

Monday, 25 February 2013

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(10.00 am)

THE CORONER: Yes, good morning everybody. Please sit down, thank you. Yes, are there any matters that we need to raise before we begin the evidence this morning? In that case, please might we invite the jury in. Yes, Mr Atkins, good morning.

MR ATKINS: Good morning, madam. The first witness will be Mr David Laing.

THE CORONER: Thank you.

(In the presence of the Jury)

THE CORONER: Members of the jury, good morning. We're going to begin the evidence this week with evidence from people who were involved with the supply of the panels about which we've already heard quite a lot, and of the window frames and so on. We'll be continuing with the evidence during the course of the week, though I'll tell you about that later. So yes, the first witness I think is Mr David Laing from Trespa?

MR ATKINS: Madam, yes.

THE CORONER: Yes, would you like to come forward, Mr Laing.

DAVID Laing (affirmed)

THE CORONER: Yes, good morning, Mr Laing. Are we pronouncing your name correctly?

A. Yes.

1 THE CORONER: Thank you, do sit down. Do help yourself to
2 a glass of water.

3 A. Thank you.

4 THE CORONER: Thank you very much. The sound in this room
5 is not always easy. You see that the microphones are on
6 in front of you and they certainly help. If you direct
7 your answers across the rooms towards the members of the
8 jury who are sitting opposite you, then that will help
9 them to hear what you're saying and also help to keep
10 you close to the microphones.

11 A. Thank you.

12 THE CORONER: Thank you. Mr Atkins, who is standing, is
13 going to ask questions on my behalf and then there will
14 be questions from others.

15 Just to remind everybody that I think there will be
16 a fire alarm test at 11 o'clock this morning. There
17 normally is on a Monday morning, so provided the sound
18 only sounds for a short time we don't need to do
19 anything. We can carry on soon after. Thank you.

20 Questions by MR ATKINS

21 MR ATKINS: Can you please tell the court your full name?

22 A. David Harvey Laing.

23 Q. Mr Laing, is it right that you are a country manager for
24 a company called Trespa UK Limited?

25 A. That is correct, yes.

1 Q. Is it right that Trespa is in fact a larger organisation
2 and that it is mainly based in Holland?

3 A. Yes, the head office is in the Netherlands and Trespa UK
4 is a wholly owned subsidiary.

5 Q. Mr Laing, what I'd like to do, please, is to ask you
6 questions in stages so that we can build up, first of
7 all, an understanding of what it is that your company
8 produces, the characteristics of the material that it
9 produces and what it was used for at Lakanal House and
10 how that came about.

11 Could I ask you first of all, please, to turn to
12 tab 18 of the jury bundle. Mr Clark will hand that to
13 you now. (Handed) We have there three pages which are
14 intended to illustrate the facade of Lakanal House and
15 we have three --

16 THE CORONER: Sorry, could we just stop a moment because the
17 members of the jury are just turning up the pages in
18 their bundles. Yes, thank you.

19 MR ATKINS: Yes, Mr Laing, we have three pages and they each
20 illustrate a different section of the facade of
21 Lakanal House. So you see on the first page we have the
22 bedroom, on the second page the kitchen on the upper
23 floor, and on the third page the lounge on the upper
24 floor. We can deal in more detail a little later on
25 with the characteristics of the materials used in each

1 place, but it may be helpful just to use this diagram to
2 help us get our bearings and to understand where
3 materials which were manufactured by Trespa were used.
4 Have you seen these diagrams before?

5 A. Yes, I have.

6 Q. If we just look, please, at the first page, the bedroom
7 page, we can see that the upper section of the facade is
8 glazed. Do Trespa have anything to do with glazing?

9 A. No.

10 Q. We can see that the facade is made up inside these grey
11 sections marked as frames. Do Trespa manufacture frames
12 for facades?

13 A. No.

14 Q. Then we can see, at the bottom of that section, there
15 are two panels shown in green and marked with the number
16 2, and if you look on the right-hand side there's a key
17 which explains that they are composite panels with
18 insulation core. Could I just ask you, please: is it
19 your understanding that the composite panels which were
20 used at Lakanal House had, on either side of them,
21 sheets of three-millimetre thick Trespa Meteon?

22 A. It's my understanding that the panels or composite
23 panels had three-millimetre HPL with an insulation core
24 and there's a high probability that the material came
25 from Trespa.

1 Q. Just so that we're clear, do Trespa manufacture the
2 insulation material that goes between the two sheets of
3 a panel such as that?

4 A. Trespa neither manufacture the insulation material or
5 the composite panels.

6 Q. Again, we can come back to the detail of this a little
7 later on, but in outline is it right that Trespa produce
8 this material in two grades known as standard grade and
9 fire-retardant grade?

10 A. That is correct.

11 Q. And in this instance the material found in these
12 composite panels was the standard grade?

13 A. From all our records through order acknowledgements,
14 deliveries, it is standard material.

15 Q. If I could ask you, please, then, to turn over to the
16 second page, which is the kitchen. We can see that
17 there are, again, a number of panels marked with
18 a number 2 on a green background. Just to explain, the
19 top diagram shows the facade -- so that's everything
20 which is in the same vertical plane -- and then the
21 bottom diagram shows the same thing but with the balcony
22 panels in front of them, if that makes sense. So
23 looking at the panels which are marked with a 2, is it
24 your understanding that that was the same material that
25 we saw in the first diagram?

1 A. Yes, it is.

2 Q. So in other words the composite panels, as far as you
3 have been able to tell, had three-millimetre standard
4 grade Trespa on either side of some insulation material?

5 A. Correct.

6 Q. Looking, then, at the bottom of those two diagrams,
7 still on the second page, there are two panels marked in
8 darker green with the number 5. Again, if we look to
9 the key at the right-hand side they are marked as
10 balcony panels. In summary, is it your understanding
11 that the balcony panels were made out of, again, Trespa
12 sheeting, but this time 13 millimetres thick?

13 A. Again, from checking customer records, we believe that
14 material is Trespa.

15 Q. Does it appear to be the case that again that material
16 was the standard grade rather than the fire-retardant
17 grade?

18 A. Yes, also from checking customer records, the material
19 is standard grade.

20 Q. You've explained that in the case of the composite
21 panels, they would be manufactured -- that is, put
22 together -- by somebody other than Trespa. In the case
23 of the balcony panels, is it correct that that is
24 a finished product which Trespa manufactures?

25 A. Yes, the 13-millimetre is a finished product

1 manufactured by Trespa.

2 Q. Could I ask you then, please, to turn on to the third
3 page, which is the diagram of the lounge facade. We
4 have the same thing: the upper diagram shows the facade
5 itself and the lower diagram shows the facade but with
6 the balcony panels as a screen in front of them. This
7 time we can see that there is the material marked
8 number 2 in the lower panel of the door in the top
9 diagram, and in the bottom diagram again we have the
10 balcony panels made of the material marked 5. In
11 summary, then, we are looking at two different sorts of
12 material across those three facade sections; is that
13 right?

14 A. Correct, yes.

15 Q. Would it be correct to describe the material that Trespa
16 manufacture as high pressure laminate sheeting?

17 A. Yes, that is a generic term for that type of product.

18 Q. Can you just tell us, please, in simple terms what that
19 material is made of?

20 A. The panel is made of 70 per cent cellulose fibre and
21 30 per cent thermosetting resins.

22 Q. Is it right that that merely itself is sometimes
23 referred to, for shorthand, as "Trespa"?

24 A. Yes, it could be.

25 Q. Do Trespa manufacture any products which contain metal?

1 A. No products made of metal are manufactured by Trespa.

2 Q. So if we take the high pressure laminate sheeting, which
3 you say is made of cellulose fibre and resin, is it
4 correct that that material is then available in a range
5 of thicknesses and textures and colours?

6 A. That is correct, yes.

7 Q. And that the range of thicknesses ranges from something
8 like three-millimetre, very thin, at the bottom, to
9 perhaps 25-millimetre at the top end?

10 A. That's correct, yes.

11 Q. Out of that range of thickness, three millimetres to
12 25 millimetres, which thicknesses are sold as finished
13 products?

14 A. Any product from six-millimetre and above is sold as
15 a finished product and certified. Any product less than
16 six-millimetre is an unfinished product and is not
17 certified.

18 Q. I'll come back, if I may, to ask you about certification
19 a little later on. Just thinking about the question of
20 whether something is a finished product or not, is it
21 the case first of all that the Trespa sheeting, the high
22 pressure laminate sheeting, has no insulating
23 properties?

24 A. That is correct.

25 Q. In other words, if you use it in a wall, for example, it

1 won't help to keep you warm?

2 A. No, its insulation properties are negligible.

3 Q. So in the case of, say, for the sake of argument,

4 15-millimetre thick Trespa sheeting, what sorts of

5 applications are there in construction for material of

6 that sort?

7 A. That material would normally be used as balcony

8 application or on a facade application as a wall

9 cladding.

10 Q. Is it a material which could be used -- or which would

11 be used -- as part of a facade such as the bedroom

12 facade we have on page 1 of tab 18?

13 A. Do you mean as a composite panel?

14 Q. No, by itself. Would it be used for that sort of

15 purpose?

16 A. It would not be used for that purpose.

17 Q. Why not?

18 A. Because (a) it has no insulation qualities, (b)

19 Trespa -- without getting too technical, Trespa is

20 manufactured in thicker panels as a balanced panel, and

21 it requires to have the air on the outside and the

22 inside and the humidity the same to keep it in balance.

23 Q. We've looked at the thicker Trespa. What about the

24 thinner material, the three-millimetre Trespa. Is that

25 sold as a finished product?

1 A. That is sold as a part-finished product and is not
2 certified.

3 Q. In your experience, is it used as a standalone building
4 material?

5 A. No.

6 Q. Why not?

7 A. It is not a balanced product in three-millimetre format
8 so it cannot be applied on a facade. It has to be
9 bonded to other materials to form a balanced composite
10 panel.

11 Q. Is it correct that the predominant use, in fact, in the
12 industry of the thinner three-millimetre sheeting is in
13 the manufacture of composite panels?

14 A. That is correct, yes.

15 Q. In other words, panels which have some thin sheeting
16 either side and some other material in between?

17 A. That is correct, yes.

18 Q. I'd like to ask you, please, now, about the fire-related
19 properties of these materials that we've been looking
20 at. First of all, so far as you are aware, are high
21 pressure laminate sheets combustible?

22 A. Yes.

23 Q. Is it possible, so far as you're aware, to supply
24 a non-combustible high pressure laminate sheet?

25 A. It is not possible to produce a high pressure laminate

1 as a non-combustible product.

2 Q. Can you help us, in simple terms, with why that is?

3 A. Basically because of the make up of 70 per cent
4 cellulose fibre, which is wood-based or paper-based.

5 Q. In other words, the materials that the sheets are made
6 of are inherently combustible materials?

7 A. That's correct.

8 Q. The jury's attention has already been drawn in this case
9 to the distinction between two sorts of fire properties
10 a material might have. The first is fire-resistant,
11 which is the spread of fire through the material from
12 one side to the other, and the second is something
13 called the surface spread of flame, or fire-retardance,
14 which is to do with fire moving across the surface of
15 the material. Is that a distinction that you're
16 familiar with?

17 A. Yes, it is.

18 Q. Are any of the high pressure laminate sheets that Trespa
19 manufacture marketed as being fire-resistant; that is,
20 as stopping fire passing through the material?

21 A. No, the designation of FR is fire-retardant. We do not
22 sell fire-resistant products.

23 Q. A little earlier on we touched on the fact that there
24 are two grades of material supplied, standard grade and
25 fire-retardant grade. That's known as FR grade; is that

1 right?

2 A. That's correct.

3 Q. What, in fact, is the difference, again in simple terms,
4 between the two substances?

5 A. Do you mean a difference in manufacture or the
6 difference in --

7 Q. In terms of manufacture, what goes into them?

8 A. There's a different resin used in the manufacture of the
9 FR product.

10 Q. Earlier, you talked about some of the products being
11 certified and others not being certified. If we just
12 follow that through, is it right that thicknesses of
13 six-millimetre and above are tested for their
14 fire-retardant properties, and if they pass the
15 necessary tests they're marketed as being
16 fire-retardant?

17 A. Product from six-millimetre and above are tested for
18 fire reaction, their reaction to fire, and are certified
19 as such.

20 Q. There's no need to go into the technical detail for now,
21 but is it correct that that testing is based on a test
22 specified in the British Standard?

23 A. Yes, the panels in the past have been tested under BS476
24 parts 6 and 7.

25 Q. Is it right that in the case of thicknesses below six

1 millimetres, your company takes the view that the test
2 requires that they have to be tested with the material
3 that they're going to be bonded to?

4 A. Yes, my understanding is that a composite panel should
5 be tested in its final composition, ie that which is to
6 be glazed on a building.

7 Q. So if we think about the three-millimetre panels, you've
8 told us that that would be used by somebody else as part
9 of a composite panel. Does that mean that the person
10 who manufacturers the composite panel could carry out
11 the British Standard test on the finished panel but that
12 Trespa would not test the three-millimetre sheet by
13 itself?

14 A. Trespa do not test the three-millimetre sheet by itself,
15 because it would never be used on a building in that
16 format. It's our belief that the responsibility for
17 testing the completed product lies with the manufacturer
18 of that product, who would then have knowledge of the
19 insulation used.

20 Q. So does it follow for that reason that Trespa do not
21 advertise or market thicknesses below six-millimetre as
22 being fire-retardant?

23 A. That is correct, yes.

24 Q. Could I ask a slightly different question, which is
25 this: is it possible to make three-millimetre sheet of

1 the grade which would be called fire-retardant if it
2 were thick enough? Does that make sense?

3 A. Sorry, can you repeat the question?

4 Q. Trespa manufacture two grades, standard grade and
5 fire-retardant grade, and you've told us that for
6 sheeting which is six millimetres and above it would be
7 tested, and if it passed the necessary test it could be
8 marketed as fire-retardant. Is it possible to make
9 a thinner sheet of that same material?

10 A. Yes, it is possible. My own belief is that because of
11 the limited thickness on three-millimetre, any use of
12 an FR resin would have a nominal effect on the
13 performance of the panel.

14 Q. That is to say Trespa could manufacture the
15 fire-retardant grade material in a thickness of three
16 millimetres but you wouldn't make the claim about it
17 that it was fire-retardant?

18 A. It could be made, but again it would be a non-certified
19 product.

20 Q. Again, without going into the technical detail of the
21 tests, is it your understanding in outline that first of
22 all one could test the material under something called
23 part 7 of British Standard 476 to determine the class
24 for surface spread of flame, which would be from 1 to 4,
25 and that in the case of a material which fell into

1 class 1, you could then do a second test under part 6 of
2 the same standard, and if the material achieved
3 a sufficiently good score, then as a result of passing
4 those two tests it would be classed as class 0?

5 A. That is the testing regime that we have used in the past
6 in the UK for thicknesses of six-millimetre and above.

7 Q. You say that that's a testing regime you've used in the
8 past. Has the company now switched to a different
9 testing regime?

10 A. The company has now adopted the euro classification,
11 EN13501, as its testing format.

12 Q. Are the European standards an alternative system for
13 testing and classifying the same sorts of materials?

14 A. I should add that I'm not an expert in the testing of
15 panels but the test -- the European classification takes
16 a test on three factors: burning, smoke emission and
17 also dripping.

18 Q. If we can, could we focus on the sorts of testing that
19 the company would have carried out in, say, 2006. Do
20 you know whether at that time it was the British
21 Standard tests that were being used?

22 A. That would be the British Standard tests.

23 Q. Is it right that the fire-retardant grade of
24 six-millimetres or thicker Trespa material when tested
25 was found to be a class 0 material?

1 A. That is correct, and that's certified by an independent
2 test.

3 Q. Whereas the standard grade of the same thickness was
4 found to be a class 2 material; is that right?

5 A. The standard grade would have a surface spread of flame
6 test at somewhere about class 2, which would then mean
7 it would not be tested for class 0.

8 Q. Because you would only do the second test under part 6
9 if the material first of all fell within class 1?

10 A. That's correct; you can only test the second part if it
11 reaches class 1 surface spread of flame.

12 Q. We were talking a few minutes ago about composite panels
13 and the fact that the person who manufactured that panel
14 could, in principle, carry out this sort of testing on
15 the finished composite panel. Could we just think,
16 please, about the sorts of factors which might have
17 a bearing on the fire performance of such a panel.
18 Would they include, for example, the type and thickness
19 of the high pressure laminate sheeting used on either
20 side?

21 A. Yes, it would depend on the thickness of the high
22 pressure laminate used and also the component
23 insulation.

24 Q. Could I move on then, please, to ask you about how
25 Trespa's products are distributed and how people who

1 want to use them could find out about them and come to
2 order them and use them in their buildings. Is it
3 correct that these materials are in fact manufactured in
4 the Netherlands?

5 A. Yes, that's correct.

6 Q. What sorts of activities does Trespa UK Limited carry
7 out?

8 A. Trespa UK are responsible for the sales, promotion and
9 support of the products within the UK and Ireland.

10 Q. Do you employ a number of people in a role called
11 regional sales manager?

12 A. Yes, we normally have six regional sales managers
13 throughout the UK and Ireland.

14 Q. Would there be occasions when, at the design stage of
15 a project, the designer would approach one of the
16 regional sales managers for advice about Trespa
17 products? Does that ever happen?

18 A. Yes, that happens on a number of occasion. 60 per cent
19 of a regional sales manager's time would be with
20 architects.

21 Q. In the case of products which are not finished products,
22 such as the three-millimetre sheeting, would the
23 regional sales managers be in a position to provide
24 advice about those materials?

25 A. They would only be in a position to offer advice on the

1 various finishes on those products. They would not be
2 in a position to advise on thermal performance or any
3 other performance criteria.

4 Q. Why is that?

5 A. Simply because we are not involved in the manufacture of
6 the end product.

7 Q. Of the composite panels?

8 A. Of the composite panels.

9 Q. In the case of the products which are finished products,
10 what sorts of technical advice might a regional sales
11 manager be able to provide?

12 A. In terms of the specification of thicker products,
13 normally our regional sales managers would be asked to
14 provide advice on thickness, support systems, fixing
15 centres and also detailing.

16 Q. Broadly speaking, those sound like factors connected to
17 the choice of the right sort of Trespa sheeting and how
18 it would be installed physically at a building?

19 A. Yes, for the most part the decisions would be made on
20 advising a suitable thickness, advising fixing centres
21 and also ensuring that the detailing was such that the
22 panel was held in balance when it was applied on
23 a structure.

24 Q. What sorts of factors affect the correct thickness to
25 use for a particular application?

1 A. It would depend upon the fixing system that the
2 architect would desire, whether it be a secret fix or
3 a visible fixing system. It would depend, in the case
4 of balcony panels, on the spanning of the height of the
5 balcony panel.

6 Q. Is the gist of that that if you have a wider or a taller
7 panel, it has to be thicker in order to remain rigid and
8 strong?

9 A. As you increase the fixing centres, then you need
10 a thicker panel to support itself.

11 THE CORONER: When you say "fixing centres", just so the
12 jury understand, you're talking about the gap between
13 fixings?

14 A. Gap between fixings, distance between fixings, yes.

15 MR ATKINS: Would the regional sales managers be in
16 a position to provide information about the fire
17 performance of these materials, the sorts of things we
18 looked at a moment ago?

19 A. They would be in a position to advise on the reaction to
20 fire on panels from six-millimetre and above.

21 Q. In your experience, would your regional sales managers
22 provide advice about whether certain sorts of materials
23 would satisfy the requirements of building regulations?

24 A. Our regional sales managers have no specific knowledge
25 of building regulations, which are very, very complex

1 and vary throughout the country.

2 Q. Because we will hear his name a little later on, is it
3 correct that one of the regional sales managers at that
4 time was somebody called Charles Sawyer?

5 A. That is correct, yes.

6 Q. When it comes to actually selling the material, is that
7 done through the regional sales managers?

8 A. The physical sale or the specification of the product?

9 Q. If I want to order the product, do I place my order
10 through one of the regional sales managers or not?

11 A. No. In the UK, we are -- we sell the material through
12 a network of distributors, of which there are
13 approximately 12 in the UK, and an installer or
14 a contractor would place his order with a distributor,
15 who would then place the order direct with Trespa in
16 Holland.

17 Q. Again, because we will see their name shortly, is it
18 right that a company called Vivalda are one of the
19 approved distributors?

20 A. That is correct, yes.

21 Q. So to buy a finished product, I would place my order
22 with a distributor who would obtain the material from
23 Holland. In the case of a composite panel, does that
24 mean that the manufacturer of the panel would have to go
25 to a distributor in order to order the thinner sheeting?

1 A. Yes, there are a limited number of distributors who
2 handle the three-millimetre, non-certified product, and
3 they again would place their order direct with Holland.

4 Q. If we could move on, then, please, to the Lakanal House
5 project itself. There is a bundle of chronological
6 documents. Could I ask you to look at page 1148, which
7 is in file number 3. Mr Clark will hand that to you in
8 a second. (Handed) I can put it on the screen for the
9 jury.

10 What I would like to do is to follow through some of
11 the emails and other notes that were made at the time to
12 understand how the Trespa materials came, we think, to
13 be used at Lakanal House. So first of all here, we have
14 an email from somebody called Annabel Sidney, whom the
15 jury have heard was the construction project manager, to
16 C.Sawyer at Trespa.com. Presumably Charles Sawyer, your
17 regional sales manager?

18 A. Yes.

19 Q. We can see that the date of this email is 28 January
20 2005 and Annabel Sidney said:

21 "Dear Charles, to confirm our meeting on Monday
22 31 January 2005, I will meet you at the property, which
23 is called Lakanal. The building is a 14-storey high
24 rise and we are proposing to replace the asbestos
25 balcony infill panels, possibly with Trespa Meteon.

1 Please bring samples and relevant literature."

2 So is this an example of what you described earlier,
3 of one of your regional sales managers becoming involved
4 with the designer at an early stage of the project?

5 A. Yes, that would be a normal request by a specifier
6 asking for a visit.

7 Q. If we just go on a few pages, please, to page 1151. You
8 can see the Trespa logo in the top right-hand corner of
9 the page. Do you recognise this as a Trespa internal
10 note?

11 A. Yes, I do. It's a record from our customer record
12 management system.

13 Q. We can see the date under the words "activity number",
14 about two lines down, a start date and end date, both
15 31 January 2005. Then if we look at the note in the box
16 at the bottom of the page:

17 "Note: request visit to site to determine quantities
18 and thickness. Have done so and 13-millimetre thick is
19 to be used."

20 Do we understand that to be a reference to
21 13-millimetre thick Trespa sheeting?

22 A. Yes, I do.

23 Q. Aside from the note that we now have in front of us at
24 page 1151, are you aware of any other notes or records
25 of what was discussed on the visit on 31 January?

1 A. This is the only note I have of -- record of that visit.

2 Q. So you're not able to help us with the detail of any
3 discussions that Mr Sawyer might have had with Ms Sidney
4 at that time?

5 A. No, the regional sales managers are responsible for
6 updating the records with notes of their activities at
7 the visit, of which this is a record.

8 Q. If I could ask you, please, to turn on two pages to
9 page 1153. We have another email, this time on
10 3 February, so a few days later, from Charles Sawyer to
11 Annabel Sidney. He says:

12 "Good afternoon. Following our recent meeting,
13 please find the following attachment as a draft
14 specification."

15 Then he discusses the sizes of the panels to be
16 used. If I just show you the next page. Is that a
17 document you recognise?

