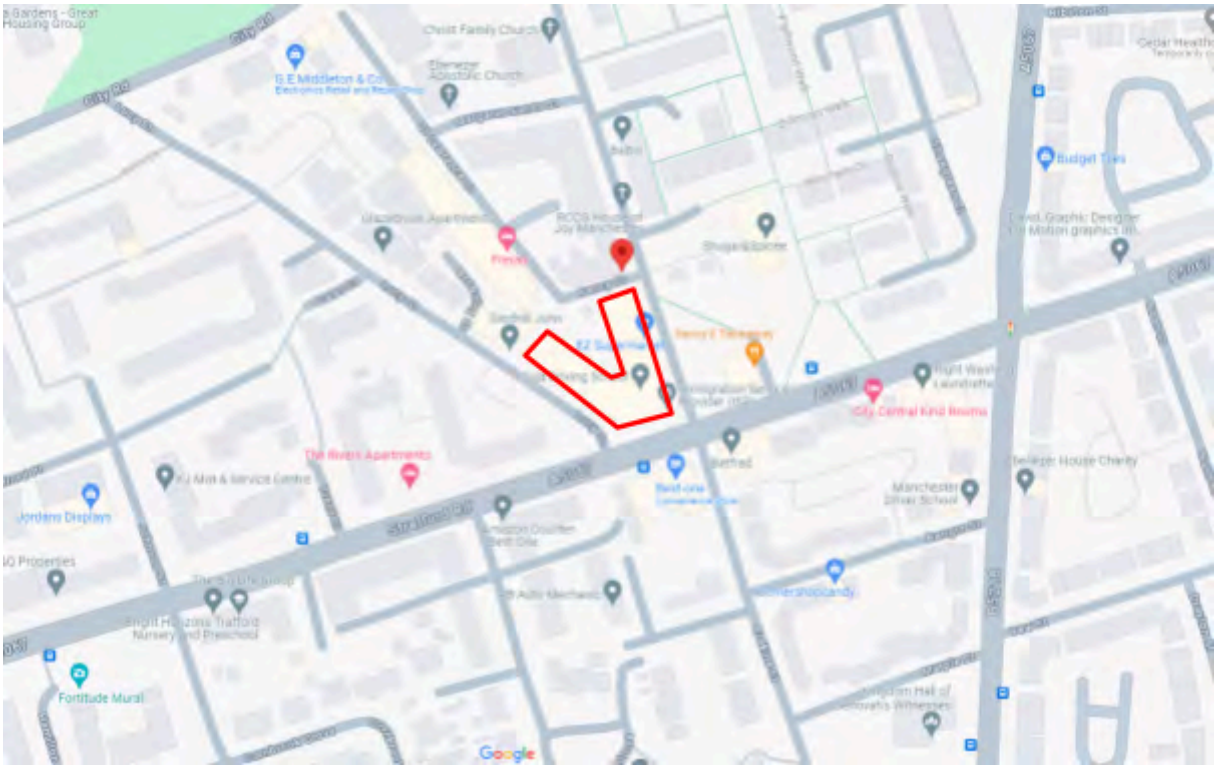
APPENDIX A

LOCATION PLAN

Street View


AURA COURT
EZ SUPERMARKET
GROCERIES, HALAL MEAT & POULTRY, FRUIT & VEG

Site Location



APPENDIX B

SURVEY LIMITATION CLAUSES

1. Survey Limitation Clauses

2. General

This document sets out the extent and limitations of our intentions and should be read and understood by the party for whom the report is being prepared.

It is our intention to inspect all parts of the property that are reasonably accessible and to prepare a report describing the construction of the property, any defects found and remedial action considered necessary.

We will not be inspecting framing, woodwork or other parts of the structure that are covered, unexposed or inaccessible and will therefore be unable to report that any such part of the property is free from defect.

Where further specialist testing or investigation is agreed as necessary, clients are generally happy for us to obtain quotations from consultants with whom we are familiar and appoint them on the client's behalf, liaising between the client and the consultant on the findings of their inspection. However, this does not mean that we are acting as the client's agent in respect of liability for payment of fees to the consultant or any other matters related to the consultant's performance. The consultant will always confirm their fee and the limitations of their inspection directly with the client and will be directly employed by the client.

2.1. Excluded Materials

Our inspection will be restricted to a visual inspection only. We shall not undertake testing to determine if the materials scheduled below are present. They are usually excluded from building specifications on the grounds of structural defects, health, safety or environmental hazards or inadequate durability.

We will not therefore be able to report that the building is free from risk in this respect. We will make recommendations within the main body of the report if we feel it likely any such tests are required. We will also arrange for any tests if agreed.

a) High Alumina cement concrete used in structural elements.

b) Woodwool slabs in permanent formwork to concrete or in structural elements.

c) Calcium chloride in admixtures for use in reinforced concrete.

d) Calcium silicate bricks, occasionally used in lieu of concrete or clay bricks often below dpc level.

e) Mundic blocks or Mundic concrete, manufactured from quarry shale and common in the SW

f) Natural aggregates for use in reinforced concrete which do not comply with British Standards BS882 and aggregates for use in concrete which do not comply with the provision of British Standard BS 8110.

g) All forms of asbestos or materials containing asbestos.

h) Silicate fibres, including asbestiform minerals and ceramic fibres with a diameter of three microns or less unless those fibres are so stabilised and sealed that airborne migration of such fibres are prevented.

i) Lead or materials containing lead which may lead to:

- Direct cutaneous absorption.
- Lead in drinking water in excess of the limits specified in the Water Supply (Water Quality) Regulations 1989.
- Lead in air concentrates in excess of the Health and Safety Executive limits published in Guidance Note EH40 under the Control of Substances Hazardous to Health Regulations 1988.

j) Urea formaldehyde foam is used as a thermal insulation material where free formaldehyde may be generated in concentrations in excess of the limits published by the Health and Safety Executive in Guidance Note EH40 under the Control of Substances Hazardous to Health Regulations 1988.

k) PUR, PIR or EPS foam thermal insulation to composite cladding panels that is not stamped as approved by LPBC to comply with Loss Prevention Standard (LPS)1181, found to be a potential fire hazard by some insurance companies.

l) Nickel sulphide inclusions in toughened glass and solar reflective glass.

m) Polychlorinated Biphenyls used in electrical equipment hydraulic fluids, paints or any other applications.

n) Fibrous vermiculite or materials containing fibrous vermiculite in which the fibres are not bound to prevent the migration of the fibres.

o) Plastic materials used to contain and deliver drinking water, which have not been approved for that purpose by the Water Research Council and the British Standard Institution.

p) Toxic Moulds are the few species of moulds capable of producing mycotoxins known to initiate a toxic response in humans and/or pets.

3. Roof

~~If there is no access for a close inspection of a roof covering we will report on those parts of the roof that can be seen from ground level using a 3 metre ladder or an accessible location.~~

~~Roof spaces will be inspected if there is direct or reasonable safe access using a 3 metre ladder and it is safe to enter the roof space.~~

~~Where ladders over 3 metre length or mechanical access equipment are required we will advise if justified and arrange such access after agreement with the Client of the additional costs involved.~~

~~4. Floors~~

~~It is our intention to lift a selected sample of floorboards where possible to do so without damage, in order to inspect the general condition of the timber joists, but we shall not be raising fixed floor coverings or moving heavy or fitted fixtures unless you specifically require us to do so and you have obtained the permission of the vendor that these may be disturbed.~~

~~Where raised access floors, fitted floor coverings etc prevent inspection of floor structures we cannot confirm that such elements are free from defects, but we would make recommendations within the main report if we felt further investigations were justified.~~

5. Elevations

Intrusive inspections in the form of removing the existing materials to the building facade in localised areas where safe access can be obtained through the use of a cherry picker.

~~6. Services~~

~~It is our intention to report on the likely age and general condition of the mechanical and electrical services installations within the property from a visual inspection by a Building Surveyor only, unless instructions are agreed with you for services engineers and/or specialist contractors to be appointed to undertake more detailed surveys and/or testing. We would recommend such further specialist testing if found to be necessary during our visual inspection.~~

6.1. Site Contamination and Flooding

We will not carry out or commission formal enquiries or tests relating to potential soil or ground contamination of and /or flood risk to the site or neighbouring land. ~~You should ensure that your solicitors have as much information as possible about the land and its previous uses. If these enquiries or our inspections reveal potential contamination then we will make recommendations for appropriate action, which may include site testing, a desktop study or obtaining a warranty from the vendor.~~

~~7. Drains~~

~~We will carry out a visual inspection of manholes, gullies etc., where safe, reasonable access is possible without the use of specialist lifting equipment. If problems are indicated or should you require a drain survey or tests to be undertaken, we will make the arrangements for this to be carried out subject to agreement.~~

~~8. Boundaries~~

~~It is our intention to report on the description and general condition of the boundaries. Your legal adviser should be in a position to advise you of the ownership and legally confirmed location of such boundaries.~~

~~9. Decorations~~

~~We shall make a general comment on the condition of the internal and external decorations and recommendations as to the desired frequency of decoration together with a note of any significant defects or suspect areas.~~

10. Measurements of Rooms / Site Survey

It is not our intention to measure rooms, unless specifically requested. However, should a detailed survey drawing be required of the site, property or part thereof, this can be prepared subject to agreement.

11. Leasehold and Multi-Occupancy Properties

Where the property is to be inspected is a leasehold and/or multi-occupancy property, we need to view the relevant clauses of the lease or other document setting out the prospective purchaser's responsibility towards the cost of repair and upkeep of the building as a whole, the extent of the work this covers, and an indication of any works programmed for the future and the method of funding those works, if we are to comment on these matters in the report.

~~The inspection will be limited to the parts of the property as instructed and those reasonably accessible parts of the building as a whole for which the prospective purchaser will have a responsibility in common with others, together with all visible external areas.~~

~~We shall make a general visual inspection of lifts, security equipment, communal heating and hot water systems and other services and, as a result, advise if specialist tests and reports are required for specific items.~~

12. Safety

If the Client is aware of any potential dangers that the surveyor may encounter at the property, including vacant premises, unguarded holes, unsafe or inoperative electrical systems, flooding, vermin infestation, structural instability, known asbestos or other contamination risks etc., they have a duty to advise us prior to inspection.

We will not be able to confirm whether any glass present has been properly heat soaked in order to prevent the spontaneous shattering phenomenon associated with some toughened and solar reflective glass. Where the installation of toughened glass is appropriate we will not be able to confirm the exact specification for the glass used and can only confirm the presence of a BS Kitemark as indicative of suitable safety glass.

We will not consider the effect of low frequency electromagnetic fields on the premises or its occupants.

13. Valuations

We do not include advice on the value of the building either for sale or letting nor can we therefore advise on any diminution of the value due to any defects found. We can include general guidance only on the likely level of the costs of any repair works necessary.

Fire insurance valuations can be given if we are separately instructed to do so prior to undertaking the survey.

14. Costs

Where costs are given in the report for works identified, these will be approximate budget costs only, based on our experience of the likely cost of such works when undertaken by a suitable main contractor. The costs will not be based on quotations obtained from contractors nor detailed measurement and calculation that would be required if more accurate costs were needed. Such more detailed cost estimating would be subject to further client instructions if required.

