gets commissions, does it, from owners of premises, including local authorities, to conduct fire risk assessments?

A. Yes, it does.

Q. What change have you seen in the volume of instructions since the Lakanal House fire?

A. Since the Lakanal House fire, our instructions have been increased dramatically. We did some before then but very limited in tower blocks and residential accommodation. But since then -- certainly 2010/2011 -- it has taken off enormously, where people are now taking it seriously and implementing the fire risk assessments.

Q. When you are instructed nowadays to carry out fire risk

assessments, will it always be the case that at least somebody has done a fire risk assessment under the Fire Safety Order before you are brought in, or do you sometimes find that you're the first person asked to do them?

A. Yes, we're still finding that out now. This year already, we're doing some that have never been risk-assessed before.

Q. May I then ask you about your views on Lakanal House as part of a portfolio of properties and about whether there are any features of it that, in your view, would suggest it ought to be given relatively high priority for fire risk assessment?

A. Yes, there's a list of items that I believe you would have looked at at Lakanal House: the height of the building; the number of residential units within that building; the unusual construction of the building, with the maisonette structure on two floors with a corridor on alternative floors; the age of the building; the single fire escape staircase; and previous history of fires.

Q. For those reasons, do you take the view that Lakanal House was a high-risk building which ought to have been prioritised and assessed early in any programme of carrying out fire risk assessments?

A. Yes, I do.
Q. If I ask you then about the knowledge and training and competence required to carry out fire risk assessments. I'm looking now at page 31 of your report. If I approach it first in this way: is there any requirement in the Fire Safety Order for persons carrying out fire risk assessments to have specific qualifications?
A. No, it just says they have to be competent.
Q. So no requirement for specific qualifications, and does it follow no requirement for specific training to have been undertaken?
A. The wording in the document is:

"A person is to be regarded as competent for the purposes of this article where he has sufficient training and experience or knowledge and other qualities to enable him to properly assist in the undertaking of preventive and protective measures."

So the -- but there is no set level of training.
Q. If I then put two alternative propositions to you so that you can help us with which you think to be more accurate: firstly, the proposition that if you're competent to do one fire risk assessment, you're competent to do all fire risk assessments, and then, on the other hand, the proposition that it depends on the nature and complexity of the building, and that somebody

might be competent to fire-risk-assess a small, simple building but not necessarily a complex building. Which of those would you tend to agree with?

A. It's the second. The guidance is that a simple building could be undertaken by, for example, a housing officer up to a height of three stories, so a simple building. However, if there's a complex building -- complex in many ways from a construction point of view, but certainly a high rise building -- then it should be somebody with a good technical knowledge of construction that undertakes that fire risk assessment.

Q. Does it follow from what you have just told us that in your view, housing officers would be potentially competent to carry out some fire risk assessments?

A. Yes, I agree.

Q. Would you be able to assist the court with the extent to which you would regard Lakanal House as a complex building, and therefore more difficult to carry out a fire risk assessment on?

A. Yes, the Lakanal House is more complex because of the communal services such as the heating, such as cross-ventilation requirements and, as we've heard, the requirement of various compartmentations and separation for Building Regulations, fire resistance in materials.

Q. What implications would that have, in your opinion, for

the level of competence required to be sufficiently competent to carry out a fire risk assessment of Lakanal House?

A. The person undertaking the fire risk assessment should have some technical knowledge. Now, they don't need to be a construction person, but they do need to have a good construction knowledge to be able to assess what the risks are.

Q. Then if I ask you about the format of fire risk assessments when they are carried out. I'm looking now at page 32 of your report. Is it right that there's no prescribed format prescribed by the Fire Safety Order?

A. Yes, that's correct.

Q. But as you've indicated earlier there are standard forms for persons to complete?

A. Yes, there are.

Q. Were there such standard forms available before the Lakanal House fire?

A. Yes, there were forms available in 2005, and they were continually improved, and then, as the years went on, there are more forms available. And even now, you know, there are being published additional forms with more detail.

THE CORONER: Who is making these available? Who's publishing these?

A. There's a wide variety of people. The public access specification, known as PAS 79, was probably the guide at the time. There are numerous -- I don't know all the publications.

THE CORONER: Thank you.

MR MAXWELL-SCOTT: If I ask you then in principle about the action points that might arise once a fire risk assessment has been carried out on site. I'm looking at page 33 of your report. What, in general terms, is the outcome of a fire risk assessment?

A. The outcome is that you have to identify the hazards, you have to identify the people at risk, you then have to evaluate what you found in identifying the hazards, evaluate those, and you should make a record and an action of those that need work undertaking to it. So the outcome should be that there is a recommendation for action to be taken.

Q. Was that the case before the Lakanal House fire as well?

A. There -- to my knowledge, no, not effectively.

Q. Your report refers to action plans, which would effectively be recommendations that work be carried out to remedy problems identified in the fire risk assessment; is that right?

A. Yes.

Q. Would recommendations, in your experience, simply be

expressed as "This needs to be done" or would it be normal practice to provide slightly more guidance than that and to indicate which action points were higher priority and which were less urgent?

A. Yes, the guidance is to give it a priority, so whether that be high priority, medium priority or low priority. Some of the forms and guidance differ and have different categories, but generally the one that is used are the three categories: high, medium and low.

Q. In your experience, were forms being used before the Lakanal House fire as detailed as that? Did they, at that time, enable one to say whether matters were high, medium or low priority?

A. No, there was no specific guidance on the action required on many of the points.

Q. So that feature of industry practice has become more sophisticated since this fire; is that right?

A. Yes, it has, and even now you still get reports that are prepared that don't set out the action and the priorities correctly.

Q. You have had the opportunity of a site visit to Lakanal House. Bearing that in mind, what I now want to ask you is to give a broad description of, in your view, how long it would take to carry out a suitable and sufficient fire risk assessment of Lakanal House and

which parts of the building one would expect to look at.
A. Okay.
Q. I'm looking at pages 33 and 34 of your report.
A. Yes. The inspection of Lakanal House would be undertaken to the common parts of the building, so those areas that effectively are everywhere that the landlord would go but not necessarily inside the flats, but I'll come back to that in a second. My view is that it would take four to six hours to carry out an inspection of those common parts, and those common parts would include the stairwell, would include the balcony, if it was accessible, and all plant rooms, the undercroft, the external areas to look at the access and any cupboards and risers within the common parts.
Q. Just pausing there, can you just explain to the members of the jury what you mean by the "undercroft" and the "plant room", and where they are at Lakanal House?
A. Sorry, the plant room is on the roof, which has the lift motor room, water tanks, et cetera. So it's a place of work for caretaker, maintenance et cetera, also on the roof. And the undercroft of Lakanal House is an area underneath the first floor accommodation, basically, that is an open -- or partly an open area beneath the building.
So I would expect four to six hours to be on site

for the inspection, perhaps one hour or thereabouts for looking at documentation that is available -- although that's not always available when you look at sites and buildings -- and then somewhere around probably four hours to write the report, so to clarify what action points are needed from the items that you've raised, the hazards you looked at.

So in total around 11 hours for the site inspection, looking at the documentation and producing the report.

Q. I'll come to inspection of flats in a moment, but before I do so just a couple of short matters. Is it right that we need to be clear that a fire risk assessment is not a structural survey of the building?

A. That's correct.

Q. It's therefore not a guarantee by any means that all fire safety issues have been discovered?

A. That's correct. A lot of -- a lot of the construction will be hidden behind suspended ceilings, behind panels on walls, that you're not able to view while you're doing the fire risk assessment.

Q. In your report you say:

"It is not uncommon that a fire may reveal deficiencies in the structure that could not have reasonably been seen by the fire risk assessor."

Is that your view?

A. Yes, that is my view.
Q. If we turn then to the question of inspection of flats. I'm looking at page 35 of your report. You make the point that before 2009, it was more normal not to inspect flats, and that since 2009 it has become more common to carry out more thorough inspections, including inspecting a sample of flats; is that right?
A. Yes, that's correct.
Q. That's the general background. We're interested not only in industry practice at the time but also more specifically in your expert opinion of what would have been required in order to carry out a suitable and sufficient fire risk assessment of Lakanal House. What is your view on whether a suitable and sufficient fire risk assessment of Lakanal House should include inspection of flats?
A. Okay, my view is you cannot put a good risk assessment together without carrying out an inspection of flats. Not all of the flats, because access is particularly difficult, and I anticipate that it's around 10 per cent that I would advise should be done on the flats, just to get a sample of a couple on every floor if possible. It might not always be possible because of access problems, but from my point of view, if you're going to do a risk assessment, the most important area of risk assessment

is clearly fire escape, fire protection, and the fire compartmentation, so the separation of living accommodation from the communal corridors, and unless you enter one or two flats, you cannot assess whether or not there is a problem within the flat that might not be seen from the communal corridor side.

Q. So since the Fire Safety Order came into force in 2006, the basic requirement to carry out suitable and sufficient fire risk assessment has remained unchanged; is that right?

A. Yes, it is.

Q. In your view, in order to do that, it's necessary in respect of Lakanal House to inspect, say, 10 per cent of the flats in the block?

A. Correct.

Q. If one then thinks about this by reference to industry practice, is it right that before the Lakanal House fire, many risk assessors were not inspecting sample flats and some landlords were making no inspections of sample flats?

A. Correct.

Q. In fact, you say in your report that some landlords continue to produce risk assessments without there being inspection of any sample flats?

A. Correct.

Q. Focussing on Lakanal House and on what is required to carry out a suitable and sufficient risk assessment, you've said it doesn't need to be a structural survey, but can I ask you to what extent the risk assessor would need to consider issues such as the fabric of the building and the materials that make up the building? I'm looking at page 36 of your report.

A. The materials are important, clearly, and somebody with a technical background should be able to make an assessment of materials, although you cannot obviously always tell what a material is. But obvious ones: if you have a hardboard cover over a timber partition, for example, rather than an asbestos material or an obvious fire protection material, then the risk assessor should be able to pick that up.

Q. In terms of equipment that one might take with you to carry out a fire risk assessment, is it right that it's not normal to take ladders or other specialist equipment to enable one to open up concealed parts of the building?

A. Correct.

Q. Does it follow from that that if the necessary equipment isn't available on site, you have to note that in the fire risk assessment and consider whether to recommend a further inspection?

A. Yes, that's right, it would be a recommendation. If you feel that it's really important to access somewhere because you might see some deterioration but you can't get there, then it's got to be a recommendation in the fire risk assessment.

Q. If I could ask you then to take up the jury bundle at tab 13 and look at photograph 17, which is in one of the corridors. (Handed) We can see there a corridor with a suspended ceiling intact in Lakanal House.

A. Yes.

Q. Of course, while it is in that condition, one cannot know what lies above it, and in order to find out what lies above it, one would, to some extent, have to open it up; is that right?

A. Correct, yes.

Q. What is your expert opinion on whether or not a suitable and sufficient fire risk assessment of Lakanal House would recommend the opening up of part of the suspended ceiling in order to see what lies above?

A. From the condition that I saw on the ceilings during my brief visit, there were quite a lot of small defects and small repairs that had been undertaken, and the ceiling was generally in a very tired condition, and because of that, I would have recommended further action to open up the ceiling to carry out an inspection.

Q. Of course, we should state for the purposes of completeness that your inspection was in January of this year.
A. Yes.
Q. So you can't be sure what condition the ceiling would have been in three or four years ago; is that correct?
A. Yes.
Q. I'm then going to ask you about some features of the building that we have heard about already in these inquests and have, in some cases, photographs of, and ask you if a suitable and sufficient risk assessment had been carried out, what, in your expert opinion, it would have said about such features. I'm moving on now to page 43 of your report.

Firstly, if I ask you about doors. We've heard and seen that individual flats had two doors onto the communal internal corridor: a front door and an escape door.
A. Yes.
Q. Firstly, what can one discover, if anything, from looking at a front door from the corridor? So in other words, without opening it and without going into a flat.
A. Okay, well, clearly all you can see is the face of the door, and in this case a letterbox, and the letterbox wasn't -- didn't have any fire protection, ie

an intumescent strip that would expand if there was a fire inside or outside of the flat.

The only other thing that you could see whilst looking at the door is if there are any gaps around the edge, which would indicate that perhaps there was a problem with the fitting of the fire door.

Q. You've already explained to the members of the jury that you would have expected a risk assessment to look at perhaps 10 per cent of the flats and therefore to open up some of the doors to individual flats.

A. Yes, correct.

Q. Therefore if one were to open up a front door or an escape door, what additional information would one gain that one wouldn't get just from looking at the door when it's closed?

A. The seals around the perimeter of the door would become visible, so we'd see the smoke and fire seals then, or lack of them. Sorry, also the thickness of the door, so that you could judge what the fire-rating of the door may be.