18 A. Yes, that's an NBS specification.

19 Q. What is the purpose of that document?

20 A. The purpose of that document is to identify the material
21 to be used on a project so that any tenderer who is
22 pricing for that project is pricing on an equitable
23 basis.

24 Q. So is this Charles Sawyer, in effect, recommending to
25 Annabel Sidney what sort of Trespa sheeting would be

1 appropriate for the work that she had in mind?

2 A. This is a specification identifying a suitable Trespa
3 product based primarily on the indicative sizes, which
4 are mentioned in the email, of 1710 by 805.

5 Q. I'll just go back to that. That's a reference, is it,
6 to the second paragraph:

7 "The panels have been taken as indicative sizes of
8 1710 millimetres by 805 millimetres."

9 THE CORONER: Sorry, could you just increase that size so
10 the jurors can read that, Mr Atkins. Thank you.

11 MR ATKINS: Where would those sizes come from? Would that
12 have been based on looking at what had been there
13 before?

14 A. My -- my assumption is that Trespa have -- Charles has
15 visited the site and measured the balcony panel. The
16 reason the size is significant is because a balcony
17 panel is only held around a perimeter, which means the
18 panel has to span 805 millimetres from one fixing to the
19 other, hence the need for 13-millimetre panels.

20 Q. If I could move on, please, to page 1643, which is in
21 the fifth file. We'll just wait while Mr Clark finds
22 the page for you. (Handed)

23 Again, we have, do we, a Trespa internal file note,
24 and the start date, if we look under the words "activity
25 number", is 31 March. Again, this is in relation to the

1 London Borough of Southwark, we see in the box on the
2 left, and the contact named on the right is
3 Annabel Sidney. Then if we go to the bottom of the
4 page, the very last line says:

5 "Called me. Appointment for 3 April 2006."

6 So does this appear to be a note by Mr Sawyer about
7 a meeting that he was going to have with Annabel Sidney
8 on 3 April 2006?

9 A. Yes, this is a record of a project update which is
10 signified by the letters "PU" under "activity
11 description", where Charles has followed up the project
12 to continue its progress.

13 Q. Is it right that notes such as this would be made from
14 time to time as a project continued in order to record
15 what was happening and what Trespa's involvement was?

16 A. That would be the normal pattern of behaviour for
17 an RSM, to follow the project through from start to
18 conclusion.

19 Q. If we want to find out what happened at that meeting,
20 could we please turn to page 1704, another Trespa file
21 note. We can see that the start date this time is
22 6 April 2006. Again, the London Borough of Southwark,
23 contact Annabel Sidney, and in the box at the bottom
24 Mr Sawyer has recorded:

25 "Note: taking full set Meteon samples to select

1 from. Samples posted. Left full set satin with
2 Anabella so as to select colour for project. Looks
3 like June 2006 order. Apollo had contract."

4 It appears, then, that Mr Sawyer had had by 6 April
5 a meeting with Annabel Sidney and had left some samples
6 of the material with her; is that right?

7 A. That's my reading from the activity log.

8 Q. Again, are you aware of any other record or note of that
9 meeting?

10 A. No, that's the only record I have of the appointment.

11 Q. If we could look, please, at page 1856, which you should
12 have further on in the same bundle. This time we have
13 an email from Mr Sawyer to Annabel Sidney on 5 May 2006.
14 We can see that the first email on that page is a reply
15 to an email that she sent to him earlier on on the same
16 day. If we follow through what happened, on the bottom
17 part of that page, she said:

18 "Hi Charles, to confirm our conversation, the
19 following samples are urgently required, please."

20 Do we see that one of the samples says "1 no" --
21 does that simply mean "one of" -- and then "verdigris"?

22 A. Yes, correct.

23 Q. Is verdigris one of the colours that Trespa has in its
24 range of colours?

25 A. That is correct, yes.

1 Q. And in his reply, Mr Sawyer said:

2 "Sorted. Will have four-millimetre samples sent.

3 My office has arranged today. Best regards."

4 Is there a reason why Mr Sawyer would have been

5 sending four-millimetre samples, given that the previous

6 discussion had been about 13-millimetre sheets?

7 A. Yes. In the Trespa UK office, we carry samples which

8 are issued on a daily basis to specifiers and customers.

9 We make those decors available in four-millimetre

10 because if we are asked to send out 20 colours, if

11 they're sent in 13-millimetre it's a very heavy package.

12 It's pure logistics. That's why we have samples in

13 four-millimetre.

14 Q. So the colours are all the same irrespective of the

15 thickness of material?

16 A. The colours are exactly the same. It's purely

17 a logistical exercise to make it thinner panels.

18 Q. Could we move on then, please, to page 2319, which is in

19 the sixth file. It's a little bit hard to read in this

20 copy -- it hasn't photocopied very well -- but in the

21 top left of that page we see the name "Vivalda".

22 Earlier on you told us that that's one of the approved

23 distributors?

24 A. That's correct, yes.

25 Q. So these with are one of the companies who would obtain

1 the material from Trespa?

2 A. Yes.

3 Q. In the top right-hand corner, we see this page is
4 described as a purchase order. So is this Vivalda
5 ordering something from Trespa?

6 A. This is a standard purchase order from Vivalda, ordering
7 material from Trespa International in Holland.

8 Q. Could I ask you then, please, first of all to look at
9 the order date, which is pretty much in the middle of
10 the page, as it is on screen, of 7 July 2006.

11 A. Yes.

12 Q. Beneath that we have a list of different products. Are
13 you able to help us with whether any of those are
14 related to the Lakanal House project?

15 A. Yes. If you look towards the lower part, under "product
16 description", the last item is:
17 "Two number 13-millimetre Meteon double-sided A30,
18 3.2 verdigris free-of-charge sample panels for
19 Lakanal House."

20 Q. We have then an explicit reference to this being in
21 relation to Lakanal House, so we can be confident about
22 that. Thinking about the material that's been asked
23 for, then, we have 13-millimetre, which is the thickness
24 which Mr Sawyer had already suggested for the balcony
25 panels?

1 A. That's correct.

2 Q. It's double-sided. Can you just help us with that.
3 What does that mean?

4 A. Yeah, for the most part Trespa material, when it's used
5 as a facade cladding, has the decor on one side only and
6 has a black balancer on the back. That makes the
7 product slightly cheaper for installing on a facade.
8 For applications on a balcony, where the decor is
9 required on both sides, that means the product is
10 slightly more expensive, but it does indicate its use is
11 for a balcony application.

12 Q. A little earlier on in that description we have the same
13 colour, verdigris. So that's one of those for which
14 a sample was sent, we saw earlier?

15 A. That's correct.

16 Q. Then "free sample for Lakanal House". Why would Vivalda
17 in this order refer to the project that the material is
18 going to be used for? If we look at the ones above, the
19 first two refer to a particular project, Bromyard
20 Avenue, and the second two don't. So in your
21 experience, why would there be a reference to the name
22 of the project in this order?

23 A. A distributor would normally make reference to a project
24 if there was either a special price or the material was
25 being issued free of charge.

1 Q. Looking at what's said in this document, it does not
2 state whether the 13-millimetre sheet is standard grade
3 or fire-retardant grade. Are you able to tell from
4 looking at this which it is?

5 A. It's general practice with distributors when they place
6 orders that it's for standard grade material unless it
7 specifically mentions FR grade on the order form.

8 Q. In other words, because there's no mention of the grade
9 in this document, you would have expected Trespa in
10 Holland to have supplied standard grade?

11 A. Firstly, Trespa would have sent an order confirmation
12 back to the customer, confirming what was ordered, and
13 that would also be as written, which would be standard
14 grade, or not refer to FR grade.

15 Q. If we want to see the first time that the material was
16 ordered, so far as we're aware, we need to go to the
17 seventh file at page 2677. So a similar document to the
18 one that we were looking at a moment ago, on Vivalda
19 headed paper, marked "Purchase order" in the top
20 right-hand corner. The order date is 10 October 2006,
21 again, in the middle of the page.

22 A. Yes.

23 Q. So far as you're aware, was that the first order of the
24 material which you believe in the end was used at
25 Lakanal House?

1 A. It's the first order, other than the sample panels that
2 were ordered, yes.

3 Q. This time, there's only one item on the purchase order,
4 and it's 65 sheets of, again, 13-millimetre Meteon
5 double-sided verdigris. So is that the same material
6 that was described in the purchase order for the free
7 sample?

8 A. That's the same material, yes.

9 Q. Without going to all of the different purchase orders
10 and all of the confirmations, could you just explain to
11 us in outline why it is that you believe that this is
12 the material which came to be used at Lakanal House?

13 A. Yes. If we look at the normal ordering within the UK,
14 most of our product is manufactured and delivered as
15 single-sided material. Balcony applications is a very
16 small part of our business, so it's relatively easy to
17 track through our customer records and our records at
18 CSD, customer service department, to identify any sales
19 of double-sided. Also, 13-millimetre is a very unusual
20 thickness. It's not a large part of our business.

21 Q. So by looking for material which was 13-millimetre thick
22 and double-sided and the right colour, you were able to
23 track down the documents which you believe related to
24 Lakanal House?

25 A. Through our records in CSD, yes.

1 Q. That's the sheets which were used in the balcony panels.
2 That's the material marked 5 in dark green in the
3 diagrams we identified earlier.

4 What I'd like to do now, please, is move on to the
5 thinner sheets which you've explained you believe were
6 used in the composite panels utility. So that's the
7 material in light green marked on our diagrams. Can I
8 ask you first of all -- there's no need to turn on it on
9 the paper copy; I'll put it on the screen. Page 1131.
10 This is an email from somebody called Liam Hanson, who
11 the jury will hear worked for a company called SAPA, to
12 Annabel Sidney. It may well be that you've never seen
13 this email before, because it wasn't addressed to you
14 and you weren't copied into it. We can see here that
15 the content of this email is about the window and door
16 specification that's going to be used at Lakanal House.
17 Do you see that in the subject?

18 A. Yes.

19 Q. If we go on, please, to page 1141, which is a document
20 linked to that email. I don't know whether you've seen
21 this document before. It's a document which was
22 prepared by SAPA. It's the performance specification
23 for windows and doors. Have you seen this document
24 before?

25 A. I don't recall having seen that document.

1 Q. Forgive me, I should have gone to the page before,
2 page 1140. I'll just zoom in on a section at the top of
3 the page. Can you see a line which starts "Solid infill
4 panels"?

5 A. Yes.

6 Q. "Solid infill panels, where required, are to be
7 28-millimetre insulated sandwich panels with facings of
8 polyester powder-coated aluminium."

9 If we just go through that. By "sandwich panel", do
10 you understand that one would be talking about the same
11 thing as a composite panel?

12 A. Yes, I do.

13 Q. So that is a panel made up of two thin sheets of one
14 material with an insulation core between them. At this
15 stage, the specification was that the facing of those
16 sheets, the material on either side, should be
17 powder-coated aluminium. Is that a material which
18 Trespa manufactures?

19 A. No, we do not manufacture aluminium.

20 Q. Again, I don't ask you to turn this up in the paper copy
21 but I've put on the screen the email at page 2099, which
22 is an email from Annabel Sidney to somebody called James
23 Cousins, who worked for Apollo. We can see this is an
24 email dated 2 June 2006, and she says:

25 "Hello James, I've just spoken with Nick at Symphony

1 and I am happy with proceed with Trespa. Formal
2 instruction to follow."

3 Again, is that an email which you have seen before
4 or which you were aware of?

5 A. It's an email that I have seen in the lead-up to the
6 inquiry. I had not seen it at the time.

7 Q. Not at the time. If we could just bear that date in
8 mind then, 2 June 2006, when we look at the next
9 document, which is on page 2404, which is in the seventh
10 file. Do you have file number 7 in front of you?
11 Page 2404. In the top left-hand corner of that page,
12 there's a name, "FGF Continental Limited". Is that
13 a name you're familiar with?

14 A. FGF are one of the approved distributors in the UK of
15 Trespa material.

16 Q. So they're in the same category of companies as Vivalda?

17 A. That's correct.

18 Q. In the middle of that page, between items 2 and 3,
19 there's a line where it says:

20 "Special price, Commercial Panels ..."

21 Do you have that in the middle of the page?

22 A. Yes.

23 Q. Why would a distributor placing an order mention the
24 name "Commercial Panels" in a document like this?

25 A. At that time, FGF were developing a business

1 relationship with Commercial Panels, primarily for the
2 sale of three-mill material, and they had negotiated
3 with us a special price, which is highlighted on two
4 occasions under "SPA number", which is "special price
5 agreement".

6 Q. Sorry, where is that, please?

7 A. Halfway down the order on the big block, on the third
8 box.

9 Q. So in the box below item number 2?

10 A. "Special price, Commercial Panels, SPA number ..."
11 Which is a special price agreement.

12 Q. If we look at what is being ordered here, we have four
13 items. Looking in the third column, where it says
14 "colour", do we see that the first two are described as
15 pure white?

16 A. Yes.

17 Q. And then the second two are both described as mid-green?

18 A. Yes.

19 Q. Then if we look in the second column at the dimensions
20 of the sheets, the first pair we can see are 2550 by
21 1860 and then 3050 by 1530, in each case three
22 millimetres thick, and those are the same dimensions
23 that appear for the second pair of items. Does that
24 suggest that these were going to be the two sides of the
25 same sheets?

1 A. It would suggest before our distributor orders material
2 from us, they would take all of the panel sizes for the
3 finished product and they would optimise it through
4 a computer programme to work out the most effective
5 sheet size of material. The fact that both are
6 consistent because the panels are double-sided would
7 appear to me to be the same project.

8 Q. So looking at this, it may well be that somebody wishing
9 to manufacture composite panels has ordered white for
10 one side of those panels and mid-green for the other
11 side?

12 A. Correct.

13 Q. Is it the same as before, that because this order
14 doesn't mention whether the material is to be standard
15 grade or fire-retardant grade, that would be taken to be
16 a reference to standard grade?

17 A. That's correct also.

18 Q. Could I ask you just to turn two pages on, please. This
19 time it's a Trespa document. A few moments ago, you
20 mentioned that there would be an order confirmation. If
21 we could look, please, just at the top of this page in
22 the middle, is that what this is?

23 A. This is an order confirmation form from Trespa CSD,
24 customer services department.

25 Q. It goes over two pages. There's this page, and then

1 2407. In summary, is this confirming what was on the
2 last document we looked at?

3 A. Yes, it is.

4 Q. The same material. Could I ask you, please, to turn to
5 page 2699, which is still in the same bundle, I think.
6 It's another of the Trespa internal notes that we saw
7 earlier. Again, it's Mr Sawyer. I think if we look
8 about six lines below the words "activity number" on the
9 left-hand side -- do you have that?

10 A. Yes.

11 Q. "Employee responsible: Charles Sawyer."

12 To the right of the word "opportunity" we can see
13 the words "Lakanal tower block". Then if we look at the
14 note in the box at the bottom of the page -- I'll just
15 make that a little easier to read -- I'm sorry, I should
16 have gone to the date first. Do you see at the top of
17 the page the start date 18 October 2006?

18 A. Yes, I do.

19 Q. So this is a little later on than the other documents
20 we've looked at so far. Then the box at the bottom of
21 the page:

22 "Note: called to site at request of Apollo, who are
23 very pleased with Trespa."

24 There's then some discussion about fixings before we
25 get to this second paragraph, where Mr Sawyer has

1 recorded:

2 "Also found that Apollo have used Trespa for the
3 window and doors. This is another 1500 square metres,
4 three-millimetre. Unknown until today they have used
5 Trespa in this application due to our quality."

6 I appreciate that this is not a note which you
7 yourself made, but does it appear from that that
8 Mr Sawyer first of all attended site in relation to the
9 balcony panels, which he had previously been involved
10 in, but then discovered that material that had
11 originally come from Trespa, the thinner
12 three-millimetre sheets, had also been used for the
13 windows and doors?

14 A. Yes, this is the first record on our CRM system which
15 acknowledges the use of Trespa in the infill panels.

16 Q. Just turn one page back to 2698. It's another note with
17 the same date, 18 October 2006. Again a note which by
18 Mr Sawyer, who said at the bottom there:

19 "Info at request from Apollo to ascertain if Trespa
20 ordered came from Commercial Panels to window company
21 Symphony, so no problem. Vivalda did not supply this
22 three-millimetre white and mid-green."

23 In summary, does that suggest that the material
24 which was used in the panels under the windows, in the
25 composite panels, was sourced by Apollo and by Symphony

1 Windows through a company called Commercial Panels,
2 rather than through Vivalda?

3 A. Yes, unfortunately the record -- the note on the
4 activity system is not as clear as perhaps it could be,
5 but my understanding from that is that the
6 750 millimetres of white and mid-green in three-mill
7 came from Commercial Panels to Symphony and was not
8 ordered via Vivalda.

9 Q. We've seen on page 2699 that Mr Sawyer has said that he
10 wasn't aware until that visit that Trespa was being used
11 in anything other than the balcony panels. Is there any
12 other note or record, so far as you're aware, of what
13 Mr Sawyer thought when he discovered that Trespa had
14 been used?

15 A. We have supplied -- all of the activity records relating
16 to this project have been disclosed.

17 Q. Are you able to say whether there was any discussion at
18 that time involving Mr Sawyer and anybody else about
19 those composite panels?

20 A. No, I'm not aware of any other discussion.

21 Q. Finally, then, a similar question to the one I asked
22 about the balcony panels. Could you just explain to us
23 why it is that Trespa believe that the material that was
24 used at Lakanal House was three-millimetre sheets of
25 Trespa?

1 A. Yes, I can. Again, from checking our customer records,
2 three-millimetre is not a dominant product for Trespa.
3 It's a relatively smaller volume than our core business.
4 It's also identifiable by colour, because in the period
5 of 2006 there was only one significant order for the
6 dark green three-millimetre material, and that came from
7 FGF. So we believe we have a high probability of having
8 identified where that material came from and to.

9 Q. Mr Laing, thank you. Those are all the questions
10 I have. There may be questions from others.

11 THE CORONER: Thank you.

12 MR HENDY: No questions.

13 THE CORONER: Mr Dowden? Ms Al Tai?

14 MS AL TAI: No, thank you, madam.

15 THE CORONER: Thank you. Mr Walsh? Mr Matthews?

16 Mr Compton?

17 MR COMPTON: No thank you.

18 THE CORONER: Mr Leonard.

19 Questions by MR LEONARD

20 MR LEONARD: Just very briefly. I just want to understand
21 clearly the distinction you draw between
22 three-millimetre sheets being used by others to
23 manufacture composite panels and the thicker sheets that
24 you used to manufacture your own panels in one form or
25 another. Am I right so far?

1 A. Yes, correct.

2 Q. Just this simple point -- and I'm quoting from your
3 third statement. For those that want to look at it,
4 it's at page 581 of the statements bundle. What you say
5 there is this:

6 "We also manufacture --"

7 THE CORONER: Sorry, may I just stop you a moment. Let
8 Mr Laing have sight of it. Either we can put it on
9 screen if it's only a very short passage or --

10 MR LEONARD: It is. 581. This is the third, as I say, of
11 the statements that you've made in this case.

12 THE CORONER: Which paragraph number are you going to?

13 MR LEONARD: 5.

14 THE CORONER: Number 5. Okay, if that could just be
15 increased in size.

16 Mr Laing, are you happy to read that off the screen?

17 A. Yes.

18 THE CORONER: Yes, thank you.

19 MR LEONARD: "We also manufacture three-millimetre resin
20 sheets in the Meteon range which are not a finished
21 product but sold as a component part which is then
22 predominantly used by third parties to fabricate
23 composite panels, sometimes called 'sandwich' or
24 'infill' panels. These are made by bonding the Trespa
25 sheets to a 'filling' of some kind. Trespa does not now

1 and has never manufacture such panels. I am aware,
2 however, that these types of composite panel can be
3 'filled' with materials which do have insulating
4 properties and so they can be glazed into window
5 sections or curtain walling which I would describe as
6 'sealed systems'."

7 Yes?

8 A. Yes.

9 Q. That's the position, and that's essentially what your
10 colleague, I think, saw when he went in October of 2006
11 and made a note to that effect in the document we've
12 looked at.

13 A. That's correct.

14 Q. Thank you.

15 THE CORONER: Thank you. Yes, Ms Canby, thank you.

16 Questions by MS CANBY

17 MS CANBY: Madam, sorry, if I may just ask some questions on
18 behalf of SAPA. Mr Laing, it's Ms Canby for SAPA
19 Building Systems Limited. Just a couple of questions,
20 please. In 2006, do you know how the cost of Trespa
21 compared to the cost of powder-coated aluminium?

22 A. I wouldn't have that knowledge.

23 Q. Perhaps if we have a look at one of the documents in the
24 chronological bundle. If Mr Clark could get that for
25 you. It's in folder 5 and it's at page 1642. (Handed)

1 I appreciate that this is a document that you probably
2 have not seen before. You can see that it's a letter
3 from Commercial Panels to Symphony. If I give you
4 a moment to have a look at it.

5 A. Yes.

6 Q. Do you agree that that document suggests that the cost
7 of Trespa and the cost of powder-coated aluminium was
8 the same in 2006?

9 A. Yes, I agree.

10 Q. Thank you. You can put that bundle to one side. The
11 next point, please: you've told us that your product can
12 either be provided as standard grade or fire-retardant.
13 Could you just explain to the jury, please, what you
14 mean by fire-retardant?

15 A. It has improved performance in the event of a fire.

16 Q. How does that differ from fire-resistant?

17 A. Trespa panels are only tested on reaction to fire. My
18 understanding is that fire resistance is always quoted
19 in a period of time to resist the passage of fire.

20 Q. Then the final point, please. If you could be provided
21 with a copy of the jury bundle. You'll find some
22 photographs at tab 13. If you could look, please, at
23 photograph 32. The jury knows that this shows a --

24 THE CORONER: Sorry, could you just wait, Ms Canby, whilst
25 the jurors are turning up the photographs. Yes, thank

1 you.

2 MS CANBY: The jury knows that this shows a photograph of
3 a living room door open with a balcony panel shown
4 through the open door, and you can see that there is
5 a gap underneath the balcony panel. Do you agree that
6 whatever material had been used in the balcony panel or
7 on that balcony, the structure itself could not have
8 been fire-resistant because fire and smoke could pass
9 under that balcony panel?

10 A. I wouldn't profess to be an expert on fire, but I would
11 imagine through a gap underneath, that would allow easy
12 access to flames or smoke.

13 Q. Thank you very much.

14 THE CORONER: Ms Petherbridge?

15 Questions by MS PETHERBRIDGE

16 MS PETHERBRIDGE: Perhaps three points of clarification,
17 Mr Laing. We've looked at, when you were answering
18 questions from Mr Atkins, page 2099 of the chronological
19 bundle, which was an email from Annabel Sidney to James
20 Cousins. Just to clear, Mr Laing, you said you had seen
21 that email in the run-up to the inquest. Can I just
22 confirm, is that an email -- we can see in fact on the
23 very top left-hand side that this comes from something
24 called LBS file 6 of 8. Can you just confirm, did you
25 see that email because it's part of your own company's

1 records or were you shown it as part of the inquiry --

2 A. It's not part of my company's records. I saw it as part
3 of the inquiry.

4 Q. Thank you. Turning on to a couple of points about the
5 composite panels, on page 2404, if we could have that up
6 a moment, if we look there at the order dated
7 31 July 2006 from FGF. This is simply to solve what
8 might be a curiosity. We saw that the orders there --
9 if we look at the quantities of panels, for pure white
10 there were 30 of one size and 188 of the size given
11 below, and then for the green panels, 30 of one size and
12 again 188 below. But if we turn over to page 2406, just
13 in case it drew anybody's attention, we can see that
14 while the white panels remain as 30 and 188, the green
15 panels, the third item on the page, we now see quantity
16 six pieces and quantity 188 pieces. Do you see that?
17 It seems to be a slight change from the order.