15. Photographs

We would normally include suitably referenced photographs of the property and key defects noted in an appendix to the report to explain or clarify the text.

16. Legal Advice

We always assume that the Client is receiving separate legal advice and that any comments we make regarding leases, boundaries etc., will be clarified with the Client's legal advisers.

17. Privacy of Contract

The report will be confidential to you and for your sole benefit as the person for whom the report is being prepared. Whilst it may be shown to other professional advisers acting for you in connection with the property, the contents may not be disclosed to nor made use of by any third party without our express prior consent in writing, without which no responsibility to any such third party can be accepted.

APPENDIX C

BUILDING HEIGHT ASSESSMENT


Building Height:
The height of the top storey measured from the upper floor surface of the top floor to ground level on the lowest side of the building Aura Court, is 15.30 less 0.15 = 15.15m
FFL 15.30m
15.15m
FFL 0.15m

Diagram Showing the height of the Building on Lucy Street facing South West taken from Drawing Number: (2-) 08

Height Calculation: 15.30 less 0.15 FFL = 15.15m

APPENDIX D

RECORD INFORMATION

EXTERNAL FAÇADE REPORT

AURA COURT

1 PERCY STREET, MANCHESTER, M15 4AB

Date carried out:	23RD November 2018
Report Number:	LS/076/23112018

FR Consultants Ltd
Abbey House, Premier Way, Romsey
Hampshire, SO51 9AQ

T + 44 (0)1794 332 456
E enquiries@frcconsultants.co.uk
W www.frcconsultants.co.uk

Prepared for:
Compton Property Management Ltd
45-51 Wychtree Street
Swansea
SA6 8EX

Report carried out and prepared by

Name	Lee Smith
Position	Assessor
Date	30/11/2018
Signature	

Authorised by

Name	Dorian Lawrence
Position	Managing Director
Date	30/11/2018
Signature	

Table of Contents

Tel: 01794 332456 Email: enquiries@frcconsultants.co.uk Web: frcconsultants.co.uk

1. Objective

Following the recent takeover of the management of Aura Court, Compton Property Management would like a cost to undertake an inspection which investigates the building to review the materials used in the façade construction behind the upper level cladding and other areas of interest. The aim is to determine the existence and quality of the buildings fire stopping measures within the façade and to ascertain if the façade materials are suitable for the property and its use.

The survey was combined with a meeting on site with Jean Jones of Comptons and a local fire officer.

2. Scope of works

- ☐ Assessor(s) to attend site and take {250mm x 250mm} samples of each different material used on the façade. If found to be an ACM type material, two samples will be taken and one sent to BRE Global for testing. Test results from BRE to be forwarded to client with our recommendations. If not ACM type product, one sample of cladding material will be removed and the product identified.
- ☐ Sample areas clad with a temporary mill finish aluminum panels (not colour-matched).
- ☐ Remove façade material in a number of areas as detailed below to enable review of the construction to those areas and expose fire barriers, insulation, sub-base and membrane
- ☐ Inspection of coping details and report on materials used
- ☐ Report on type and combustibility of insulation, membrane, sub-base materials and fixings / retainers used etc.
- ☐ Report on construction of fire barrier (see section below for classification of a fire barrier) and include any remedial works required.
- ☐ Report on any other fire risks to the external facades
- ☐ To carry out a review of the O & M manuals, if available
- ☐ To carry out a review of the Fire Risk Assessment, if available
- ☐ Produce a full intrusive façade report to include technical data sheets where available and recommendations
- ☐ Supply all sundries to carry out the investigations, such as; rivets, fixings etc. and postage/packaging of samples to be sent to BRE Global.

3. Elevations

South West Elevation showing roller shutter doors to the ground floor commercial space. There are windows to each flat, some with Juliette balconies whilst the top three floors are covered with a cladding material.

South Elevation with curtain walling to the ground floor commercial space and ground to floor feature area, windows to each flat with Juliette balconies. The top three floors are covered with a cladding material.

South East Elevation showing roller shutter doors to the ground floor commercial space. There are windows to each flat, some with Juliette balconies whilst the top three floors are covered with a cladding material.

The rear courtyard contained rendered columns with curtain walling to the ground floor commercial space and ground to floor feature area windows to each flat with Juliette balconies.

Inner courtyard area clad in timber with doors to each flat and a central staircase with access to the flats.

The timber decking of the walkways in the inner courtyard shown from below with softwood timber joists.

4. Executive Summary

The inspection was carried out on Friday 23 November 2018. The location of the inspection was the Aura Court, 1 Percy Street, Manchester, M4 4AB. The building was constructed in 2005 by Enterprise Property Group and is a purpose built residential complex. The building is 6 floors high and consists of self-contained residential apartments above commercial ground floor units.

A total of 3 areas were inspected, as detailed in the report, and all elevations of the building were visually inspected from ground floor level where accessible. No ACM type cladding was found during the inspection to the areas available however other important recommendations are outlined in **Section 6** of this report.

Area 1 concerned the rainscreen cladding to the 4th - 6th floors consists of 8mm Trespa Meteon High Pressure Laminate, this was standard rather than fire resistant cladding. There were neoprene gaskets to the vertical and horizontal joints, screw fixed with 38mm torx fixings to 50mm x 50mm softwood vertical battens, which were in turn fixed to 75mm x 75mm softwood horizontal battens. These are fixed through a sterling board sheathing to the structure which is thought to be of timber frame construction.
There is a standard breather membrane laid to the face of the sheathing board that has been stapled in position. No thermal insulation was present in the cavity.

There are Rockwool 'sock' type fire barriers staple fixed to the sheathing board around the windows although it must be noted that these do not extend fully across the rainscreen cavity, there is a 50x50 vertical timber batten against the window which will act as a cavity closer. However, there are combustible materials in this build-up and it must be noted that the poorly fitted fire barriers that have been included will not perform as they are designed to.

Area 2 covered the render areas within the rear courtyard. A drill test was carried out to demonstrate that the render was solid render 2 coat system onto a solid masonry substrate with no cavity. No combustible elements were found in the area checked. As there is no cavity within this render construction fire barriers are not required here.

Area 3 was an investigation of the timber cladding found in the inner courtyard area. This was 15mm thick Tongue & Groove (T&G) softwood boarding measuring 90mm wide. It is not known if this is timber is fire treated although our experience would suggest that, from its appearance, it is not. The cladding backs on to 50x50 softwood battens and counter battens. There do appear to be fire barriers around this window, the only window in the courtyard area. There is no insulation in the cavity and there is a paper breather membrane onto the sheathing board. This area also had an element of Trespa cladding to the 6th floor, the substructure of which mirrored that of those in Area 1. There are elements of combustible materials in this make up. There was no thermal insulation found in the opened up area. The combustible materials in this area is of deep concern as it is a main evacuation route in the event of a fire.

All of the walkways have been constructed with a timber decking. A link to a test video concerning timber decking used in balconies and walkways can be found below. This shows the importance of ensuring balcony areas are kept clear of barbeques and other sources of fire. Replacement of the timber cladding with a material of limited combustibility should be considered.

https://www.linkedin.com/feed/update/urn:li:activity:6465511137478799360

5. Observations

5.1 Inspection Summary - Area 1

Level South West Elevation, Floors 4-6 **Location:** Grey Cladding Material

Materials/systems viewed:	Cladding
Type	High Pressure Laminate (HPL)
Manufacturer	Trespa (Meteon)
Does the panel have a core material	Yes – Compacted Wood/Paper & Resin
Does the panel have a tested fire rating	Euroclass D
Materials/systems viewed:	**Support Framework**
Material	Timber
Type	50mm x 50mm vertical and 75mm x 75mm horizontal battens
Materials/systems viewed:	**Insulation**
Type	None
Manufacturer	N/A
Materials/systems viewed:	**Fire barriers**
Are the following fire barriers installed?	
Vertical at compartment walls	No
Horizontal at floor slabs	Yes but not across the full cavity
If yes, are horizontal fitted between or behind vertical rails	Behind
Materials/systems viewed:	**Breather membrane**
Manufacturer	Unknown
Type	Standard Breather Paper Membrane

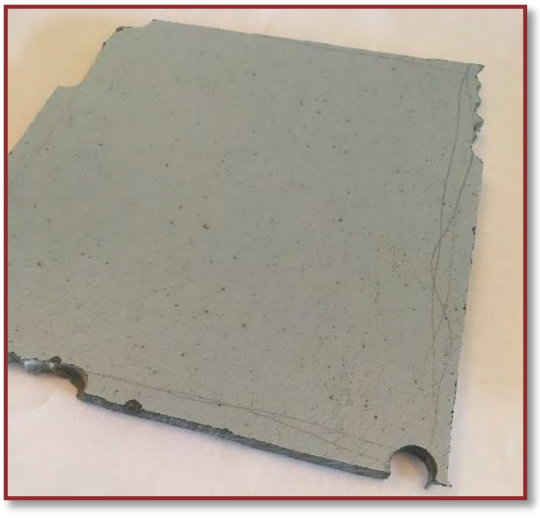


Image of Trespa Meteon HPL sample taken during survey. Made of compacted wood/paper and resin, the majority of HPL products have the potential to be extremely combustible.

Panels that were removed and replaced to investigate the fire barriers and facade build up are marked above.

Images showing the horizontal and vertical Rockwool 'sock' fire barriers. Their fitting, which doesn't cover the entire cavity, means that they will not be able to perform their task effectively.

5.2 Inspection Summary - Area 2

Level Ground Floor Rear Courtyard **Location:** Render

Materials/systems viewed:	Render
Type	2-Coat Render
Manufacturer	Unknown
Does the panel have a core material	No – applied to solid masonry substrate
Does the panel have a tested fire rating	Limited Combustibility
Materials/systems viewed:	**Support Framework**
Material	N/A
Type	N/A
Materials/systems viewed:	**Insulation**
Type	None
Manufacturer	N/A
Materials/systems viewed:	**Fire barriers**
Are the following fire barriers installed?	NOT REQUIRED – NO CAVITY
Vertical at compartment walls	No
Horizontal at floor slabs	No
If yes, are horizontal fitted between or behind vertical rails	N/A
Materials/systems viewed:	**Breather membrane**
Manufacturer	N/A
Type	None

Image showing the render drill test being performed. This render backed onto a solid masonry substrate, with no cavities. Therefore no fire barriers are required within this area.

5.3 Inspection Summary - Area 3

Level Internal Courtyard (Floors G-6) **Location:** Timber Wall Cladding

Materials/systems viewed:	Cladding
Type	Softwood Timber
Manufacturer	Unknown
Does the panel have a core material	No – Solid Timber (15mm thick)
Does the panel have a tested fire rating	Timber treatment not obvious
Materials/systems viewed:	**Support Framework**
Material	Timber
Type	50mm x 50mm battens
Materials/systems viewed:	**Insulation**
Type	None
Manufacturer	N/A
Materials/systems viewed:	**Fire barriers**
Are the following fire barriers installed?	
Vertical at compartment walls	No
Horizontal at floor slabs	No
If yes, are horizontal fitted between or behind vertical rails	N/A
Are cavity barriers present around windows and doors?	Yes – around the single window in this area, and the doors, there was evidence of 'sock' fire barriers – due to their poor installation these will not be effective and should be deemed insufficient
Materials/systems viewed:	**Breather membrane**
Manufacturer	Unknown – no markings
Type	Breather Paper

Image showing the fire barrier around the single window in this area. This has not been installed correctly and therefore will not all effective performance.