Q. What would you have expected a fire risk assessor to say about the front doors and the absence of smoke seals?

A. That they would have been an item for action, in that they should have been upgraded to 30-minute fire doors.

Q. What about the smoke seals?

A. Sorry, that's what I meant by upgrading, that if the smoke seals weren't evident, that smoke seals with placed in the door.
Q. So that would be part and parcel of a 30-minute fire door?
A. Yes.
Q. If we move then to the panels above the front doors to the flats. If we look in photograph 20, please, in the same tab. That is a view of a panel above the front door. It's, of course, a view that you can only get if you do decide to inspect sample flats, because it's a photo taken from inside a flat.
A. Yes.
Q. Is that a more informative view than the one that you would get from the corridor if the suspended ceiling were in place?
A. Yes. It's not possible to view the panel from the corridor to make any judgment, so not until you enter the flat could you actually see that there was a panel there and -- and then, even the situation of seeing that panel, it's difficult to assess just by looking at it whether or not it's got any fire resistance.
Q. In your report, you make the point that unless you open up the suspended ceiling, you cannot be fully aware of the thickness or construction of that panel.

A. Yes, that's correct.
Q. Does it follow from that that your views on what would be recommended in relation to those panels are dependent upon the fire risk assessor opening up the suspended ceiling?
A. Yes, correct.
Q. With that qualification, if the suspended ceiling were opened up, therefore making it possible to better assess the nature and construction of those panels, without getting too heavily into approved document B again, is it your view that the fire performance of those panels would be recommended to be either 30 minutes or 60 minutes?
A. Yes.
THE CORONER: That's because, in effect, it's one of the elements that separates the flat from the corridor?
A. Yes, it's part of the compartment wall, yes.
MR MAXWELL-SCOTT: Then if I ask you essentially the same point about boxing in, and if we refresh our memory about what that is from photograph 27. Firstly, is it right that one can't discover anything about the boxing in without opening up the suspended ceiling?
A. Correct.
Q. So it is only if one takes the view that it's necessary to open up the suspended ceiling that one can even begin

to consider the adequacy of the boxing in?

A. Correct.

Q. So with that qualification, if a fire risk assessor had opened up the suspended ceiling and had had the opportunity to view the boxing in, in your opinion would they have recommended that boxing in be fire-resistant to either 30 minutes or 60 minutes?

A. Correct.

Q. Can you just explain briefly the logic behind that?

A. Okay. The boxing in is basically the underside of the internal staircase in the maisonette from the -- downstairs to the bedroom accommodation, and as such, is a compartment wall which needs to be fire-resistant and is very important, in my view. The protection that was in place that I viewed during the inspection that I had wasn't brilliant and had numerous defects in the actual undercloaking that was there.

So there was some protection, but in my view it wasn't good enough, and the important thing is that it's a separation of a compartment not only from one side of the wall to the other but also from one floor to another.

Q. So if the boxing in were viewed on a fire risk assessment, is it your view that the recommendation in the fire risk assessment ought to be that it be

upgraded?
A. Correct.
Q. Would that be a low, medium or high priority?
A. A high priority.
Q. What recommendations would you expect to be made in respect of the suspended ceiling itself?
A. If it had been opened up, you mean, as --
Q. I think you're right; we perhaps need to consider that in terms of two scenarios: firstly, if, for whatever reason, the risk assessor decided not to open it up?
A. Yes. If a risk assessor was just looking from the corridor and not opening up, my view would be that he should be -- well, the risk assessor should be recommending further action to have an inspection to open up to find out what the integrity is. There are pieces that were visible during my inspection in January that had chipboard visible, there were screws missing -- some of that might have happened since the fire, I don't know, but it was in a condition that would actually direct me to saying, "I'm not happy with this. I need to put it as an action for further inspection."
Q. Before I then go on to ask you about recommendations, elsewhere in your report you refer to the fact that the communal heating system we now know was replaced some time in the history of the building, probably the 1980s?

A. Yes.
Q. Is it your view that if a fire risk assessor knew that, that fact alone might be sufficient to lead the fire risk assessor to recommend opening up the ceiling?
A. Yes. It's a common problem when refurbishment of heating, ventilation or electrical systems have taken place that people run new pipework, cables, et cetera through compartment walls and perhaps don't make good as well as they should do, from a fire separation point of view. So with that knowledge that works had been undertaken, the fire risk assessor, in my opinion, should be recommending a further inspection.
Q. But on that specific point, am I right in thinking that it is dependent upon knowing that the communal heating system had been replaced?
A. Correct.
Q. If the suspended ceiling were opened up, for whatever reason, what recommendations would you expect a fire risk assessor to make in relation to it?
A. That the -- first of all, the pipes et cetera, the fire stopping in there, be made good, so action if there's a seam where there are gaps. Likewise if the undercloaking to the staircase is visible, so the boxing in of the staircase is visible, that that would be reformed to create the fire resistance.

Q. If I move on, then, to the question of the works that were done in 2006/2007, and if we look in the jury bundle now at tab 18. We can refresh our memory from these photographs of the fact that new windows and panels were installed in 2006/2007. Is it your view that composite panels are known in the construction industry to pose a fire hazard?

A. Yes, it is.

Q. If a fire risk assessor was aware that these windows, panels and doors were of recent installation, is that a fact that might lead them to assume that there was probably no particular issue with them from a fire safety perspective?

A. Yes, I believe that's the case, because visually, externally, you wouldn't be able to make an assessment of the material, and if I attended site and had seen that the works had only just been undertaken, I would have assumed that that work would have been undertaken to the correct standards.

Q. If, perhaps contrary to that, one were to form the view that there was a desirability to replace aspects of those works, is it right that firstly there would be considerable practical problems with replacing them, and that in your view such replacement would not be a high priority, and indeed might be a low priority?

A. The access to the -- some of the panels is very difficult, and would require full scaffold of the building, and the -- if it had been had highlighted that those panels did need to be replaced, it would be put forward as a recommendation and it would be then prioritised, but it would take some time to obviously carry out that work, due to access to the -- to the areas.

Q. Presumably, the panels underneath the bedroom windows would pose greater access problems?

A. Yes, yes.

Q. If I ask you then about the cross-ventilation scheme, as you describe it. Firstly if I could show you some photographs to help us identify what you mean by that.

A. Okay.

Q. If we look at tab 13 in the jury bundle. At page 11, we have a photograph of doors from the lift lobby area onto the corridors.

A. Yes.

Q. There is a ventilation element to those doors because of the large panel metal grills on them provide ventilation, don't they?

A. Yes.

Q. Then if we look on to photograph 39, that is the grill at the end of one of those corridors?

A. Yes.
Q. Then photograph 40 shows the grills in the centre of the building, near the lobbies and central staircase.
A. Yes, yes.
Q. Having identified those three photographs, which of those features form part of what you describe as the cross-ventilation scheme?
A. All of these impact on the cross-ventilation. The most important ones are the ones in 39, which are the ends of the corridor, and obviously through the door.
Q. In your report -- and I'm looking at page 50 -- you make the point that smoke ventilation is a key part of fire safety, especially for taller buildings, and you would have expected a fire risk assessment to have identified the nature of the ventilation system.
A. Yes.
Q. We have heard some evidence from you yesterday to the effect that the Building Regulations do not always require one to bring a building up to current standards?
A. Yes.
Q. Having that fact in mind -- the fact there isn't necessarily a requirement to bring features of a building up to current standards -- what would you have expected a fire risk assessment to say about the smoke ventilation system?

A. I would have expected it to be raised as further investigation, because visually the louvres are particularly small and there is fly-mesh attached to the back of the louvres which collects dirt and prevents the transfer of air. So I would have expected it to be raised as an issue to be investigating further.
Q. Did the cross-ventilation scheme in Lakanal House at the time in fact comply with current standards, as at 2006?
A. Did it comply with current standards?
Q. I think in your paragraph 3.6.39, you say you would have expected an assessment to have identified that it deviated from current standards.
A. Sorry, that it did?
Q. That it did not comply with current standards.
A. That did not. Sorry, I misheard you. I thought you said "did".
Q. Deviated from.
A. Deviated from. Right, okay. It's difficult to tell whether it complies or not, and because of that reason you would have raised it as an issue.
Q. You explained to us yesterday how a building needs to be viewed as a whole, as a system, and that one can't look solely at individual aspects of it in isolation.
A. Yes.
Q. I think at the top of page 51 you explain how the

possible problems with the cross-ventilation scheme have implications for how one views fire safety in the building as a whole; is that right?

A. Yes, that's right.

Q. Can you just explain that to the jury?

A. The smoke ventilation in the building, clearly it's important, if you have a fire and the smoke gets within the corridors, that it's taken to the outside as quickly as possible, so what is important is that it's allowed to do that and the cross-ventilation scheme isn't impacted, because the fire escape from the building, clearly impedes the escape, both from a visual point of view and obviously from smoke inhalation.

Q. You make the point that in terms of trying to make a recommendation to deal directly with the cross-ventilation scheme, there would be practical problems. For example, it would have been impractical to install a full smoke vent system; is that right?

A. Yes. Because of the construction detailing of Lakanal House, it's very difficult to put in a full cross-ventilation system, so -- you would have to go through the flats, basically, to do that, and it's a very difficult thing to achieve.

Q. Is it your view that the problems with the smoke ventilation system and the difficulties of addressing

them directly focus the spotlight on other features of the building, and for example make the installation of smoke seals to doors more desirable?

A. Yes, absolutely.

Q. Because the systems for addressing the risks of smoke spread need to be viewed as a whole, and the simpler way of improving the system as a whole is to look at smoke seals to doors rather than full smoke vent systems?

A. Yes.

Q. You finally in your report commented on what an inspection might say about fire safety measures, by which we mean things like fire exit signs and fire alarms and the like. Of course, your inspection was in January of this year, at a time when the building had been unoccupied for some three and a half years.

A. Yes.

Q. So I'm only going to touch on a small number of points that you make in this section. If I firstly ask you about the mechanism for inspecting some aspects of the building. Is it right that you would expect a fire risk assessor to test a sample of the drop keys that are used by persons such as members of the fire and risk service to inspect a building?

A. Yes, I would.

Q. If I then ask you about what is sometimes called a fire

information box and sometimes called a premises information box. You make the point that there was no such box at Lakanal, and we've heard some evidence from some firefighters about the fact that it would have been of assistance to have one. You say, in agreement with that view, that the unusual layout of the building means that such information would have been valuable; is that right?

A. Yes, correct.

Q. However, you say that you don't think most assessors in 2009 would have recommended implementing such a box?

A. Yes, that's correct.

Q. Finally, on sprinkler systems, is it your view that a sprinkler system would have been extremely beneficial?

A. Yes, it would.

Q. However, there was no obligation to install one and the number of sprinkler systems that have been installed in buildings in the United Kingdom not at the time of construction but at a later date is minimal?

A. Yes.

Q. Mr Walker, thank you very much. Those are my questions. That would be a convenient moment for a break.

Questions from THE CORONER

THE CORONER: Yes, we'll have a break in a moment. I just wanted to raise a couple of things with you, Mr Walker,

if I may. Could I just ask you to look at photograph 18 in the section of the jury bundle behind tab 13. You might have it open already. Photo 18.

A. Yes.

THE CORONER: Which shows us the suspended ceiling opened up. If a fire risk assessor had opened up a suspended ceiling like this and looked inside, you've referred us to matters that he or she should have been identified regarding pipework penetrating flats and fire stopping and so forth.

A. Yes.

THE CORONER: Is there anything else that should have come to the attention of the assessor when looking at that ceiling?

A. Well, it's possible that they should have identified that there is no barrier in that ceiling to prevent the horizontal spread of flame, but that depends on where and how they accessed the ceiling to actually see that. So where the corridor extends through the communal lobby area, there should be a barrier within the ceiling there.

THE CORONER: So you would expect someone who looked into a ceiling to recognise that there were no barriers, or if they couldn't see any barriers?

A. Ideally, yes.

THE CORONER: Thank you. Then just a more general point. You have extensive experience, I think, of doing fire risk assessments for local authorities and housing associations?

A. Correct, yes.

THE CORONER: And similar providers of housing?

A. Yes.

THE CORONER: So large providers, if I can put it that way?

A. Yes.

THE CORONER: In your experience, do any of these bodies keep, for example, a log book for a building, which would record details of when it was constructed and refurbishments carried out and, for example, fires which have occurred in the past?

A. It's very mixed. There are some that have records and can give you documentation but it's very rare, as a fire risk assessor, that you're given comprehensive documentation before you visit site.

THE CORONER: Is that something which, in your experience, would be useful to a fire risk assessor?

A. Absolutely would, yes.

THE CORONER: And in your experience of dealing with large scale housing providers, is it your experience that there's one person, or more than one person, in a organisation who has responsibility for collating all

of the information which comes in from assessors and who has responsibility for prioritising buildings to be inspected and then work to be undertaken, or further investigation to be undertaken?

A. Again, it's very mixed. My view is that there are some organisations that have that person, and in other organisations it's a team or it's a department that carry that responsibility, and it's not always straightforward to find the right person who's going to deal with those instructions and deal with the prioritisation of what's got to happen.

THE CORONER: But someone needs to have a corporate memory?