18 A. Yes, I can see that.

19 Q. Could we then just look, please, at page 2413. Do we
20 see there a fax form from FGF, the same distributors,
21 dated 2 August 2006?

22 A. Yes.

23 Q. And can we see that what that fax is asking Trespa to do
24 is to amend the third item on their previous order to
25 read six mid-green panels?

1 A. Yes.

2 Q. So between the order and your confirmation --

3 A. It was amended.

4 Q. -- FGF in fact revised the number of panels they wanted?

5 A. That's correct.

6 Q. Thank you. Mr Laing, you've told us about the

7 distinction between the finished panels and the thin

8 three-millimetre that's used to make composite panels.

9 I think you've been very clear that Trespa can't speak

10 for the eventual fire performance of the composite

11 panels. You said that would depend upon the insulation.

12 Would it also depend upon how the panels are bonded

13 together, for example?

14 A. It would depend on all the components that make an

15 insulated panel, or a composite panel, which would be

16 any glues or adhesives that are used to bond the panel

17 and also the insulation.

18 Q. Do you have any general knowledge as to whether you

19 could, in fact, make a composite panel using Trespa

20 three-millimetre that was fire resistant, where fire

21 wouldn't pass through it?

22 A. I don't have specialist knowledge, but I do have some

23 knowledge that if, for example, the insulation core was

24 non-combustible or if a thicker panel of Trespa was

25 used, then it may have enhanced fire properties.

1 Q. Mr Sawyer -- we've seen that 18 October seems to be the
2 first time he knew that the three-millimetre sheeting
3 was used in the composite panels used at Lakanal. Would
4 he, from looking at those composite panels in situ, be
5 able to tell what was in the middle?

6 A. He would not be able to tell what was the core material.

7 Q. Finally, Mr Laing, turning to the 13-millimetre panels
8 that were used at Lakanal, they, of course, are part of
9 the category of product six-millimetre and above, so you
10 would certify those as to their general fire-proofing?

11 A. These are certified products, yes.

12 Q. You did mention earlier in your evidence that there are
13 some new European standards and Trespa now apply those
14 standards when they test their panels?

15 A. Yes, and those standards are published on our website.

16 Q. Your products haven't changed, have they, since 2006 to
17 the ones that you now certify using the European
18 standards?

19 A. It's the same products.

20 Q. You were, I think, in court when Mr Crowder gave some
21 evidence as to some of the standard tests that his
22 organisation, BRE, had done on both the composite and
23 the thicker 13-millimetre panels, were you not?

24 A. Yes, I was.

25 Q. We heard that in the six test runs that Mr Crowder did,

1 when he dealt with the 13-millimetre panels, the ones
2 that were Trespa Meteon throughout, that through the six
3 test runs there was no -- what he called incandescent
4 spalling, so while pieces may fall from the panel, none
5 of them were flaming. Do you recall that evidence?

6 A. I do recall that.

7 Q. Is it right that there's one part of the new European
8 standards that actually test that property of the
9 material, its propensity for flaming particles or
10 droplets to fall away from it?

11 A. Yes, as I said earlier, it tests three factors: it tests
12 burning, smoke and also dripping.

13 Q. Specifically it's flaming dripping and flaming
14 particles, is it not, that third part of the test?

15 A. That's correct.

16 Q. And that test can be D0, the very best category, down to
17 D1 and D2; is that right?

18 A. That's also correct.

19 Q. In terms of the Trespa six-millimetre and above --
20 I appreciate you can't speak for the thinner panels
21 because you don't test them, but for six-millimetre and
22 above, what category does the Trespa panel achieve in
23 terms of burning particles or burning droplets?

24 A. It's D0.

25 Q. Remind us, is that the best or the worst?

1 A. That's the best category it's possible to achieve.

2 Q. Mr Laing, that's all the questions I have. Thank you.

3 THE CORONER: Thank you. Members of the jury, do you have
4 any questions?

5 Questions by the Jury

6 THE FOREMAN OF THE JURY: Thank you, Madam Coroner, we have
7 two. We have heard how the fire safety of the thicker
8 panels --

9 A. Sorry, I can't hear the question.

10 THE FOREMAN OF THE JURY: Sorry, is that better?

11 A. That's better.

12 THE FOREMAN OF THE JURY: We've heard how the finished
13 panels have been tested according to British standards,
14 European standards. We were concerned with the
15 certificates, for instance, that might relate to the raw
16 materials used, cellulose, that sort of thing. Is there
17 any way of tracing back how fire-safe the raw materials
18 actually are?

19 A. Not that I'm aware of. My knowledge is you can only
20 test the product in its manufactured format.

21 THE FOREMAN OF THE JURY: Sorry, just let me clarify.

22 (Pause) Okay, that's all for that question.

23 THE CORONER: Sorry, just to clarify, what you're saying is
24 that you manufacture your panel, that's your finished
25 product, and then it's that finished product which is

1 tested as you've described?

2 A. Certified and tested, yes.

3 THE FOREMAN OF THE JURY: Thank you. The second question,
4 we've just heard from you right at the end here that if
5 thicker panels of Trespa are used, that six-millimetre
6 and above are certified by yourselves as being more
7 resistant to fire. How common is it, in your
8 experience, for composite panels to be made with the
9 thicker sheeting?

10 A. Sorry, I missed the last part of the question.

11 THE CORONER: It was: how common is it for the composite
12 panels to be made with the thicker sheeting? So talking
13 about six millimetres and above.

14 A. I would have to say it's relatively rare, because as you
15 increase the thicker part of the HPL, you would then
16 reduce the core material, which is the insulation.

17 THE CORONER: Sorry, can you explain "HPL"?

18 A. "High pressure laminate", sorry.

19 THE FOREMAN OF THE JURY: Thank you. That's all.

20 THE CORONER: Does that answer your questions?

21 THE FOREMAN OF THE JURY: I think so.

22 THE CORONER: Thank you very much.

23 Mr Laing, thank you very much for coming and thank
24 you for the evidence that you've given to us today.
25 You're welcome to stay if you would like, but you're

1 free to go if you would prefer. Thank you very much.

2 MR ATKINS: Madam, it's about 11.25. Would that be

3 a convenient moment for a break?

4 THE CORONER: Yes, that looks a good moment to have a break.

5 So members of the jury, could you be back for 11.35,

6 a ten minute break? Thank you.

7 (11.23 am)

8 (A short break)

9 (11.38 am)

10 THE CORONER: Yes, it's Mr Hanson next?

11 MR ATKINS: Madam, yes.

12 THE CORONER: Is Mr Hanson in court? Yes, if you would like

13 to come forward. Just wait there a moment. Mr Clark

14 will be with you.

15 (In the presence of the Jury)

16 THE CORONER: Yes, thank you, Mr Hanson.

17 LIAM HANSON (sworn)

18 THE CORONER: Mr Hanson, thank you very much. Do sit down.

19 I think you've helped yourself to a glass of water.

20 A. Thank you.

21 THE CORONER: Please could you keep your voice up. You've

22 been sitting at the back so you'll realise that the

23 sound in this room isn't always easy.

24 A. Yes, indeed.

25 THE CORONER: And if you give your answers across the room

1 to the members of the jury then that will help them to
2 hear your evidence and also help you to keep close to
3 the microphones. Mr Atkins, who's standing, is going to
4 ask questions on my behalf initially and then there may
5 be questions from others.

6 A. Thank you.

7 MR ATKINS: Could you please tell the court your full name?

8 A. My full name is Jeremiah Liam Hanson.

9 Q. Could you please tell us what job you do and for whom
10 you work?

11 A. I -- my job role is senior product consultant working
12 for SAPA Building Systems.

13 Q. To help us understand where SAPA fit in, could I ask you
14 please to turn to tab 18 of the jury bundle. You may
15 have been in court earlier when we were looking at these
16 documents with Mr Laing.

17 A. Indeed.

18 Q. So you will recall then that we have three pages, each
19 of which shows a different section of the facade of
20 Lakanal House. So on the first page the bedroom, on the
21 second page the kitchen, where the top diagram shows the
22 facade and the lower diagram shows the facade with the
23 balcony panels in front of it, and then the lounge on
24 the third page, again with the facade at the top and the
25 facade with the balcony panels in front beneath.

1 A. Yes.

2 Q. In each case a photograph on the left-hand side to
3 remind us of what we're looking at. We can see, if we
4 take the first page as an example, that the facade is
5 made up mainly of glazing shown in white and blue and
6 composite panels shown in green. Then around those
7 elements there are shown in grey some frames. I'd just
8 like to ask you about SAPA's business. Do SAPA
9 manufacture the frames?

10 A. SAPA supply extruded lengths of frames.

11 Q. What are the frames made of?

12 A. Aluminium.

13 Q. You say that SAPA supply the extruded lengths of frames.
14 Does somebody else have to cut them to the right sizes
15 to be used in a project such as this?

16 A. Yes, they would be supplied to a commercial dealer, who
17 will then cut the profile to the appropriate shapes and
18 sizes and then fabricate the window in its entirety.

19 Q. When you say "profile", are we talking simply about
20 a length of aluminium to be used as part of a frame such
21 as this?

22 A. That is correct.

23 Q. Do SAPA manufacture glazed units, windows?

24 A. No, SAPA do not.

25 Q. What about composite panels?

1 A. No, SAPA do not.

2 Q. So if we look at these three diagrams together, is it
3 right that the only material included in them which SAPA
4 manufacture are the extruded aluminium sections which
5 become the frames?

6 A. That is correct.

7 Q. I think it's right that the profiles -- that is, the
8 lengths of aluminium which are made up into frames --
9 are held together with fastening components called
10 couplings?

11 A. The corners are hold together with things called
12 chevrons and cleats to keep things square, and then one
13 when one frame is manufactured and then needs to be
14 attached, if you like, to another window, then the
15 coupling is the profile you're referring to.

16 Q. Without losing ourselves in the detail of this, do SAPA
17 manufacture the various pieces that are necessary to
18 hold the frames together?

19 A. Yes, indeed.

20 Q. Do you know whether SAPA products are used in the
21 context of social housing in London generally?

22 A. Sorry, could you repeat that?

23 Q. We gather that SAPA products were used in the works in
24 2006/2007 at Lakanal House.

25 A. Correct.

1 Q. To your knowledge, are they also used in other social
2 housing buildings in London?

3 A. Sorry, yes they are.

4 Q. Have SAPA worked previously with the London Borough of
5 Southwark?

6 A. Yes, on many projects.

7 Q. What about the contractor Apollo?

8 A. Yes, we've worked with Apollo on many projects as well.

9 Q. Have you also worked with a company called Symphony
10 Windows before?

11 A. Yes, we have.

12 Q. Was Lakanal House the first time you worked with any of
13 those companies?

14 A. To the best of my recollection, I think that was the
15 very first project we worked on together but it was
16 certainly in the low numbers if it was more than one.

17 Q. Was that true of both Apollo and Symphony?

18 A. No, I'd say we'd worked on quite a lot more projects
19 with Apollo than with Symphony at that point.

20 Q. In case we need it later, could I just ask you a few
21 questions, please, about terminology. Is it right that
22 a profile or part of a frame which reasons horizontally
23 is known as a transom?

24 A. That is correct.

25 Q. Whereas part of a frame which runs vertically is

1 a mullion?

2 A. That's also correct.

3 Q. Are the frames that were used at Lakanal House marketed
4 on the basis that they are fire-resistant in any way?

5 A. No, not at all.

6 Q. Do SAPA produce any frames and linking parts which are
7 marketed as being fire-resistant?

8 A. We have fire-rated products.

9 Q. What determines whether the fire-rated products are used
10 for a particular project?

11 A. The -- whether a fire-rated product is used on any
12 particular project is governed by the design team, who
13 one would naturally assume takes advice from building
14 control.

15 Q. Whose design team are we talking about?

16 A. That would be the clients' design team. On various
17 projects it could vary as to who that person or persons
18 would be, but every project has a design team, ie
19 a person or department that takes responsibility for the
20 design of that building.

21 Q. Is the difference between the fire-rated version of the
22 frames and the non-fire-rated essentially that the
23 non-fire-rated version will distort at lower
24 temperatures than the fire-rated version?

25 A. I'm no real expert on the actual fire test itself, but

1 the key objective of a fire-rated product would be
2 basically to hold back fire for the given period of time
3 using a number of components to make that system that
4 will be fully tested.

5 Q. In your experience, where a designer is producing
6 a design and using panels and other components which are
7 fire-resistant, will they also ask SAPA for frames which
8 are fire-resistant?

9 A. Yes, on the limited number of projects that I've worked
10 on that require fire-rated products, which is a small
11 amount of our business, in all cases the actual
12 specifier/design team person will make us aware of the
13 fact that there are fire-rated products and indeed the
14 fire rating that they require.

15 Q. Have you been involved in many projects involving work
16 on a high rise block?

17 A. I have.

18 Q. Are you able to help us with what proportion of those
19 projects used a fire-rated system of frames?

20 A. In terms of fire-rated product, there have been none
21 that I've importantly worked on. Generally speaking, it
22 can be perhaps an entrance door to a dwelling that may
23 be fire-rated, but not to be confused with -- virtually
24 all buildings will have an egress escape window which
25 will come under the same banner, but it's not

1 a fire-rated product.

2 Q. In what circumstances, then, might SAPA -- or would
3 SAPA -- ever recommend the use of a fire-rated set of
4 frames?

5 A. SAPA would recommend fire-rated products where asked to
6 do so. For example, there may be a screen with a door
7 within that screen that needs fire-rating, and we would
8 be asked to supply that product and we would therefore
9 have to ask whether that's a 30-minute, 60-minute, or
10 whatever the actual requirement may end up being.

11 Q. Have there been, in your experience, occasions when
12 a designer has asked you to design a set of frames for
13 a building and SAPA had responded by saying, "Well,
14 actually, we think you ought to consider a fire-rated
15 set of frames for this purpose"?

16 A. If we refer back to the times for 2006/2007, what would
17 happen in those cases is we have to work on the
18 information that we're given from the design team or
19 specifier, as we commonly call those individuals. They
20 would advise us of the type of product they need and the
21 requirements of that product.

22 Q. But to go back to my question, would there be occasions
23 when the specifier asked you for one thing, and you at
24 SAPA said, "Well, actually, we think you ought to do
25 something else"?

1 A. Yes, sorry, there have been occasions when people ask us
2 for a particular product -- based upon the information
3 that we're given, if there's something we see that is
4 obvious, we can make a suggestion and the design team
5 member will either take on board that comment or not.

6 Q. Do we take it, then, the decision about what type of
7 frames to use would remain with the specifier, or the
8 designer?

9 A. Always.

10 Q. In focussing in my questions on the issue of fire
11 rating, is it right that other considerations from
12 SAPA's point of view would include wind-loading, which
13 is the extent to which the frames would distort under
14 the pressure of wind --

15 A. That is correct.

16 Q. -- and also load-bearing, which is the extent to which
17 the frames might deform under the weight of the
18 components of the facade itself?

19 A. Yes, indeed. Standard frames are not load-bearing.

20 Q. Are those two factors, the wind-loading and the
21 load-bearing aspects, both things which would have to be
22 considered really for any design for a facade?

23 A. Just about every design.

24 Q. Can I move on immediately then to look at how SAPA came
25 to be involved in the work that was done at

1 Lakanal House in 2006/2007. As I understand it, SAPA's
2 involvement began when you were asked to prepare
3 something called a performance specification?

4 A. That is correct.

5 Q. So we understand how this fits into the process of
6 a project like this, is it correct that SAPA would
7 sometimes be contacted by a specifier and asked to
8 provide a specification at an early stage, and that that
9 then becomes part of the overall specification of the
10 project when it goes out to tender?

11 A. Yes, I think there are two questions there, the first
12 being how we're contacted. We are regularly contacted
13 directly by specifiers. As for the specification
14 itself, we pass that specification on to the person who
15 requested it, and it's their decision to include that
16 specification, having checked it, or whether to exclude
17 it and use something else.

18 Q. So the specification that SAPA provide at that stage
19 might be included in the tender or not, depending on
20 what the designer chooses?

21 A. That's correct.

22 Q. Is it correct that at that stage, typically SAPA would
23 not be paid for that specification?

24 A. SAPA are never paid for specifications.

25 Q. So is the idea from SAPA's point of view that if you

1 provide a specification and it is included in the
2 tender, then in due course, whichever contractor wins
3 the contract will then ask you to provide the aluminium
4 sections that become the frames?

5 A. Yes, it's very similar to that, with just one small
6 deviation, is that somewhere along the line, albeit SAPA
7 may well provide the specification and that may well be
8 issued with a tender document, ultimately it's
9 a decision, I would say, perhaps of the -- maybe the
10 main contractor to decide which products they're going
11 to use. Just because it says SAPA doesn't mean
12 ultimately they will use SAPA due to sort of fair
13 tendering process.

14 Q. But presumably your hope is that they will use SAPA?

15 A. Yes, sorry.

16 Q. Because otherwise your company gets nothing out of
17 involvement in the specification?

18 A. Absolutely, yes, obviously. The purpose of us writing
19 the specification is obviously to try and provide
20 a unique selling point in the hope that yes, our product
21 will be used on that project.

22 Q. If we could look, please, at page 1032, which is in file
23 number 3. Mr Clark will hand you that in just a moment.
24 File 3, page 1032, please. (Handed) What we have there
25 is an email from Annabel Sidney, who worked for SBDS --

1 she was the specifier in relation to this project -- to
2 somebody called David Sales at Marsland Windows, and
3 this is an email on 11 November 2004. Is Marsland
4 a name that you're familiar with?

5 A. Yes, it is.

6 Q. What was their business?

7 A. Marsland Windows have ceased to trade, but back then
8 they were what we would term as a SAPA commercial
9 dealer, ie they are a company that we would sell, as we
10 spoke of earlier, the lengths of aluminium profile to
11 actually fabricate and install windows.

12 Q. So we can see that Annabel Sidney wrote to David Sales
13 and said:

14 "Dear David, I am currently preparing
15 a specification for refurbishment works at the above
16 property."

17 We can see Lakanal named in the subject:

18 "I would like to meet with you at your earliest
19 possible convenience to discuss options for window
20 replacements."

21 Then if I could ask you, please, to turn on to
22 page 1056 in the same bundle.

23 A. Yes, I've got that.

24 Q. In the middle of that page, we have an email from
25 Annabel Sidney, again to David Sales, this time on

1 16 December 2004, where she said:

2 "David, please could you provide me with
3 a specification for the above."

4 So at this stage, Annabel Sidney was asking this
5 other company, Marsland, to provide a specification?

6 A. That is correct.

7 Q. If we look further down the same page -- sorry, perhaps
8 on page 1055. There's an email at the bottom from David
9 Sales to you on 16 December 2004. Do you see that?
10 Right at the bottom of page 1055?

11 A. Sorry, yes I do, yes.

12 Q. Mr Sales said to you:

13 "Liam, this is the latest job from the John Menlove
14 camp. I have attached the photos I have taken. It is
15 very similar to Colbert House."

16 Then over the page:

17 "Can you please assist regarding specification by
18 the required date?"

19 So is what had happened there in effect that
20 Annabel Sidney had asked them for a specification and
21 they in turn had asked you to provide one?

22 A. Yes, generally speaking, Marsland Windows wouldn't
23 actually write a specification. They would contact
24 ourselves to do that on their behalf.

25 Q. And the date by which the specification was required, we

1 can see in Annabel Sidney's email in the middle of
2 page 1056, was 5 January?

3 A. Yes, which obviously provided a limited amount of time,
4 taking into account the Christmas break.

5 Q. If we just go back, please, to page 1055, we can see
6 that you wrote back to Mr Sales and said:

7 "Hi Dave, having taken a look at the photos I have
8 a few questions."

9 And then you asked him a number of points. Is it
10 right that attached to his original email to you were
11 the photos that we see from page 1042 onwards?

12 A. Yes, I believe those are the photographs that came with
13 the email.

14 Q. I'll just run through them for the jury. They're from
15 pages 1042 to 1054. We can come back to look at them in
16 more detail, if needs be, later on. If we return to
17 page 1055, can we see at the top of that page that after
18 your email with questions, Mr Sales then wrote back to
19 you on 20 December and said:

20 "Morning Liam, please find attached details and
21 sizes of screens."

22 And answered the various questions that you had
23 asked him.

24 A. Yes, I see that.

25 Q. The reference there to attached details and sizes of

1 screens, would I be right in suggesting that he attached
2 to that email what we have at page 1080?

3 A. If you could just scroll down a little bit, because
4 there are two that are very similar. Mine had headnotes
5 on the bottom. Yes, that is the one from David Sales.

6 Q. So Mr Sales had, by this stage, sent to you the
7 information that was in the emails that we've looked at,
8 the photographs that we have just seen, and these
9 sketches?

10 A. Yes.

11 Q. So far as you're aware, did these sketches that we're
12 looking at now come from Marsland?

13 A. They definitely came from Marsland's.

14 Q. At that point, had you been to Lakanal House? Had you
15 visited it?

16 A. I can't actually recall. I've checked our database,
17 I have no record of it there, but looking at the time
18 frames and work loads it's unlikely at that point that
19 I'd actually been to site.

20 Q. Would you aim to visit a site before preparing any sort
21 of specification for work there?

22 A. No, not always. We would always like to. Sometimes
23 time restraints don't allow that to happen.

24 Q. If you haven't been to the building, does it follow,
25 then, that you are relying on the information that is

1 provided to you?

2 A. Yes, we have to -- in our business, we have to rely on
3 the information that's supplied to us in the same way
4 that if it was a new build project, then there are only
5 drawings and information to work on.

6 Q. Can I show you, please, the document at page 1508 that
7 I've just put on the screen. This is a document which
8 describes itself as a "performance specification for the
9 provision of polyester powder-coated aluminium windows
10 and doors" for Lakanal House. Is that a document that
11 SAPA have prepared?

12 A. That's actually a document that I prepared on SAPA's
13 behalf.

14 Q. In the bottom right-hand corner of that page, do we see
15 a date, 24 December 2004?

16 A. I do.

17 Q. Was this the first version of the performance
18 specification?

19 A. I'll just have to go, if I can flick through here, to
20 the back page and I can tell from there. Yes, this is
21 the first document on 24 December.

22 Q. Could you just let us know the page number you were just
23 referring to?

24 A. I'm sorry, I do apologise. It's 1065.

25 Q. 1065. Is what you were looking at the date in the

1 bottom right-hand corner?

2 A. That's correct.

3 Q. 24/12/04?

4 A. Yes.

5 Q. Is there a difference between a performance
6 specification and some other kind of specification?

7 A. Well, there is now. Again, if we stay strictly with the
8 time period we're referring to, back then we wrote
9 performance specifications, and that has moved on now to
10 what they call NBS specifications.

11 Q. At the time this document was drafted, you entitled it
12 "Performance specification" rather than simply
13 "Specification". Was that to make some particular
14 distinction?

15 A. No, that's -- I don't believe it was. I -- that's
16 actually the specification template, and we call it
17 a performance specification because it outlines things
18 such as the weather rating, for example.