Close-up of the Rockwool ‘sock’ cavity closer along with the timber support batten, no insulation can be seen in the cavity. The timber cladding does not appear to have been treated with any fire-resistant products during manufacture.

There is a lack of fire barriers at the floor slab under the door frame as shown here. There is a clear continuation of the timber cladding from the floor below, which would assist the spread of any fire.

(Damage to door frame and cill was existing)

6.0 Recommendations

Area One: We would recommend that the entirety of the HPL material used in the upper level cladding of all elevations **be replaced** with a suitable alternative with a product of limited or no combustibility. The product used has been identified as 8mm Trespa Meteon, a panel with a Euroclass D fire rating. For comparison, the Aluminium Composite Material (ACM) used in the cladding of Grenfell was Euroclass B rated.

The table below shows a number of products, including Trespa Std, and the speed and energy at which they burn:

Cladding Product	Type	Thickness	UK Class	Euroclass	Fire Load (MJ/m2)
Alucobond PE	ACM	4mm	0	D	123
Alucobond Plus	ACM	4mm	0	B	68.9
Alucobond A2	ACM	4mm	0	A2	17
Reynobond PE	ACM	4mm	0	B	123
Reynobond FR	ACM	4mm	0	B	76
Trespa Standard	HPL	6mm	1	D	162
Trespa Standard	HPL	8mm	1	D	216
Trespa FR	HPL	6mm	0	B	162
Trespa FR	HPL	8mm	0	B	216
Fundermax	HPL	6mm	0	B	150
Fundermax	HPL	8mm	0	B	200
Fundermax m.look	HPL	7mm	0	A2	40
Marley Eternit	Fibre Cement	8mm	0	A2	23.03
Rockpanel Durable	Mineral Wool Composite	8mm	0	B	35.5
Rockpanel Durable	Mineral Wool Composite	10mm	0	B	44.4

Reynobond PE was the product used for the cladding of Grenfell and as shown, 8mm Trespa Std burns with 75% more energy than was produced in the Grenfell fire, a clear indication that this material has the potential to be extremely combustible.

Following the post-Grenfell enquiry, the government has reviewed the regulations concerning acceptable materials used in the construction of facades. These new regulations apply to new build properties but in the interest of safety we always recommend they are adhered to in existing properties.

This table illustrates the different classes of building materials and whether or not they meet the current building regulations. Following the Grenfell Enquiry, plans are in place to change Class B materials, to a status of 'non-compliant'. (A1/A2 materials only will meet the new regulations.)

Euroclass Rating	Definition	Example Materials
A1	Non-Combustible	Mineral Wool, Brickwork, Concrete, Plain Aluminium
A2	Limited Combustibility	Some A1 materials with Organic Facings (e.g. Powder Coating)
B-s3, d2 (or better)	Combustible	Phenolic foams, ACM (Aluminium Composite Material)
C-s3, d2 (or better)	Combustible	Phenolic foams, PIR, HPL (High Pressure Laminate)
D-s3, d2 (or better)	Combustible	PIR (Polyisocyanurate), HPL
E-s3, d2 (or better)	Combustible	Flame Retardant EPS (Expanded Polystyrene) Render, PUR
F-s3, d2 (or better)	Combustible	Standard EPS Render, PUR (Polyurethane)

Although fire barriers were present behind the Trespa cladding, these **were not** fitted in a way that would provide effective fire stopping protection and we would recommend that they be **reviewed and replaced** in a manner that would delay the spread of a fire.

Area Two: No recommendations – the render is of limited combustibility with no cavity.

Area Three: The timber clad areas and timber walkway decking covered the areas around the flat entrances and stairs of the inner courtyard. **Neither** of these timber materials showed any sign of being treated with flame retardant products at the time of manufacture. (The previously mentioned video relating to timber balconies can also apply to timber cladding and walkways used in this way.) Sock fire barriers in cavities around the window and doors were **not installed correctly** and did not fill the cavity fully as required. The fire officer in attendance was deeply concerned that the combustible timber material was present in areas that are considered a main evacuation route for residents in the event of a fire. We would recommend that removal of the timber cladding and decking is seriously considered, along with installation of effective fire barriers.

Fire Service Action Plan

Following on from the action plan served on the previous managing agent by the Greater Manchester Fire & Rescue Service, our report would suggest that the Trespa cladded areas along with the timber walkways and cladding would neither pass a BS8414 or a BR135 test due to the existence of combustible materials in the construction of both facades. The passive fire protection (fire barriers) are also not of a sufficient effective standard to be deemed acceptable for the buildings compartmentation requirements.

Report Disclaimer

(1) Introduction

This disclaimer governs the use of this report. [By using this report, you accept this disclaimer in full]

(2) Credit

This disclaimer was created using an SEQ Legal template.

(3) No advice

The report contains information about cladding systems installed on your building and is prepared from visual inspections and information provided by the managing agent at the time of the report. The information in this report does not offer any advice on further action, and should not be treated as such.

[You must not rely on the information in the report as an alternative to [legal / financial / regulations] advice from an appropriately qualified professional. If you have any specific questions about any [legal / financial / regulations] matter you should consult an appropriately qualified professional.]

[You should never delay seeking legal advice, disregard legal advice, or commence or discontinue any legal action because of information in the report.]

(4) No representations or warranties

To the maximum extent permitted by applicable law and subject to section 6 below, we exclude all representations, warranties, undertakings and guarantees relating to the report.

Without prejudice to the generality of the foregoing paragraph, we do not represent, warrant, undertake or guarantee:

- that the information in the report is correct, accurate, complete or non-misleading;
- that the use of guidance in the report will lead to any particular outcome or result;

(5) Limitations and exclusions of liability

The limitations and exclusions of liability set out in this section and elsewhere in this disclaimer: are subject to section 6 below; and govern all liabilities arising under the disclaimer or in relation to the report, including liabilities arising in contract, in tort (including negligence) and for breach of statutory duty.

We will not be liable to you in respect of any losses arising out of any event or events beyond our reasonable control.

We will not be liable to you in respect of any business losses, including without limitation loss of or damage to profits, income, revenue, use, production, anticipated savings, business, contracts, commercial opportunities or goodwill.

We will not be liable to you in respect of any special, indirect or consequential loss or damage.

(6) Exceptions

Nothing in this disclaimer shall: limit or exclude our liability for death or personal injury resulting from negligence; limit or exclude our liability for fraud or fraudulent misrepresentation; limit any of our liabilities in any way that is not permitted under applicable law; or exclude any of our liabilities that may not be excluded under applicable law.

(7) Severability

If a section of this disclaimer is determined by any court or other competent authority to be unlawful and/or unenforceable, the other sections of this disclaimer continue in effect.

If any unlawful and/or unenforceable section would be lawful or enforceable if part of it were deleted, that part will be deemed to be deleted, and the rest of the section will continue in effect.

(8) Law and jurisdiction

This disclaimer will be governed by and construed in accordance with English law, and any disputes relating to this disclaimer will be subject to the exclusive jurisdiction of the courts of England and Wales.

(9) Our details

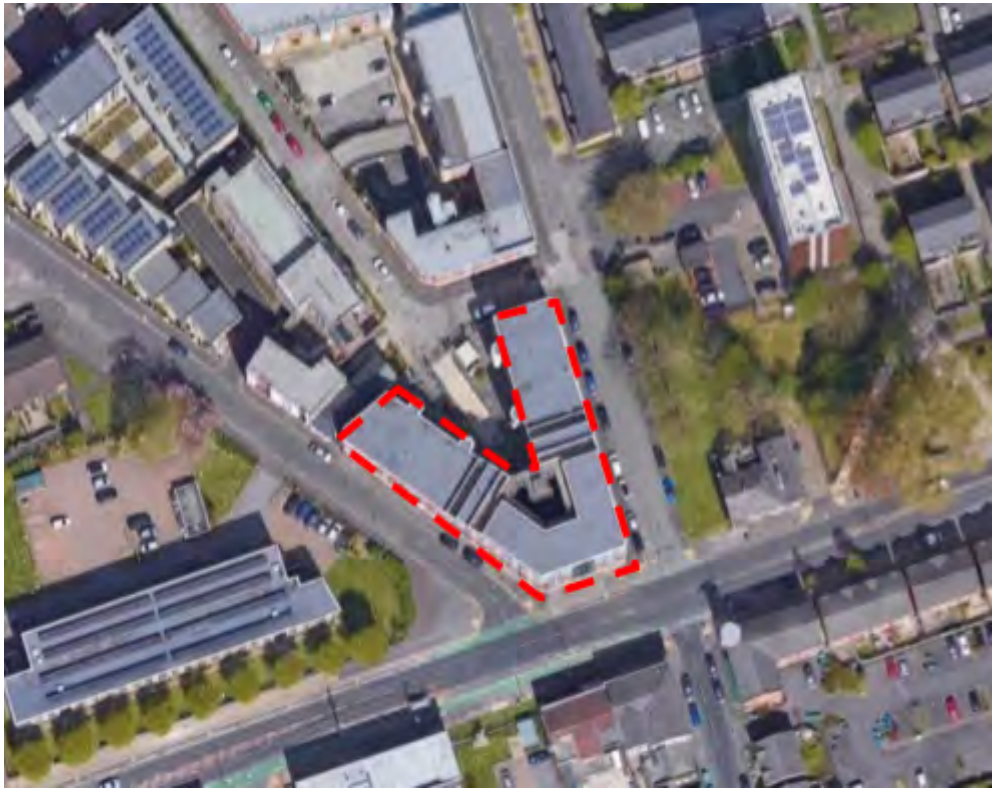
In this disclaimer, "we" means (and "us" and "our" refer to) [FR Consultants Limited], a company registered in [England and Wales] under registration number [11354060].

APPENDIX E

INTRUSIVE SAMPLE LOCATIONS

Project Details:

Project Name	Aura Court
Client	Edgerton Estates Limited
Project Address	1 Percy Street, Manchester, Greater Manchester
Date (Inspection)	TBC



SITE LOCATION PLAN (NTS)

- Residential complex comprising 5 storey apartment blocks above commercial ground floor units.
- The main entrance is off Percy Street
- Residential Accommodation built c. 2007

Address:
1 Percy Street, Manchester, Greater Manchester, M15 4AB

Coordin Coordinates:

Latitude: 53.46604

Longitude: -2.26009

Description of the building:

The building was constructed around 2007 and is approximately 18m high. The building comprises 5 residential storeys located over the commercial ground floor units and the basement carpark. The building has separate access and egress via for individual stair cores and atrium stairs. The building is of masonry construction, with predominantly brickwork facades and Trespa cladding to 4th to 6th floor.