A. Correct.

THE CORONER: Thank you.

All right, well, thank you very much, Mr Walker. We'll have a break now.

Members of the jury, we'll have a rather longer break than usual this morning. If you could be back in about half an hour's time, so 12.25.

THE FOREMAN OF THE JURY: Shall we take our papers out?

THE CORONER: Sorry, did you say you want to take your papers?

THE FOREMAN OF THE JURY: Yes.

THE CORONER: There's no need to if you don't want to. They'll be safe in this room, thank you very much. So

12.25.

(In the absence of the Jury)

THE CORONER: Yes, I've identified half an hour is an appropriate break. Is that going to be sufficient time? If anyone knows now that they're going to want more then please tell me because then we can tell the jury.

MR MATTHEWS: I don't think so. I think half an hour is actually more than enough, thank you.

THE CORONER: Fine. Well then, 12.25, we'll be back here. Thank you very much.

(11.55 am)

(A short break)

(12.15 pm)

Submissions re cross-examination

THE CORONER: Yes.

MR HENDY: Madam, there have been discussions between the advocates. Last night, at the close of business, you indicated that all the advocates, in cross-examining Mr Walker, should be careful that the jury wasn't confused. We've all taken that on board but it's quite evident that various advocates will have different views on the proper interpretation of approved document B than that expressed by Mr Walker, and they will differ amongst themselves as well, and a concern from this

table is that the jury will end up confused about the proper interpretation of approved document B.

Therefore the idea that I floated with my learned colleagues was that we should approach approved document B as a matter of law and make submissions to you, so that you could then direct the jury on the appropriate approach to approved document B. By "appropriate approach", I don't mean necessarily that you would determine that the document definitely meant X or definitely meant Y. You might prefer to give them a couple of options and say it's either one or the other, or however you wish to approach it. The advantage would be that the jury would then be free of the burden of trying to construe this rather difficult document.

That suggestion, however, hasn't met favour all round, and some counsel, I know, think that the only proper way forward is to cross-examine Mr Walker and put their different approaches to him. Madam, if that is to be the way forward -- and obviously it's entirely a matter for you -- then we feel very strongly that the jury should have, if not the entirety of approved document B in front of them in hard copy, at least all the pages that the various advocates are going to refer to, because I think that it's very difficult -- indeed,

I would respectfully submit that it's unfair to expect a jury to follow this on their screens where one is going from one paragraph to another, sometimes forward, sometimes backwards, in a document. Speaking for myself, I ended up last night with three or four fingers in the document just to remember where I had come from and how I was going to proceed. So if that is the course, we invite counsel to identify the relevant pages, and we would ask that they be copied.

Now, whether that can be done over the lunchtime adjournment or whatever the logistics of that are perhaps require further discussion.

THE CORONER: I see. Okay, that's helpful. Thank you very much. Mr Dowden, do you want to make any submissions?

MR DOWDEN: I don't think, madam --

THE CORONER: Sorry, I can't hear you.

MR DOWDEN: I was just going to practically suggest that if we can't use the photocopier, then perhaps memory sticks -- I don't know whether they're available -- so that the jury can at least navigate themselves the documents.

THE CORONER: Well, we can sort out the logistics but what's your position just on the matters of principle rather than the logistics?

MR DOWDEN: I agree with Mr Hendy.

THE CORONER: Ms Al Tai?

MS AL TAI: Similarly, madam, we would support that approach as proffered by Mr Hendy. Certainly, we would agree that it would be unfair -- that if advocates are to make reference and cross-examine on points that the jury are unable to look at themselves, it would be prejudicial -- certainly unfair.

THE CORONER: Okay. Mr Walsh?

MR WALSH: I have no representations to make.

THE CORONER: Mr Matthews?

MR MATTHEWS: In terms of principle, I don't see any way but that there's cross-examination. The issue having been explored before the jury already, it has to be pursued by the interested persons who can only pursue it through cross-examination. How you come ultimately to direct the jury and to what extent -- it's really the cart before the horse to consider that at this stage.

In terms of logistics, I took your encouragement in terms of cross-examination to be to think about how it was going to be done and to work out a way in advance of ensuring the jury aren't confused.

THE CORONER: Well, I think I prefaced that by saying "the extent to which you wanted to challenge".

MR MATTHEWS: Yes, and I've thought about the extent and I'm confident that I can do it by showing the witness,

I think, no more than five pages. For my part, I feel that with Mr Maxwell-Scott's help in terms of putting it on the screen and taking it slowly, it can be done in a way that won't be confusing, so I myself don't see the need to start copying chunks of material for the jury. It strikes me that the screen is, in many ways, a better way of looking at these documents.

THE CORONER: Okay, that's helpful. Thank you. Mr Compton, do you want to say anything?

MR COMPTON: Madam, I'm neutral in the sense of whether it's a matter for you to deal with or whether there's to be cross-examination, but I do very strongly support Mr Hendy about documentation. I think it's very difficult for a jury to follow this on screen. If they have the underlining pen and so on, it's a much, much easier exercise for them to follow and it makes it an easier exercise.

THE CORONER: All right, thank you. Mr Leonard?

MR LEONARD: I agree with Mr Compton.

THE CORONER: Sorry, you agree with ...?

MS CANBY: Mr Compton.

THE CORONER: Thank you. Ms Canby?

MS CANBY: I agree with Mr Matthews. It seems to me that having started along the route of hearing evidence in open court from Mr Walker, we should now be given

an opportunity to cross-examine what he's said in relation to that, and it seems to me that there's some difficulty in you making a ruling in relation to what approved document B means. It's arguably not strictly a matter of law; it is, of course, just guidance. So I would agree that there be cross-examination.

In terms of how that is presented, it seems to me that if we all put our heads together, there is actually only, as Mr Matthews has indicated, a handful of pages that would need to be provided to the jury. Perhaps if we could do that and avoid the need for them to be provided with over 100 pages, that would be a better way of dealing with it, or alternatively, as Mr Matthews has said, dealing with it slowly on the screen.

THE CORONER: All right, thank you. Ms Petherbridge?

MS PETHERBRIDGE: Madam, I support those who submit that cross-examination is the proper way forward. As to logistically how that's achieved, I'll leave it to those who are principally concerned in this area of the evidence.

THE CORONER: Thank you very much. Mr Maxwell-Scott, do you want to make any observations?

MR MAXWELL-SCOTT: In my submission, the interpretation of approved document B is not a matter of pure law. It's perhaps a matter that, within your discretion, you could

decide to deal with on submissions, but it's certainly a matter on which it's not inappropriate to hear expert evidence. We have started down that route, and I agree with Mr Matthews that it's perhaps too early to say the extent to which ultimately it's necessary to direct the jury on the correct interpretation of approved document B. Therefore to issue a ruling on it now may be to do something which, in the event, will prove unnecessary.

THE CORONER: Yes.

MR MAXWELL-SCOTT: I offer no further assistance than that.

THE CORONER: That's very helpful. Thank you all very much. It's helpful. Well, it seems to me that it's right that I permit those who want to put questions to Mr Walker on this to do. We've embarked with his evidence on this topic. So far as the logistics are concerned, I agree that it would be helpful if they could have some pieces of paper -- so looking at Mr Atkins for some help -- perhaps over lunchtime, on the basis that Mr Matthews has promised us five pages. So, Mr Matthews, we can copy five pages for all the jurors. Substantially more than that is going to be a major logistical problem, but if that could be done over lunchtime, probably by the time we get to your examination after lunch, that would probably be the case.

MR MATTHEWS: Certainly. Five was the figure off the top of my head. No more than seven.

THE CORONER: I note how quickly it's creeping up.

MR MAXWELL-SCOTT: Madam, I think Mr Hendy's likely to have some pages, and I assume they're going to be different pages to Mr Matthews, but provided people identify pages that they want copied, we can copy a set for each juror. What we could not do in the course of today with the facilities here is to copy 162 pages.

THE CORONER: No, and it would be disproportionate to be doing so, so I'm certainly not going to ask for that it be done. Limited pages, yes, would be helpful, but certainly not the whole lot.

Then finally on the question of directions, that's a matter for a discussion at a later stage. I'm not going to make any ruling at this stage.

Mr Hendy, are you ready to begin without your five or seven or however many pages it may turn out to be?

MR HENDY: Of course, madam, but perhaps we could break a little early for lunch, because I don't have that much on other aspects other than approved document B.

THE CORONER: Okay. Well, we'll make a start, and then when you need to get to approved document B, we'll break for lunch and we'll allow Mr Atkins enough time to copy and people will have to give Mr Atkins over lunchtime, in

good time, their definitive version of the number of pages they want so that they're done. All right? Okay.

Yes, can we have the jury in then, thank you. Sorry to hold you up, Mr Walker.

A. That's okay.

(In the presence of the Jury)

THE CORONER: Thank you very much, members of the jury. In your absence, we've been discussing the way in which the various advocates are going to want to have a discussion with Mr Walker over the matters that he ran through in great detail yesterday afternoon so that we can try and do it for you in a way that isn't going to be massively confusing. So we may be photocopying some documents for you over lunchtime but it won't be a massive number.

We're going to continue now with Mr Hendy putting some questions to Mr Walker, and then we'll have a break so that over lunchtime the documents can be printed so that you can follow the pages and that will help you follow the questions being put to Mr Walker.

You'd finished, I think, Mr Maxwell-Scott?

MR MAXWELL-SCOTT: Yes, I had, thank you very much.

THE CORONER: Yes, Mr Hendy.

DAVID WALKER (continued)

Questions by MR HENDY

MR HENDY: Thank you, madam. Mr Walker, my name's Hendy. I represent some of the bereaved families. Can I first of all ask you about the FENSA scheme about which you gave evidence. I just wanted to clarify with you that the effect of a FENSA certificate on a window or windows is that the local authority can accept the certificate as evidence that regulations 4 and 7 of the Building Regulations have been satisfied; am I right?

A. Yes, for windows, yes.

Q. But even in relation to windows, it's not proof that the Building Regulations have in fact been complied with, is it?

A. That's correct.

Q. You were asked about the Building Regulations in general terms, and there's just one point in general terms that I want to explore with you at this stage. That is that, as Mr Maxwell-Scott put to you, if you're carrying out building works, in order to determine whether the Building Regulations apply and whether you have to go through Building Control and lodge plans and building notices and all the rest of it, you have to know whether the works that you do are going to reduce or going to be more inferior in terms of fire protection than that which was there before, right?

A. Correct.
Q. It must therefore follow, as night follows day, that you have to know two things: you have to know what the standard of fire protection was of that which you're removing, and you have to know what the standard of fire protection is for that which you're going to put in its place?
A. Yes, and also to what regulation did it comply with when it was installed in the first place.
Q. We know from cross-examination by Ms Canby of Annabel Sidney, the project manager, that she didn't have available to her any documentation as to what the standard of fire protection was in relation to various aspects of the work. In order to determine what the fire standard was, do you agree either you have to have documentation or you have to test it?
A. Correct.
Q. We'll deal with approved document B later.

Some other points, if I may. In your report -- and I wonder if we could just put this on screen. It's page 27 of your main report, paragraph 3.4.19. I'm very grateful for that. There you say:

"In my opinion, Lakanal House was a high risk building which out to have been prioritised and assessed early in any programme."

You're talking about fire risk assessment programmes there?

A. Correct, yes.

Q. "This view is based on: the height of the building; the number of units; the unusual construction ..."

By which you meant maisonettes which were upside down, as it were, and interlocking?

A. Yes.

Q. "... age of the building ..."

1959/1960?

A. Yes.

Q. What's the indicator there that that makes it high risk?

A. Well, the regulations have changed since and the construction, being the age of the building, will have been repaired and altered during that period, so it makes it a higher risk that people will have messed around in the building, essentially, with the construction.

Q. "Previous history of fires", which the jury have heard about, and you added a sixth element in your answer to Mr Maxwell-Scott: the single staircase?

A. Yes.

Q. Because a modern high rise block of flats, of course, would have at least two internal staircases?

A. In most situations now, yes.

Q. I wondered whether you thought that one could add to that list yet further. You've mentioned the single staircase, but one of the features of that single staircase -- and the jury have seen it, of course -- is its narrowness, isn't it?
A. I don't know about that, I'm afraid.
Q. Well, you've seen it as well. Isn't it a relatively narrow staircase?
A. I have to say I haven't measured it and I can't recall.
Q. We have, but I'm afraid I lost the bit of paper that we wrote it down on. I'm told that it varies between 107 and 110 centimetres wide. So it's not much wider than a metre.
A. Okay.
Q. Isn't that narrow?
A. I believe it is slightly narrow, yes.
Q. You mention the number of units. We know there were 98 units. We know that these were two-bedroom maisonettes. Obviously there'll be some dwellings where, for one reason or another, there's nobody living there temporarily. There'll be some which are crowded. We've heard about the families that I represent. Four people: two children and two adults. The Nuhus were similar. There will be some where there's only one resident or two residents. But if we assumed, just off the cuff,

that the average was, say, three residents, if all 98 flats are filled, we're talking about just short of 300 people in that block of flats, aren't we?