19 Q. Could somebody who received this document go away and
20 build the window and door sets without any other
21 information?

22 A. No.

23 Q. What else would they need to have before they were able
24 to build the windows and doors described in the
25 specification?

1 A. Well, what would happen if we went back to the sketches
2 provided by David Sales is an, if you like,
3 configuration of how the windows were required, and what
4 we'd have to look at is whether we could achieve those
5 wind loadings, those designs that you see the bottom
6 right-hand drawing. There's quite a span there. We
7 have to consider the sag that the weight of the windows
8 might cause. We have to take into account any wind
9 loadings that may be imposed upon those windows,
10 particularly at high levels. So what we'd have to do is
11 look at how we calculated that, and there's more than
12 one way of fabricating that window, and you'll see or
13 note in the email that was displayed earlier that we
14 referred to full height mullions, and you'll see in the
15 original sketches that they're not.

16 Q. That's quite a lot of information there. Let me see if
17 I can break it down in this way. These sketches
18 provided by Marsland, this is what they were asking you
19 to design the frames for; is that right?

20 A. That is correct.

21 Q. And so you had to assess whether what was being asked
22 for was technically feasible --

23 A. Also correct.

24 Q. I'm sorry?

25 A. That is also correct.

1 Q. Yes -- and if it wasn't feasible, what the best way of
2 designing it would be?

3 A. Indeed, yes.

4 Q. You mentioned a moment ago that the emails referred to
5 full height mullions; that is full height vertical
6 sections of the frames?

7 A. That's correct.

8 Q. And is it right the point you were just making is that
9 these drawings we're now looking at do not show full
10 height mullions?

11 A. That's correct.

12 Q. But at this stage the design of the frames and which
13 profiles you would use, which sections of aluminium, was
14 what you were being asked to design?

15 A. Yes. I had sent back -- in response to the sketches
16 that are now up on the screen, I had sent back amended
17 sketches to David Sales with the notes that would -- on
18 my sketches would be in the bottom right-hand corner.

19 Q. To the back to the question I asked you a few moments
20 ago about what information somebody would actually need
21 to build the windows, if I were armed with this page and
22 also with the performance specification, could I go away
23 and make up and install the windows?

24 A. In principle, yes, but it's not quite that simple,
25 because there's software that's used to determine

1 whether windows can be made to a certain size, to
2 calculate the wind loadings, maximum sizes of windows.
3 So a fabricator with the information that we've supplied
4 could actually make these windows. Maybe not exactly to
5 design. They may come up with their own design.

6 Q. Would there be a need for you or for the fabricator to
7 go to the site and measure the individual spaces that
8 the window sets were going to be put into?

9 A. No. Sorry, can I just correct that? In terms of when
10 we're looking at doing specifications, whether a window
11 is, we'll say, one metre tall or one metre and five
12 millimetres is irrelevant from a quoting point of view.
13 If one is to actually then fabricate a window to
14 actually fit in, if you like, the hole in the building,
15 then of course you would have to go to site and measure
16 it for an installed measurement.

17 Q. I see. So at the stage of providing a specification in
18 response to the query from Marsland -- and as we know,
19 it was ultimately going to go to Annabel Sidney -- it
20 wasn't necessary to go to the site to measure where the
21 windows were going to be put in?

22 A. No, it wasn't necessary to go there.

23 Q. But in order to install them, in due course it be?

24 A. Oh absolutely, yes.

25 Q. In the information which had been provided to you by

1 that stage -- and we will just remind ourselves; it's
2 the information in the email, the sketches we've just
3 been looking at and the photographs -- there was no
4 reference either way to fire safety?

5 A. There wasn't.

6 Q. Is that unusual for a project of this sort in your
7 experience?

8 A. No, it's not unusual. I'd say in the majority of cases,
9 probably -- well, I think I did actually calculate
10 there's around about 1 per cent of the projects I work
11 on require fire-rated products.

12 Q. When a request made to SAPA is silent on fire safety,
13 how do you deal with that at the design stage, when
14 you're preparing your specification?

15 A. If no -- no reference is made to fire-rated product when
16 we receive our information, then we take on board the
17 information that we're given and supply the
18 specification according to the information we're given,
19 if we're talking about -- solely about the time of 2006
20 to 2007.

21 Q. Could we go back then, please, to page 1058, which is
22 the original performance specification, and just look at
23 a couple of elements of it so we understand what it was
24 you were putting forward.

25 The first thing to note then on page 1058 itself is

1 that it was a specification for polyester powder-coated
2 aluminium windows and doors. Is that a reference to the
3 facing of the panels that would be used?

4 A. It's a reference to the fact that the product itself,
5 the profile is aluminium and the coating on the
6 aluminium is powder coating.

7 Q. Just going over the page to page 1059, in the
8 introduction section it explains the context of the
9 specification. We can see that it's for "the supply and
10 installation of aluminium windows and doors to replace
11 existing windows and doors". As far as you were aware,
12 was this a wholesale replacement of what had been there
13 previously?

14 A. It was a replacement scheme, yes.

15 Q. At the time you prepared this document, did you know
16 what was already in place and what it was made of?

17 A. No. Part of what I worked on, again, coming back to the
18 information file, was the reference to Colbert House,
19 that it was very similar to Colbert House, so we were
20 familiar with the estate.

21 Q. Is Colbert House another building on the Sceaux Gardens
22 estate?

23 A. It is.

24 Q. But at this stage you were being asked to draw up
25 a specification to replace what was there without having

1 been to site and without having been given information
2 about what was in Lakanal House; is that right?

3 A. Correct.

4 Q. Going over the page, please, to page 1060, under the
5 heading, paragraph 5, "Window and door construction,"
6 and then the subheading "Windows", we can see:

7 "To be manufactured as SAPA Building Systems ...
8 Dualframe 55-millimetre casement and TBT window
9 system..."

10 You told us a little earlier that SAPA doesn't in
11 actual fact manufacture glazed units. What is this
12 referring to? What is that system for?

13 A. The system referred to there called "Dualframe" is the
14 actual, if you like, product name, the brand.

15 "55-millimetre" refers to the thickness, the front to
16 back measurement of the system. The casement would mean
17 a typical side-hung open casement with which generally
18 most people are familiar, where the -- it just swings,
19 hinged on one side. And then "TBT" stands for "tilt
20 before turn", and that's when the window is hinged at
21 the bottom, it drops into the building, you close the
22 window again and then you can open it inwards, like
23 a casement window, for cleaning.

24 Q. If SAPA don't manufacture glazed units, what is it about
25 any of that which is actually part of SAPA's product or

1 SAPA's system?

2 A. The part that's actually SAPA is actually detailed below
3 when we look just slightly below that, where it says
4 outer frame, opening light, outer frame, transom, and so
5 on and so forth.

6 Q. This list that we have in the middle of the page, is
7 that a list of SAPA profiles?

8 A. That is correct. Sorry, that's correct in the sense
9 relating to the casement of tilt before turns. It's not
10 all the profiles that we do.

11 Q. As said earlier, whatever is said in this document,
12 a contractor would, in principle -- well, first of all
13 a designer is free to reject the specification?

14 A. Yes, that's correct.

15 Q. And if the specification is included in the tender, then
16 the contractor is free to reject it, presumably if they
17 provide a suitable alternative?

18 A. Yes, the common phrase used is -- it would perhaps be,
19 in this instance, a "SAPA-equal" or "approved". It
20 wouldn't say solely SAPA.

21 Q. A few pages further on, please, at page 1063, there is
22 a description of the type of panels to be used, towards
23 the bottom of the page, next to heading 11, "Glazing"
24 Do. You have that in front of you?

25 A. I do, yes.

1 Q. We can see:

2 "Solid infill panels where required are to be
3 28-millimetre insulated sandwich panels with facing of
4 polyester powder-coated aluminium."

5 SAPA don't manufacture the panels?

6 A. No, SAPA don't manufacture panels.

7 Q. What is it which determines, in your specification, what
8 sorts of panels you put forward?

9 A. Well, what we have to do in the specification, we're
10 often asked, as in this case, is a type of panel that
11 will fit into our system. Of course, not just any panel
12 will fit into a framing, so we tend to put forward the
13 powder-coated aluminium panel. Mainly, in this case,
14 you'll note the reference that says "finished to match
15 framing". So the framing is a white polyester powdered
16 coating and the only true way to get something that
17 truly matches is to have something of the same finish,
18 so as a powder-coated aluminium panel you could have
19 exactly the same colour as per the frames.

20 Q. Do we understand then that from the point of view of
21 SAPA producing the specification, the type of panel to
22 be used is really secondly to the design of the frames,
23 because you have to suggest a panel which will fit with
24 the frames you are designing?

25 A. It is. It's a non-SAPA product, and what we do is we

1 make the suggestion of a panel that will fit in to our
2 system, based on the recommendations or information
3 given by the specifier, and then, further on towards the
4 bottom of the specification, you will see that we advise
5 the specifier to go and check with the manufacturer of
6 the panels to make sure they're suitable. It's a little
7 further down. That would be page 1065.

8 Q. Thank you. So if we look at the bottom of 1065, we have
9 the small print, and the first of the footnotes is:

10 "Information is given on an advisory basis only and
11 specifiers are particularly recommended to contact
12 suppliers of non-SAPA Building Systems Limited products
13 to ensure that such products are suitable."

14 A. That's correct.

15 Q. So in the context of this specification, does that in
16 fact mean everything part from the frames?

17 A. Indeed. I think -- there's really three key elements:
18 panels, glazing, frames.

19 Q. So in the specification, you have suggested
20 28-millimetre composite panels with powder-coated
21 aluminium facing, but those are not SAPA products, and
22 so this part of the specification tells the person you
23 are providing it to to consider whether those panels are
24 appropriate?

25 A. That's correct.

1 Q. The explanation of what type of panels should be used
2 that we were looking at a moment ago on page 1063
3 describes them in general terms, according to, for
4 example, their depth and the finish, but it doesn't
5 actually name a particular producer of panels, for
6 example, or a particular model number. Did you ever get
7 as far as specifying a particular type of panel in that
8 way?

9 A. No, SAPA wouldn't specify the panel in any great detail.
10 It's merely a starting point.

11 Q. So somebody receiving the specification would in fact
12 still have options about what sort of 28-millimetre
13 composite panel was to be used?

14 A. That's correct.

15 Q. Could I ask you then, please, about the question of the
16 balcony doors. I'll just put on the screen page 1061.
17 Right at the top of that page, we have:

18 "Doors, residential, to be Dualframe 75-millimetre
19 HP doors system."

20 "Dualframe" you've told us is the product name?

21 A. Yes.

22 Q. Is "75-millimetre" the width of the door?

23 A. Yes, the thickness.

24 Q. What does "HP" mean please?

25 A. "High performance".

1 Q. "High performance"?

2 A. Yes.

3 Q. In relation to what?

4 A. Weather rating, mainly.

5 Q. There isn't any reference there to whether the doors are
6 to be solid doors or glazed or part-glazed. Is the
7 specification simply silent on that question?

8 A. The -- there is -- with a choice of -- you have the
9 glazing specification further back in the -- sorry, the
10 glazing specification further back in this document,
11 also with the panels, and with this particular door, you
12 could have glass, all glass, half-glass and then
13 half-glass at the bottom or a combination of panels,
14 whichever somebody chose to do.

15 Q. Is the upshot of the section we're looking at, though,
16 that you were not specifying that it should be one thing
17 or the other?

18 A. No. But sorry, I should say that it does tie back to
19 the original sketches, which was glazed at the top and
20 packaging at the bottom.

21 Q. But just in the context of this document, this document
22 doesn't specify one thing one way or the other?

23 A. No, this document does not.

24 Q. The section that we're looking at on page 1061 to do
25 with doors doesn't make any mention of whether the doors

1 should be fire doors or not. Was that something that
2 you were asked to consider when preparing this document?

3 A. No, we were never asked to consider anything to do with
4 fire-rated products at Lakanal House. Had this been
5 a fire-rated product that we could have supplied, it
6 would have stated so.

7 Q. If you had been asked to draw up this specification, and
8 for example the only mention of a fire-rated element had
9 been "We would like you to specify fire-rated doors" but
10 nothing was said about the panels or about the frames,
11 would that be the sort of situation you described as
12 obvious earlier, where you might query why one part of
13 the design was to be fire-rated but other parts were
14 not?

15 A. Many buildings are very complex, so as I said, we have
16 to rely on the information that we're given, but if
17 I had anticipated there was a fire-rated product
18 requirement, or more so that I should have been told if
19 there was a requirement for a fire-rated product, then
20 I could have built it into this specification.

21 Q. Yes, my question was slightly different. Your
22 specification has a number of elements. If someone were
23 to ask you to make one of those elements fire-rated but
24 not the others, is that something that might cause you
25 to query what you were being asked to do or not?

1 A. No.

2 Q. No?

3 A. No. The answer's no.

4 Q. What I'd like to do is as briskly as possible follow
5 through what happened with this document and how it came
6 to be included in the tender for the Lakanal House
7 works. If we could turn, please, to page 1086. There's
8 a letter there from -- sorry, I'll wait you to get the
9 page.

10 A. I'm there.

11 Q. 1086, a letter from Annabel Sidney to someone called
12 Daniel Wallace who works for a firm of surveyors called
13 Franklin & Andrews. They were assisting SBDS in the
14 preparation of the tender documents. We can see there
15 that Annabel Sidney on 13 January 2005 wrote to
16 Mr Wallace and said:

17 "Please find enclosed amendments to the draft
18 specification."

19 I don't know whether you've ever seen this document
20 before? It may well be that you haven't, or at least
21 not at the time.

22 A. I didn't see the document at the time, but obviously in
23 the lead-up to the inquest I have seen this document.

24 Q. If we have a look, please, at page 1093, which is the
25 attachment to that letter. Do you see next to the

1 circle with a number 19 in it at the top of the page

2 "kitchen windows"?

3 A. Yes, I see that.

4 Q. Then, a little further down:

5 "Amend to read: kitchen windows type 2 comprising of
6 tilt and turn and fixed windows, solid fire-rated door
7 to meet part B."

8 Were you ever asked to include in your specification
9 a solid fire-rated door which would meet part B of the
10 building regulations?

11 A. No, I wasn't.

12 Q. So that wasn't a requirement that was put forward to
13 you. If we look at page 1361, please, which is in file
14 number 4, Mr Clark will pass it to you. (Handed)

15 Do you recognise the format of this document? It's
16 a schedule of the works to be carried out under
17 a construction contract.

18 A. Yes, I recognise it as a bill of quantities.

19 Q. If we look at the top of that page on 1361, we can see
20 the same thing:

21 "Kitchen window type 2 comprising of tilt and turn
22 and fixed windows, solid fire-rated door to meet part
23 B."

24 So in other words, the amendment that we saw in the
25 handwritten document has made its way into this bill of

1 quantities. Do you follow that?

2 A. I do follow that.

3 Q. Again, was this something that SAPA were aware of at the
4 time, that that had been incorporated into the
5 specification of the works?

6 A. No, it wasn't. At no point was SAPA aware of the
7 requirement for these doors to be fire-rated.

8 Q. At page 1129 -- back in file 3, I'm afraid. (Handed)
9 At page 1129, an email from Annabel Sidney on
10 19 January 2005 to Mr Sales at Marsland. I'll just make
11 that a little bigger:

12 "Dear Liam and David [because it's addressed to you
13 as well], please could you have a look at the attached
14 document and ensure that the specification is revised
15 according. Please let me know if anything I have
16 suggested contravenes regulations or what your
17 experience would recommend."

18 Attached to that document was page 1130, headed
19 "Queries and amendments to window and door
20 specification". So it would appear that this is the
21 document that Annabel Sidney was sending to you and
22 Mr Sales for your comments. Do you remember receiving
23 this document?

24 A. I do.

25 Q. Could I ask you to look in particular, please, at point

1 number 2, where she said:

2 "Both lounge and kitchen window/doors lead onto
3 a fire escape balcony. The doors are only meant to be
4 used as a means of escape and not general access,
5 although residents do have them open for ventilation.
6 They must meet the following requirements."

7 The first one was:

8 "Residents must be able to open them quickly in the
9 event of a fire."

10 And the second was:

11 "Lounge and kitchen doors and windows must be as
12 burglar-proof as possible."

13 If we pause there, there isn't a mention, there, is
14 there, of the doors being fire doors?

15 A. I think we shouldn't confuse things with being called
16 fire doors. "Fire-rated" is the term for doors.
17 There's no mention of them being fire-rated or
18 non-fire-rated.

19 Q. So no mention of the doors being fire-rated. She, as we
20 had seen on the previous page, was asking both you and
21 Mr Sales whether or not anything that she had said in
22 that document contravened the building regulations. Did
23 it seem to you that anything she had suggested would be
24 in contravention of the building regulations?

25 A. In the context of this document, no, but we can't just

1 say the building regulations per se. It's such a vast
2 area.

3 Q. Thinking in particular about part B of the regulations
4 and the requirements relating to fire safety, did you
5 understand her email to be asking you to assess whether
6 your design as a whole would satisfy the requirements of
7 part B?

8 A. My understanding of what I was being asked for was to
9 provide a door that provided means of escape, ie
10 a thumb-turned lock on the inside which negates the need
11 for a key to gain exit from that building.

12 Q. So far as you were concerned, whose responsibility was
13 it to consider whether the design for the work that was
14 to be done did comply with the various requirements of
15 the building regulations?

16 A. As I've stated earlier, the responsibility, in my
17 opinion, always lies with the design team, who then have
18 the back up and benefit of the use of building control.

19 Q. Can you recall, then, whether, at the time you received
20 that email and the attachment, you considered only the
21 suggested changes that she put forward at page 1130 or
22 whether you considered the requirements of the building
23 regulations more generally?

24 A. I think due to the passage of time, it's -- it's not
25 easy to be 100 per cent clear. I've looked at the

1 documents and thought about if I had received it back
2 then what I would have done, and I believe that my
3 response would have been in direct relation to the
4 information that was given to me.

5 Q. Is it correct that in response to that email you were
6 then sent, possibly via Marsland, an advised performance
7 specification?

8 A. I did send a revised specification. As far as I can
9 recall, that did go directly to Annabel Sidney, not
10 through Marsland.

11 Q. I've just put on screen the performance specification on
12 1134, which is in file 3.

13 A. Yes, I have that.

14 Q. The date at the bottom right-hand corner of that page
15 appears to be 20 January.

16 A. Yes, I think those dates are handwritten on after the
17 date. If I could just look at the back of this document
18 that would tell me. Yes, that is the correct date.

19 Q. So this is the revised performance specification which
20 you believe you sent to Annabel Sidney?

21 A. I believe I did, yes.

22 Q. Just to touch on two points quickly if we can. If
23 I could ask you to turn to page 1140. It's the second
24 paragraph on that page. We can see that the infill
25 panels are still going to be 28-millimetre insulated

1 sandwich panels, so no change from the original
2 specification there?

3 A. No change at all.

4 Q. And if we go to page 1137 to look at the doors, it's as
5 before, isn't it? Dualframe 75-millimetre HP doors
6 system?

7 A. Yes, it is.

8 Q. In other words, the changes that we saw that were made
9 to the bill of quantities didn't find their way into
10 this revised performance specification?

11 A. No, I was never asked to. I think you'll find the main
12 change in this particular document over the original is
13 the introduction of the thumb-turn in the hardware
14 section which was relating to the email received from
15 Annabel Sidney.

16 Q. So there were no changes relating to the type of panel
17 to be used or the specification of the doors to be used
18 in this specification?

19 A. No change at all.

20 Q. Please can we turn to page 1143 to see what became of
21 the revised specification. It's an email from
22 Annabel Sidney to David Wallace at Franklin & Andrews,
23 the surveyors on 24 January:

24 "Dear Daniel, please find enclosed the revised
25 performance specification for windows and doors to be

1 incorporated into the tender documents."

2 Would you agree it would appear that that second
3 version of the performance specification is what went
4 into the tender documents and was then sent out to the
5 contractors who were bidding to do the work at
6 Lakanal House?

7 A. Based on this information, I would agree.

8 Q. Could you help us, please, to understand the supply
9 chain then, from SAPA's point of view, once the work was
10 starting. To whom did you supply the lengths of
11 aluminium that were going to be used in the frames?

12 A. The lengths of aluminium were supplied to a company in
13 Ashchurch in Gloucestershire called Joedan Windows.

14 Q. Is it your understanding that in turn Joedan were in
15 a relationship with a company called Symphony Windows?

16 A. That is correct.

17 Q. Symphony Windows were in a contract with Apollo?

18 A. Also correct.

19 Q. And ultimately Apollo had a contract with the
20 London Borough of Southwark?

21 A. That's my understanding.

22 Q. Do we take it, then, that SAPA's only contractual
23 relationship was with Joedan?

24 A. That is correct.

25 Q. Notwithstanding that you had, at an earlier stage,

1 provided the specification to Southwark via Marsland?

2 A. That's correct. Our contract was with Joedan.

3 Q. At the stage of providing that specification, did SAPA
4 produce any drawings?

5 A. At the point of the specification, no drawings were
6 produced other than hand sketches, so no what I would
7 call technical drawings, CAD drawings.

8 Q. Could I show you, please, page 1067, which again is in
9 file number 3.

10 A. Yes, I have that.

11 Q. A lot of the text is quite small, but we can see in the
12 top left it's headed "Lakanal -- windows. Drawing
13 number LW1". Then on the right-hand side there are
14 drawings of three different sections of facade, which we
15 may recognise as being the bedroom windows, the kitchen
16 and the lounge. On the right-hand side, two other
17 sections, and if we look at the bottom right-hand
18 corner -- in fact, it's helpful first to look in the
19 bottom left-hand corner, the words "Southwark Building
20 Design Service". Do you see that?

21 A. I do.

22 Q. Do we take it that this is an SBDS drawing rather than
23 a SAPA drawing?

24 A. I'd say it is, yes.

25 Q. And the date of it, towards the right-hand side,

1 January 2005?

2 A. Yes.

3 Q. Was that a drawing that you had at the time of preparing
4 the revised specification? Can you remember?

5 A. That specific drawing?

6 Q. This particular drawing.

7 A. No, the original -- the information I had was the hand
8 sketches drawn by David Sales.

9 Q. Was this drawing produced with the assistance of SAPA,
10 or was this a drawing which SBDS produced on their own?

11 A. I didn't assist with the drawing.

12 Q. You didn't assist with it. Were you the person at SAPA
13 who was involved in this project?

14 A. I was, but what I'm saying -- I can't tell, obviously,
15 if they phoned in the offices or not. But it looks very
16 much -- it's not our type of drawing so I would assume
17 it was solely done by Southwark Building Design
18 Services.

19 Q. Moving on from the specification stage to see how things
20 developed from there, could I ask you, please, to look
21 at page 1283, which is in the fourth bundle. Hopefully
22 you can help us to understand the source of the
23 documents which made their way ultimately to Symphony
24 Windows. We have here a letter from Apollo to Symphony
25 Windows for the attention of somebody called Tom

1 Campbell, and this letter is dated 23 August 2005. Do
2 you see that?

3 A. Yes, I do.

4 Q. I'll just zoom in to make it easier to read. The first
5 paragraph says:

6 "We are currently tendering for the above project
7 and would be pleased to receive your most competitive
8 quotation on a supply or supply-and-fix basis for the
9 aluminium windows requirements."