Proposed Investigation:

Wall Type 1 – Artstone	• Review building with intrusive inspections to confirm materials in wall build-up
Wall Type 2 – Timber cladding	• Review building with intrusive inspections to confirm materials in wall build-up
Wall Type 3 – Trespa cladding	• Review building with intrusive inspections to confirm materials in wall build-up
Wall Type 4 – Brickwork	• Review building with intrusive inspections to confirm materials in wall build-up

Key to Wall Types:

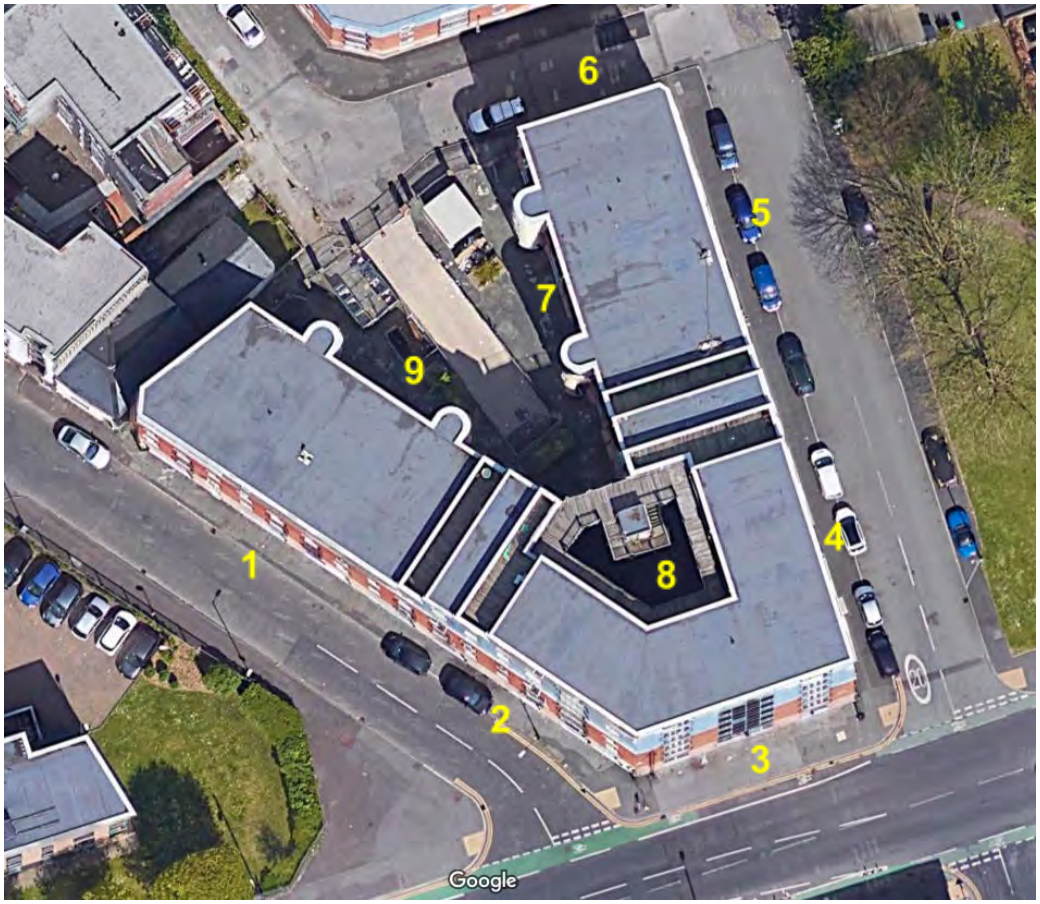
- **Wall Type Ref 1 - Artstone**
- **Wall Type Ref 2 - Timber cladding**
- **Wall Type Ref 3 - Trespa cladding**
- **Wall Type Ref 4 - Brickwork**

Survey Key:

The following identifies the proposed inspection works to be undertaken, locations are then marked up on the following photos.

●	**Wall Type Ref: 1 - Artstone** Contractor to carefully create a 150mm hole through any insulation and other such layers to the outside face of the internal finish. Sample locations to confirm wall makeup in addition to determining the presence of horizontal and vertical cavity barriers. The surveyor to carry out an inspection to confirm the construction of the wall including the location of the fire barriers. Repair and reinstate on like-for-like basis and make good after surveyor's inspection and instruction to close up the works.
●	**Wall Type Ref: 2 – Timber cladding** Contractor to carefully remove and retain sections of the timber cladding and create a 150mm hole through any insulation and other such layers to the outside face of the internal finish. Sample locations to confirm wall makeup in addition to determining the presence of horizontal and vertical cavity barriers. The surveyor to carry out an inspection to confirm the construction of the wall including the location of the fire barriers. Repair and reinstate on like-for-like basis and make good after surveyor's inspection and instruction to close up the works.
●	**Wall Type Ref: 3 – Trespa cladding** Contractor to carefully remove and retain sections of the Trespa cladding panel and create a 150mm hole through any insulation and other such layers to the outside face of the internal finish. Sample locations to confirm wall makeup in addition to determining the presence of horizontal and vertical cavity barriers. The surveyor to carry out an inspection to confirm the construction of the wall including the location of the fire barriers. Repair and reinstate on like-for-like basis and make good after surveyor's inspection and instruction to close up the works.
●	**Wall Type Ref: 4 – Brickwork** Contractor to carefully create a 150mm hole through any insulation and other such layers to the outside face of the internal finish. Sample locations to confirm wall makeup in addition to determining the presence of horizontal and vertical cavity barriers. The surveyor to carry out an inspection to confirm the construction of the wall including the location of the fire barriers. Repair and reinstate on like-for-like basis and make good after surveyor's inspection and instruction to close up the works.

Note: Locations may be subject to change during the site investigations; surveyor to confirm.
Note: Principal contractor to allow reinstatement and repair like for like materials and construction details to make good to all opened up areas with minimal disturbance where possible and make good as necessary including finishes, to manufacturers advised standards.
Note: Principal Contractor to allow for all necessary compliance with Health and Safety legislation for the full duration of the works including that of the Construction (Design & Management) Regulations 2015 and that of the Workplace Regulations and welfare provisions made thereunder. Safe methods of working to be demonstrated by RAMS and Covid 19 safe working procedures are expected to be demonstrated in any tender returns/documents.



Location Area Plan - showing approximate locations of pinpointed areas on elevations. Location area 01 shown as 1 etc.

Location Area 01 - Southern West Elevation Left Hand Side

Location 1 - Wall Type 3 - Open up this area to expose the cavity barrier at the wall/floor junction.

Location 2 - Wall Type 4 - Open up this area to expose the cavity closer at the window junction.

Location 3 - Wall Type 1 - Open up this area to expose the cavity barrier at the wall/floor junction.

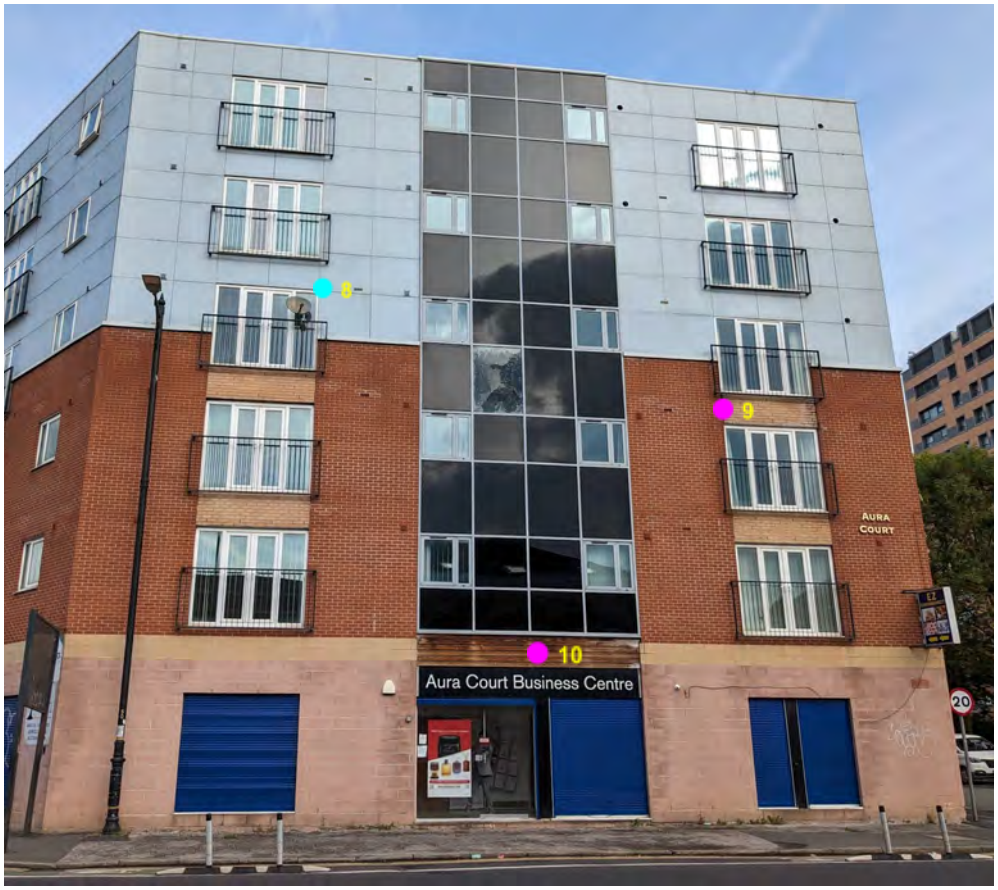
Location Area 02 - Southern West Elevation Right Hand Side

Location 4 - Wall Type 3 - Open up this area to expose the cavity barrier at the wall/floor junction.

Location 5 - Wall Type 3 - Open up this area to expose the cavity closer at the window junction.

Location 6 - Wall Type 2 - Open up this area to expose the cavity barrier at the wall/floor junction and cavity closer at door junction.

Location 7 - Wall Type 3 - Open up this area to expose the cavity barrier at the wall/floor junction.



Location Area 03 Southern Elevation

Location 8 - Wall Type 3 - Open up this area to expose the cavity barrier at the floor junction and cavity closer at the door junction.

Location 9 – Wall Type 2 – Open up this area to expose the cavity barrier at the floor junction and cavity closer at the door junction.

Location 10 – Wall Type 2 – Open up this area to expose the cavity barrier at the floor junction.

Location Area 04 Eastern Elevation Left Hand Side

Location 11 - Wall Type 2 – Open up this area to expose the cavity closer at the door junction.

Location 12 - Wall Type 3 – Open up this area to expose the cavity barrier at the floor/wall junction.

Location 13 - Wall Type 3 – Open up this area to expose the cavity barrier at the floor/wall junction.

Location Area 05 Eastern Elevation Right Hand Side

Location 14 - Wall Type 4 - Open up this area to expose the cavity closer at the window junction.

Location 15 - Wall Type 4 – Open up this area to expose the cavity barrier at the wall/floor junction.

Location 16 - Wall Type 3 – Open up this area to expose the cavity barrier at the floor/wall junction.

Location Area 06 Northern Elevation

Location 17 - Wall Type 3 – Open up this area to expose the cavity barrier at the floor junction.

Location Area 07 Northern West Elevation

Location 18 - Wall Type 1 - Open up this area to expose the cavity barrier at the wall/floor junction.

Location 19 - Wall Type 1 - Open up this area to expose the cavity barrier at the wall junction.

Location 20 - Wall Type 1 - Open up this area to expose the cavity barrier at the wall junction.

Location Area 08 Atrium Elevation

Location 21 - Wall Type 2 - Open up this area to expose the cavity barrier at the wall junction and cavity closer at door junction.

Location 22 - Wall Type 2 - Open up this area to expose the cavity barrier at the floor junction.