A. Yes.

Q. So if we were to imagine a disastrous fire breaking out at 4 o'clock in the morning, when everybody's at home apart from the night workers, we'd have a lot of people to get down that staircase, wouldn't we?

A. Yes, we would.

Q. Therefore I just wonder whether the jury would be right if they were to add to "single stair case" "single narrow staircase" as a feature of this building being high risk.

A. Well, without looking at the actual dimensions and without looking at what the regulations say for the number of people, I'm afraid I can't answer that.

Q. I'm not asking you whether it's compliant with regulations or not. That's not my question. The question is: when you're looking to see whether this is high risk and therefore ought to be prioritised for fire risk assessment, is it not material to take into account the narrowness of the staircase, given the number of people residing in the block?

A. I don't think it would have been considered in prioritising Lakanal House.

Q. Associated with that single staircase is another feature. We know that there's a secondary means of escape in this building along the escape balconies on either side of even-numbered floors, yes?
A. Yes.
Q. But those escape balconies lead only to one place, and that is the single central staircase?
A. Correct.
Q. They don't have independent means of escape from the balconies. Again, can I suggest to you that that's another feature that makes this a particularly high risk building?
A. It's not unusual for other buildings of a similar age, again, to have a single corridor with a single staircase, so again, I don't think it is something that would be considered when prioritising the building, unless all of the other buildings were known to have two escape routes, two stairs. So it perhaps would have been considered, but I don't believe it would have moved it up the priority level in this particular case.
Q. I'm not quite following that answer. The question is not whether it's unusual or not. It may be standard, but nevertheless it makes it high risk, doesn't it?
A. Well, it's not higher risk to just having a single corridor.

Q. Another feature of this building is, of course, that it has no sprinkler system?
A. Yes.
Q. A sprinkler would have lowered the risk?
A. Correct.
Q. And given it less priority?
A. Correct.
Q. We know another feature of this building is that it has a wholly uninformative flat numbering system which caused great confusion to the firefighters on 3 July 2009. I imagine you're going to say to me that that's not something that a fire risk assessor would normally take into account, but if you are about to say to me, nevertheless it is something that increases the risk in this building, doesn't it?
A. Yes. Having walked up and down the staircase myself, yes, it does, and signage -- fire escape signage and particularly the number of the floor that you're on being particularly well signed should have been something that the fire risk assessor picked up, yes.
Q. Signage is, of course, one of the features of a fire risk assessment. Do I understand from your answer that signage is not just "Fire escape this way" or "Push bar to open" or things like that but it would also include the numbers for the flats and the floors that they were

on?

A. I don't -- I don't think it would include the flat numbers. However, it would be -- if there were no indication of what floor it was, I'm sure the fire risk assessor would pick that up and make it known.

Q. Because those things are obviously of critical importance to firefighters, aren't they, particularly firefighters in a smokey atmosphere?

A. Yes, I would think so.

Q. The Fire Safety Order came into effect on 1 October 2006. By the time of this terrible fire on 3 July 2009 -- that's two years and nine months later -- no fire risk assessment had been done. Do you agree with me that that's utterly unacceptable?

A. Well, I don't think it's unusual for the fire risk assessment not to have been done. However, I do think that perhaps they were a little slow at undertaking it, yes.

Q. Can I ask you next about the suspended ceiling above the main corridors on the access floors. You mentioned at page 37 -- if Mr Maxwell-Scott would be kind enough just to put that up, at 3.5.35. Again, the context of that part of your report is looking to see what would be done on a fire risk assessment, isn't it?

A. Yes.

Q. Then you say at 3.5.35:

"In the context of Lakanal House, I would consider the suspended ceiling in the corridors to be an area that would have warranted opening up for the following reasons."

Then you spell them out:

"There are areas of chipped paint where the chipboard was visible and this would give rise to concern over on the materials used;

"Suspended ceiling is in a high risk part of the building that should be clear of combustible material..."

That's because it's on a central corridor on which all of the front doors open --

A. Yes.

Q. -- and therefore is a primary escape route?

A. Correct.

Q. "The method of fixing the ceiling is variable, with many screws missing their cups ..."

What does that indicate?

A. Well, it indicates that somebody has taken it down. They've taken the screws out to put the panels down but have not put the cups back in, which affects the integrity of the fixing.

Q. "A risk assessor would have been concerned about the

structure to which the ceiling panels were fixed."

Is this a reference to the softwood frame to which the panels were attached?

A. It's really a reference to because it has -- there are lots of patch repairs that are evident, it makes you wonder what all the patch repairs have actually been fixed to and whether any alterations have been carried out to do that.

Q. "There are access hatches of a different material and the method of fixing is not available."

And the worry there is?

A. Just how secure the -- the hatches are.

Q. The invisibility of the method of fixing, what's the relevance of that?

A. Depending on what it's fixed with, it affects the fire integrity.

Q. "The assessor is likely to have been aware that the heating system had been changed (this is evident from the blocking up of the redundant warm air grills)."

Those are warm air grills which can be seen as you walk down the corridor in the walls of the corridor; am I right?

A. Correct.

Q. So the assessor's likely to have been aware that the heating system had been changed, and the implications of

making that observation are what?
A. In that -- as I said earlier, that if the heating system has been changed, there are likely to have been pipe runs in the ceiling void and in common areas that break through the compartment fire walls.
Q. Therefore one would need to know that they'd been fire-stopped properly?
A. Correct.
Q. "The sealing to the perimeter of the ceiling is poor."
That's round the edges of the suspended ceiling?
A. Yes.
Q. When you say it's poor, just convey to the jury what you were seeing?
A. There are gaps around the edges of the ceiling.
Q. I appreciate you were talking about a fire risk assessment which should have taken place between 1 October 2006 and at least by the time of this fire, but the jury have heard that Miss Annabel Sidney, who became the project manager on the works that were done in 2006, carried out, at an early stage, what she described as a building survey. She went -- I have her words in her statement. She says she was asked:
"... to visit the building and inspect the existing decorations and general state of the repair of the building and its common parts in accordance with the

client's instructions and the items the client had specifically identified. I also undertook a 10 per cent survey of the flats as required and arranged for asbestos surveys to be carried out."

Now, that work was done in either late 2004 or early 2005. Ms Sidney was, like yourself, a member of the Royal Institution of Chartered Surveyors --

THE CORONER: Mr Hendy, we're not in the business of criticising individuals in these inquests. That's not part of the process.

MR HENDY: I understand that, madam.

THE CORONER: We're not attaching blame to individuals in any respect.

MR HENDY: Of course not, but what I ask Mr Walker is whether carrying out a survey of that kind was that an opportunity to see the things that you saw in relation to the suspended ceiling?

MR MATTHEWS: Forgive me, I think there was a bit more detail about "a survey of that kind". I recollect she was asked to qualify what she meant by a building survey and said that she'd been given specific instructions about the scope of the survey. "Building survey" could cover many different things.

THE CORONER: I think that's a fair point, Mr Hendy.

MR HENDY: I'm grateful for that. But such a look at the

general state of repair, if the state of the ceiling had been as you saw it -- of course, this was some years earlier -- should that have provoked a further enquiry along the lines that you would have suggested a fire risk assessor would look, or not?

A. Sorry, are you asking me if a fire risk assessor should have picked up --

Q. No, I'm saying if you're not carrying out a fire risk assessment -- because this was done before the Fire Safety Order came in --

A. So a general inspection of the building?

Q. When you're looking around in the way that Ms Sidney was, is this the sort of thing you look for, or not?

A. Well, I think it depends on the scope of what she's looking for. If the inspection is to pick up decorations and is to pick up the removal of asbestos, then perhaps no, I wouldn't expect that to be highlighted.

Q. We know these --

THE CORONER: And that was carried out before the Fire Safety Order came into force.

MR HENDY: Absolutely. That's understood. What she was doing was not a fire risk assessment, and I don't think anybody's suggested that it was.

In the course of the works that were done in 2006,

we know that the flats were rewired and the rewiring was placed into the suspended ceiling along the corridors. Obviously in order to do that they had to get access to the suspended ceiling. Was that an opportunity to have a look generally, or would you have expected the work simply to have been confined to what was necessary to see whether rewiring could be done in that way, and if so to do it?

A. I think clearly there is an opportunity, but whether the opportunity was taken or not is, I think -- you know, it's not certain whether anybody -- it depends who's sticking their head up there to have a look where the wiring goes, but if the specification is just for an operative to run the wiring through that void -- and the way that electrics are installed, there would be very few openings, I suspect, into the ceiling void, and they would thread the wiring through from one flat to the other.

THE CORONER: Well, the evidence that we heard, as I recall, is that the electricians down every several third panel. I'll be corrected if I'm wrong, but that was my recollection of the evidence.

A. Okay. So the operative would have clearly had to put the wiring through there and would have to view the void, but he would be looking for, I guess, just to see

where he can run his wires.

MR HENDY: Right. One other aspect. Can we look again at the photograph in the jury bundle, tab 13, page 18, which the jury looked at a little earlier and you looked at earlier. Of course, this isn't the corridor on which the fire occurred but we all see that it's very similar to the corridor on which the fire occurred. We can see that the supports for the panels are actually made of what appears to be softwood frames. Is that something that would strike you if you were carrying out a fire risk assessment after the Fire Safety Order came into effect in October 2006?

A. I don't think -- it's more of the panelling that would be fixed to that having the right grade of fire resistance rather than the frame behind.

Q. The frames themselves are obviously combustible?

A. Yes, they are.

THE CORONER: When you say that a fire risk assessor would be focussing on the panel, is that your assumption, that the panel would act as a barrier and so the fire wouldn't get to the softwood frame? Is that what you're saying?

A. Yes, it would be a fire-resisting barrier, yes.

MR HENDY: So as long as the ceiling itself offered a sufficient degree of fire resistance, in your view,

the fact that it was suspended on inflammable supports would not necessarily be a cause for concern?

A. I don't think so.

Q. Madam, I think I've reached the point where I need approved document B.

THE CORONER: All right. Okay, in that case we'll have a break now, and we'll continue. Mr Atkins, is 2 o'clock okay for you, provided you're given the right number?

All right, members of the jury, we'll stop now and we'll continue at 2 o'clock. That will give Mr Atkins the chance to copy the papers that you'll have this afternoon. So please be back for 2 o'clock.

Mr Walker, again, please be back for 2 o'clock, but in the meantime you mustn't talk to anyone about your evidence, thank you.

(12.54 pm)

(The short adjournment)

(2.00 pm)

THE CORONER: Thank you. Yes, thank you for arranging copies. I gather they've been put on the jurors' desks. Thank you.

(In the presence of the Jury)

THE CORONER: Thank you, members of the jury. Mr Atkins has organised photocopies of the pages which the advocates

think might be referred to. If any pages need to be referred to which aren't on your tables, then I think we'll be able to put them on up on the screen and hope that that will be sufficient, all right?

Yes, Mr Hendy, thank you.

MR HENDY: Thank you, madam.

Just before we get to approved document B, can I ask you about two other things very shortly. First of all, we've been given a document called "Fire safety risk assessment for sleeping accommodation" which was published by the government in 2006.

A. Yes.

Q. I wonder if we could put up page 5 of the introduction to this. As it's going up, can I ask you, Mr Walker, whether this is a document that you've seen before?

A. Yes, it is.

Q. On the fifth page, after the first few bullet points, there's a paragraph which begins:

"It has been written ..."

I don't know if the jury can read that. Can I read it to you, Mr Walker:

"It has been written [that's this book] to provide guidance for a responsible person, to help them to carry out a risk assessment in less complex premises. If you read the guide and decide that you are unable to apply

the guidance, then you should seek expert advice from a competent person. More complex premises will probably need to be assessed by a person who has comprehensive training or experience in fire risk assessment. However, this guide can be used for multi-occupied buildings to address fire safety issues within their individual occupancies."

Two questions I will put to you: do you agree with the proposition that in more complex premises the risk assessment will probably need to be done by a person who has comprehensive training or experience in fire risk assessment?

A. Yes.

Q. Secondly, do you agree that Lakanal House was a complex premises?

A. I do, yes.

Q. The other short point I wanted to deal with you was this: you are no doubt aware of section 20 of the London Building Acts (Amendment) Act of 1939, which I think was repealed on 9 January of this year, yes?