10 There's then a list of documents which are attached
11 to this letter. Do you see that? So we have
12 preliminary pages, 5/8 through to 5/10, something called
13 location, and then preamble pages, the window/door
14 specification, and then three documents called L10, L20
15 and L40, and some pages from the schedule of works, 7/19
16 through to 7/21, and some others. Then, a little
17 further down, "Drawings: LW1". Of course, we've just
18 seen the drawing LW1 a few seconds ago.

19 A. Yes.

20 Q. Could I ask you just to help us with each of those
21 things in turn. Page 1284, project particulars. Is
22 that a document which SAPA drew up?

23 A. No.

24 Q. Do you know who drew that document up?

25 A. I don't. I assume Southwark Building Design Services,

1 as it says at the top, maybe.

2 Q. There's then this document, "Requirements for the
3 replacement of window/panel/door units window designs".
4 Is that a SAPA document, do you know?

5 A. It's not a SAPA document.

6 Q. Are you able to say where that came from?

7 A. I'm sorry, I have no idea.

8 Q. Then there are these three documents that begin with the
9 letter L. So at 1306, a document that looks like that,
10 "Windows/roof lights/screens/louvres", some details
11 about the performance required and the components to be
12 used. Is that a document which originated from SAPA?

13 A. No, it's not. L10 is, if you like, an abbreviation for
14 a window specification.

15 Q. Is that conventional that that's what L10 is short for?

16 A. Industry standard.

17 Q. Do you know who prepared that document?

18 A. Sorry, again, I have no idea.

19 Q. Then if we go on to page 1297, we see this again. This
20 is the SAPA performance specification document.

21 A. That's correct.

22 Q. So of that list of documents that it seems were sent by
23 Apollo to Symphony Windows, do we understand that the
24 only one of those which SAPA have prepared was the
25 performance specification?

1 A. Yes, the one on the screen now.

2 Q. In February of 2006, on the 13th, there was
3 a pre-contract meeting. I've just put up the first page
4 of the minutes on the screen. It doesn't suggest,
5 looking at the minutes, as though anyone from SAPA
6 attended that pre contract meeting. Does that tie in
7 with your recollection?

8 A. I would suggest as I'm not on the list, or anyone from
9 SAPA is not on the list, then we weren't there. I would
10 have to check a calendar to see where I was on that day.

11 Q. Would you expect to attend a pre-contract meeting of
12 this sort?

13 A. No, I wouldn't. The reason being I wouldn't expect to
14 is quite simply at this point the contract has been
15 agreed, shall we say, and those parties that are in the
16 contract are in contract, and SAPA wouldn't be one of
17 those parties, so therefore we would have to be invited
18 to a meeting as opposed to just as a matter of course
19 being invited to it.

20 Q. During the work, the clerk of works prepared a report
21 each week, and I've just put on the screen page 1649,
22 which is a page from one of those reports. Page 1649 is
23 in the fifth bundle. (Handed) I've put it on the screen
24 as well.

25 A. Yes, I have that.

1 Q. Mr Hanson, we're interested in the top one of those
2 boxes, the entry for Monday, 27 March 2006. The clerk
3 of works has recorded:

4 "Meeting held on site with the site agent, CPM [who
5 we understand is Annabel Sidney], project consultant
6 from SAPA and site agents from Apollo."

7 Do you recall whether you were the project
8 consultant from SAPA who attended on the site on this
9 day?

10 A. I didn't until I saw this document, as I say, in
11 relation to the inquest, but we have electronic
12 calendars that were used and I then correlated this
13 document to my calendar and I did attend the meeting.

14 Q. Can you remember what the purpose of that meeting was?

15 A. I'm sorry, but I can't.

16 Q. As we understand it, that was the second week of works.
17 Does that help you? Can you remember a meeting at the
18 very early stages?

19 A. Not particularly. The thing that springs to mind, which
20 is just really an opinion, not necessarily factual, is
21 that there were some documents requesting window
22 samples. It could have been to take a sample, but as
23 I said earlier, I just simply don't recall exactly what
24 that meeting was for.

25 Q. Do you recall that a little later on in the project, on

1 3 May, there was a meeting to which SAPA were invited?

2 A. Unfortunately, during that period I was off on sick
3 leave for two weeks following a motorcycle accident. So
4 I know of it, but I didn't attend.

5 Q. You didn't attend it yourself but is it right that your
6 colleague Mr Hurrell attended in your place?

7 A. That is my understanding.

8 Q. I'd like please to look at some of the documents that
9 were going backwards and forwards in the run up to that
10 meeting so that you can explain the context of it to us.
11 Could I take you first of all to page 1729. We can see
12 in the top right-hand corner the Symphony logo, so this
13 isn't a SAPA document, but it seems to be a fax from
14 Symphony Windows to Apollo for the attention of James
15 Cousins on 13 April 2006, attaching ten or 11 other
16 sheets.

17 If we look forward, please, together to page 1738,
18 there's a drawing there which apparently was attached to
19 that fax. Looking at that document, first of all,
20 ignoring what's written on it, are you able to say
21 whether that is a SAPA produced diagram?

22 A. It could be from our software package, which the company
23 I mentioned earlier, Joedan, would have access to. So
24 it looks on a similar format, but I couldn't say with
25 absolute certainty.

1 Q. We can see that somebody has made various handwritten
2 annotations on it. Is that your handwriting, first of
3 all?

4 A. No, it's not.

5 Q. If we look in the bottom right, somebody has written
6 these words, they've said:

7 "James, this is as tender. SAPA are now saying the
8 outer frame should be larger."

9 And then:

10 "Trying to resolve as the sections were specified
11 by ... "

12 And then the words are cut off at the bottom.

13 A. Sorry, I'm just on the wrong page.

14 Q. Sorry, it's page 1738.

15 A. Yes, I'm with you now.

16 Q. Those words are in handwriting at the bottom right-hand
17 corner of the page.

18 A. Okay. It's not my handwriting.

19 Q. The suggestion there is that there was a need for the
20 outer frames to be larger and that there was something
21 that needed to be resolved. Can you remember whether at
22 that stage in April 2006 there was a problem with the
23 design of the frames?

24 A. Well I can obviously again, having gone over these
25 documents recently, I do recall there was an issue with

1 the detailing, but if we were to go right back to the
2 beginning of this conversation, we've mentioned about
3 full height mullions, full length mullions, these
4 clearly don't have it. So it's not -- it's not a design
5 fault, it's merely someone has chosen to redesign the
6 windows.

7 Q. In simple terms, please, what is the significance of
8 whether the mullions are full height or not?

9 A. Well if we're looking at what's up on the screen
10 currently, you will see in essence there's, for the sake
11 of argument, four windows along the top and two areas at
12 the bottom. The problem with what's been designed there
13 is that the fact that the transom, ie the horizontal
14 section, between the top half and the bottom half, there
15 would be a very good strong possibility that that would
16 sag. Should that sag, obviously glazing can pop out,
17 windows don't operate correctly, so when we did the
18 original calculation we would make sure that that was
19 supported effectively enough so it wouldn't sag, and for
20 wind loadings.

21 Q. Would I be right if thinking that the full height
22 mullions, if they had been included, would be, first of
23 all on this left hand section, where I have the arrow?

24 A. That's correct.

25 Q. That would extend down the whole length, and likewise on

1 the right-hand side?

2 A. That is correct.

3 Q. And that would provide more support to the structure?

4 A. Yes, the necessary support, yes.

5 Q. Given that discrepancy between this drawing and the
6 performance specification SAPA compiled, is that
7 a reason for thinking that SAPA did not produce this
8 document?

9 A. Yes.

10 Q. Following things through, could we go, please, to
11 page 1783. This time it's a letter from Apollo to
12 Annabel Sidney on 20 April 2006, about a week later on.
13 He says:

14 "Please find enclosed the following drawings."
15 Which appear to be alternative drawings for each
16 type of window set. Underneath that in the main
17 paragraph, the writer says:

18 "Due to the original design of windows numbers 1, 4
19 and 5 failing to provide sufficient strength throughout
20 the fenestration, SAPA are recommending the coupling
21 support to be added as window alternatives 1, 4 and 5."
22 Was it the case, so far as you were concerned, that
23 the original design didn't provide the strength
24 required?

25 A. The original design drawing by SAPA passed to Marsland

1 and passed to Southwark Building Design did meet the
2 requirements for wind-loading. Somewhere along the line
3 a decision was made to change that design, and that's
4 the effect of the drawings we were looking at earlier.

5 Q. When that change that you mention was made, can you
6 recall whether or not SAPA were consulted about it?

7 A. I certainly wasn't consulted, but this date that we're
8 looking at here, 20 April, was just prior to me going on
9 sick leave, so I can confirm that I certainly wasn't
10 consulted.

11 Q. On page 1802, we have an email that was written five
12 days later than that letter. It's an email from
13 Annabel Sidney to James Cousins at Apollo which said:

14 "Dear James, please find attached our response to
15 your letter of 20 April."

16 Which is the letter that we've just been looking at.
17 On the next page, page 1803, we have the letter that was
18 attached. So this is Annabel Sidney, we see at the
19 bottom there, to James Cousins, dated 20 April 2006.

20 She says:

21 "Thank you for your letter of 20 April and
22 enclosures regarding the windows."

23 Then the second paragraph:

24 "In order for us to respond to your queries and
25 enable you to make a full presentation of the

1 information required, may I suggest that we meet at our
2 offices with yourselves, our client, SAPA and Symphony
3 at 3 o'clock on Wednesday 3 May 2006."

4 Do you recall whether this was a letter that you saw
5 at the time?

6 A. At the time, I did not see this letter.

7 Q. If we go on just a few pages to page 1805, at the bottom
8 there, we have an email from Mr Hurrell, your colleague,
9 to you on 26 April:

10 "Liam, a pre-start meeting of all parties has been
11 called for next Wednesday at 9 o'clock. I'm going to
12 commit one of us to be, you if you are fit, me if not.
13 Regards, Graham."

14 So is that Mr Hurrell letting you know about that
15 meeting?

16 A. Yes, it was. During that period, I think it was
17 24 April, I was on sick leave, as I say, following
18 a motorcycle accident for two weeks. However, albeit
19 being on sick leave, we do tend to pick up emails and
20 one thing or another, so I think it's just a question of
21 my colleague Graham keeping me informed, and I was
22 keeping him informed of my expected return to work.

23 Q. At page 1809 we can see that James Cousins of Apollo is
24 telling Annabel Sidney on 28 April that he had spoken to
25 somebody at SAPA and that SAPA had confirmed that you

1 would attend the meeting, that is somebody from SAPA
2 would attend the meeting.

3 Could we look, please, at page 1819.

4 A. Yes, I have that.

5 Q. We have what seems to be the agenda for the meeting on
6 3 May 2006 at 3 o'clock. Can you recall whether at the
7 time you saw that agenda?

8 A. No, I haven't, I only saw this agenda very recently.

9 Q. In that case I won't ask you anything more about it.

10 Could I ask you, please, to look just at one more
11 document for now, which is at page 1828. It is an email
12 from, at the bottom of the page there, Graham Hurrell to
13 Graeme Paterson on 3 May at 10.40 in the morning. First
14 of all, who is Graeme Paterson, please?

15 A. Graeme Paterson is office based and he's in our
16 technical team.

17 Q. We can see that Mr Hurrell was writing to Mr Paterson
18 and he said:

19 "More info, Liam's spec mentioned DF709 as
20 a horizontal coupler. Can this be done? Is it strong
21 enough for the lyy calc?"

22 Is that a loading calculation?

23 A. Yes, it's actually iyy, that's where I was speaking
24 earlier about the sag of windows, so instead of being
25 the vertical, the ixx, the horizontal is the iyy.

1 Q. So it's an email on the morning of the day of the
2 meeting from Mr Hurrell to somebody in SAPA's technical
3 department asking a question about loading?

4 A. Correct.

5 Q. Can you recall whether anyone mentioned this email to
6 you at the time, or was this also when you were on
7 leave?

8 A. I would say it was unlikely actually at the time,
9 because as I say I was off sick, but certainly after my
10 return to work, which I believe was 8 May.

11 Q. Madam, that might be a convenient moment to break.

12 THE CORONER: Thank you.

13 Yes, we'll have a break now until 2 o'clock, thank
14 you, members of the jury.

15 Mr Hanson, because you're part way through giving
16 your evidence, the strict rule is that you must not talk
17 to anyone at all about your evidence or indeed this
18 matter, so the safe option for you is to have lunch by
19 yourself.

20 A. Okay, I will.

21 THE CORONER: And please be back here for 2 o'clock.

22 (12.58 pm)

23 (The short adjournment)

24 (2.00 pm)

25 (In the presence of the Jury)

1 THE CORONER: Thank you. Yes, Mr Hanson, thank you.

2 MR ATKINS: Yes, Mr Hanson, before lunch we had been looking
3 at the correspondence which led up to the meeting on
4 3 May 2006. As you've explained to us, at the time
5 unfortunately you were off work and so you couldn't go
6 to that meeting. Is it right that your colleague
7 Mr Hurrell went in your place?

8 A. It is right.

9 Q. Could you remind us, please, when it was you came back
10 to work?

11 A. I came back to work on 8 May, which was a Monday.

12 Q. I'd like, please, to show you some emails which were
13 sent shortly after that meeting, starting at page 1849.
14 That page is in the fifth of the files.

15 We're looking at the email there towards the bottom
16 of the page from Mr Hurrell to someone called Crispin.
17 Can you just tell, is he someone who works for SAPA?

18 A. Crispin is one of the technical advisers, office-based.

19 Q. So he's part of the same team at Graeme Patterson?

20 A. He is indeed.

21 Q. So this was an email sent on 4 May. Perhaps if we could
22 all just read through that, we'll see that it's to do
23 with transoms, the question of whether there would be
24 sagging in the framing, and some different options that
25 were available. Was that an email which you remember

1 seeing at the time?

2 A. I don't particularly remember seeing it at the time, but
3 I'm sure I did.

4 Q. If we could go, please, to page 1872. There's an email
5 at the bottom of that page from James Cousins of Apollo
6 to Graham Hurrell and also to Symphony Windows' general
7 address, which says:

8 "Graham/Nick, have you retested the wind deflections
9 of the windows or is there a requirement for an internal
10 brace of some description?"

11 Does that, again, appear to be to do with the
12 strength of the window sets?

13 A. Yes, I believe it does. I would only say that
14 "retesting" is the wrong word. It's "recalculating"
15 should be the correct word.

16 Q. These are calculations that are done on paper rather
17 than a test done in 3D, as it were?

18 A. It is a piece of software, so you don't -- it's not --
19 a test is a completely different thing to us to
20 a calculation.

21 Q. Then if we look towards the top of that page, please,
22 there is an email from Symphony Windows back to James
23 Cousins at Apollo, on 8 May this time, which begins:

24 "James, just to keep you up to speed, I have had
25 a chat with Liam Hanson of SAPA this am. It appears

1 they are resolving wind-loading issues without the need
2 of a brace and at the same time this would now indicate
3 that we don't need to pursue load-bearing panel
4 options."

5 So he's referring there to a conversation which he
6 had had with you. Could I ask you: when you returned to
7 work, did you speak to Mr Hurrell about what had
8 happened at the meeting?

9 A. I would suggest it was more a case of the second week
10 I was off work sick, which was sort of probably the
11 first few days of May, I was keeping up to speed with
12 Graham, and he, of course, was emailing me. So I would
13 suggest that I had conversations probably prior to this
14 day, and indeed perhaps first thing on that morning.

15 Q. So far as you were aware, did Mr Hurrell make any notes
16 of the meeting on 3 May?

17 A. That I don't know.

18 Q. Have you ever seen any notes of that meeting taken by
19 him?

20 A. Not that I recall.

21 Q. But you think that at the time you had this conversation
22 with -- you can just see his name there at the bottom:
23 Nick. That's Nick Coupe, I think, of Symphony Windows?

24 A. Yes.

25 Q. At the time you had this conversation with Mr Coupe, you

1 think you were in the loop from speaking to Mr Hurrell?

2 A. Yes, I do believe so.

3 Q. Can we also please, look at page 1893, a little further
4 on in the bundle.

5 A. Yes, I have that.

6 Q. There's an email right at the bottom of that page from
7 you to, I think, Mark Snowden at Joedan; is that right?

8 A. That looks like, yes.

9 Q. We can see again the date is 8 May, the same as the last
10 email we looked at. You said:

11 "Good afternoon, Mark. Please find attached a CAD
12 drawing relating to the above project. I have spoken
13 with Nick Coupe today to advise him of the changes and
14 to inform him of the importance of ensuring good sound
15 fixings and packing to the head of window and in
16 particular the need for a fixing 150 millimetres either
17 side of the mullion."

18 So to those two emails that we've looked at refer to
19 different conversations with Mr Coupe, or is there one
20 conversation?

21 A. My understanding from, as I say, the passage of time --

22 I'm just trying to recall exactly what did happen.

23 There's a particular detail where two screws are needed
24 to be inserted. That's what the 150-mill refers to, and
25 that's just again to stop this sagging issue with the

1 weight of the windows above.

2 Q. Other than issues to do with sagging, can you remember
3 whether you discussed any other topics with Mr Coupe on
4 8 May?

5 A. As far as I can recall the conversation on that day --
6 I dare say there probably was some other chit chat along
7 the way, but the main core of the conversation was to do
8 with this element of ixx and iyy calculations or, if you
9 like, in short, wind-loading and sagging.

10 Q. At that time, in the early part of May, were you aware
11 that any change was being proposed to the type of panel
12 which should be used?

13 A. I don't think I was at that point.

14 Q. Could you turn, please, to page 1941, just looking again
15 at the question of the doors for the kitchen and the
16 lounge on the upper floor of each flat. We have here
17 an email from Annabel Sidney to James Cousins at Apollo
18 on 10 May 2006. She said:

19 "Hi James, I'm out of the office in a couple of
20 minutes. I've only had a quick glance at the drawings.
21 As discussed last week, subsequent to the residents'
22 letter, I advised that the doors are to be fully
23 panelled and not semi-glazed as we had previously
24 decided. Can you get SAPA to revise those drawings,
25 please, to reflect that."

1 Can you recall whether, in the middle of May 2006,
2 you were asked to revise drawings to show a different
3 type of door?

4 A. I -- I can say that we weren't asked to do some revised
5 drawings because at that point the project is in
6 contract, so those parties that agreed to be in contract
7 are, and that doesn't include SAPA so it wouldn't be my
8 place or position to issue drawings for a live project.

9 Q. We've seen already that the SAPA performance
10 specification didn't specify a particular sort of door,
11 for example a solid door or a wholly glazed door. Did
12 you update the performance specification at any time to
13 deal with doors?

14 A. No, the only time the specification was updated, as we
15 discussed before lunch, which was fundamentally to
16 change the type of locking on the inside of the door.

17 Q. In other words, the performance specification document
18 remained silent about what sort of door would be used?

19 A. That's correct.

20 Q. Could I ask you, please, to move on to page 2099, which
21 is in the sixth bundle. Mr Clark is just getting it for
22 you. (Handed) This is an email that the jury have seen
23 before. It's an email from Annabel Sidney to James
24 Cousins on 2 June 2006, when she says:

25 "Hello James, I've just spoken with Nick at Symphony

1 and I'm happy to proceed with the Trespa."

2 So it seems this was about a change in the type of
3 panels that were going to be used. Can you recall
4 whether you were aware in June 2006 that there was going
5 to be a change from the aluminium panels which were
6 included in your performance specification to the panels
7 that were faced with Trespa?

8 A. As far as I can recall, I wasn't aware. The panels, as
9 stated earlier, are not a SAPA product so it wouldn't be
10 something I would be referred to.

11 Q. Did SAPA, at any stage of this project, produce any
12 drawings to show what was actually being installed, what
13 I think might be called "as-built drawings"?

14 A. The drawings that were produced by SAPA were initially
15 amendments to the sketches from David Sales, and I -- as
16 far as I'm aware, there were some drawings produced
17 following the period when I was on sick leave about the
18 window designs. They would then be sent on further up
19 the chains but SAPA do not and cannot approve drawings
20 for installation.

21 Q. Have you seen any formal CAD drawings that show what was
22 actually installed?

23 A. I've seen a number of drawings in relation to the build
24 up to this inquiry, but not -- none that I particularly
25 recall at the time of the project being live on site.

1 Q. Is that normal, in your experience, that you might get
2 to the end of that project and not be holding a drawing
3 that shows what has been built?

4 A. It's quite commonplace.

5 Q. Finally, then, could I ask whether, so far as you know,
6 what was installed at Lakanal House corresponded with
7 what you had originally put in the performance
8 specification?

9 A. Going back to the original performance specification,
10 the actual framing that was specified was installed, the
11 door that we specified was installed -- that being the
12 lounge doors and the kitchen doors -- and as far as I'm
13 aware, the glass specification was the same, and I think
14 it was just the panel specification that changed.

15 Q. Earlier you drew our attention to a difference between
16 some of the drawings we looked at and the specification
17 to do with whether the mullions were full height or not.
18 In the end, is what was constructed consistent with the
19 performance specification on that point or not?

20 A. Yes, I think after we initially raised the concerns
21 about the mullions not being full height, that was
22 addressed and that was amended, and again that was over
23 the two-week period that I was on sick leave.

24 Q. Mr Hanson, thank you. Those are all the questions
25 I have. If you wait there, there may be questions from

1 others.

2 A. Thank you.

3 THE CORONER: Thank you. Mr Hendy?

4 Questions by MR HENDY

5 MR HENDY: Mr Hanson, my name's Hendy. I represent some of
6 the bereaved families. I want to just ask you about the
7 specification that you drew up. Can we take the final
8 specification as it was in the form attached to the
9 tender documents. For this, we need volume 4 at 1297.

10 (Handed) As I say, this is the version which you
11 produced which was amongst the various documents sent to
12 those who were interested in putting in a tender for the
13 works. Mr Atkins took you to some pages of it. I have
14 one question just before we look at some other matters.

15 At page 1299, under the heading "Window and door
16 construction", if you look at the last three paragraphs
17 on that page, it says:

18 "The sections forming the windows are to incorporate
19 a thermal break, achieved using a high strength,
20 glass-reinforced polyamide barrier.

21 "The thermal break is to be applicable to all
22 profiles, including vents, couplers and sills."

23 And I think there's a thermal break on the doors
24 as well, which we needn't look at, on the next page.

25 Just tell us about a thermal break. What's that?

1 A. A thermal break is quite simply to try and stop the
2 general windows -- the cold from the outside meeting the
3 heat from the inside and causing things such as
4 condensation.

5 Q. Right, thank you very much. If we can keep that page
6 open, we can see that in the course of the
7 specification, you identified various standards to which
8 the contractors would have to comply. If we look at the
9 top of the page, under the heading "Standards" -- it's
10 being scrolled up for the jury now -- we can see that
11 the section begins:

12 "The frames are to comply with any British Standard
13 specification, code of practice ..."

14 And so on. Now, that British Standard
15 specification -- I'm sure most members of the jury are
16 familiar with it, but just help us with that. That's
17 a standard specification certified by the British
18 Standards Institution, which maintains high standards in
19 all sorts of things, not just building work?

20 A. Yes, it's, if you like, a method devised by people
21 familiar with the industry in a proper way of doing
22 things, I should imagine is the best way of putting
23 that.

24 Q. Yes, not just the way of doing things, but also the
25 composition of materials and so on as well?

1 A. Yes, indeed.

2 Q. There's an equivalent international body called the ISO,
3 the International Standards Organisation, is there not?

4 A. There is.

5 Q. And by and large, at least for our purposes or the
6 jury's purposes, the British Standard institutional
7 standard and the ISO standard are equivalent?