Location 23 - Wall Type 2 - Open up this area to expose the cavity closer at the window junction.

Location Area 08 Atrium Elevation

Location 24 - Wall Type 2 - Open up this area to expose the cavity barrier at the wall/floor junction.

Location 25 - Wall Type 2 - Open up this area to expose the cavity barrier at the floor junction.

Location 26 - Wall Type 2 - Open up this area to expose the cavity closer at the door junction.

Location Area 09 Northern East Elevation Left Hand Side

Location 27 - Wall Type 1 - Open up this area to expose the cavity closer at the door junction.

Location 28 - Wall Type 1 - Open up this area to expose the cavity barrier at the floor/wall junction.

Location 29 - Wall Type 1 - Open up this area to expose the cavity barrier at floor/wall junction.

Location Area 09 Northern East Elevation Right Hand Side

Location 30 - Wall Type 1 - Open up this area to expose the cavity barrier at the floor/wall junction.

Notes:

The Principal Contractor is requested to allow CAT scanning all areas to be opened up prior to such operations and make all endeavours to trace/locate services buried in walls and other structures before undertaking any opening up works. Please also make suitable provision for emergency repairs if unforeseen services are found to be contained therein during investigation works.

The Principal Contractor is required to comply with the Construction (Design & Management) Regulations 2015 and shall make suitable provision for temporary firefighting (suitable extinguishers) to all work levels and suitable means of alarm/alert to fire, with a fire watching, permit to work type cooling down and observation period to all opened up works. Any core drilling or the like into wall materials shall go a small depth at a time, inspected, and repeated to avoid fire risks and clasing with unknown services and is to be detailed within the RAMS to be submitted by the Principal Contractor.

APPENDIX F

INSPECTION PHOTOGRAPHIC SCHEDULE

Photo 1: General view of North East Elevation

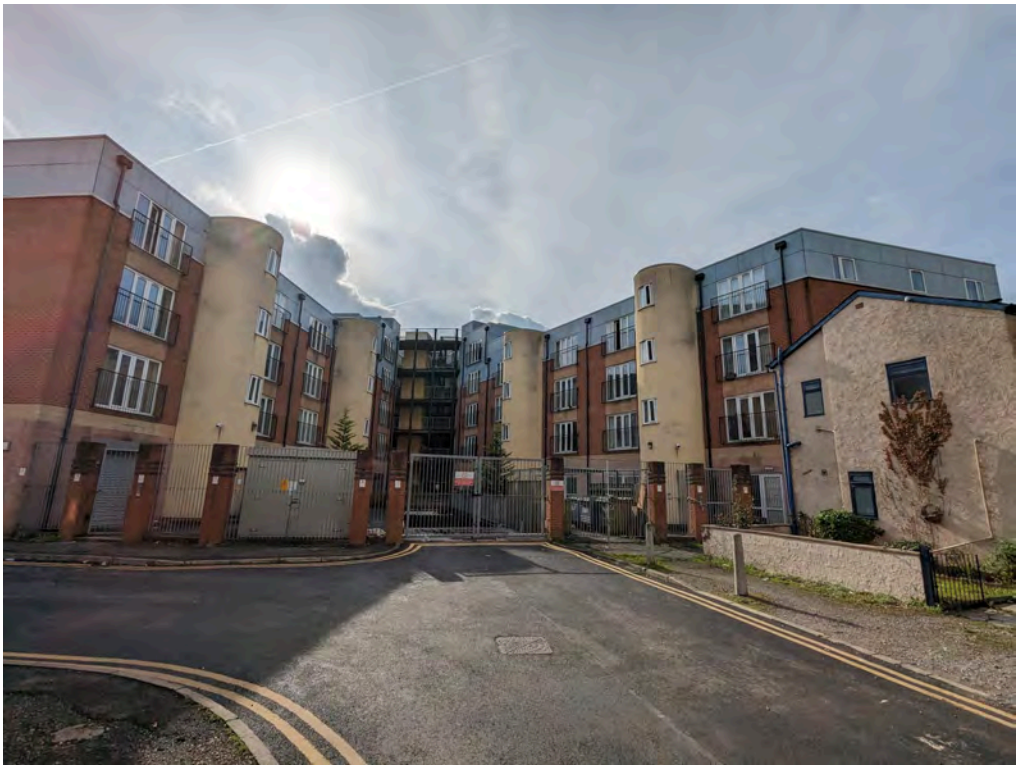


Photo 2: General view of Courtyard Elevation

Photo 3: General view of South West Elevation facing Lucy Street

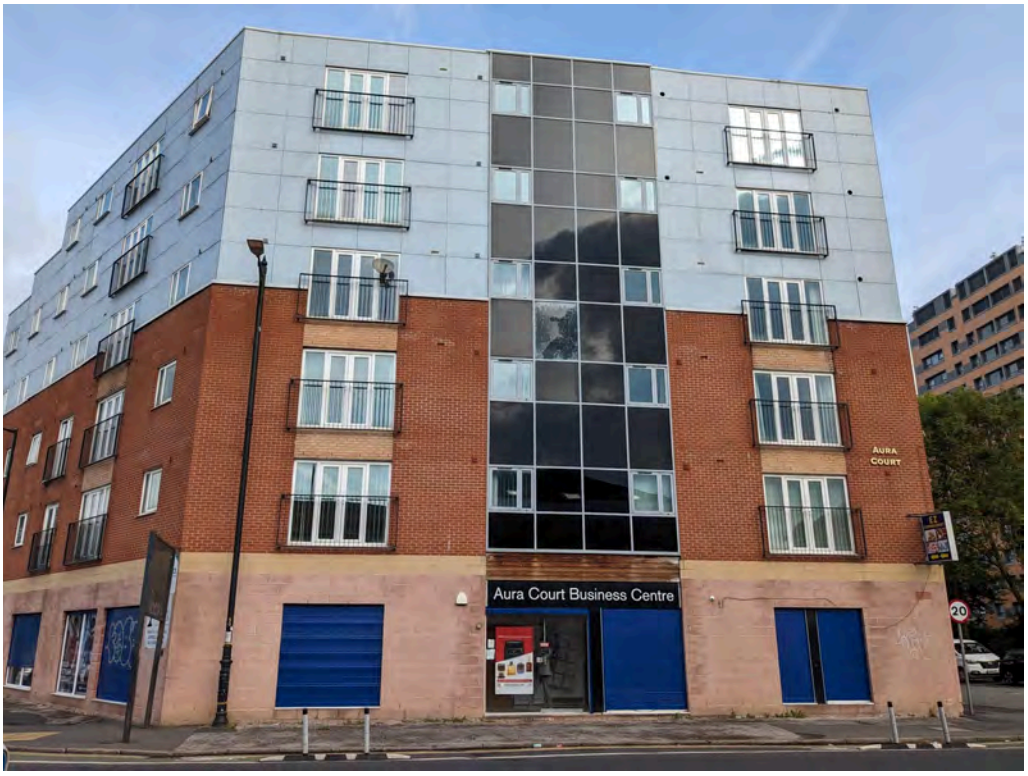


Photo 4: General view of South Elevation facing Stretford Road

Photo 5: Location 1 - HPL removed on 3rd floor on 3rd floor at South West Elevation

Photo 6: Location 1 - Cavity showing absence of horizontal barriers at compartment floors

Photo 7: Location 2 - Brick removed on 1st floor at front facade

Photo 8: Location 2 - Cavity with wall ties and breather membrane, but no cavity closer at window opening

Photo 9: Location 3 - Brick removed on 1st floor at front facade

Photo 10: Location 3 - Cavity with wall ties, damp proof membrane and cavity barriers

Photo 11: Location 4 - HPL removed on 3rd floor at front facade

Photo 12: Location 4 - Cavity showing timber studs, breather membrane and cavity barriers

Photo 13: Location 5 - HPL removed on 4th floor at front facade

Photo 14: Location 5 - Cavity of cavity barrier, breather membrane and timber studs

Photo 15: Location 6 - Brick removed on 2nd floor at front facade

Photo 16: Location 6 - Cavity with damp proof membrane, breather membrane and cavity barriers

Photo 17: Location 7 - HPL removed on 3rd floor at south elevation

Photo 18: Location 7 - HPL facade build up

Photo 19: Location 8 - HPL removed on 3rd floor at south elevation

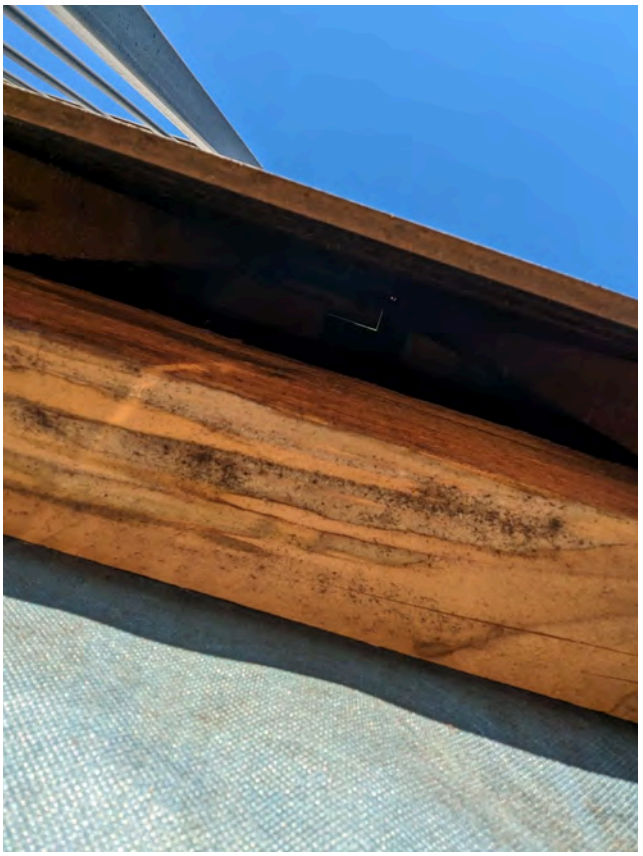


Photo 20: Location 8 - Cavity with timber studs and breather membrane, no horizontal barriers between compartment floors

Photo 21: Location 9 - Brick removed on 2nd floor at south elevation

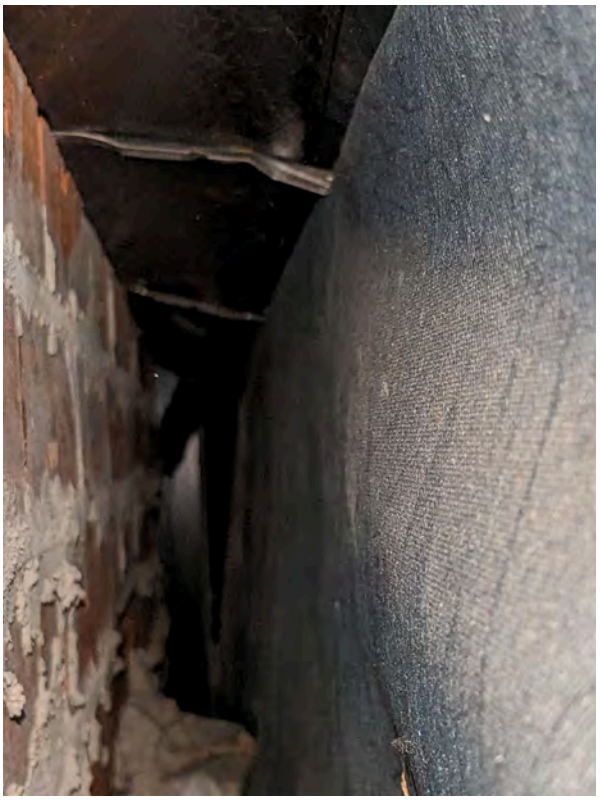


Photo 22: Location 9 - Cavity with wall ties, breather membrane and damp proof membrane and barriers

Photo 23: Location 10 - timber spandrel panel cored out on 1st floor balcony at business centre entrance

Photo 24: Location 10 - timber spandrel panel build up

Photo 25: Location 11 - Brick removed on 2nd floor at east elevation

Photo 26: Location 11 - Cavity with barriers, wall ties, damp proof membrane and breather membrane

Photo 27: Location 12 - HPL removed on 3rd floor at east elevation

Photo 28: Location 12 - Cavity showing the timber studs, breather membrane and horizontal barriers, but no vertical barrier

Photo 29: Location 13 - HPL removed on 2nd floor at east elevation

Photo 30: Location 13 - Cavity with timber studs, breather membrane and vertical barriers, but no horizontal barrier between floors.