A. Yes.

Q. Under that legislation, by-laws were published from time to time by what was then the London County Council, subsequently the GLC -- and there have been changes since then -- for the London Building Acts 1930 on 39

constructional laws, the last of which was 1972.
A. Yes.
Q. Would you be aware, in general terms, of that?
A. I am, yes.
Q. To the best of your understanding, was that still in force in the year 2006 to 2007?
A. Yes.
Q. Does that provide that for buildings over 100 feet in height what was then the district surveyor could specify that the external enclosures of the building would be designated as class 1, A and B, and class 2, A, B and C?
A. Yes, but that's aimed at new construction or rebuilding of buildings, so it's not aimed at refurbishments and maintenance.
Q. No. But are you aware that Lakanal House was a class 2 enclosure under previous London by-laws when it was built?
A. Yes.
Q. Madam, we'll have a short submission on law on the consequence of that but I won't pursue it with the witness.
THE CORONER: Okay, we'll deal with that at the appropriate time.
MR HENDY: Turning to approved document B, I wanted to ask you, I think, five different points. First of all can I

say, just to make it clear to the jury, that there's no dispute with your analysis, and I'm not sure if it's true all the advocates but certainly a number of them agree with your analysis of the requirement in relation to fire spread, so the passage of flame across the surface of a particular substance.

THE CORONER: Well, let's wait and see where the discussion goes on that, Mr Hendy.

MR HENDY: Of course. I'm not going to pursue that with Mr Walker.

I wanted to ask you about something else. Could we take up, please, paragraph 13.2, which the members of the jury -- sorry, let me just find it. Page 89. Page 89, as we see, is the beginning of section 13 of this document, and it's headed "Construction of external walls". There's an introduction in paragraph 13.1. We can skip the first paragraph of that, but can I just read to you the second paragraph:

"External walls are elements of structure and relevant period fire resistance specified in appendix A depends on the use, height and size of the building concerned."

We don't need the rest of that paragraph. 13.2 says:

"Provisions are also made to restrict the

combustibility of external walls of buildings that are less than 1,000 millimetres from the relevant boundary and, irrespective of boundary distance, the external walls of high buildings."

And those in other groups:

"This is in order to reduce the surface's susceptibility to ignition from an external source and to reduce the danger from fire spread up the external face of the building."

Do you agree with me that these provisions are likely to be relevant because the bedroom windows and the panels beneath were clearly an external wall -- agreed?

A. Agreed.

Q. And the windows to the lounge and to the kitchen, and the block-work beneath, were also external walls?

A. Correct.

Q. So let's see what the provisions then require. "Fire-resistant standard" is the next heading, 1373:

"The external walls of the building should have the appropriate fire resistance given in appendix A, table A1, unless they form an unprotected area under the provisions of section 14."

Do you agree with me we don't need to go to section 14 because that specifies limited situations in

which there can be small areas of unprotected exterior wall?

A. Yes.

Q. So let's go to appendix A, table A1. This we have at page 116. If we run down the left-hand column to 5, "External walls", we see there are three situations there. A is:

"Any part less than 1,000 millimetres from any point on the relevant boundary."

And B:

"Any part 1,000 millimetres or more from the relevant boundary."

We've already seen that for high buildings, these parts of the document apply irrespective of boundary distance. If we read across from that, the first column is "Load-bearing capacity", which I don't think is relevant, but the second column is "Integrity", and that means fire resistance, as we see from the heading "Specific provisions of tests for fire resistance of elements of structure ..." et cetera. Do you agree with that?

A. Yes, I do.

Q. So A and B direct us towards table A2. Now, table A2 is found on the next page, 117. Sorry, 119, I'm told. Box number 1 reads:

"Residential domestic (a) flats and maisonettes."

We read across from that. The first two columns deal with a basement storey, and then the last four deal with ground or upper stories. Then it subcategories that into height: not more than five metres, not more than 18 metres, not more than 30 metres, and more than 30 metres. Do you agree with me that Lakanal House was more than 30 metres high?

A. I do, yes.

Q. And therefore the fire-resistant quality of the external walls should be 120 minutes, unless those two little asterisks apply. So let's just look down to see whether the two little asterisks do apply. We can see that towards the bottom of the page that that total is reduced to 30 minutes for any floor within a maisonette, but not if the floor contributes to the support of a building. We're not talking about floors in or out of maisonettes, so it seems to me -- let's see if you agree, Mr Walker -- that the two little asterisks don't apply to the external walls?

A. Yes.

Q. Does it therefore follow that the external walls should be fire-resistant for 120 minutes?

A. Yes, it does.

Q. It may be said that there's some different provision in

relation to the walls of the lounge and the kitchen because they are adjacent to escape balconies, so we ought to look to see what the provisions are on escape balconies to see whether there's some lesser standard provided for those external walls.

First of all, can I ask you a general question, which is: compartmentation, do you understand that to apply to all the walls, the ceiling and the floor of a maisonette in a block of maisonettes?

A. Dividing the dwelling areas, yes. So from flat to flat and floor to floor. Not an external wall.

Q. What about the external wall? Is the external wall of a maisonette or a flat in a block part of the compartment or is it not, in your view?

A. I don't believe it is.

Q. You don't think it is?

A. No.

Q. Well, let's go, if we may, to paragraph 3.9, which we have on page 29. This is headed "Flats and maisonettes". 3.9 is headed "Balconies and flat roofs" and says that:

"The guidance in section 2 ... on balconies and flat roofs of dwelling houses applies equally to flats and maisonettes. In addition, any balcony outside an alternative exit to a dwelling more than four and

a half metres above ground level should be a common balcony and meet the conditions in paragraph 3.15."

It's a difficult piece of prose to get your head round, but do you agree with me that the escape balconies at Lakanal House would fall into those last phrases?

A. Yes, I do.

Q. So that would then take us to paragraph 3.15, which we have on page 32. That says:

"To be effective, an alternative exit from a flat or maisonette should satisfy the following conditions."

Then it sets out a series of conditions which probably are not -- well, they're certainly not relevant for where I want to take you but the note might be. The note says:

"Any such access to a final exit or common stair should meet the appropriate provisions dealing with means of escape in the common parts of the building; see paragraph 3.17."

So let's go there next, to 3.17, which is on page 33. That says that:

"The following paragraphs deal with the means of escape from the entrance doors of dwellings to the final exit. They should be read in conjunction with the general provisions in section 6."

Then it says:

"Note: paragraphs 3.18 to 3.48 are not applicable where the top floor is not more than 4.5 metres above ground level."

It seems to us an unnecessary double negative there. As I read that, it means that those paragraphs 3.18 to 3.48 do apply if the top floor is higher than 4.5 metres. Is that how you read it?

A. Paragraphs 3.18 to 3.48 are not applicable where the top floor is not more than 4 and a half metres, so if it is above 4.5 metres, they are applicable. Is that what you're asking me?

Q. That's the way I read it, so if you knock out both "not"s.

A. Yeah.

Q. Thank you. Before we come to the provisions of section 6, which I'm going to come to in a moment, let me just show you the provision of 3.22, which is on page 35. This is within that set of paragraphs which do apply. 3.22 is headed "Protection of common escape routes" and it says:

"To reduce the risk of a fire in a dwelling affecting the means of escape from other dwellings in common parts of the building, the common corridors should be protected corridors. The wall between each

dwelling and the corridor should be a compartment wall; see section 9."

We'll look at that in a moment, but let's just see if I'm now going somewhere that I shouldn't go:

"To reduce the risk of a fire in a dwelling affecting the means of escape from other dwellings ..."

Our escape balconies at Lakanal House would fall within that description, wouldn't they?

A. Yes, they would.

Q. "... and common parts of the building ..."

Well, I suppose the escape balconies were common parts, were they not?

A. Yes.

Q. "... the common corridors should be protected corridors."

Would we be right in saying that a common escape balcony falls within the description of a common corridor and thus should be a protected corridor?

A. It's -- it's not as simple as that, I'm afraid, and it's not defined anywhere to determine one way or the other, and -- it's clearly a corridor but it's not an enclosed corridor ad so the rules around -- that the guidance gives around corridors don't all apply to an external corridor with an open area.

Q. All right, well let's just see if we can derive anything

from section 9 here, and specifically from 9.22. 9.22 is found at page 70. That says:

"Every compartment wall and compartment floor should form a complete barrier to fire between the compartments they separate and have the appropriate fire resistance as indicated in appendix A."

I think your view that you've already expressed is that the external walls of the lounge and the kitchen were not, in fact, compartment walls, properly so-called?

A. Yes.

Q. Is that right?

A. Yes.

Q. That point may be perhaps emphasised if we go to 9.15, which is at page 68, which says that:

"In buildings containing flats or maisonettes, the following shall be constructed as compartment walls or compartment floors: every floor, unless it's within a maisonette ..."

Which we need not trouble with:

"... every wall separating a flat or maisonette from any other part of the building ..."

And "any other part of the building" doesn't include an external balcony or deck access. So that would exclude us from relying on these provisions as

identifying the fire resistance of the walls of the lounge and the kitchen onto the fire escape, yes?

A. I believe so, yes.

Q. Let's just go back -- we needn't turn it up, but we recall that paragraph 3.17 that we started with said that when dealing with means of escape, those provisions should be read in conjunction with the general provisions of section 6. Let's just see whether section 6 gives us any assistance. 6.2 is at page 51.

So notwithstanding the heading of section 6 is "General provisions common to buildings other than dwelling houses", we've already observed that the paragraphs headed "Means of escape in the common parts of flats and maisonettes" specifically direct us to read the provisions for means of escape in conjunction with the general provisions of section 6. Let's see what section 6 says. Under the heading of "Protection of escape routes", it says:

"Details of fire resistance test criteria and standards of performance are set out in appendix A. Generally, a 30-minute standard is sufficient for the protection of means of escape. The exceptions for this are when greater fire resistance is required by the guidance on requirements B3."

And various other requirements. 6.3:

"All walls, partitions and other enclosures that need to be fire-resistant to meet the provisions in this approved document, including roofs [and so on] ... should have the appropriate performance given in tables A1 and A2 of appendix A."

And:

"Elements protecting means of escape should meet any limitations on the use of glass; see paragraph 6.7."

6.7 deals with glazed elements in fire-resisting enclosures and doors and it refers us to the provisions set out in appendix A, table A4.

Now, just to see where we've got to --

THE CORONER: So far this is the route that Mr Walker took us through yesterday, with the exception of the alleyway which you took us down. So we're on the same route.

MR HENDY: I'm sorry, madam, if we're repeating old ground, but the point I make, I think, is a slightly different one. We have a 30-minute standard, which is what you spoke of yesterday.

A. Yes.

Q. Yes? But there's an exception to that where greater fire resistance is required by the requirements of B3, right?

A. Yes.

Q. And B3 covers, as we've seen, external walls. So where

the wall fronting onto an escape balcony is also an external wall, then the external wall requirement would apply. Would you agree with that?

A. Logic says that's right, yes.

Q. We've already seen that the external wall requirement in Lakanal House is 120 minutes, which is obviously greater than the 30 minutes provided in relation to escape routes.

A. Yes.

Q. At the bottom there we have got to appendix A, table A4, and again -- now I won't cover old ground, madam, because I think your point was that the doors from the lounge and the kitchen, according to the table here, have to be fire-resistant up to 1,100 millimetres?

A. Yes.

Q. After that they can be glazed?

A. Yes.

Q. And that applies to the doors --

A. Yes.

Q. Let's not trouble to go there then.

Just two other matters I wanted to ask you about. The next one is boxing in under the stairs. We can do this one quite shortly. We want 9. Let me just find this. We want page 68. We've looked at this already. 9.15, this is the requirement for compartmentation.

You've excluded it for the walls onto the balconies but compartmentation does apply to every floor, unless it's within a maisonette between one storey and another, and "every wall separating a flat or maisonette from any other part of the building".

Now, the wooden stairs inside each of the flats cuts across both the ceiling, or floor, above the common corridor and also cuts into the wall which supports that floor, doesn't it?

A. It does, yes.

Q. And therefore it does breach the compartmentation which 9.15 requires. Do you agree?

A. Well, again, it's a difficult detail because the -- it could be argued that compartmentation is the actual external walls of the maisonette rather than the floor in this instance, because the staircase internally in the maisonette breaches that compartment, if you were going to take it completely as a separate floor.

Q. Understood. If it simply went to the upper floor of a maisonette, no problem, but because it cuts into the common corridor, and therefore breaches the wall between the flat and the common corridor, and also the ceiling of the common corridor, it does, in fact, breach the compartment, doesn't it?

A. Into the corridor, yes.

Q. Into the corridor, yes, absolutely.
A. Yes.
Q. If we go to 9.22 at page 70, that says that:

"Every compartment wall and compartment floor should (a) form a complete barrier to fire between the compartments they separate; and (b) have the appropriate fire resistance, as indicated in appendix A, tables A and 1."

So the fact that the staircase cuts into the common corridor is only acceptable if it has the fire resistance required by appendix A, tables A and 1; would you agree?

A. Yes.
Q. If we just remind ourselves of that. Again, going back to page 116 at item 7, compartment walls other than in 6 -- and as you pointed out, this is not a compartment wall in 6 because it doesn't separate an occupancy, but it's nevertheless a compartment wall, and we look to see the integrity is specified by A2, and if we look at table A2 on page 119, we are sent back to residential, line 1, and we've already seen what the result of that is. So the boxing in should also have fire protection for 120 minutes?
A. Well, I -- no, I don't believe that.
Q. Right.