8 A. I'm no expert, but yes, I would agree.

9 Q. If we look at the second paragraph, we see that:

10 "The window extrusion systems manufacturer must hold
11 British Standard kite mark licences for BS4873,
12 specification for aluminium alloy windows, and BS7950,
13 enhanced security of casement and tilt and turn windows
14 for domestic applications."

15 And before they start work, the installer has to
16 supply the certificates to the council's contract
17 administrator. So there you've specified the
18 certification of the manufacturer and installer; am
19 I right?

20 A. Yes, you are.

21 Q. If we go to the next paragraph, we see:

22 "The door extrusion system manufacturer has to hold
23 a test certificate in the following standards: PAS ..."

24 And so on:

25 "... PAS024 'Doors of enhanced security'."

1 This is an equivalent certification system, is it
2 not?

3 A. The security and weather testing, yes.

4 Q. Then if with go to the next paragraph, we see:

5 "Aluminium window profiles are to be manufactured by
6 an approved systems company to BS EN ISO.9001/9002."

7 That standard is a British Standard,
8 an international standard, and "EN" signifies that it's
9 a European Union standard as well?

10 A. That is also correct.

11 Q. The fabricated product itself has to conform with
12 British Standard 4873, yes?

13 A. Yes, it does.

14 Q. We won't go through the whole document, but just to
15 glance at the next section on windows and door
16 construction, we can see that the windows in the first
17 paragraph have to comply with requirements of BS4873,
18 and frames and other sections have to comply with
19 BSEN755-9. So in your specification, you thought it
20 appropriate to identify the particular standards to
21 which the contractors would have to ensure that they and
22 their products complied?

23 A. Yes.

24 Q. When drawing up this specification, you were presumably
25 aware that if it was acceptable to the council it was

1 likely to be used in the contract documentation?

2 A. In the majority of cases the actual specification SAPA
3 produces is amended accordingly to go into the tender
4 documents. SAPA building systems, on a rare occasion,
5 would actually see the specification that goes into
6 a tender document.

7 Q. Of course, but on the assumption that no further
8 amendment was necessary, it was quite likely -- or you
9 had in mind -- that this was a document which had to be
10 written so that it would provide part of the contractual
11 documentation which installers would have to comply
12 with?

13 A. Yes.

14 Q. You knew that what you were specifying here,
15 powder-coated aluminium windows and doors and so forth,
16 was for installation in a high rise block of flats?

17 A. Yes, I did.

18 Q. You knew that the building regulations would apply to
19 that block of flats?

20 A. I knew some building regulations would apply to that
21 block of flats.

22 Q. You knew that part B of the building regulations in
23 relation to fire protection would apply to that block of
24 flats?

25 A. Part B could apply to the block of flats in a number of

1 areas, maybe including windows and maybe not.

2 Q. You knew that in relation to the panels below the
3 windows, they were to replace asbestos panels which had
4 been removed, or were to be removed?

5 A. No, that's not the case. The product that was in the
6 panels originally was unknown to us.

7 Q. Is that right? You never knew that you were replacing
8 asbestos?

9 A. Sorry, I apologise. I thought you were referring to the
10 time of writing the specification.

11 Q. Sorry, I was, in fact. Let's get it right. At the time
12 you wrote the specification, you didn't realise that you
13 were replacing asbestos in the panels, and subsequently,
14 you learnt that that was what the panels were previously
15 made of?

16 A. Yes. It wasn't that I didn't realise; I wasn't
17 informed. We asked what we're replacing to get some
18 indication as to an example of what we can put in the
19 specification, but at that point it wasn't clear.

20 Q. If you'd been told that it was asbestos panels, of
21 course, you would have realised that you were replacing
22 a fire-proof product with another product?

23 A. If I was told it was asbestos that was being removed --
24 as far as I'm aware, asbestos doesn't have any
25 particular fire-rated property. I do know it's

1 non-combustible but as always, we would refer the
2 specifier to the footnotes on our specification, saying
3 that obviously panels are not a product made and
4 fabricated by SAPA building systems and they should seek
5 advice from those people.

6 Q. Understood, and I'll come to those footnotes in
7 a moment. But had you known that it was asbestos, would
8 you have thought it appropriate in the specification to
9 supply panels of equivalent fire resistance or
10 non-combustible?

11 A. What I would have done -- if I was asked for
12 a fire-rated panel product, I would again have to steer
13 people -- the specifier to a panel company, or any
14 special requirements to a panel company. The key issue
15 for us with specifying panels, of course, is that it
16 fits into our system in terms of advice to the
17 specifier. So for example, if someone was to say,
18 "Could I put a corrugated panel into our system?"
19 I would have to say no, because it allows in water. We
20 don't specify panels per se.

21 Q. In your witness statement -- we needn't put it up. I'll
22 just read a sentence to you. You say:

23 "Ideally, to enable [you] to draw up a full and
24 comprehensive specification, the client would have to
25 give me information, namely drawings, height, postcode,

1 fire rating, security et cetera."

2 Is that right, that you were entirely reliant on the
3 client to tell you about the fire rating?

4 A. Yes, we see it as the responsibility of the client
5 because we can't possibly know the full layout of
6 an existing building or the fire risk assessment that's
7 been done on that building.

8 Q. Could we have 1299 back again. In the top part, under
9 the heading of "Standards", there's no reference to the
10 building regulations at all, although to be fair to you,
11 in the second line, it does say "statutory requirements,
12 including all revisions and amendments". But that's
13 only in relation to the frames that have to comply with
14 "British Standard specification, code of practice, and
15 statutory requirements, including all revisions and
16 amendments". There's no other reference to the building
17 regulations at all, is there?

18 A. With the exception -- I think further on you'll find
19 reference to part L.

20 Q. Indeed. I'll come to those. But in general, in that
21 general paragraph telling the potential contractor what
22 standards need to apply, there's no specific reference
23 to building regulations?

24 A. There is not.

25 Q. If we come to page 1305, we can see in the footnotes,

1 first of all the footnote which I think you referred to
2 earlier just now:

3 "Information is given on an advisory basis only and
4 specifiers are particularly recommended to contact
5 suppliers of non-SAPA Building Systems Limited products
6 to ensure that such products are suitable."

7 Is that what you had in mind earlier?

8 A. It is.

9 Q. But it's not telling anybody that they ought to check
10 whether such products conform to the building
11 regulations, is it?

12 A. Well, the people that we deal with that come to us
13 asking for specifications are professional people who
14 operate in that field, so it is, of course, assumed that
15 those people know the building regulations and that they
16 apply them to the building which they're designing.

17 Q. Okay. Just going down to the fifth paragraph, it says:

18 "Certain window configurations may not meet the
19 requirement of approved document B (2000) of the
20 building regulations for a fire escape window."

21 So from that we can take it that you thought it was
22 appropriate to draw potential contractors' attention to
23 part B of the building regulations in relation to
24 windows which were also fire escapes?

25 A. It is. This specification that we're referring to is

1 a specification that does not relate to fire-rated
2 products. However, as I said earlier with building
3 regulations that I'm no expert on, is that in any common
4 building where -- just a standard building, be it
5 a house, block of flats or otherwise, there always needs
6 to be an egress window, and that comes under part B. So
7 even though this is a specification for non-fire-rated
8 products, the fire escape egress window, ie the size of
9 it, needs to be referred to.

10 Q. As you say, part B, of course, is the fire protection
11 part of the building regulations.

12 A. Yes, it covers many areas.

13 Q. Yes. You mentioned another reference to the building
14 regulation. Can we just look at 1304, please. The last
15 entry under "Hardware" is:

16 "Fully drained low threshold to comply with the
17 requirements of building regulation approved
18 document M."

19 Perhaps you can help us: what does that refer to?
20 What part of the building regulations is that?

21 A. Part M, in this instance, is referring to a low
22 threshold, so people with difficulties perhaps of
23 stepping over a threshold, wheelchair users, et cetera.

24 Q. Yes. Then under "Ventilation", at the bottom of that
25 page, again the last paragraph says:

1 "Trickle ventilation shall also comply with approved
2 document J [and a British Standard] with respect to
3 ventilation of gas-burning appliances."

4 J is to do with ventilation, is it not?

5 A. It is, yes.

6 Q. That requirement shall take precedent over the
7 requirements of approved document F1, and again, that's
8 an approved document under the regulations, is it not?

9 A. Indeed.

10 Q. With that in mind, the jury may well be asking
11 themselves when they look at page 1303 -- if we could
12 have that up, where, in the marked paragraph:

13 "Solid infill panels, where required, are to be
14 28-millimetre insulated sandwich panels with facings of
15 polyester powder-coated aluminium, finished to match
16 framing."

17 Why did you not specify that that should comply with
18 part B of the building regulations?

19 A. Well, again, I come back to the fact that we're advised
20 on whether things need to be fire-rated or whether
21 they're not fire-rated, and as I said earlier, this is
22 not a fire-rated specification. Neither is it a product
23 that we sell, and both the specifier, verbally and
24 indeed in the footnotes, would be told to seek advice
25 from the appropriate company.

1 Q. But the danger is that if this specification is simply
2 incorporated into the contract, a contractor might read
3 this literally and assume that there's no need to comply
4 with part B of the building regulations in relation to
5 these insulated panels.

6 A. Well, that may well be their assumption, but again,
7 we're dealing with professional people who know the
8 building regulations and the footnotes still stand there
9 to advise people to seek alternative advice,
10 highlighting the fact that SAPA do not either sell or
11 manufacture sandwich panels or any form of panel.

12 Q. Would you put it perhaps another way? Would you say
13 that it was so blindingly obvious that sandwich panels
14 to be fitted to a high rise block of flats ought to
15 comply with part B that it was really unnecessary to
16 spell it out?

17 A. It's not my opinion.

18 Q. Isn't it?

19 A. No.

20 Q. So you don't think it was obvious, then?

21 A. It was not obvious to ...?

22 Q. To the potential contractor. Sorry, perhaps I haven't
23 explained myself very well. An alternative way of
24 looking at this is that when you wrote that, you thought
25 to yourself: "Well, any professional contractor, knowing

1 that these insulated panels are to be fitted to a high
2 rise block of flats, must have appreciated that they
3 would have to conform to part B of the building
4 regulations. Therefore it's really not necessary for me
5 to spell that out to them"?

6 A. I wouldn't spell that out to them because it's not
7 a product that we sell.

8 Q. I understand that it's not a product that you sell, but
9 you were drawing up a specification which might well be
10 adopted by the local authority into a contract, so you
11 must have had had in mind what contractors would think
12 when they read this section on glazing and looked at
13 what they had to do and what they had to tender for and
14 so on, right?

15 A. Yes.

16 Q. I'm just wondering whether the jury should draw the
17 conclusion that you thought that any reputable,
18 professional, competent fitting of insulated sandwich
19 panels would know that they had to comply with part B of
20 the building regulations without you telling them?

21 A. If you're looking for me to offer you an opinion, it's
22 that -- I would just say that from where this
23 specification starts is exactly that. It is a starting
24 point. There is ample opportunity for anybody within
25 that chain to come back to me, anybody else, building

1 control, and find out the information they need.

2 Q. What if they had come back to you and said, "These
3 insulated sandwich panels, part B of the building regs
4 or not?"

5 A. If that -- that was a question coming back to me from
6 the specifier, the end installer, the main contractor,
7 I would, of course, have to direct them to somebody that
8 could actually answer that question based upon the
9 design layout of the building.

10 Q. Of course, I understand that. From an authoritative
11 point of view, you would have to tell them to get on to
12 Southwark building control. But what if they'd said to
13 you, "Well, what do you think?"

14 A. It's not for me to think on that. It's because I
15 don't -- I'm no expert, as I said, on building
16 regulations. I don't have the qualifications or the
17 know how to be 100 per cent authoritative on what should
18 or shouldn't be used. We get a snapshot of the
19 information of -- of that building. We don't see
20 anything about -- perhaps about the internals or
21 otherwise. I'm not informed as whether there are
22 sprinklers or anything else on this building. I simply
23 have to rely on the information that's given to me, and
24 of course we do ask questions, but if people don't come
25 back to us, they don't know an answer to a question, we

1 have to accept what information we're given in the same
2 way as we do on a new build project.

3 Q. Well, I'm going to suggest to you, Mr Hanson, that any
4 professional person familiar with drawing up
5 specifications of this kind and any professional
6 contractor potentially contracting for a job of this
7 kind would know that part B of the building regulations
8 applied to panels on the front of a high rise block of
9 flats.

10 A. I think that's reasonable to assume.

11 Q. I think I'm coming to the last matter but one. Can we
12 just go to page 1300. Under heading 5, "Windows and
13 door construction", there's a subheading, "Doors
14 (residential)". Mr Atkins took you to this and pointed
15 out that this specification was used after there had
16 been an email correspondence specifying that the doors
17 onto the escape balconies from the lounges and the
18 kitchens should be fire doors. It was probably me, but
19 I didn't quite understand why that additional
20 requirement didn't get into your specification. Can you
21 just help us again with that?

22 A. Well, when you say "fire doors", can you confirm whether
23 you're talking fire-rated or fire escape?

24 Q. I thought fire-rated. I think Mr Atkins showed you
25 an email correspondence showing that they were to be

1 solid doors and therefore fire-resistant?

2 A. The -- I think you're referring to the bill of
3 quantities; would that be correct?

4 Q. Yes.

5 A. Yes, in the bill of quantities that I hadn't seen until
6 the start of this inquest, that did actually refer to
7 only on the kitchen doors, not the lounge doors.

8 Q. Okay. Just the kitchen doors, then, solid fire-rated
9 doors to meet part B?

10 A. Yes.

11 Q. Yes. What I missed -- and I'm sure the jury heard it
12 and I didn't, but what I missed was why that didn't get
13 into your specification.

14 A. Well, I would say that the answer to that is quite
15 simply that at no point at any time did anybody come to
16 us in any shape or form and say a fire-rated door was
17 required. Had they have done so we could quite simply
18 have done a fire-rated specification.

19 Q. I think really the final thing I wanted to ask you about
20 was page 1298. Towards the bottom half of the page,
21 there's a heading, "Survey, dimensions and design",
22 number 3 there. Just a quick glance through it. It
23 says that the contractor is expected to make
24 a pre-tender visit and an inspection and so forth and so
25 on, and then in the third paragraph:

1 "The contractor shall allow in his price for
2 a survey visit to site."

3 The fourth paragraph:

4 "The contractor is responsible for ensuring that all
5 new windows and doors are square and central in the
6 opening."

7 And gaps and what have you. Then the next paragraph
8 says:

9 "The contractor is to allow for any anomalies and
10 variations in size."

11 All framing to be set out, transoms should be
12 positioned -- and so on.

13 I appreciate this heading is "Survey, dimensions and
14 design", but can we take it that it was just so
15 blindingly obvious that it wasn't necessary to say that
16 contractors would have to comply with the relevant parts
17 of the building regulations?

18 A. All buildings have to comply with the building
19 regulations.

20 Q. Yes, and all contractors do?

21 A. Yes, indeed.

22 Q. Yes, thank you, Mr Hanson.

23 THE CORONER: Mr Matthews?

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Questions by MR MATTHEWS

MR MATTHEWS: Can I just get your help briefly with two pages, 1129 and 1130. If we could have 1130 up on our screen first. Mr Hanson you probably have the advantage of having it on paper. You can, as it were, flick between the two. Oh, you don't have it. (Handed)

A. It's here.

Q. Fine. 1130 then is --

THE CORONER: Wait one moment.

MR MATTHEWS: 1130 is that list of queries and amendments to window and door specification that I think was sent to you by email as an attachment. We have the email on 1129. Just before we go to 1129, you've been taken to it and at 2 we can see you're being given more information about:

"The lounge and kitchen windows/doors lead onto a fire escape gallery. The doors are only meant to be used as a means of escape."

You've been taken to the sort of bullet points underneath but we haven't looked at what's in the brackets on those bullet points, because they both end with a question mark, don't they?

"Internal thumb-turn or other override facility to locking device to meet fire regulations and the British Standard?"

1 And then the next bullet point down -- it's about
2 security, and that ends with a question mark:

3 "Could we have 6.4-millimetre laminated glass on the
4 windows in those areas?"

5 So two specific questions in there?

6 A. Yes.

7 Q. If we then go to the page before, which is the email, we
8 have:

9 "Dear Liam and David, please could you have a look
10 at the attached document and ensure that the
11 specification is revised accordingly. Please let me
12 know if anything I have suggested contravenes
13 regulations or what your experience would recommend."

14 Can you help us: what regulations did you think were
15 being asked about in that email?

16 A. Well, what was -- sorry, what was asked for in that
17 email -- my understanding is that I was directed
18 directly to BS5588, and within that same paragraph, it
19 strictly refers to a thumb-turn means of escape, which
20 is a little bit in the same way as an egress window.
21 It's just a quick exit, an area for people to get
22 through. So as it said on here that the -- and without
23 question it says in paragraph 2 above -- it says:

24 "The residents use the doors for ventilation."

25 That would indicate that it is a means of escape,

1 not as a fire-rated door. We have to be very careful
2 about the difference between a fire escape door and
3 a fire-rated door.

4 Q. That's a very long answer, but not to the question
5 I asked, I'm afraid. I was asking what regulations did
6 you read that email as referring to?

7 A. Sorry, I thought I did answer that. BS5588.

8 Q. The British Standard?

9 A. Yes.

10 Q. The question about your experience, what your experience
11 would recommend, what did you think that was asking you
12 for?

13 A. That was, I think, my -- I took that as my experience
14 with reference to how one would exit a door without the
15 need for a key.

16 Q. Thank you very much.

17 THE CORONER: Thank you very much. Who's next?

18 Ms Petherbridge? No. Ms Canby.

19 Questions by MS CANBY

20 MS CANBY: Mr Hanson, just two short topics, please. The
21 first is fire doors. Could we have a look, again,
22 please, at page 1086, which is in volume 3 of the
23 chronological bundle.

24 A. Sorry. Yes, I have that.

25 Q. This is a document that Mr Atkins took you to, and it's

1 a letter from Annabel Sidney to Daniel Wallace of
2 Franklin & Andrews Limited. We know that Daniel Wallace
3 was helping Annabel Sidney with the specification for
4 Lakanal House, and it's dated 13 January 2005. She
5 says:

6 "Please find enclosed amendments to draft
7 specification."

8 Can you see that, Mr Hanson?

9 A. I can.

10 Q. Could you now, please, turn to page 1093 in the same
11 bundle.

12 A. Yes, I have that.

13 Q. You can see here some handwritten amendments. Mr Atkins
14 took you to this as well. Number 19, "Kitchen windows",
15 amended to read:

16 "Kitchen window type 2 comprising of tilt and turn
17 and fixed windows, solid fire-rated door to meet
18 part B."

19 Is this a document that you were shown before you
20 produced the amended specification on 20 January 2005?

21 A. I've never seen this document other than in relation to
22 this inquest.

23 Q. Could you please, Mr Hanson, now look at page 1361,
24 which is in file 4 of the chronological bundle.

25 (Handed)

1 A. I have that.

2 Q. You've been taken to this document already as well this
3 morning, but this is what you referred to as the bill of
4 quantities and what others have referred to as the
5 schedule of works. You will see that the handwritten
6 amendments that we looked at on the previous document on
7 page 1086 now find their way into this bill of
8 quantities. At the top of the page it says:

9 "Kitchen window type 2 comprising of tilt and turn
10 and fixed windows, solid fire-rated door to meet part B
11 and panel containing flue aperture."

12 And we can see in the paragraph below that there is
13 no such requirement for the lounge window. That is
14 just:

15 "Type 3 comprising of tilt and turn, fixed, bottom
16 and top hung windows, glazed door ..."

17 Can you see that, Mr Hanson?

18 A. Sorry, I didn't catch the last part.

19 Q. We're looking at paragraph B on page 1361. That just
20 requires a lounge window type 3, "comprising of tilt and
21 turn, fixed, bottom and top hung windows, glazed door
22 and panel".

23 So there's a distinction here. We have a kitchen
24 balcony door that is be to be solid fire-rated to meet
25 part B and we have no such requirement for the lounge

1 balcony door. Do you agree?

2 A. I agree, yes.

3 Q. This is the document that was sent out to the
4 contractors as part of the tender?

5 A. Yes, I believe so.

6 Q. Were you ever provided with a copy of this document
7 before you produced your performance specification?

8 A. Apart from the lead up to this inquest, I've never seen
9 this document before.

10 Q. Would you have expected SAPA to have been provided with
11 this document?

12 A. SAPA haven't been provided with this document.

13 Q. Would you have expected them to be?

14 A. Sorry, no, I wouldn't really expect them to have been.
15 Once, as I said early, people were in contract -- we
16 were outside contract. These are generally documents
17 that filter between people in contract.

18 Q. Thank you. Moving on in relation to some of the
19 questions that were asked of you by Mr Matthews, you
20 were making a distinction between a door which is
21 provided for means of escape and a fire-rated door.
22 Could you please explain to the jury what you mean by
23 those two terms?

24 A. People often use a word such as "fire door" or "fire
25 escape" and they don't really get the terminology

1 correct. There are two types of door in this instance:
2 a fire escape door and a fire-rated door. A fire escape
3 door, simply put, means that you push a bar, typically
4 a bar, use something other than a key to get out of the
5 door and escape to an area outside the -- outside of the
6 building. If you have a fire-rated door, that
7 fire-rated door, as I explained earlier, would be given
8 a fire-rating, be it usually 30 minutes, 60 minutes or
9 so, and that would hold back fire on a stability,
10 integrity, insulation basis as required.

11 Q. And do you understand that there are two requirements in
12 order for a door to be a fire door? The first is that
13 it would have to have a self-closing mechanism and the
14 second is that it would have to be fire-resistant, as
15 you've just explained?

16 A. Yes, I do understand that.

17 Q. So what is the significance in the email that we see
18 from Annabel Sidney of her telling you that the door was
19 to be used for ventilation purposes?

20 A. Well, the significance of being told that a door is used
21 for ventilation is that there's no reference to
22 a closer, and if I was to put that to one side, the fact
23 that somebody would tell me a door is used for
24 ventilation and not add something along the lines of
25 "But it shouldn't be because it's a fire-rated door"

1 gives me no indication whatsoever that that is
2 a fire-rated door that's required.

3 Q. The final topic, please, Mr Hanson. The jury are going
4 to hear evidence from Mr Cousins on Wednesday from
5 Apollo. In his witness statement, which doesn't need to
6 go up, he says this:

7 "With reference to the ventilation panels in the
8 lobby areas, these would have been standard SAPA
9 installations and I have every belief that building
10 regulations would have been considered by SAPA in
11 connection with these installations."

12 If I could ask you a number of questions in relation
13 to that. What involvement, if any, did SAPA have in
14 relation to the ventilation panels in the lobby areas?

15 A. It's a very similar situation to the panel, whereby
16 we're asked to suggest something that will simply fit
17 into our system and we advise people to seek advice
18 elsewhere.

19 Q. So if you have a look again, please, at the SAPA
20 performance specification at page 1303, which is in
21 folder 4 of the chronological bundle.

22 A. Yes, I have that.

23 Q. Under the heading "Glazing", about four paragraphs down,
24 there's reference there to the louvres, and in the very
25 last paragraph before the heading "Hardware", there's

1 reference to a company called Levolux. Is that in
2 relation to the ventilation panels in the lobby areas?