Photo 31: Location 14 - Brick removed on 2nd floor at east elevation

Photo 32: Location 14 - Brick build up

Photo 33: Location 15 - Brick removed on 1st floor at east elevation

Photo 34: Location 15 - Cavity with damp proof membrane, breather membrane and timber frame

Photo 35: Location 16 - HPL removed on 3rd floor at east elevation

Photo 36: Location 16 - Cavity with breather membrane, wall ties, cavity closer, but no cavity barriers.

Photo 37: Location 17 - HPL removed on 3rd floor at north elevation

Photo 38: Location 17 - Cavity showing the cavity barrier at window openings, but no horizontal barrier between floors

Photo 39: Location 18 - Brick removed on 1st floor at courtyard elevation

Photo 40: Location 18 - Cavity showing the cavity barrier, cavity tray, breather membrane and wall ties

Photo 41: Location 19 - Brick removed on 1st floor at courtyard elevation

Photo 42: Location 19 - Cavity showing the cavity barrier, cavity tray, breather membrane and wall ties

Photo 43: Location 20 - Brick removed on 1st floor at courtyard elevation

Photo 44: Location 20 - Cavity showing the cavity barrier, cavity tray, breather membrane and wall ties

Photo 45: Location 21 - Timber cladding removed on 2nd floor at inner courtyard elevation

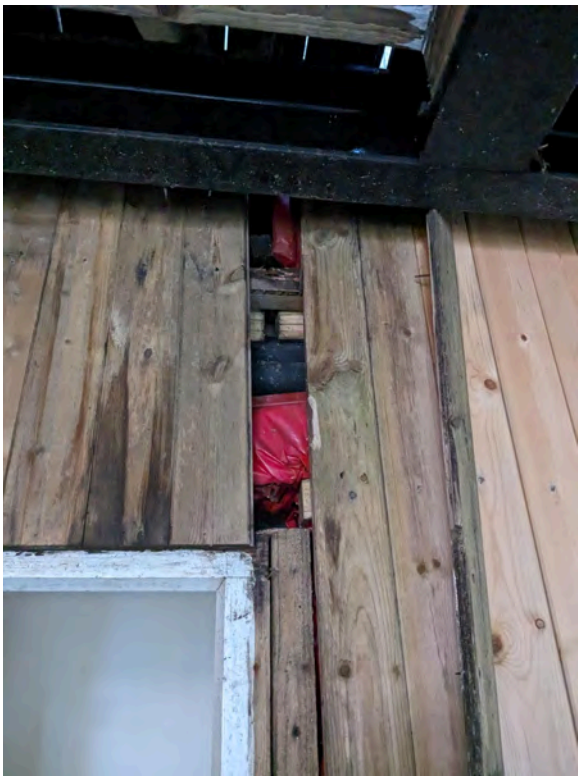


Photo 46: Location 21 - Cavity with cavity barriers,timber studs and thermoplastic insulation.

Photo 47: Location 22 - Timber cladding removed on 3rd floor at inner courtyard elevation

Photo 48: Location 22 - Timber cladding system build up

Photo 49: Location 23 - Timber cladding removed on 1st floor at inner courtyard elevation

Photo 50: Location 23 - Cavity showing cavity closer at window openings and breather membrane

Photo 51: Location 24 - ETICS cored out on 1st floor at side elevation

Photo 52: Location 24 - Cavity with vertical barriers, breather membrane and electric wiring with thermoplastic insulation

Photo 53: Location 25 - timber cladding removed on 3rd floor at inner courtyard elevation

Photo 54: Location 25 - Cavity with barriers, thermoplastic insulations and breather membrane

Photo 55: Location 26 - Timber cladding removed on 2nd floor at inner courtyard elevation

Photo 56: Location 26 - Cavity with cavity closers at door openings, thermoplastic insulations and breather membrane

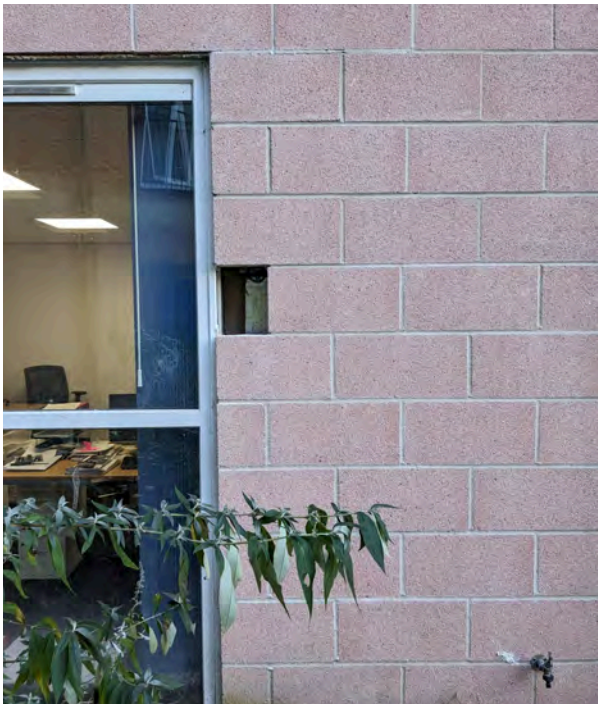


Photo 57: Location 27 - Artstone removed at ground floor at courtyard elevation

Photo 58: Location 27 - Artstone build up

Photo 59: Location 28 - Brick removed at 1st floor at courtyard elevation

Photo 60: Location 28 - Cavity with no cavity barriers in line with compartment walls and floors

Photo 61: Location 29 - Brick removed at 1st floor at courtyard elevation

Photo 62: Location 29 - Brick build up

Photo 63: Location 30 - Brick removed at 1st floor at courtyard elevation

Photo 64: Location 29 - Cavity with no cavity barriers in line with compartment walls

Photo 65: General view of basement car park with composite decking

Photo 66: General view of exterior walkway at inner courtyard area

APPENDIX G

FIRE RISK ASSESSMENT

Risk Improvement Programme

Date of survey: 19 Feb 2019
Report date: 11 Mar 2019

General Information

Client name:	
Site/Development:	Aura Court 1 Percy Street Manchester Lancashire M15 4AB
Site/Development Reference:	
Surveyor / assessor:	Samantha Crawley
Next review date:	19 Feb 2020
Next assessment date:	19 Feb 2021

About this report

The purpose of this report is to make recommendations to aid compliance with relevant Health, Safety and Welfare Legislation.

Every effort has been made to ensure that all statements and information offered in our assessment report are given in good faith; they relate to matters seen during the safety review and information supplied at the time.

To assist in complying with the risk Improvements that resulted from the risk survey, each improvement has been individually classified and assigned a timescale for completion.

Improvements will help to remove, reduce, mitigate or control potential exposures.

Specialist advice may be necessary to implement certain Risk Improvements and the following guidance may cover broad principles only. Some items may require planning or other permissions from your local authority and/or the property owner; who should be consulted with before implementing, particularly those that may alter the structure or appearance of any premises.

All work should be carried out by competent contractors. Further advice and information can be obtained via trade/professional organisations.

The table below shows the recommended risk improvements that have been assigned.

No responsibility can be accepted for any unauthorised amendments or alterations to this report.

Risk Improvement Summary

No	Title	Task Code	Priority	Status
2019-334	Electrical	PAT Testing	MEDIUM	
2019-334	Smoking	Smoking	MEDIUM	
2019-334	Arson	Arson security	MEDIUM	
2019-334	Arson	Arson combustible materials	MEDIUM	
2019-334	Arson	Arson bins	MEDIUM	Not Agreed
2019-334	Flammable Materials	Flammable liquids and gases storage and use	LOW	
2019-334	Flammable Materials	Hot works procedures.	MEDIUM	
2019-334	Fire Detection and Alarm	AFD provision	HIGH	
2019-334	Escape	Escape routes obstructed	MEDIUM	
2019-334	Escape	Fire separation	MEDIUM	
2019-334	Escape	Fire doors	MEDIUM	
2019-336	Escape	Fire doors unsecured	MEDIUM	
2019-336	Escape	Emergency lighting	MEDIUM	
2019-336	Testing and Maintenance	EL test and maintenance	MEDIUM	
2019-336	Testing and Maintenance	External stairs and gangways inspection	HIGH	
2019-336	Testing and Maintenance	Rising mains tests and maintenance	HIGH	
2019-336	Testing and Maintenance	Fire exits and doors inspection and maintenance	HIGH	
2019-336	Evacuation	Commercial EAP	MEDIUM	
2019-336	Electrical	Periodic inspection of residential electrical installation.	HIGH	
2019-336	Heating	Portable heaters combustible materials	HIGH	
2019-336	Fire Fighting Equipment	Fixed fire fighting installations	MEDIUM	

2019-338	Arson	Arson letterbox	LOW
2019-338	Facilities	Fire fighters operational information	MEDIUM
2019-340	Construction	Other cladding / wall systems	HIGH
2019-340	Testing and Maintenance	Fire safety check list	MEDIUM
2019-340	Evacuation	High Rise EAP	HIGH
2019-340	Construction	Building Structure - General	HIGH

Risk Improvement

High Priority

2019-334 Fire Detection and Alarm — AFD provision

On a temporary basis to support the simultaneous evacuation strategy, It is recommended that a temporary automatic fire detection and warning system designed, installed and maintained to the details given in British Standard 5839 is provided.
A wireless system would be acceptable.

Required By: 11 Jul 2019

2019-336 Testing and Maintenance — External stairs and gangways inspection

Periodic inspection of external escape stairs and gangways to be carried out by competent person and certificate obtained regarding their satisfactory condition.

Note: All records of test and maintenance to be kept in a dedicated log book or held electronically.