A. My understanding is that that would be 60. I know the table leads you to the 120 and it certainly can be interpreted that way, but I believe that the separation into the corridor would be 60, and I think that would be part of the discussions with the Building Control team and the Fire Brigade to look at that particular issue, because the installations, the walls that would go into -- into the building I don't believe would be above 60.

Q. Right. So 60 minutes, you say?

A. I think it would be 60.

Q. Okay. Then the final topic I wanted to raise with you was suspended ceilings, because there's some material about that in this document. Can we go, please, to page 60. Please forgive me if you covered at least the first part of this yesterday, but at page 60, in paragraph 7.1, it provides that:

"The surface linings of walls and ceilings should meet the following classifications."

And we're in "Other circulation spaces", which require national class 0; is that right? That would be the outer side of the suspended ceiling, wouldn't it?

A. Yes, that's right.

Q. Yes. But in 7.5, in the right-hand column, we see "Fire-protecting suspended ceilings":

"A suspended ceiling can contribute to the overall fire resistance of a floor/ceiling assembly. Such a ceiling should satisfy paragraph 7.1. It should also meet the provisions of appendix A, table A3."

So the ceiling has to have class 0 in relation to flame spread, and appendix A, table A3, if we can just turn that up -- it's at page 120, and I'm going to need your help here. Table A3 is in the bottom half of the page, "Limitations on --"

A. Sorry, can I just stop you there, because it's not a fire-protecting suspended ceiling that we have in the corridor.

Q. Oh right, I thought it was the protection of suspended ceilings. I'm barking up the wrong tree, am I?

A. I think this is aimed at a suspended ceiling that's part of the fire protection to the structure rather than just a ceiling in a corridor, so it's the surface spread of flame that we should be looking at for the ceiling.

Q. I see. All right. Well, it won't be the last bad point I take.

Okay, let's go to something else in relation to these ceilings. I wanted to ask you to look at concealed spaces, which we find at page 76. This may be a more fruitful area for me. Does it look as if these concealed spaces might be the sort of thing we're

looking for in relation to the suspended ceilings?

A. Yes.

Q. So 10.1 tells us that:

"Concealed spaces or cavities in the construction of a building provide a ready route for smoke and flame spread, particularly so in the case of voids above other spaces in a building, for example above a suspended ceiling or in a roof space, as any spread that is concealed presents a greater danger and would be a more obvious weakness in the fabric of the building. Provisions are made to restrict this by interrupting cavities which could form a pathway round a barrier to a fire, subdividing extensive cavities, and closing the edges of openings."

Then there's a diagram, 31, of cavity barriers within a suspended ceiling, which I won't take time on.

Can I take you over to page 79 to look at paragraph 10.5. It says:

"As compartment walls should be carried up full storey height to a compartment floor or to the roof as appropriate (see paragraphs 9.2 and so on) it's not appropriate to complete a line of compartmentation by fitting cavity barriers above them. Therefore it's important to continue the compartment wall through the cavity to maintain the standard of fire resistance."

So if you've got a compartment wall, you have to take it right up to the ceiling; you can't put a cavity barrier above it and think that's good enough?

A. Yes, that's true but if you're then aiming at the undercloaking to the staircase, the undercloaking can be carried out in such a way that it is a continuation of the compartmental wall.

Q. Right. Let's see what it says about cavity barriers in 10.6:

"Every cavity barrier should be constructed to provide at least 30 minutes' fire resistance (appendix A ... However, cavity barriers in a stud wall ..."

Then it tells us how they might be. 1078 says:

"Cavity barriers should be tightly fitted to a rigid construction."

1079:

"Cavity barriers should also be fixed ..."

And it develops that further. Then over on page 80, if we could look at that, at paragraph 10.10, under the heading "Maximum dimensions of concealed spaces", it says:

"With the exceptions given in paragraphs 10.11 to 10.13, extensive concealed spaces should be subdivided to comply with the dimensions in table 14."

It's that provision, as I understand it, that led

you to say this morning that there should have been cavity barriers within the suspended ceilings above the corridors on the 11th floor.

A. To comply with current Building Regulations, yes, but in place at the time the ceiling, we believe, was installed, that wasn't a regulation.

Q. Just give me one moment. (Pause) There are also, in appendix B, provisions for fire stopping, which I'm not going to take any time on, but -- sorry, excuse me. I do apologise, madam. In divider 11, there's a provision in relation to fire stopping.

THE CORONER: Can you give us a page number?

MR HENDY: I'll just find it, madam. It's page 82. Does that require --

THE CORONER: Before we look in detail at the question, is this something that was applicable at the time, given that we're looking at pre-2006/2007 work, are we not?

A. I don't know, I'm afraid.

MR HENDY: Well, I'll leave it there. I think there was something similar before that but I don't need Mr Walker to deal with it. Thank you very much.

THE CORONER: Thank you very much. Mr Dowden.

Questions by MR DOWDEN

MR DOWDEN: Yes, good afternoon. My name's Dowden and I ask questions on behalf of Mr Francisquini. I'm not going

to go down the same route again. Perhaps in a different court I'd be adopting the questions put by Mr Hendy. Ours is a very similar approach. I would, however, like to ask you questions in respect of the fire risk assessment. Perhaps we could turn to the jury bundle at tab 13 and photograph 17.

THE CORONER: Could you all please make sure you've turned off your phones.

MR DOWDEN: Do you have that?

A. Yes.

Q. Thank you. It's a very short point. Looking at the suspended ceiling there, we can see that the ceiling has been lowered to the extent that it's resting on top of the doorframe; is that right?

A. Yes.

Q. There are perhaps two reasons why a suspended ceiling would be put in place. Would you agree that one may be to assist with the heating of buildings with high ceilings, and another reason may be for putting in services below the original ceiling?

A. Well, I think there are numerous reasons why, and those two reasons are good reasons. One is to enhance the fire performance as well.

Q. Looking at that particular ceiling and the height of it, it's a particularly low ceiling, would you agree?

A. Yes.
Q. Given that, would you expect somebody conducting a fire risk assessment to look at that and to conclude that perhaps there had been some major works conducted above that when that ceiling was put in in 2006 or 2007?
A. Yes, I think as we said earlier, if they'd known about heating amendments and electrical works and that the ceiling has been altered from the original ceiling, then the risk assessor would have assumed that there was something behind that ceiling.
Q. And it would have been quite a high priority to have opened up and checked the work above that ceiling?
A. Well, again, I think as I said earlier, in the knowledge that there was heating, electrical works, and ventilation works through the common parts, I think it would have been an item that would have been raised in the fire risk assessment as an item to be further investigated.
Q. Thank you.
THE CORONER: Thank you. Ms Al Tai.

Questions by MS AL TAI

MS AL TAI: Good afternoon, Mr Walker. I don't have any questions in respect of approved document B, and we would adopt the approach that my learned friend Mr Hendy has taken in respect of taking you through the document

itself. My question merely relates to something you spoke about earlier. It's really in reference to your report at page 26. It's not necessary to put it up but if you'd like to refresh your memory. It's in respect of the commencement of the Fire Safety Order and when fire risk assessments should have been undertaken.
I believe it's right that the Fire Safety Order came into effect on 1 October 2006; is that correct?

A. Yes, that's correct.

Q. And I believe it was put to you on two different occasions, by Mr Maxwell-Scott and Mr Hendy, that there was obviously a two and a half year period between when the safety order came into effect in 2006 and the date of the fire at Lakanal?

A. Yes.

Q. I believe in answer to Mr Hendy's questions, you said that it was a little slow in being undertaken, the fire risk assessment, or the fact that it hadn't been?

A. Yes, I think -- you know, the industry in general has been slow to react to the order, and at the time it came in on 1 October 2006, there probably were very few undertaken, and there was no leading period. That was the date that it was actually brought in, and you should have had them done by 1 October, because it had been loitering for so long to get it to be a formal document.

The thing that I want to raise, I think, is that this wasn't a one-off in that, you know, it was just this one authority that hadn't undertaken risk assessment. It was an industry-wide problem.

Q. Understood, Mr Walker, but regardless of that fact, there was a two-and-a-half-year period between the date at which the Fire Safety Order commenced and the date in which the fire took place.

A. Yes.

Q. Yes. I would put to you that in fact that the day was not just slow but perhaps significantly delayed.

A. Well, again, I would just refer you back to what I've just said. It wasn't unusual for risk assessments to have taken, you know, longer than they should have done, and this was one of those.

Q. That's appreciated, Mr Walker, and I won't push you further, but the fact of whether it was unusual or not is not relevant. It was a delay; is that not correct?

A. It was delayed, yes.

Q. And that delay was significant?

A. Yes, the delay was -- is significant for a high risk building, yes.

Q. Thank you, Mr Walker.

THE CORONER: Thank you. Mr Walsh.

Questions by MR WALSH

MR WALSH: Yes, please, madam. Mr Walker, I ask questions on behalf of the Fire Brigade. I'm not going to ask you anything at all about Building Regulations. I'm also going to touch on risk assessments just for a few questions.

You said yesterday that you had been doing some risk assessments upon instructions after the order came into force at the end of 2006 but there weren't very many, and it wasn't until 2009/2010 that your major fire risk assessments commissions started. That's how you put it?

A. Yes.

Q. Before your major commissions started, whereabouts mostly were you doing risk assessments or training for the purposes?

A. Predominantly for housing associations.

Q. In any particular part of the country, as a matter of interest?

A. I can't recall to be honest.

Q. No, all right.

A. But generally through the southeast.

Q. Right. What I mean to say is: is your experience national? When you say that people were slow to get off the mark, is it experienced nationally or a particular part of the country?

A. It is national, but predominantly the areas where we were undertaking that sort of work was in the southeast at the time.

Q. The southeast of England. All right. Thank you very much. You then make mention -- I won't ask that your report be put up, but at paragraph 3.4.26, you say that in July 2007, the LGA, the local government association, brought out its guide, and it is now the standard that most fire risk assessors use to assess buildings against.

A. Yes.

Q. I'm going to take you to certain parts of that document. I hope Mr Atkins is in a position to be able to do that. I won't need it for a moment. First of all can you help us with this: that guide, which is entitled "Fire safety in purpose-built blocks of flats" was funded by a grant from the Department of Communities and Local Government following calls by what you describe as the industry, those in the housing sector, for more specific guidance on how to manage fire safety in blocks of flats?

A. Correct.

Q. It runs to nearly 200 pages, so I'm not going to ask you to look at it all, but it was significant that that guide was produced after the Lakanal fire, which probably played no small part in the incentive to

producing that guide?

A. Probably, yes.

Q. Now the current guide, then, makes the point that at the point at which the order came into force in 2006 -- and indeed, all the way up until this guide was published -- traditionally guidance has referred -- that is government guidance -- to the five steps risk assessment?

A. Yes.

Q. I'll go into more detail about that in a moment. That approach was outlined in the government guidance "Fire safety risk assessment sleeping accommodation"?

A. Yes.

Q. It is, I hope, unnecessary to take you to the documents. I simply want to establish that up until, really, this document was produced, the guidance which the industry, the housing sector, had for looking at risk assessments was that document, the government sleeping accommodation document --

A. Yes.

Q. -- together with the document that you've also mentioned earlier on, and that is the PAS 79 guide?

A. Correct.

Q. Which speaks for British Standards, which has a nine-stage process to looking at risk assessments and

indeed training for risk assessments?
A. Yes.
Q. No doubt you may well have conducted some training yourself based upon those documents during those years?
A. Sorry? I missed that.
Q. Did you conduct training yourself, referring to those documents --
A. Not personally, but others in my business did, yes.
Q. Right, okay. It follows that most proper training or risk assessments at the time, up until 2011, would have been heavily influenced by those documents?
A. Yes.
Q. All right.
A. Sorry, can I just add --
Q. Yes, of course?
A. The PAS 79 was not for -- not -- it was a general form, not specifically for blocks of flats.
Q. No. The fire safety risk assessment sleeping accommodation guidance, which was issued by the government department, was also fairly general, but it made the point that it was suitable for maisonettes and blocks of flats as well.
A. Indeed.
Q. Yes, all right. Thank you. I just want to take you to some basic points of principle which are stated now in

that local government associations guidance. Could you look at page 20, first. I wonder if that could be put up. That is the front cover of the document. That's page 20. I wonder if it might just be increased in size a little bit.

THE CORONER: Just remind me of the date of that?

MR WALSH: That document was published in 2011. It's been very difficult to find a precise date for it, madam.

A. July 2011.

Q. I'm most grateful.

THE CORONER: Thank you. Yes.

MR WALSH: I'm going to ask you, I'm afraid, to look at the whole of that page, from 11.3 all the way down. I hope it's legible for that purpose. This page touches upon the "stay put" principle and gives the view of the local government association about whether or not it's safe, and then touches upon high rise as high risk.

First of all, 11.3. I'm going to ask you whether you agree with the LGA on these principles. 11.3:

"Once a fire occurs in a block of flats, the likelihood of a death is actually less than the likelihood of a death when fire occurs in a bungalow or a house. The lower frequency of deaths when fire occurs is parallelled by a lower rate of injury. One possible reason for this is that greater protection is afforded

to escape routes in flats than in bungalows and two-storey houses."