3 A. That is. Levolux are a manufacturer of ventilation
4 panels and obviously are giving their details there to
5 be contacted.

6 Q. So would those ventilation panels have been standard
7 SAPA installations?

8 A. There's no such thing as a standard SAPA installation
9 when it comes to louvre panels. SAPA neither
10 manufacture or supply louvre panels.

11 Q. Finally, would building regulations have been considered
12 by SAPA in connection with those installations?

13 A. No, it wouldn't -- it would have been perhaps considered
14 on a limited basis, but generally speaking no, because
15 obviously, as I said earlier, we would be guiding people
16 towards the manufacturer of that product to make sure
17 that they advise on their product and the building
18 regulations accordingly.

19 Q. Thank you very much, Mr Hanson.

20 THE CORONER: Thank you. Members of the jury, do you have
21 any questions? Thank you.

22 Mr Hanson, thank you very much for coming and for
23 the help that you've been able to give us. You're
24 welcome to stay if you would like, but you're free to go
25 if you would prefer.

1 A. Thank you.

2 (The witness withdrew)

3 THE CORONER: Yes, Mr Atkins.

4 MR ATKINS: Madam, the next witness will be Mr Graham
5 Hurrell. I don't know whether the jury are happy to
6 press on now or whether they would welcome a short
7 break.

8 THE CORONER: Would you like a five minute break, members of
9 the jury? I think we'll press on then. Okay, thank
10 you. Yes.

11 Mr Hurrell, would you like to come forward. Thank
12 you.

13 GRAHAM HURRELL (affirmed)

14 THE CORONER: Mr Hurrell, thank you very much. Do sit down
15 and do help yourself to a glass of water, thank you.
16 I think you've been sitting at the back, so you'll
17 realise that it's not always easy to hear what's been
18 said, so please, if you could speak closely to the
19 microphones, that would help, and if you give your
20 answers across the room towards members of the jury,
21 then that will help them to hear your evidence and also
22 help to keep you close to the microphones.

23 Mr Atkins will begin by asking questions on my
24 behalf and then there may be questions from others.

25

1 Questions by MR ATKINS

2 MR ATKINS: Could you please tell the court your full name?

3 A. Graham Neil Hurrell.

4 Q. Mr Hurrell, do you also work for SAPA building systems?

5 A. I do.

6 Q. What job do you do, please?

7 A. I'm currently international business development
8 manager.

9 Q. In 2006, is it right that you worked as a specification
10 manager?

11 A. That's correct, yes.

12 Q. You'll have heard mentioned earlier this afternoon the
13 meeting on 3 May 2006. Is it right that that was really
14 your first involvement in the works at Lakanal House?

15 A. Yes, it was, and just prior to that, some preparation
16 for that meeting.

17 Q. If we could look at that, please, first of all at
18 page 1085, which is in the fifth bundle. (Handed) I'm
19 sorry, I think I said the wrong page number but the
20 right one is on the screen. Page 1805. This is
21 an email from you to Mr Hanson on 26 April 2006, where
22 you said:

23 "Liam, a pre-start meeting of all parties has been
24 called for next Wednesday at 9 o'clock. I'm going to
25 commit one of us to be there, you if you are fit, me if

1 not."

2 Can you remember when you first became aware of the
3 meeting which was to be held on 3 May?

4 A. I don't remember the first time that I was made aware of
5 it. The first time that we have some document relating
6 to would be -- would be this email.

7 Q. As we've heard already, this is the point that Mr Hanson
8 unfortunately had had an accident and so it was possible
9 that he wouldn't be able to attend. If he couldn't go,
10 you would step into his shoes for that meeting?

11 A. Yes, that's correct.

12 Q. Had you been involved in the process we were looking at
13 earlier of preparing a performance specification for
14 this project?

15 A. No.

16 Q. Could I just show you another few documents, please. At
17 page 1729, first of all, which should be a little
18 earlier on in the same bundle, we have the fax from
19 Symphony Windows to Apollo. This was a fax on
20 13 April 2006, attaching a number of pages. One of
21 those pages we have at 1738, which is this diagram that
22 we looked at earlier on today. First of all, are you
23 able to help us, is this a diagram drawn by SAPA, do you
24 know?

25 A. I do not believe this was drawn by SAPA, no.

1 Q. Is there something about it which makes you think that
2 in particular?

3 A. If I look at the use of hand -- handwriting to indicate
4 certain points -- typically, anything drawn by SAPA
5 would be drawn on a CAD system, a computer system, and
6 would not typically show handwritten symbols or writing.

7 Q. So for example, we can see that there is some hand-drawn
8 information here in the louvres?

9 A. Yes.

10 Q. Could I just ask you about the comment in the bottom
11 right of that page. Somebody has written:

12 "James, this is as tender. SAPA are now saying the
13 outer frame should be a larger outer frame. Trying to
14 resolve as the sections were specified by ..."

15 And possibly those last two words are "specified by
16 them anyway".

17 Do you recall, at around the time of your email of
18 26 April, being aware of this diagram with that comment
19 on it?

20 A. I don't recall specifically seeing that diagram with
21 that comment.

22 Q. Were you aware that there was a suggestion that the SAPA
23 specification was not appropriate or not correct?

24 A. Prior to the meeting and in the process, I believe, of
25 the meeting being arranged, I became aware that there

1 were differences between some drawings that had been
2 produced by possibly the subcontractor and the main
3 contractor and the specification document that we had
4 worked on earlier. So I knew that there were some
5 differences between them.

6 Q. Was that something which you yourself spotted by
7 comparing the performance specification to the drawings,
8 or is it something which somebody else drew to your
9 attention?

10 A. It's unclear from my records how I became aware of this,
11 but -- I don't believe that we saw the drawing that you
12 just previously showed prior to the meeting but there
13 was some communication into our technical department,
14 a different drawing, actually of a window very much like
15 the bedroom window, and there was a response from our
16 technical department to -- to that query, and how
17 I became aware of it is unclear. It could be that I was
18 made aware of it as part of the invitation to attend the
19 meeting, that this issue had arisen.

20 Q. Could I show you some other correspondence from around
21 that time. If we go to 1783, which I've just put on the
22 screen. A letter this time from Apollo to SBDS. The
23 writer of that letter, we can see under the list of
24 drawings, said:

25 "Due to the original design of windows numbers 1, 4

1 and 5 failing to provide sufficient strength throughout
2 the fenestration, SAPA are recommending the coupling
3 support to be added as window alternatives 1, 4 and 5."

4 Do you remember whether this was a letter which was
5 brought to your attention prior to the meeting?

6 A. I don't recall having seen this letter other than as
7 preparation for this inquest.

8 Q. Could I ask you about one other piece of correspondence
9 then, again to see whether you think you saw it before
10 the meeting. This is an email which we looked at
11 earlier on page 1802 from Annabel Sidney to James
12 Cousins on 25 April, in which she said:

13 "Please find attached our response to your letter of
14 20 April."

15 Then on page 1803 we have her letter. She said:

16 "Thank you for your letter of 20 April."

17 And then in the second paragraph:

18 "In order for to us respond to your queries and
19 enable to you make a full presentation of the
20 information required, may I suggest that we meet at our
21 offices?"

22 So it seems that was the letter which prompted
23 the meeting on 3 May. Do you think you had seen that
24 letter?

25 A. I don't recall actually having actually seen that

1 specific letter as a means of inviting us to attend the
2 meeting.

3 Q. Can you remember what you did to prepare for the
4 meeting? If you hadn't had any involvement in this
5 project up until that time, what did you look at in
6 order to prepare for the meeting?

7 A. My involvement -- or my preparation would consist of
8 going into our record system and looking at the project
9 documents that we had, that my colleagues had already
10 filed on the system, which showed the work that they had
11 done up to that point. So I had the opportunity to
12 bring myself up to speed with our own documents and
13 anything that we had received in from others that had
14 been filed in that system, and as I believe that I knew
15 that a key topic for the meeting would be this issue of
16 window frames and strength, I did some preparation work
17 on that specific issue.

18 Q. Do you think that at the time of preparing for the
19 meeting you looked at the SAPA performance specification
20 document to see what you had put forward to SBDS?

21 A. It's extremely likely that I would have opened up and
22 read the specification document, probably before looking
23 at any of our other documents in our system.

24 Q. Do you think at that time you also had the bill of
25 quantities or the schedule of works which we see at

1 page 1361?

2 A. We did not have the schedule of works filed on our
3 system.

4 Q. Is that a document, in your experience, that you would
5 have expected to have?

6 A. I would not have expected to see that document in our
7 system. It's a document that is part of the tender
8 process and usually goes completely outside our
9 information system and circulates from client to
10 contractor to subcontractor in the tendering process and
11 then becomes part of the contract. But it's very
12 unusual for us to actually have sight of that document
13 as a routine piece of information.

14 Q. I'm just going to show you two different diagrams to ask
15 you whether you think that you had seen these prior to
16 the meeting. The first is a sketch which is headed
17 "Marsland Limited" at page 1080. It's a hand-drawn
18 sketch. Do you think that that's something that you
19 looked at prior to the meeting?

20 A. It was in our files, and there's a very good chance that
21 I would have looked at that in conjunction with the
22 specification document prior to attending the meeting.

23 Q. In your view, are these sketches consistent with what
24 was in the SAPA performance specification?

25 A. There is a difference, one significant difference,

1 between these sketches and what is written in the SAPA
2 performance specification. Would you like me to
3 explain?

4 Q. Could you just outline, please, in simple terms what
5 that different is?

6 A. You've already heard today people talking about full
7 height vertical framing or mullions. If you look at the
8 bedroom window, which is on the top left, the design
9 only has one full height vertical piece of framing. The
10 other vertical piece is not full height.

11 Q. I'll just zoom in to make it easier to see.

12 A. On the left, where the cursor is now, that's close to
13 the full height, and then further to the right, the next
14 one is not full height. The specification was written
15 on the premise that both were full height, and I think
16 you've seen some documents about that earlier. The
17 specification would be incorrect in terms of the
18 particular profiles that are listed in the specification
19 by reference number if the window were to be configured
20 as we see in this sketch.

21 Q. So there was a difference between what was contained in
22 the performance specification and what is shown in this
23 diagram?

24 A. Yes.

25 Q. Could I show you a different diagram, please, which is

1 1067. It's another diagram the jury have seen before,
2 drawing LW1. This is the drawing, if we remind
3 ourselves, at the bottom of the page, which says
4 "Southward Building Design Service" in the bottom left
5 and is dated January 2005 in the bottom right. This
6 drawing to me looks as though it has the same difference
7 that you've just been describing; that is that in the
8 top left drawing there's a full height mullion on the
9 left-hand side but not on the right-hand side?

10 A. This drawing in that respect is consistent with the
11 sketches we just looked at, yes.

12 Q. And so for the same reason it's inconsistent with --

13 A. It's inconsistent with the specification, yes.

14 Q. -- the specification. You described the question of the
15 window frames and the strength a few moments ago as
16 being a key topic for this meeting. Could I show you,
17 please, at page 1819, the agenda for the meeting. We
18 can see there that after the introductions we have item
19 number 2, "Window design existing/proposed", and item
20 number 3, "Lounge and kitchen doors/larder wall panel".
21 Could you just help us with those, please. What did you
22 expect was going to be discussed under the heading
23 "Window design existing/proposed"?

24 A. Under that topic I expected to discuss exactly what
25 we've just alone been looking at: the frames, the

1 strength of the frame and the configuration of the
2 windows visa vis the wind loads that will be imposed on
3 the system.

4 Q. Sorry, just to pause there -- I'm sorry to interrupt
5 you -- on that question of the window frames and
6 strengths, did you have in mind some proposal or
7 solution which you were going to put forward at the
8 meeting?

9 A. Yes, I worked out in advance with the help of some
10 colleagues something that could be used to achieve the
11 configurations that we saw in the sketch and in drawing
12 LW1, which are, in effect, the same for the bedroom. It
13 would mean a modification in one respect to the
14 specification, but we checked it out from a calculation
15 point of view before I went to the meeting.

16 Q. Just on that point, could I show you, please, the email
17 at page 1828. This is an email from you to Graeme
18 Patterson, whom we understand is in SAPA's technical
19 department, on 3 May at 10.40 am. You say:

20 "More info. Liam's spec mentions DF709 as
21 a horizontal coupler."

22 Is DF709 the name of the component?

23 A. DF709 is one of our profile references, yes.

24 Q. Does this email relate to the point you've just
25 mentioned or not?

1 A. It does.

2 Q. So do we understand that by altering the configuration
3 in the specification you would have been able to produce
4 what was shown in the drawings in a way which was sound
5 from the point of view of strength? That's a rather
6 long way of putting it.

7 A. I'll try and answer it.

8 Q. Sorry, I'll try and ask the question again. You had
9 said there was an issue with the window frames and the
10 strength of them, and that with the help of a colleague
11 you had looked at another way of designing the frames in
12 a way which would produce what was shown in the drawings
13 that we've looked at. Is this email part of the
14 process?

15 A. This is part of that process, yes.

16 Q. Then returning to the agenda at page 1819, that third
17 item, "Lounge and kitchen doors/larder wall panel", did
18 you know what was to be discussed under that heading?

19 A. No, I didn't. I've only recently seen this agenda and
20 didn't recall having seen it before, but that's just
21 an issue of recollection. My understanding is that the
22 agenda was produced and handed out on the day, not in
23 advance, and this item -- there was no preparatory
24 discussions or calculation work for item 3 prior to the
25 meeting.

1 Q. When you received the agenda and saw that item, did you
2 think that that was something which related to SAPA?

3 A. As the lounge and kitchen doors had been specified as
4 SAPA items, it would be reasonable to assume that that
5 would relate to SAPA. The larder wall panel is not
6 specifically a SAPA item, although it could be a panel
7 that sits in a SAPA frame. So there's slightly --
8 there's two slight distinctions between those two.

9 Q. Did you in fact then attend the meeting on 3 May?

10 A. I did, yes, yes.

11 Q. Can you remember whether you took anything with you to
12 that meeting? For example, calculations or drawings?

13 A. I cannot recall exactly what I took to the meeting other
14 than I had access to documents which -- I would have
15 printed the specification off to take with me at the
16 very least.

17 Q. We saw in the letter proposing the meeting that it was
18 suggested that it would be held at 3 o'clock in the
19 afternoon. Was it, in fact, in the afternoon?

20 A. Yes, the meeting was in the afternoon. My comment that
21 it was at 9 am was an error in my email.

22 Q. Can you remember where the meeting was held?

23 A. I recall a meeting in an office environment and
24 documents that I've seen subsequently lead me to
25 conclude that it was at the SBDS offices.

1 THE CORONER: So Southwark Building Design Services?

2 A. Yes.

3 MR ATKINS: Aside from you, who else attended that meeting?

4 A. At the meeting we had two representatives from Southwark
5 Building Design Services, which was Annabel Sidney and
6 John Menlove, Nick Coupe from Symphony Windows and James
7 Cousins from Apollo.

8 Q. Do you remember, were all of these people present for
9 the whole of the meeting?

10 A. I can't recall that.

11 Q. Did you, at any stage during the meeting, actually go to
12 Lakanal House itself?

13 A. My only recollection of Lakanal House is standing
14 outside the block looking from Dalwood Street. I do not
15 recall whether that view -- or that recollection was
16 taken as part of the meeting, or prior to the meeting,
17 just to drive by it to give myself a look at the
18 building from -- from the outside before we started the
19 meeting. So I don't know whether that was done as part
20 of the meeting or not.

21 Q. Do you have any recollection of the five of you standing
22 outside Lakanal together?

23 A. No, I don't recalling standing as a group. I only
24 recall myself, but it's a long time ago and I can't
25 really be very -- ultra-precise about that, I'm sorry.

1 Q. To the best of your recollection, have you ever been
2 inside Lakanal House?

3 A. I have, subsequently, in preparation for this inquest,
4 but at that point I do not recall having been inside
5 Lakanal House.

6 Q. Did you take any notes at the meeting at the time?

7 A. Almost inevitably. It's my standard practice to take
8 notes at any meeting that I attend in my day book.

9 Q. Do you still have a copy of your day book for that time?

10 A. No, I don't.

11 Q. On agenda item number 2 then, window design, can you
12 recall whether what was discussed was what you were
13 expecting or something else?

14 A. Recall is hard. I certainly would have expected to
15 discuss bedroom window issues that we looked at earlier
16 because I was aware of that already and wanted to
17 resolve that. Recollection of other issues around
18 item 2 I would not be so clear on, because I hadn't
19 necessarily prepared for other issues.

20 Q. Do you recall whether anybody at the meeting suggested
21 that there was a problem with your original
22 specification?

23 A. That may have been -- that may have been a way of
24 expressing it. My response to that is that there was
25 a discrepancy between the specification and the

1 drawings, not that necessarily there was an error or
2 a mistake but there was a discrepancy which needed to be
3 resolved.

4 Q. Thinking back, are you able to help us with what was
5 discussed under the third item, the lounge and kitchen
6 doors and larder wall panel?

7 A. I don't have a recollection or any subsequent
8 documentation regarding discussing lounge and kitchen
9 doors or the larder wall panel at that meeting.

10 Q. Do you think that it was something that was discussed,
11 or do you think that it was included on the agenda but
12 not actually discussed in the event?

13 A. I'm quite willing to accept that it's because -- because
14 it was on the agenda, it would have been discussed at
15 that meeting.

16 Q. By the sounds of it, you're not able to help us one way
17 or the other?

18 A. I -- I don't have a direct recollection myself or any
19 documentation, no.

20 Q. It may help to look at some of the correspondence which
21 came shortly after the meeting. If we look at, first of
22 all, page 1849. We have an email towards the lower part
23 of the page sent by you on 4 May to somebody called
24 Crispin. Does he work for SAPA?

25 A. Crispin is a technical colleague at SAPA, yes.

1 Q. If you could perhaps just read that through to yourself
2 and then explain to us briefly what it's about.

3 A. This would have been about getting our technical
4 colleagues to verify or comment on some options which,
5 I believe, relate to the window 1, the bedroom window,
6 and this question of whether having taken away one of
7 the vertical members in comparison to the way we'd
8 originally envisaged it, how a framing might sag under
9 the weight of the glass and the frames above it, and
10 I was really asking Crispin to do a calculation to work
11 out, given certain frame sections, whether it would sag
12 or wouldn't sag or would need additional bracing.

13 Q. So it is connected, by the sounds of it, to the sorts of
14 questions you said were in your mind before the meeting?

15 A. It's part of the same issue, yes.

16 Q. That was 4 May. Could I ask you then, please, to look
17 at the next page, which is 1872. Towards the bottom of
18 that page there's an email from James Cousins to you and
19 to Symphony Windows, in which Mr Cousins said:

20 "Graham/Nick, have you retested the wind deflections
21 of the windows or is there a requirement for an internal
22 brace of some description?"

23 What was that about, please?

24 A. That's Mr Cousins following up the issue which I put in
25 the email to my colleague Crispin the previous day to

1 find out if we've come to a conclusion about whether we
2 need additional bracing.

3 Q. On page 1874, we can see your reply to that email sent
4 on 8 May. So this is your email on your colleague, Liam
5 Hanson, where you say:

6 "Just for the sake of completeness, already dealt
7 with this morning."

8 So at that time you were still involved in this
9 project, and you were assisting Mr Hanson with these
10 questions?

11 A. This is the time that I handed the project back to
12 Mr Hanson, on 8 May. He would have had a phonecall in
13 the morning where I would have brought up him to speed.
14 I would have had my notes and my day book to hand at
15 that time and I then forwarded this email to him just so
16 he was aware that Mr Cousins had an outstanding email
17 query which needed to be answered by him now I'd handed
18 the project over, back to him.

19 Q. So what was it exactly you were saying you had already
20 dealt with?

21 A. I think I'm referring there to the fact that I would
22 have had a phone conversation with Mr Hanson and gone
23 through all the issues that were discussed in the
24 meeting, got him completely up to date with everything
25 as it stood at that point, and then this was just

1 a document for him to put on record for him to then
2 start to follow up and give Mr Cousins the answer.

3 Q. Was there any other sort of report back from you to
4 Mr Hanson or any note, perhaps, to fill him in with what
5 had happened at the meeting?

6 A. No, this was the -- as far as I was concerned at the
7 time, this was the outstanding issue that needed to be
8 followed up, and this was -- this was the content of it.
9 This was the entirety of it.

10 Q. At page 1873, there's an email from James Cousins to
11 Annabel Sidney, again on 8 May, in which he said:

12 "Annabel, update of windows: Liam Hanson of SAPA has
13 returned from illness and has taken over the project
14 from Graham Hurrell. Liam has confirmed that in
15 principle the fenestration design will not require any
16 additional bracing from the reverse. They are currently
17 preparing drawings and calculations for this."

18 Do you remember whether SAPA were asked to provide
19 prepare any further drawings or any further calculations
20 in the wake of the meeting on 3 May?

21 A. Okay, I'll take drawings and calculations as two
22 separate issues, if I may. As part of solving the
23 problem that we had potentially found with this issue of
24 sag, we would have offered to do a stiffness calculation
25 on some framing sections to see whether they would sag

1 too much, and we have a piece of software that allows us
2 to do this and we would then provide the results of that
3 calculation in the form of a piece of advice down the
4 supply chain to say either "This is going to sag too
5 much; you need to do something else" or "This requires
6 additional bracing" or "This will be absolutely fine as
7 it is". So that's the calculation element.

8 In terms of drawings, the only drawings that SAPA
9 would normally provide to a group of companies who are
10 now in contract would be drawings of specific profiles
11 rather than a complete assembly drawing or a drawing
12 that in any way was a contractual design drawing. So
13 when --

14 Q. Sorry, just to pause there --

15 A. Yeah.

16 Q. -- was the upshot of the meeting that you would need to
17 change the design of the profiles or couplings, can you
18 remember?

19 A. It's unclear from this document. I have seen a drawing
20 which shows a change to the horizontal frame in W1, the
21 bedroom window, which, if that change actually was --
22 was done, would have resulted in a stronger frame than
23 the one that was originally in the specification, which
24 of course was based on there being two verticals rather
25 than one.

1 Q. And again, any such drawing would have been connected to
2 this question of the strength of the frame, rather than
3 to any other issue?

4 A. That's correct, yes.

5 Q. Is it right that after the exchange of emails on 8 May,
6 you handed the project back to Mr Hanson?

7 A. Yes, I did. Mr Hanson then took over his normal
8 communication duties with regards to the project.
9 I would add that I had some internal communications with
10 my colleagues about the project over the subsequent
11 week, but as far as external communication and contact
12 was concerned, at that point I handed it back to
13 Mr Hanson.

14 Q. Do you recall in the meeting on 3 May a suggestion being
15 made that the panel type should be changed from
16 powder-coated aluminium to a panel that was faced with
17 Trespa?

18 A. I've got no personal specific recollection of that
19 suggestion.

20 Q. Do you recall mentioning that aluminium panels could
21 easily be scratched or dented?

22 A. I don't have a specific recollection of making that
23 point in connection with Lakanal, although it's a point
24 which has been my experience in certain types of
25 projects up to that point.

1 Q. Is that something you've remembered mentioning in this
2 particular meeting?

3 A. Not in this particular meeting, no.

4 Q. Can you recall whether there was any discussion of which
5 type of panel would weather better?

6 A. I -- again, similar. I don't really have a recollection
7 of discussing panels in terms of weathering, no.

8 Q. Do you recall any discussion of the relative cost of
9 aluminium-faced panels and Trespa-faced panels?

10 A. Not in regard to this specific meeting on this specific
11 project.

12 Q. Do you recall any discussion about whether it would be
13 possible to match the colour of the balcony panels to
14 any other part of the building?