The block 12B to 35 is constructed around a steel supported stairwell and exterior walk ways to access the apartments. The stairs are constructed around and supported by a non-combustible masonry block work shaft in the centre. The stairs and walk ways structurally will be able to support a 60 minute evacuation period, however the following was noted;
- All the timber elements are degrading and require replacement, additionally the floors and steps have holes in them and parts missing and are covered in slippery algae and have plants growing to verges.
- They require immediate jet washing to remove slippery film and urgent remedial replacement.
- The external walk ways are showing evidence of rotting through the timber.
- The wood handrail is rotting and split to 5th floor.
- Timber elevations have degraded, there is a replaced light fitting by right side which the fitting has been replaced, but the wood under has holes through into void and exposed wires underneath.

Required By: 11 Jun 2019

2019-336 Testing and Maintenance — Rising mains tests and maintenance

Six monthly inspection and annual test of the dry rising mains to be carried out.
On inspection the deteriorated appearance of the riser, riser housing, electrical installation, electric heater and ingress of water to the interior of this shaft leads us to believe there has been no inspection or maintenance of this installation for many years.
1. Six monthly inspection.
Inspections largely involve simple checks to confirm that the outlets are not damaged
and padlocks and straps on the landing valves are still in place. This could readily be incorporated within formal fire safety inspections.

2. Annual testing will involve pressurising the main, and will therefore, normally require a specialist contractor to carry it out.

Note: All records of test and maintenance to be kept in a dedicated log book or held electronically.

NB The shaft in block 12B to 35 is not fire retardant and should be replaced with a fire resistant structure. Additionally it is not suitable to house the electrical intake the two need separate compartments as risk of fire or electric shock to fire service is a concern.

Required By: 11 May 2019

2019-336 Testing and Maintenance — Fire exits and doors inspection and maintenance

As the fire doors throughout the premises are designed to prevent the spread of smoke and flame it is important to maintain these doors in good order. This could be achieved by carrying out periodic checks on all fire doors and maintaining a register with a record of defects and corrective maintenance. Check all fire doors in premises for general condition including intumescent strips, cold smoke seals and operation of self closers. Check all fire exits in premises for general condition and operation.

Note: All records of test and maintenance to be kept in a dedicated log book or held electronically.

Required By: 11 Jul 2019

2019-336	Electrical	Periodic inspection of residential electrical installation.

Recommendation is made for the periodic inspection of electrical installations to be carried out by a competent electrical engineer in accordance with the current BS 7671 (Institution of Engineering and Technology Wiring Regulations) and a certificate of compliance to be obtained.
Note: This may have been carried out but there was no evidence available at time of assessment. The onsite evidence points to the inspection being overdue by 2 years.
The mains supply to block 12B-35 is housed in a shared riser also housing the dry riser and the water supply. The external housing is within a weathered timber structure which is not fire or thermally resistant. Ingress of water to the installation has corroded and badly rusted the bottom edge of the electrical installation which also has a plastic bag over the top, presumed to stop water penetration from above.
Installed in the riser is an electric heater, also badly corroded, fitted to a 13A plug socket which should not be in the riser. This has presumably been fitted to combat frost or condensation to the installations.

The riser cupboard at fourth floor level is adjacent to a breach in the fire barrier under the cladding, providing a 5cm gap where smoke and flames could spread behind the brick to the timber structure and voids behind.

We recommend the dry riser and electrical provision be separated in fire and thermal proof structure.

Required By: 11 May 2019

2019-336	Heating	Portable heaters combustible materials

Ensure that portable heaters are kept clear of combustible materials, this refers to:

1. Remove heater from riser cupboard to core 12b - 35. This housing is flammable and smoke and flames could quickly spread across the exterior timber cladding, and into voids and timber structure behind the brick façade of block 36 - 4. There is a breach in fire separation to the fourth floor between brick and the trespa cladding. There is no horizontal fire separation to this riser.

Required By: 11 Jun 2019

2019-340	Construction	Other cladding / wall systems

Following guidance from the Ministry of Housing, Communities and Local Government (MHCLG) all external cladding wall systems should be proven to meet with Building Regulation guidance for resisting fire spread across external wall surfaces.
The Government’s expert panel’s view is that for buildings over 18m, the clearest way to ensure they do not present a risk of fire spread is to confirm that materials are limited combustibility* or better. Where the panels do not meet this classification, the most appropriate means of remediation is to remove and replace the panels; however professional advice should be sought first. The building was measured to be 17.9 metres in height, as so close to the recommended height for remediation we would not rely on the building being under the threshold for the purposes of fire safety.
The removal of external cladding applies to all areas of Trespa Meteon cladding on floors 4 to 6 and the soft wood cladding to the building around the central courtyard core, floors 1 to 6.

Building owners should not delay the removal of materials where they are assessed to be unsafe.

* Materials of limited combustibility would either include a material or product which is at least Class A2-s3, d2 in accordance with BS EN 13501-1:2007; or has achieved a national equivalent classification in accordance with Table A7 of Approved Document B volume 2.

Required By: 11 Jun 2019

2019-340	Evacuation	High Rise EAP

Supply tenants with general fire safety advice for high rise flats.
The building in which you live has been designed with safety in mind. Outside the building, roads and other areas are designed so that emergency vehicles can get as near as possible. The walls, doors and floors are specially designed to resist fire and stop the spread of smoke. To do this, these doors need to be kept closed when they are not in use. Don't be tempted to clutter the stairs and corridors of your building. Remember, when you share a building with other families your safety and theirs depends on everyone co-operating. If fire breaks out the hall is the only escape route for you and your family. Do not obstruct it, particularly with things that may catch fire easily.
Never prop or wedge doors open.
It is also a good idea to close your internal doors too when you retire for the night and turn off all electrical items not designed to stay on for long periods. Keep your escapes routes, inside and outside of your flat, clear of obstacles at all times.
Vital time needed to escape may be lost if you do not keep keys close to the door.
If a fire does break out in your flat:
When the smoke alarm sounds...
- Don't open doors looking for the source of the fire
- Alert everyone else and leave the flat, closing the door behind you
- Don't stop to gather personal belongings or pets
- Don't use a balcony to escape from unless it is a part of an official escape route
- When you are out of the building find a phone and call 999
- Keep calm and speak clearly
- Never go back into the building until you have been told it is safe to do so

If a fire breaks out elsewhere in the building:
• It will normally be safe for you to stay in your own flat. Currently the evacuation strategy has changed to simultaneous evacuation. If the alarm sounds, leave your flat immediately and go to the muster point.
• If you have to move through smoke keep as close to the floor as you can, where the air is fresher.

Plan ahead now by making a fire action plan taking everyone living in your flat into account. Look after your smoke alarms - test them regularly and replace batteries promptly. Make sure they are positioned and maintained according to the manufacturer's instructions.
Prevent fires:
• Never leaving cooking unattended
• Maintain electrical goods and use correctly
• Dispose of cigarette ends carefully
• Keep lighters and matches out of the sight and reach of children.

Required By: 11 Apr 2019

2019-340	Construction	Building Structure - General

It is recommended that structural repairs are made on elements identified to avoid further damage, collapse and or falls of materials.
This refers to:
1. appoint a competent surveyor to prepare schedule of works, tender and project manager repairs and upgrades.

Required By: 11 Apr 2019

Medium Priority

2019-334	Electrical	PAT Testing

It is recommended that Portable Appliance Testing (PAT) of relevant electrical equipment is carried out by a competent electrical contractor.
This refers to:
1. TV boosters in electrical intake cupboards to the ground floor. Flats 1-6, 7-12, 36-41, 42-47
2. CCTV system for owner occupiers.

Required By: 11 Sep 2019

2019-334	Smoking	Smoking

Implement No Smoking Regulations 2012 for building by fixing appropriate signage at entrance points or internal notice boards.

The duty to display no-smoking signs in smoke-free premises and vehicles in England is being made simpler. Since 1st October 2012 at least one legible no-smoking sign must still be displayed but owners and managers are now free to decide the size, design and location of the signs.

For residential premises signs can state 'It is against the law to smoke in the communal areas of this building'.

The internal protected stair well cores at ,1-6, 7-12, 36-41 and 42-47 have signs and do comply. 12B-35 (22 flats) has no signs and there is evidence of smoking on the walk ways and balconies. As the courtyard cladding is not of fire resistant material we advise the residents are strongly cautioned not to smoke in this area.

Required By: 11 Jul 2019

2019-334	Arson	Arson security

Consider installation of means of controlling access to building, this refers to;
1. Reinstate security to courtyard pedestrian gate.
2. Reinstate security to vehicle access.
3. Repair and reinstate door locking to stair cores, 1-6, 7-12, 36-41, 42-47.
4. Units 14-35 have no additional security, the metal stairwell opens directly to the courtyard, consider adding security keypad gate with push bar exit.

Required By: 11 May 2019

2019-334	Arson	Arson combustible materials

Clear combustible materials from exterior of building to prevent the likelihood of arson, this refers to;
1. Mattress at base of 14-35. Evidence of drug taking (sharps hazard)
2. Items in the car park; sofa, furniture, broken items, chairs, waste paper. NB this is hazardous waste as has been soaked in sewage (biological hazard) and evidence of drug taking noted, (sharps hazard).
3. Fly tipped mattress and furniture at entrance to the courtyard, to left of bin area.
4. Overflowing bin area. (only 3 metres from external walls)
We have been advised on site that the Local Authority has had problems with contractor "Enterprise" who are failing to meet the statutory 2 week collection period. This build up of waste is now forming a health hazard and needs to be remediated urgently.
5. There are many items stored on the timber decked external stairwell, to include but limited to ; 2 red chairs; chairs, dog bed and containers of cigarette waste, bags of rubbish, timber fragments. This may also be attracting vermin, evidence of mouse dropping and pigeons noted.

There is a heightened arson risk from homeless drug takers in the car park, lobbies and service cupboards. It was noted block 1-6 has scorch marks in several places, on timber balustrade, smoke alarm to ground floor, and the UPVC window.

Required By: 11 May 2019

2019-334	Arson	Arson bins

Consider use of lockable bins , or secure external area to deter use by public for disposal of smoking materials and arson.

Required By: 11 Jun 2019

2019-334	Flammable Materials	Hot works procedures.

Implement hot works procedures. Apply a strict "Permit to Work" procedure and communicate this to all commercial users on the ground floor, as well as to any planned maintenance or works within residential parts, especially where timber exterior structure is present, roof areas or areas of Trespa cladding.
A hot work permit system is a formal written system and is an extension of the safe system of work.
A hot work permit is used to prevent fire or explosion and will specifically detail the work to be carried out, how and when it is to be done and the precautions to be taken.
A hot work permit should be issued to persons carrying out temporary work which involves;
gas/electric welding and cutting, blowtorches, grinding wheels or cutting discs.
Hot work is only to be carried out by persons trained in the use of equipment, hazards and precautions to prevent fires.

NB; applies to any flat roof maintenance be carried out, or any other maintenance, process or soldering on the premises.

Required By: 11 Sep 2019

2019-334	Escape	Escape routes obstructed

All escape routes to be kept clear of obstruction and or combustible materials to ensure that all persons can evacuate the premises as quickly and as safely as possible this refers to;
1. Pram block 36-41
2. Multiple items to block 12B-35 on open air walk ways, chairs, multiple rubbish bags, old timber. Ensure residents remove rubbish and food waste.
3 Of note the block 12B to 35 the escape route was slimy with verdigris, made worse with large numbers of pigeons, attracted to food waste left on the walk ways, with droppings making the escape route slippery.
Recommend early jet washing or scrubbing to clear slippery surface, regular inspection and cleaning regime to be implemented.