Do you agree with that?

A. I'm not sure that I do, personally.

Q. Right. I'm just interested to know whether you agree or not. I'm not going to suggest that you're right or wrong about it.

A. No.

Q. All right. Put a mental finger on that, as it were, then. 11.4:

"In addition, because in a block of flats, each individual flat is totally enclosed in fire-resisting construction, the vast majority of fires are contained within the flat (and, in the majority of cases, in the room) where they start. It is certainly rare for anyone outside the flat where a fire starts to die as a result of a fire in a flat."

Would you agree with that paragraph?

A. I think I do, yes.

Q. Then we come to the consideration of whether the "stay put" principle is safe, and with the last two paragraphs in mind, and that which went before it, the LGA say this:

"This is the basis for the 'stay put' principle ... when a fire occurs within one dwelling (or, less likely,

in the common parts), it is normally safe for other residents to remain within their own flat."

You would agree with that?

A. Yes.

Q. "This principle is undoubtedly successful in an overwhelming number of fires in blocks of flats. In 2009/2010, of over 8,000 fires in these blocks, only 22 fires necessitated evacuation of more than five people with the assistance of the fire and rescue service."

I suppose you wouldn't disagree with the figures, because --

A. I don't know.

Q. The reason I ask you those questions is, I suppose, to emphasise by way of a question the importance of the design features in a high rise block of flats, which includes compartmentation and controls of the external spread of flame over a surface for the purpose of making the block of flats safe.

A. Yes.

Q. Would you agree or disagree, then, with paragraph 13.1 and 13.2? It is said by the local government association that:

"There is a common misconception that those living on the higher levels of a high rise block of flats are at greater risk from fire than people living in low rise

blocks or in bungalows and two-storey houses. However, statistically, there is no evidence to support this, even though, in principle, the potential risk might be regarded as greater."

Would you agree with that general proposition?

A. I don't understand why you're asking me to agree or disagree with it. It's a statement that somebody's written in here, and --

Q. I'll tell you why I ask you: you're the appropriate person to answer this question. When the fire and rescue services develop policies for the purpose of ensuring that firefighting and rescue is properly carried out, it has to assess risks of various different sorts of types of buildings and many factors come into play. Therefore -- I'm not suggesting that this is my view or anybody else's -- I just want to know whether you agree, from your expertise, with the view expressed in this document.

A. Well, I --

Q. If you can't --

A. It's a point of view, and I'm not sure I've got a view one way or the other. I'm skeptical about the statement it makes.

Q. Let me just read the last paragraph to you, then, 13.2:

"Obviously above first floor level, escape via

windows is impossible and above the third floor, rescue by fire and rescue service ladders is unlikely to be possible; even high reach appliances have their limits. However, this is taken into account in the design, layout and means of escape in modern blocks of flats. They are designed so that escape or rescue via windows should not be necessary."

A. Correct.

Q. All right. There is then -- this is the last matter which I'm going to ask you to agree with or otherwise that doesn't touch upon about your own evidence about your inspection of these premises. If you wouldn't mind looking at page 24. This is a discussion of the guidance and advice given by the local government association in relation to fire safety in blocks of flats, and at 16.9, the following is stated:

"The design of communal means of escape in purpose-built blocks of flats is based on certain assumptions. These include: the most likely place of origin of a fire will be in a flat itself."

I'll read them all and then you can tell me whether you agree or disagree. Secondly:

"That there is a high degree of fire separation between flats and the common parts and, therefore, the likelihood of fire and smoke spread beyond the flat of

origin is low."

The third bullet point:

"The materials used in the construction of the building or the protection afforded to them are such that fire is unlikely to spread through the fabric of the building."

The fourth bullet point:

"That the use of the common parts, and the nature of any combustible items present, is such that any fire originating in the common parts is unlikely to spread beyond the immediate vicinity."

And then finally:

"That there will be no external rescue and residents should be able to escape by themselves."

Those bullet points are explained in more detail elsewhere in the document, with which you'll be very familiar. Would you agree with those assumptions?

A. In a well-managed building, yes.

Q. Exactly, that's precisely the point. So providing the construction of the building complies with legislation, building regs and otherwise concerning the development and maintenance of premises of these kind, they ought to be safe premises in which to live?

A. Yes.

Q. In actual fact, I think buildings with single

staircases, high rise, are still built?
A. Yes.
Q. Providing that they meet those stringent standards, both in relation to compartmentation and the distance of travel from the flats to the escape routes?
A. Correct, and there's fire engineering installations in the buildings these days.
Q. Yes, all right. Thank you. I want to ask you then about who does the fire risk assessments. What you properly pointed out is that the risk assessors must be competent. There's no definition in the order as to what should be competent, but you adopt, I think, the definition of the health and safety executive, which is that they should be trained?
A. Yes.
Q. But in addition to that they should have sufficient experience and knowledge --
A. Yes.
Q. -- depending upon what they're looking at, and any other factors that might be relevant?
A. Yes.
Q. No doubt all would agree with that. You made the point that, for example, housing officers would be sufficiently, in your view, well versed in what they're looking at to be able to look at a great many buildings

of a less complex nature?

A. Yes.

Q. But those of a more complex nature should be assessed by people who know what they're looking at so they can identify problems in relation to construction and otherwise?

A. Correct. I mean, that may be a housing officer as well, dependent on their construction knowledge.

Q. Exactly. It's perhaps not the label so much that I'm looking for. It may well be that in a particular authority that there are housing officers who are used to doing property inspections of the authority's estate and property at various different times with sufficient knowledge of the type of construction of a building to be able to identify problems of the type which you describe.

A. Yes.

Q. Just finally on that topic, of course, if the risk assessor is looking around the building to see what ought to be identified and what ought not to be, if it's a non-destructive or a non-invasive inspection -- in other words, looking at the ceiling or looking at potential elements of the building which might require looking into in more detail -- what you would expect is the risk assessor to make a recommendation to the

responsible person, the landlord or the owner, for a suitably competent contractor, or something of that nature, to open up a void to carry out an inspection?

A. Yes, correct.

Q. Rather than to do it themselves?

A. Well, it could be that you go back and do that yourself, or somebody else goes back with a technical understanding. But it's -- it depends on who the client is --

Q. Of course.

A. -- and whether they want you to follow up on all the actions.

Q. All right.

If you wouldn't mind just having a look at divider 13 of the jury bundle, pages 28 and 29. I'm coming to the boxing in now, and I'm going to ask you a question which touches not so much upon Building Regulations but risk assessment.

At pages 28 and 29, there are slightly different aspects to the boxing in under the stairs which we've looked at on page 27 and elsewhere. On 29 we can see it closely, and on 29 we can see it more at a distance with some of the ceiling panels removed. My question to you is this: whether or not a risk assessment could have picked up the boxing in under the stairwell that cuts

through into the corridor, I think your inspection of the way in which it was boxed in was that -- I think the words you used was that it wasn't brilliant, but in your statement you said it was of a poor standard?

A. It is of a poor standard, yes.

Q. You told us that your view is it should be 60-minute fire-resistant?

A. Yes.

Q. Mr Crowder gave evidence some time ago concerning a reconstruction of this particular element of the building. His evidence was that the reconstruction demonstrated that once fire entered that part of the stair area in the flat, the boxing in failed within two to three minutes. Would that surprise you?

A. No.

Q. That obviously had an impact upon firefighting and rescue, which is why I ask you the question. Now I'm going to ask you to look at page 87 of the local government association guidance and look at paragraph 58.22. This is on the subject of cavity barriers. There we can see that what the local government association say about this topic is:

"False ceilings can sometimes be found in the common corridors and lobbies of blocks of flats. The materials used to construct the ceilings and the surface finishes

should preferably be non-combustible, or at least class 0."

While you would agree?

A. Yes.

Q. "There should be little or no additional fire hazards within the false ceilings. On this basis, there may not be a need for cavity barriers to subdivide the voids, but this would need to be considered in each circumstance."

A. Yes.

Q. That's the point about cavity barriers, isn't it? Whatever the position is, there may not be a need for them, but if you look into a suspended ceiling and you see that level of boxing in, the solution is not so much the installation of cavity barriers but the improvement of the boxing in so as to maintain compartmentation to 60 minutes, as you have suggested?

A. Yes.

Q. Yes, all right. Thank you very much indeed.

THE CORONER: Thank you. Mr Matthews.

Questions by MR MATTHEWS

MR MATTHEWS: Mr Walker, I'm going to have to get your help with document B and some of the evidence you've given. Before we turn to that, because I think we all need to take a deep breath, can I ask you to stand back a little

and help us understand. When you originally gave your answer concerning 30 minutes fire resistance for the panels under the bedroom windows --

A. Yes.

Q. Do you remember that?

A. Yes.

Q. Is that something that you arrived at only after a detailed examination of document B or is that something where you were able to take one look at the papers when you first got them and say, "Well, that's obviously the requirement"?

A. The 30 minutes I believed was the requirement for that, having my knowledge of the document B, but taking the logic of the steps we've been through today, you could read that it is the 120 minutes with the storeys involved.

THE FOREMAN OF THE JURY: I'm terribly sorry, madam. Might I just duck out for a brief moment?

THE CORONER: Yes, of course, yes.

THE FOREMAN OF THE JURY: I'm terribly sorry.

MR MATTHEWS: Madam, do you think we ought to take a comfort break?

THE CORONER: Yes, all right. Why don't we all have a five minute break. That would be a good idea. Do leave your papers behind.

THE FOREMAN OF THE JURY: Thank you.
THE CORONER: Yes, Mr Walker, we'll have a five minute break. You mustn't talk to anyone during the break.
(3.09 pm)
(A short break)
(3.13 pm)
(In the presence of the Jury)
THE CORONER: Yes, Mr Matthews, thank you.
MR MATTHEWS: So is this fair, Mr Walker? I promise we'll come to 120 minutes, but you, as it were, took a look at the situation you were being asked to consider and you thought: "I think the answer's 30 minutes' fire resistance. Now I'm going to go to approved document B and work out where in that document and how I arrive at confirmation of my professional instinct"?
A. Correct.
Q. I promise you I'm not going to take us through the route you gave us all over again but I'd like us to have in mind that route. Is this a good way of placing it in our minds: when it came to escape balconies, you were looking at approved document B and saying, "Well, the material in relation to external stairs is relevant to that"?
A. Correct.
Q. We've looked at why that got us to, rather

counter-intuitively, the section in document B that talks about buildings other than dwellings.

A. Yes.

Q. But we can all agree via a tortuous route that's where you were taken?

A. That's where you end up, yes.

Q. Yes. So again -- I hope everyone will be patient with me, because I am going to take this slowly. Can we look at page 53, again, bearing in mind I've taken us rather into the middle of the logic path. The logic path took us to "external escape stairs", paragraph 6.25 --

A. Yes.

Q. -- didn't it?

A. Yes.

Q. Can we just look, then, carefully at what 6.25 says, because it says:

"Where an external escape stair is provided in accordance with paragraph 3.45, paragraph 3.46 or paragraph 5.33 ..."

A. Yes.

Q. "... it should meet the following provisions."

And you then took us to (b) in this following paragraph.

THE CORONER: And (a).

MR MATTHEWS: Sorry, yes, (a) and (b). So (a) was talking

about the fire-resisting and self-closing doors?

A. Yes.

Q. And (b) is where we'd got any part of the external envelope of the building within 1800 millimetres of and nine metres vertically below. That's where your nine metres comes from?

A. Yes.

Q. And this paragraph took us at the end -- and this subparagraph (b) -- took us to "See diagram 22", didn't it?

A. Correct.

Q. I promise you we'll come there in a second, but the external escape stairs have to meet all of the following provisions, and if you look at the last one here, (e), it says this:

"Glazing in areas of fire-resisting construction mentioned above should also be fire-resisting, integrity but not insulation, and fixed shut."

A. Yes.

Q. So what this appears to be saying is that anything in that zone, that nine-metre zone -- and we'll look at it in the diagram -- also has to have fire-resisting glazing and the glazing has to be fixed shut?

A. Yes.

Q. So if we look over the page to 54, we've got the diagram

in 22, and in our black and white version, the dirty grey shading in the fire-resisting area or zone talked about in the paragraphs, isn't it?

A. Yes, indeed.

Q. We can see in the top diagram example A. There's just one window in there, and that has to be a window with 30-minute fire-resisting construction?

A. Correct.

Q. Presumably, then, if external stairs paragraphs apply, all of the glazing in that zone has to be sealed shut?

A. In -- yes, in this location, yes.

Q. By your logic, then, wouldn't all the glazing along all of the entire building have to be fixed shut?

A. To comply with this regulation at this time, the logic is: yes, it would.

Q. Does that not cause you to doubt your interpretation?

A. Well, the practical side of Lakanal House and what we have at Lakanal House is that we've got corridors with opening windows and doors on those -- on that external corridor, the balcony escape, and the existing resistance and fire precaution works on that do not comply with this, and if you were building a new building to comply with Building Regulations, you would have to comply with this or have some system that would engineer that process to be able to have opening

windows, in my view.