15 A. Not specific recollection as regards this particular
16 meeting, no.

17 Q. Do you think that after the meeting on 3 May a question
18 of the change in the type of panels was something that
19 was in your mind?

20 A. I believe not, because it would have been in my day book
21 and I would have discussed it with Mr Hanson in the
22 handover process.

23 Q. At the time you attended the meeting, did you know what
24 sort of door was due to be installed first of all in the
25 kitchen and secondly in the lounge?

1 A. Yes, in both counts, I had a copy of the specification
2 that told me that a SAPA Dualframe door was specified
3 for the kitchen and for the lounge.

4 Q. Just so we're clear, are you referring there to the SAPA
5 performance specification?

6 A. I am indeed, yes.

7 Q. You didn't have the bill of quantities and the
8 information in the bill of quantities about what type of
9 door would be used in each case?

10 A. That's correct; I didn't have the bill of quantities.

11 Q. Do you recall accepting that SAPA had made a mistake
12 because you were not able to provide an aluminium fire
13 door to fit into this system of frames?

14 A. I don't recall accepting that we had made a mistake
15 because of not being able to provide a fire door. At
16 the time we had a fire door that we could potentially
17 have provided. Sorry, a fire-resistant door.

18 Q. I've just put on screen page 4374, which is part of
19 a brochure which SAPA have provided in the course of
20 these inquests. In the top right-hand corner we can see
21 a date, April 1995, where the cursor is, and this is
22 a brochure, looking at the bottom of the page, from
23 a company called Glostal. Is that a name that you
24 recognise?

25 A. Yes, Glostal is a company that was effectively bought by

1 SAPA in 1997.

2 Q. In summary, is this a brochure for a fire-resistant
3 aluminium door?

4 A. It is.

5 Q. At the time of that meeting, if asked, would you have
6 said that you were able to provide an aluminium
7 fire-resistant door or not?

8 A. I would have said yes, that we could.

9 Q. So far as you can remember, would there have been any
10 difficulties in terms of supply? That is of actually
11 ordering one and obtaining one?

12 A. There wouldn't have been difficulties but there would
13 have been implications for the supply of that product,
14 which was a product where we controlled and restricted
15 the fabrication and manufacture to two or three key
16 customers because it was a specialist product, and those
17 customers were not in the supply chain for the project
18 as it stood at that time.

19 Q. If the matter had been raised, would that have been
20 a reason for you to say that it couldn't be done, or
21 would that have been a difficulty which could have been
22 overcome?

23 A. That is a difficulty which would have had to have been
24 overcome. It wouldn't have insurmountable, certainly as
25 far as SAPA are concerned.

1 THE CORONER: What sort of difficulty are we talking about?

2 Just inability to supply large numbers or ...

3 A. It's the technical -- it's the techniques needed to
4 produce the fire-resistant door because it contains
5 materials other than aluminium. It needs special
6 machining equipment and dust extraction equipment to
7 machine the part that is actually fire-resistant inside
8 the aluminium.

9 Also, we felt that certain customers who had been
10 trained on that product and understood the implications
11 of the product, that they were manufacturing -- from
12 a safety point of view, it's a fire-resistant product,
13 so we -- we would tend it to focus production on two or
14 three key customers.

15 The volume argument is also valid in that the number
16 of doors produced with this system is quite small and
17 therefore it would not make sense to have 100 customers
18 each producing one a year and having to do the training
19 and learn the techniques and have the equipment just to
20 produce low volume.

21 THE CORONER: Okay, thank you.

22 MR ATKINS: Leaving aside the difficulties that you've just
23 been explaining, if the doors were available, would it
24 have been possible to incorporate them into the system
25 of frames that were specified in the performance

1 specification?

2 A. Subject to one or two caveats, which I would have had to
3 have raised at the time, which I can explain --

4 Q. There's no need to go into the technical detail. Do you
5 remember whether that issue arose at the meeting?

6 A. I do not recall specifically discussing that issue at
7 this meeting.

8 Q. We've seen already that the SAPA performance
9 specification didn't say that the doors should be
10 fire-rated. In that context, if there had been
11 a suggestion that a fire-rated door should be added or
12 put in place instead of what was in your specification,
13 would that have caused you to query other aspects of the
14 specification?

15 A. It would have caused me to query the position of
16 a fire-rated door in the middle of a non-fire-rated
17 window, and whether that would actually achieve fire
18 separation.

19 Q. Could you spell that out for us. Why might it not
20 achieve fire separation?

21 A. Yes. If you can remember the kitchen window
22 configuration, you have a door and you have a window to
23 one side and you have a panel to the other side, and you
24 have some block-work at the bottom. The fire-resistant
25 door is designed to either be fixed into a complete

1 fire-resistant structural compartment within the
2 building -- so, for example, to concrete walls top and
3 bottom and down both sides -- or it's designed to be
4 fixed to another fire-resistant screen which we also
5 make, ie a fixed window. It was never designed to be
6 fixed to non fire-resisting components, on two bases:
7 one is that if it's fixed to a non-fire-resisting
8 component that then structurally fails in the event of
9 a fire, how much support does the door itself have? We
10 couldn't be -- we couldn't guarantee that the door would
11 actually remain in place to resist the fire.

12 And then secondly, the -- the logic of designing
13 a fire-resistant system to be attached to
14 a non-fire-resistant system is that fire could break
15 through either side of the door, through the
16 non-fire-resisting elements, and again, that would not
17 then constitute a fire-resistant barrier.

18 So the system was designed to be used only -- only
19 on its own and not necessarily in connection with or
20 connected to any other SAPA systems.

21 Q. Do you recall discussing those sorts of questions with
22 Mr Hanson or anyone else at SAPA after that meeting on
23 3 May?

24 A. I don't, no.

25 Q. Mr Hurrell, thank you. Those are all the questions

1 I have for you. If you would be good enough to wait
2 there, others will have questions for you.

3 THE CORONER: Do we want a five minute break? Would that be
4 sensible? Yes. Just five minutes, thank you.

5 Mr Hurrell, we'll have a five minute break, so
6 please don't go too far and don't talk to anyone during
7 the break, thank you very much.

8 (3.40 pm)

9 (A short break)

10 (3.45 pm)

11 (In the presence of the Jury)

12 THE CORONER: Yes, Mr Hendy, I think you had some questions.

13 Questions by MR HENDY

14 MR HENDY: Mr Hurrell, my name's Hendy. I represent some of
15 the bereaved. In 2006, you were the specifications
16 manager and therefore presumably familiar with all the
17 specifications for your products?

18 A. I was familiar with the overwhelming majority of the
19 product specifications.

20 Q. I'm not going to test you. Not just the specifications
21 presumably of window frames, though, but presumably you
22 were also familiar with the specifications of the
23 windows which those window frames would contain?

24 A. Yes.

25 Q. So if we look, for example, at page 1302, which is in

1 bundle 4 -- this is the performance specification
2 Mr Hanson drew up. We've looked at it before. (Handed)
3 At the bottom of the page, under "Glazing", in the third
4 paragraph, we see that glazing is to be hermitically
5 sealed double-glazed units, inner pane 4-millimetre
6 "soft coat" low emissivity glass, outer pane of
7 4-millimetre glass, argon-filled cavity, centre pane U
8 value no greater than 1.2 watts per square thousand
9 kilometres. Interpane iplus, and then various other
10 things.

11 And at the bottom of the page:

12 "All glass within 800 millimetres from FFL should be
13 toughened or laminated."

14 These are the sorts of specifications that would be
15 just bread and butter to you at that time?

16 A. These two specific aspects are very common and you could
17 say they are bread and butter.

18 Q. So if we can just look at the sorts of factors that
19 would come into play in specifying windows, in no
20 particular order. Obviously size?

21 A. Yes.

22 Q. Single, double or triple-glazed?

23 A. Yes.

24 Q. Polarisation?

25 A. No, that's not a term or a concept we would work with.

1 Q. Okay then. Emissivity?

2 A. That's insulation, effectively, yes.

3 Q. Right. Impact and strength, whether it's reinforced,
4 laminated, toughened, et cetera?

5 A. If we're referring specifically to glass here?

6 Q. Yes.

7 A. Okay. We would be aware of some basic requirements to
8 do with impacts and safety but not necessarily some more
9 specialist or esoteric ends of market.

10 Q. Right. Wind resistance? We've heard about that.

11 A. It applies to glass as well as frames, yes.

12 Q. Absolutely. You don't want it bending to the point
13 where it breaks, for example?

14 A. Indeed you don't.

15 Q. Weight?

16 A. Weight of glass for us is very important because of the
17 effect on opening frames, yes.

18 Q. And insulation, of course, you've mentioned?

19 A. Insulation, because it works in conjunction with the
20 frame to provide an overall insulation figure. We're
21 not interested in the glass insulation necessarily just
22 itself but how it works with the frame.

23 Q. Most of the windows that you supplied are presumably in
24 external walls?

25 A. That's correct, yes.

1 Q. So fire resistance would be a key property?

2 A. Not so for us.

3 Q. No?

4 A. No. Although we have a fire-resistant aluminium system,
5 fire resistance, in our experience, in external parts of
6 the building, glazing areas of the building, is
7 relatively rare. There is far more requirement for fire
8 resistance on internal products, which we really don't
9 offer. Hence fire resistance for us is a specialist
10 thing that comes along once in a while rather than
11 an everyday on every building occurrence.

12 Q. But presumably part B of the building regulations, which
13 specifies fire protection in particular in relation to
14 external walls and openings, would be likewise part of
15 your bread and butter, wouldn't it? You have to make
16 sure your windows are capable of complying with part B?

17 A. If a door was in a location that part B said had to be
18 fire-resistant, then we had a fire-resistant product for
19 that purpose, which is what we've just looked at.

20 Q. Yes.

21 A. That is still a relatively rare occurrence over the
22 years that we've been working in the -- in the industry.
23 It's actually not very common for part B to require
24 an external door to have fire-resistant characteristics.
25 It's not impossible.

1 Q. What about windows --

2 A. The same --

3 Q. -- in external walls?

4 A. The same for us really applies to windows as for doors.

5 The only window that we have that is fire-resistant is

6 a fixed window. It contains no opening parts, and my

7 understanding of the fire regulations -- and let's say

8 part B for now -- is that it's not feasible or possible

9 to have an opening window in a fire-resistant window

10 because somebody can leave it open or open it and the

11 fire can come through. So our only fire-resistant

12 window is a fixed one, and it's really like doors. It's

13 quite unusual for us to find a fire-resistant

14 application on the outside.

15 Q. What about fixed panels? Presumably these are familiar

16 items to you, or were at the time?

17 A. Fixed composite panels within windows, or --

18 Q. Any kind of panels that you would be involved with

19 because they're associated with windows, next to windows

20 or below windows, or above windows, or whatever.

21 A. We would very commonly have need to get involved with

22 panels as part of a window. At that time, for us, the

23 fire resistance characteristics, again, were relatively

24 rare, and in fact in our fire-resistant products there

25 are no panels -- no solid panels, no opaque panels, no

1 composite panels -- within the tested configuration of
2 that door or window system that we just looked at, so
3 that if a fire-resistant product were required, it could
4 not contain any type of panel if it were to perform as
5 tested, and we would only specify it as it is in its
6 tested form. So it's only been tested with glassing.

7 Q. And the frames of the windows I think you said were
8 fire-resistant?

9 A. The frames of the system that we just looked at before
10 the break.

11 Q. Only that specialist one?

12 A. Only that specialist system, yes.

13 Q. Okay. Could we just look at that for a moment. We need
14 page 4374, I think, was the page that Mr Atkins put up.
15 Within that information, if you have the hard copy --
16 actually, do you want to look at it on the screen?

17 A. I'm okay with the screen.

18 Q. Let's put it up on the screen to save time. 4376 could
19 we have? It's part of the same brochure. Can you see
20 that, "Aluminium fire screens," top right? Under the
21 heading of "Materials", it says:

22 "Aluminium profiles are extruded to various
23 standards."

24 They would be fire-proof or fire-resistant?

25 A. No, that's a general aluminium standard. The

1 fire-resistance doesn't come from the aluminium itself
2 on its own.

3 Q. Understood. Sorry. Then the third bullet point is:

4 "Core profiles are produced from machined calcium
5 silicate."

6 The next bullet point is:

7 "Insulation quilt and bracket insulation are
8 produced from ceramic fibre."

9 Are the jury to understand from that that in this
10 fire-proof system the front and the back are made of
11 aluminium and what's found between them is some product
12 made from ceramics?

13 A. That's basically correct, yes.

14 Q. And the ceramics, of course, don't burn?

15 A. They are intended to retain everything in place -- after
16 the aluminium has possibly given up supporting in the
17 event of a fire, these other components come into play
18 to allow everything to remain.

19 Q. So even if the aluminium melts, they remain inert, as it
20 were?

21 A. That's correct, yes.

22 Q. Neither do they give off smoke, as I understand it?

23 A. I don't know about that.

24 Q. Or at least non-toxic smoke?

25 A. I don't know about that.

1 Q. You don't know. Okay, I won't press you. Thank you
2 very much indeed.

3 THE CORONER: Mr Compton.

4 Questions by MR COMPTON

5 MR COMPTON: Mr Hurrell, Ben Compton. I represent Apollo
6 Services. Just one or two matters, please. You've been
7 asked to cast your mind back a long time, and I want to
8 see if I can just look a little bit more at this meeting
9 that we've heard about on 3 May, because it may be
10 important, as you appreciate, for the jury in this case.

11 Your statement that you've made -- and this is not
12 a criticism, please don't take it as such -- is dated
13 20 July 2011. It's very short and it runs to one page.
14 Would you agree with that? So with that in mind, can I
15 just ask you one or two matters just to see if there is
16 any way into unlocking your memory as to those events on
17 3 May.

18 Firstly, I think you can recall that it was in the
19 afternoon that the meeting took place?

20 A. Yes, it was, yes.

21 Q. And you said earlier in answer to Mr Atkins, who sits in
22 front of me -- this was very early on in your
23 evidence -- that it was unclear from your records when
24 you had become aware that there was a problem or
25 a design problem. Can I take it that we have all the

1 records that there were, that there's nothing else that
2 you have that would throw any light on this?

3 A. We've been through our entire customer record management
4 system. We've pulled up and disclosed every email,
5 every bit of correspondence that's in that system, so
6 I certainly do not believe there are any other documents
7 within our domain.

8 Q. Yes. So there's no notes or anything? So it's
9 recollection only that we rely upon?

10 A. Yes.

11 Q. Very well. In your original statement -- we don't need
12 to look it up, I see the time -- you say that you
13 attended the meeting with Nick Coupe from Symphony
14 Windows. You don't refer to anyone else. Is your
15 recollection now -- again, this is not a criticism --
16 that James Cousins was there from Apollo, and a number
17 of other people from Southwark, that there was
18 John Menlove and Annabel Sidney? Can you recall that
19 now?

20 A. That's correct. That is my current recollection, yes.

21 Q. Can you remember approximately, or roughly, how long
22 this meeting lasted for?

23 A. I don't actually remember, but I have seen some
24 documents that indicate it lasted until -- well, it was
25 recorded as being quite a long meeting, and for that

1 I would normally assume to be something in the region of
2 two hours, but that's just my estimate.

3 Q. All right, that's your recollection. Can you remember
4 the meeting starting or commencing with discussions in
5 relation to this design problem that had originated or
6 had come through from the pages in particular in
7 relation to the wind-loading?

8 A. I can't necessarily recall it as being -- shall we say
9 starting the meeting, but I know because of the
10 documentation we have and I do remember that this was
11 an item that was discussed. Whether it was the starting
12 item, I'm not -- I couldn't be too sure.

13 Q. This may not be important, but if others were to say the
14 fact that you had really apologised fairly early on in
15 that meeting for a number of difficulties that had
16 arisen, would you think that is likely or if you think
17 that that is unlikely? Please say so.

18 A. I have to say I think in this case it's unlikely,
19 because as far as I've been able to work out from the
20 documentation, the issue that I went there to resolve,
21 the strength issue, was not necessarily caused by
22 an error on SAPA's part; it was caused because there was
23 a discrepancy between the drawing and the specification.

24 Now, of course, that's not to say that I would
25 necessarily start to blame anybody for that. It's just

1 my job to help work through the problem.

2 Q. Very well. Let me move on. I want to also ask you
3 about aluminium and Trespa, and whether there was
4 a conversation about that. Let me make myself clear.
5 Can you remember, as part of the conversation,
6 discussions about residents potentially using the
7 walkways we know as the fire escape area to put out
8 rubbish and so forth, and the issue being raised as to
9 aluminium being scratched or dented easily?

10 A. I don't have a specific recollection of discussing that
11 issue.

12 Q. When you say that, are you saying it may have taken
13 place but because of the passage of time you can't
14 recall?

15 A. That is it, that's correct.

16 Q. Thank you very much. Well, that's a very fair way of
17 putting it. You say in your statement -- and perhaps if
18 we could just have this up. Madam, I see the time. I'm
19 only going to be two or three minutes. 594, please. Do
20 we see the third paragraph:

21 "I cannot recall suggesting aluminium panels would
22 scratch easily. I am aware they can dent easily.
23 I know Trespa ..."

24 And then it says "in more". I presume it should
25 say:

1 "... is a more robust panel."

2 A. I believe it should say that, yes.

3 Q. Was that your understanding, that Trespa was a more
4 robust panel than aluminium?

5 A. In terms of its behaviour against impact on mechanical
6 contact, that was my understanding at the time, yes.

7 Q. I'm not talking about the fire aspect; it's simply
8 talking about its robustness for knocks and bangs.

9 In the course of this conversation -- I appreciate
10 it's difficult for you -- there was also a discussion
11 about the aesthetics of the building, and whether or not
12 Trespa, which is, I think, matt in its appearance, would
13 match in with aluminium, which has a more glossy look?

14 A. It's definitely the case that from a visual point of
15 view the Trespa finishes and colours cannot be matched
16 to the finishes and colours on the aluminium. Whether
17 it's to do with matt/gloss or whether it's to do with
18 colour or whether it's to do with texture, it's
19 a combination of those.

20 Q. That is why I ask you -- and I anticipate what your
21 answer's going to be, but can you remember that there
22 was a discussion about changing aluminium to Trespa for
23 a number of reasons, but including the colour aspect?

24 A. Again, unfortunately I don't have a direct recollection
25 of that conversation and we don't have any subsequent

1 documentation on actions after the meeting that pick up
2 on that point, so I'm afraid I'm stuck with my own
3 person recollection.

4 Q. But it's something that may have been said? You
5 couldn't --

6 A. It's quite conceivable, yes.

7 Q. The only other matter is also there was, I suggest,
8 a conversation about fire doors and FD30, and in
9 relation to the balcony fire doors -- and you've already
10 been asked about this, and I appreciate the answer
11 you've given, that it is possible to have a fire-rated
12 door in aluminium, but the answer you gave at this
13 meeting is that it couldn't be done.

14 A. I would not agree with that particular statement. My
15 answer would be that it can be done but there are
16 conditions attached to the doing of it.

17 Q. Do you think in that conversation you may have headed
18 people off from following that particular course, for
19 example by pointing out difficulties in having
20 a fire-rated aluminium door?

21 A. I would just point out what the -- what the implications
22 are. If other people choose not to use it as a result
23 of understanding what I've said, then that's their
24 decision. I would be -- I would have no reason to head
25 them away from the door from a commercial perspective at

1 all.

2 Q. No, but you've told us about having special customers
3 and so forth. It wasn't going to be an easy and
4 straightforward sell; would that be right?

5 A. It would depend on the willingness of the parties who
6 were in contract to maybe change the supply chain to
7 purchase that door, and that's -- that's their decision.

8 Q. Any further conversations that I put to you about what
9 was said at the meeting would not be of any assistance
10 to you?

11 A. I'm afraid all I have is personal recollection and the
12 immediate post-meeting communications that we made on
13 the one issue of the strength, and I really cannot
14 recall any more specific discussions on that subject.

15 Q. Very well. I'll leave it there. Thank you, madam.

16 THE CORONER: Thank you. Mr Leonard.

17 Questions by MR LEONARD

18 MR LEONARD: One very short matter. I wonder if 1872 would
19 be put up. I am told it's volume 5, unless you're happy
20 just to look at it on the screen. It's an email. It
21 won't take a minute.

22 Just having a look together at the date of this
23 email, 8 May 2006, 11.48, presumably in the morning,
24 from Nick. We take that to be Nick Coupe from Symphony
25 Windows. Just before I look at the first paragraph, are

1 you saying you don't recall any conversation about
2 panels at all at the meeting on 3 May?

3 A. I don't recall discussing panels at the meeting, but if
4 you'd like me to comment on a reference to a panel in
5 this sentence --

6 Q. No, it's talking about load-bearing at that point.

7 A. This is a discussion about the sag issue.

8 Q. Absolutely.

9 A. And it's whether or not the panel that's underneath the
10 horizontal framing would actually be capable of stopping
11 the sag, in effect supporting the frame above.

12 Q. Yes, I agree.

13 A. Yes.

14 Q. It's an alternative to having another --

15 A. It's an alternative, yes.

16 Q. -- mullion in?

17 A. Indeed, yes.

18 Q. And what seems to be being discussed here is whether or
19 not, as an alternative to changing the frame design,
20 a panel would be changed as well, yes? As an
21 alternative?

22 A. That's my understanding.

23 Q. What seems to have happened is they've gone to Liam,
24 whom they heard from earlier that morning, and decided
25 that load-bearing panels don't need to form a part of

1 specified, and I had no reason other than to point out
2 some of the technical characteristics of that door and
3 it's for others to decide whether they were acceptable
4 or not. So really, we would have been quite interested
5 in the product.

6 Q. Thank you very much.

7 THE CORONER: Thank you. Ms Petherbridge? Thank you very
8 much.

9 Members of the jury, do you have any questions?
10 Thank you very much.

11 Mr Hurrell, thank you very much for coming and for
12 the help you've been able to give us. I'm grateful.
13 Yes, you're free to go now if you would like. Thank
14 you.

15 (The witness withdrew)

16 THE CORONER: Yes, just a quick preview for tomorrow and
17 then we'll release the jurors.

18 MR ATKINS: Madam, yes, the plan tomorrow is to hear the
19 evidence of Tom Campbell from Symphony Windows, and we
20 are looking into the possibility of bringing forward the
21 evidence of Giles Wilson, who would deal with the FENSA
22 certification scheme.

23 THE CORONER: Thank you very much. Members of the jury, I'm
24 sorry we've kept you late today. It's been a long day,
25 I know. Thank you very much. We look forward to seeing

1 you tomorrow at 10. Thank you.

2 (In the absence of the Jury)

3 THE CORONER: Yes, are there any matters to raise before
4 tomorrow morning?

5 MR HENDY: Just to say, madam, that our list of issues which
6 we were going to invite you to call Mr King to address
7 will be with all the parties within the next hour or so.

8 THE CORONER: That's very helpful. Thank you very much.

9 MR HENDY: I apologise for not handing it out this morning.

10 THE CORONER: No, that's fine. Thank you very much. Yes,
11 thank you all very much.

12 (4.11 pm)

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

14

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DAY 28 OF TRANSCRIPTION OF THE
Lakana1 House Fire
Inquest (CORRECTED) 25/02/13