Q. Well, have a look at page 44 of this. This is the beginning of the section on external escape routes at 4.26. Guidance on the use of external escape stairs from buildings other than dwellings is given in paragraph 5.33 and then the next paragraph is 4.27:

"Where an external escape route other than a stair is beside an external wall of the building, that part of the external wall within 1800 millimetres of the escape route should be of fire-resisting construction up to a height of 1,100 millimetres above the paving level of the route."

A. Correct.

Q. Isn't 4.27 the appropriate paragraph and answer?

A. Well, yes, and if you go back to BS5588 --

Q. We will do in just a second then.

A. Okay.

Q. Before we do, so we can understand your logic -- maybe I'm at fault. It may be my lack of understanding. I'm reading that as telling me that this concerns the situation other than an external stair, in other words other than that diagram that we've just looked at and those paragraphs we've just looked at, and it's saying fire-resisting up to a height of 1,100 millimetres.

A. Yes, correct.

Q. Isn't that the requirement, then, for the fire escape balconies?
A. It is the requirement for a fire escape balcony, yes.
Q. And then the panels under the bedroom windows simply aren't caught by that?
A. Well, the panel under the bedroom windows are -- are caught by the diagram that we saw at 22.
Q. Forgive me, Mr Walker, they can't be, because you got there by saying: when you're looking at escape balconies, look at the provisions about external stairs.
A. Yes.
Q. This paragraph's saying "Don't look at the provisions about external stairs", isn't it? (Pause)
A. Yes, it does read that way.
Q. It may be, then, I don't need to take to you BS5588, because another thing that document B says is -- without wishing to sound flippant, it basically says, "Don't mix and match. Stick with one document or the other. Don't take elements out of British Standard 5588 and approved document B", doesn't it?
A. Yes, but if there is no answer in approved document B then you have to go back to the British Standard.
Q. Well, I think we've gone there. I've suggested to you that there is an answer. But out of completeness, let's go to British Standard 5588 then. I can do that, you'll

all be relieved to know, in reference just to four pages. Have we handed the jury a copy of that? We have. Page 26.

THE CORONER: Members of the jury, do you have a copy of that? Thank you.

MR MATTHEWS: Thank you very much. All of ours have been holepunched. It's the bottom holepunch, number 12, "Escape routes from dwellings with corridor or lobby approach". I just need to start at the commentary, which is 12.1. It says:

"In these designs, because of the risks presented to escaping occupants by the presence of smoke and heat in the internal corridor lobby and to afford the designer some flexibility, the following methods of securing safety should be considered."

We can drop down to (b), which is:

"The provision of an independent alternative escape route from each dwelling, either by way of a corridor at another level or an external common balcony."

So external common balcony. We can go over to page 27 and just pick up at 13, halfway down the page:

"Escape Routes from dwellings with balcony or deck approach."

At 13.1 -- we'll only pause there briefly -- the commentary:

"If the balconies are relatively narrow, it may be assumed that in general there is little risk of them becoming smoke-logged. Therefore the only considerations necessary are to ensure that the distance to any dwelling from a fire main is acceptable for the purpose of firefighting and, in the case of single-stair buildings, that adequate safeguards are provided for persons wishing to escape past the dwelling on fire."

So we can go, with that, to -- oh no, sorry, recommendations then, still on the same page. 13.2:

"The following recommendations are applicable ..."

And (a):

"Provision of escape routes should be in accordance with the principles indicated in figure 15."

Figure 15 is the next page that we provided, and if we look at the third diagram down the page, we can see that (a) and (b) are hatched lines. If you look at the key, it says here:

"Fire-resisting construction up to a height of 1.1 metres above deck level."

So again, it's saying the same thing, isn't it?

A. Yes, it is. You're taking us through the exact route I went through yesterday.

Q. Right. So if's just the fire-resisting construction up to a height of 1.1 metres?

A. Yes.
Q. So it doesn't impact on the panels under the bedroom windows, and to show you why I say that perhaps as forcefully as I do, if we can jump, then, to page 35. Page 35 has a very similar diagram to what we've seen, and if we have a good memory, in document B I think it's diagram 22.
A. Yes.
Q. This diagram is about external stairs. Figure 16, "Fire resistance of areas adjacent to external stairs". And low and behold, it's saying the same thing, isn't it?
A. It does.
Q. So it's saying something different about external stairs in relation to escape balconies?
A. Correct.
Q. Can I then just get you to go back to where we left document -- page 44, I think it was.
MR MAXWELL-SCOTT: Madam, just before we cover that point in 44, I think it might be appropriate to introduce the section which it relates to, which is section 4, which I don't think we've been taken to the introduction of.
THE CORONER: Okay, yes, that would be helpful.
MR MAXWELL-SCOTT: Paragraph 4.1, because 4.27 falls within it.
THE CORONER: Thank you. (Pause).

MR MAXWELL-SCOTT: I don't think we've referred to the fact that 4.1 introduces 4.27.

THE CORONER: We didn't look at that yesterday.

MR MATTHEWS: I'm sorry, I'm confused. I thought I was doing it in a simple, straightforward way.

THE CORONER: Well, Mr Matthews, either you introduce this, as Mr Maxwell-Scott has suggested, or we ask Mr Maxwell-Scott to introduce this and then we come back to your questions. I don't mind which.

MR MATTHEWS: Can I ask Mr Maxwell-Scott, only because I'm missing the significance of what I'm not doing.

THE CORONER: Okay, thank you.

MR MAXWELL-SCOTT: I just wanted to draw attention to the interlink between 4.27, which talks about 1,800 millimetres, that part of the external wall within 1,800 millimetres of the escape route being of fire-resisting construction, and referring back to 4.1, saying:

"This section deals with the provision of means of escape from any point to the storey exit of the floor in question for all types of building other than dwelling houses, flats and maisonettes, for which refer to sections 2 and 3."

THE CORONER: Thank you. Yes, Mr Matthews.

MR MATTHEWS: Back, then, to page 44 and paragraph 4.27.

Can I press you again, then: am I right in my reading of this that this is the relevant matter, and not external stairs?

A. Sorry, I'm just reading 4.1.

Q. And --

THE CORONER: Just give Mr Walker a chance to refresh his memory.

MR MATTHEWS: Sorry. (Pause)

A. Okay, sorry.

Q. In fact, what I was going to say, while you were thinking, is -- I recognise that is an extremely difficult thing to do, especially in the witness box in the midst of giving evidence, so I'm genuinely simply asking you whether, having now reflected on it, isn't my reading of that as the relevant paragraph correct? Again, to be fair to you, it may be even that asking in that way is a big ask, as it were. If want some time to reflect --

THE CORONER: Well, Mr Matthews, if the point that you're predicating to Mr Walker is, as you say, correct, where does that take you?

MR MATTHEWS: That where he's described that the panels under the bedroom windows were required to be of 30 minutes' fire resistance because of the diagram 22, that's wrong.

THE CORONER: So that's the point that you're pursuing?
MR MATTHEWS: That is it, and I stress it's --
THE CORONER: What do you say that positively the requirement is? Or you say there is none?
MR MATTHEWS: From my reading, yes, there is none in terms of fire resistance.
THE CORONER: Mr Walker, do you want some time to think about that, or does --
A. I think it would be useful for me just to recap and just have a look at that, because I also need to have a look at table A2 as well, because table A2 is -- revolved around supporting structure. So I'd just like to have a --
MR MATTHEWS: Exactly, and why I predicated what I just said in that way is because I think I should deal with that 120 minutes now and put to you my understanding, and again, it may be that you want to think about it.
THE CORONER: Yes, well, why don't you run through that, and then we can leave Mr Walker some time to give some thought to it all.
MR MATTHEWS: Can I do it with this introduction: can we all bear with me, because I have only just heard the suggestion put to you by my learned friend Mr Hendy. It wasn't something I was aware was coming, and it's predicated on page 119, table A2, headed "Minimum

periods of fire resistance". Don't we have to look and notice that it says "minimum periods for elements of structure"?

A. Yes, as a rule.

Q. That's what you were just alluding to?

A. Yes.

Q. Let me just take you to one more paragraph that will help on that, which I've forgotten. I'll be reminded. Page 135. I'm not sure we have page 135, but I think we can do it on the screen, please. It's our definition of "element of structure". Oh, we do. It's page 64, sorry. Yes, it needs to be on the screen. Page 64. If we look at the top right, B3.iii.

A. Yes.

Q. "'Elements of structure' is the term applied to the main structural load-bearing elements, such as structural frames, floors, and load-bearing walls."

A. Correct.

Q. "Compartment walls are treated as elements of structure although they are not necessarily load-bearing."

Pausing there, I think you've already answered that when it comes to the exterior wall of the maisonette, it's not a compartmental wall.

A. Yes.

Q. So table A2, from my understanding --

MR HENDY: I'm sorry to interrupt, madam, but I wonder if Mr Matthews could read the rest of that paragraph about external walls.

MR MATTHEWS: Certainly, but I suspect that's taking us down a blind alley. I will do:

"Roofs, unless they serve the function of a floor, are not treated as elements of structure. External walls, such as curtain walls and other forms much cladding which transmit only self weight and wind loads and do not transmit floor loads, are not regarded as load-bearing for the purposes of B3.ii(a), although they may need fire resistance to satisfy requirement B4."

So you can confirm that we're not talking about any of that in relation to the bedroom window set and panel?

A. Correct.

Q. So it may be as clear as mud. I hope it's not. What I'd like you to consider, then -- I won't repeat the first matter, but the second matter is that table A2, where you get the 120 minutes, doesn't apply because it's about structural elements of which we're not concerned.

I leave those two with you and move to something completely different, if I may.

MR HENDY: Madam, I'm sorry to interrupt but I think Mr Matthews has left that in a misleading state. Can I

just indicate to you why that is. At page 64, "elements of structure" is defined in the passage that Mr Matthews has read out, but the passage at the end which I asked him to read is:

"External walls, such as curtain walls and other forms of cladding which transmit only self-weight and wind loads ... are not to be regarded as load-bearing."

Therefore presumably they're not load-bearing elements, therefore they're not elements of structure. But it continues:

"... although they may need fire resistance to satisfy requirement B4 (see sections 13 and 14)."

Section 13 is the very section that I put to Mr Walker, "Construction of external walls", beginning at page 89. It's because they're an external wall that they have to comply with appendix A.

So I think if Mr Walker's going to reflect on these, I think this is something he needs to reflect on, and not that external walls are simply excluded. I'm sorry to interrupt.

THE CORONER: I have both points. I think the sensible way forward is if we stop now -- Mr Walker has had a long day -- and if we ask Mr Walker please overnight -- are you able to come back tomorrow morning?

A. Yes.

THE CORONER: So please, overnight, if you could give thoughts to the points which Mr Matthews has raised, in particular under paragraph 4.27, the matter which Mr Hendy has just raised and which you debated a moment ago in relation to paragraph B3.iii on page 64, and then I think we'll continue tomorrow. Mr Maxwell-Scott?

MR MAXWELL-SCOTT: Can I -- because obviously we can't speak to Mr Walker -- also suggest that he has a look at page 17 on the use of the document, which says something about each of the different section numbers, and then looks at the definitions in appendix E, which starts on page 134, which includes definitions on "dwelling" and "dwelling house" and so on, and then looks at the introduction to section B3, which starts on page 29 and talks about flats and maisonettes and houses in multiple occupation, and also an introduction to section 4 at page 38.

THE CORONER: Thank you.

Mr Walker, do you have a note of the homework so far?

A. Yes.

THE CORONER: Thank you.

MR MATTHEWS: Can I then add one more, which may help. I think it's page 89 and it's paragraphs 13.1 and 13.2.

THE CORONER: I appreciate that we haven't yet got to the

remaining advocates, but would any of you three like to add to Mr Walker's list of homework tonight? It would be helpful if he were forewarned so he can give some thought overnight.

MS CANBY: Can I also add paragraph 13.3, on the same page.

A. Sorry, I missed that.

MS CANBY: 13.3.

THE CORONER: All right.

Well, Mr Walker, please if you could be back here tomorrow morning, and we'll continue your evidence then. If you could look at those matters overnight that would be very helpful. Thank you very much.

Members of the jury, we'll call it a day for today. I have to say I find it extraordinary that a document which is intended to be used by contractors and subcontractors and people who want building work done is so impenetrable, but there we are. Please, could you be back for a start at 10.15 tomorrow morning. Thank you very much.

Yes, Mr Walker, if you could be back for a start at 10.15. Please, no talking to anyone overnight about your evidence, thank you.

(In the absence of the Jury)

THE CORONER: If everybody else could be here for a 10 o'clock start, because there are a couple of

matters that we need to deal with before we deal with the evidence, thank you.

(3.51 pm)

(The Court adjourned until 10 o'clock the following day)

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