Required By: 11 Jun 2019

2019-334	Escape	Fire separation

Some defects were noted within apartments relating to fire separation of post second fix service installation. These defects are to the service cupboards in all apartments.
All ground floor service cupboards require minor fire stopping.
The service riser in block 12B - 35 requires replacing as externally there are different cladding components, the rendered and brick parts are not of concern except the metal barrier to the underside of the Trespa Meteon cladding on the fourth floor, where there are gaps through to the cavity and timber structure behind the bricks.
The cladding to all blocks over the fourth floor is of Trespa Meteon cladding which is affixed to 50 x 50 mm battens. The battening around the windows was intended to provide the fire break around the windows, but on inspection the battens are not tight fitting and will not give 30 minutes fire protection. This cladding should be replaced and gaps around the windows and doors upgraded to improve fire separation. There is a single window which appears to be a post construction addition, which is poorly fitted to the interior detail, with the fire protection around the window not being sufficiently affixed and this requires upgrading to the fire break around this window.
However the timber boarding to the walkway floor and steps is of flammable material, the timber is weathered and beginning to show signs of rot and requires replacing. Consideration should be given to using a non combustible material. The elevation of this area is constructed of timber cladding, which is not fire proof. Additionally the timber is beginning to degrade and will not perform as designed to do, and requires replacing.

Required By: 11 Jul 2019

2019-334	Escape	Fire doors

Fire resisting doors require maintenance in the following locations;

1. All doors to service intake on ground floor require maintenance, some are broken, locked shut or missing keys. recommend overhaul of provision and replacement where broken; 1-6 lock to be replaced, and arson vandalism noted. 7-12, door screwed closed, requires replacement or maintenance. 36-41 intake door has had locks changed and keys missing. Locksmith required.

2. Flat 8 - lock is broken.

3. Flat 30 , gaps around door require maintenance.

4. Flat 47 door requires repairs to holes or replacement to maintain fire integrity.

5. Flat 15 - bowed at the top (flat with extra window).

6. Flat 18 - dropped, bowed, missing threshold, frame rolling, paint peeling off.

7. Flat 19 - threshold missing, frame requires maintenance.

8. Flat 20 - base rotting, oil from closer.

9. Flat 21 - cigarette butts, door replaced - internal door - no finish. Self closer missing, hole in frame, threshold missing.

10. Flat 22 - threshold missing.

11. Flat 23 - threshold missing, frame at bottom dropped.

12. Flat 24 - dropped and bowed threshold.

13. Flat 25 - dropped and bowed threshold plus loose cladding RHS.

14. Flat 26 - frame and door damaged by door enforcer (lock now replaced and secure).

15. Flat 27 - threshold lacking, door dropped and bowed, evidence of barbeque on decking (burn), cigarette butts.

16. Flat 28 - replacement door, missing self closer, rot in the frame, threshold not close fitting, threshold interior lock.

17. Flat 29 - self closer rusted, canopy water run off, interior locks filed.

18. Flat 30 - threshold, door dropped, frame.

19. Flat 31 - threshold, door dropped, frame.

20. Flat 32 - threshold, door dropped, frame (threshold was replaced).

21. Flat 33 - threshold, door dropped, frame, duplex occupancy 4 bed.

22. Flat 34 - threshold, door dropped, frame, HMO student (pizza).

Required By: 11 Jun 2019

2019-336	Escape	Fire doors unsecured

Ensure that fire resisting doors to cupboards, stores and service ducts that are not self closing are kept locked, this refers to;
1. Service cupboards in blocks 1-6, 7-12, 36-41, 42-47 all require maintenance. The door locks are broken, or screwed closed to deter occupation.
1. Service cupboard in block 12b-35 is not suitable, required rebuilding in a fire proof structure, an appropriate fire door fitted with appropriate locks and signs.

Required By: 11 Oct 2019

2019-336	Escape	Emergency lighting

The objective of emergency lighting is to reduce the likelihood of panic and to enable safe movement of occupants towards escape routes by providing appropriate visual conditions and direction finding. Additional emergency lighting should be installed in the following areas:
1. The provision of emergency lighting to the courtyard area exterior stair well is insufficient.
2. There are no emergency light fittings on the fire proof structural element of the stairwell.
Emergency lighting should be fitted to the concrete structure, in the centre of the stairwell structure in order to give protection to the fitting in case of fire and also to enable the light to illuminate the stair treads in case of evacuation.

Required By: 11 Jul 2019

2019-336	Testing and Maintenance	EL test and maintenance

Confirm monthly routine test for emergency lighting.
1. The monthly functional test should be carried out using a suitable test facility – the purpose of this test is simply to establish by switching from the normal to the standby supply that the fitting has not failed. This is a quick, simple test that can easily be undertaken by non-specialists.

Confirm annual test and maintenance schedule for emergency lighting.
1. A full duration discharge test should be carried out once a year – the purpose of this is to confirm that the batteries are still capable of supplying the fitting with power for the rated amount of time. This is should be carried out by a competent contractor.

Note: All records of test and maintenance to be kept in a dedicated log book or held electronically.

Required By: 11 Jun 2019

2019-336	Evacuation	Commercial EAP

This Fire Risk Assessment is for the residential common parts only. However this is a complex building with ground floor commercial units and the fire strategy should be shared with all stakeholders. We recommend the residential managing agents are provided with the Fire Risk Assessment for the ground floor units as there are now some concerns about;

1. The building maintenance; there are 3 commercial doors now rotting and no longer able to retain fire resistance. The doors require replacing in order to maintain fire separation of compartments.

2. To ensure the builders use of and item storage is properly controlled within their ground floor units. On the day of survey there were many tins of paint stored, with all doors opened and this could provide fuel for a fire so we recommend paint storage be reviewed and stored within a fire compartment.

3. The business centre occupants to be made aware of the issues to the residential parts of the buildings and the fire risks of the whole property.

All persons using any part of the building or in control of units should be made aware of the current maintenance issues and plans for upgrading, and be part of the overall fire strategy of the building. They need to be made aware of any temporary fire strategy changes and should be given information in order to understand current issues. All persons to ensure units comply to the required fire separation.

Write an emergency plan for your premises, this could include;
• how people will be warned if there is a fire;
• what staff should do if they discover a fire;
• how the evacuation of the premises should be carried out;
• where people should assemble after they have left the premises and procedures for checking whether the premises have been evacuated;
• identification of key escape routes, how people can gain access to them and escape from them to a place of total safety;
• arrangements for fighting the fire;
• the duties and identity of staff who have specific responsibilities if there is a fire;
• arrangements for the safe evacuation of people identified as being especially at risk, such as those with disabilities, lone workers and young persons;
• any machines/appliances/processes/power supplies that need to be stopped or isolated if there is a fire;
• specific arrangements, if necessary, for high-fire-risk areas;
• contingency plans for when life safety systems such as evacuation lifts, fire-detection and warning systems, sprinklers or smoke control systems are out of order;
• how the fire and rescue service and any other necessary services will be called and who will be responsible for doing this;
• procedures for meeting the fire and rescue service on their arrival and notifying them of any special risks, e.g. the location of highly flammable materials;
• what training employees need and the arrangements for ensuring that this training is given;
• phased evacuation plans (where some areas are evacuated while others are alerted but not evacuated until later); and
• plans to deal with people once they have left the premises.
As part of your emergency plan it is good practice to prepare post-incident plans for dealing with situations that might arise such as those involving:
• unaccompanied children;
• people with personal belongings (especially valuables) still in the building;
• people wishing to re-join friends;
• getting people away from the building (e.g. to transport); and
• inclement weather.

Required By: 11 Jun 2019

2019-336	Fire Fighting Equipment	Fixed fire fighting installations

The following deficiency was found with the wet riser;

the riser is of a timber structure and also houses the electrical supply to the block, along with a portable fixed electric heater.
Recommend the riser is rebuilt as a separate fire proof structure.

Required By: 11 Jun 2019

2019-338	Facilities	Fire fighters operational information

A schematic plan should be provided for the purposes of detailing information required for fire fighting operations, this could include;
Gas shut off valves
Electrical isolators
Sprinkler stop valves
Hazardous materials storage and use
Compressed gas storage or use
Fixed fire fighting installations
Location of fire water hydrants
Fire alarm zones
The plan should be located adjacent to the main fire alarm panel and be accessible by fire service personnel

The plan should be periodically reviewed to reflect any changes in operations, hazardous materials or plant and equipment.
Required By: 11 Jun 2019

2019-340	Testing and Maintenance	Fire safety check list

Implement a fire safety check list to assist the responsible person in carrying out their routine tests and maintenance.
Required By: 11 Apr 2019

Low Priority

2019-334	Flammable Materials	Flammable liquids and gases storage and use

Reduce stocks of flammable liquids and gases to minimum amounts required. Keep remaining stocks in dedicated storerooms or flammable cabinets, this refers to;
1. Large collection of paint stored in ground floor unit.
Required By: 11 Sep 2019

2019-338	Arson	Arson letterbox

External post boxes require to be maintained due to vandalism.
Required By: 11 Sep 2019

Customer Satisfaction

We would welcome any feedback that you may have regarding this report or our services in general and would ask you to direct this to the following email address: property@cardinus.com

Samantha Crawley

Date of Report:11 Mar 2019

APPENDIX H

FIRE VOCABULARY

The following key (not exhaustive) fire vocabulary has been utilised throughout this report in accordance with BS 4422 " Fire - Vocabulary" and BS EN ISO 13943:

Automatic Opening Vent (AOV): - A vent that is part of a smoke control system, which opens automatically when smoke is detected by smoke detectors.

Cavity Barrier - A product used to close or separate a concealed space, the purpose of which is to restrict the spread of smoke/and or fire. Note this includes both closed-state and open-state cavity to BS 9414: 2019.

Open state cavity barrier - Non-load bearing element designed to provide fire separation in a concealed space (cavity), which is open to allow ventilation and drainage in the cold state, but which opens up in form, to close the cavity when exposed to a developing fire.

Closed state cavity barrier - Non-load bearing element designed to provide fire separation in a concealed space (cavity), by forming a tight seal (possibly under compression) between the inner and outer surfaces of the cavity.

Cladding - A system of a combination of one or more components covering the exterior of the building, and might form part of the weatherproof covering of the exterior of the building.

Combustible - Capable of burning in the presence of oxygen in a standard test condition. Compartmentation - A subdivision of a building by fire-resisting walls and/or floors for the purpose of limiting fire spread within the building.

Competent Person - Person, suitably trained and qualified by knowledge and practical experience, and provided with the necessary instructions, to enable the required task(s) to be carried out correctly.

FE - Abbreviation for Fire Engineer, a suitably qualified, knowledgeable and experienced engineer dealing with fire science / engineering-related specialists, usually qualified in a suitable classification of membership of a body such as the Institution of Fire Engineers (IFE) or other relevant professional body that deals with fire safety in the built environment. The signatory for an Option B EWS1 should have equivalent of the Chartered or Incorporated Engineer status and need a higher level of expertise in the assessment of fire risk presented by external wall materials.

Fire Risk - Combination of the likelihood of the occurrence of fire and consequence(s) likely to be caused by a fire.

Fire Stop - Seal provided to close an imperfection or fit or design tolerance between elements or components to restrict the spread of fire.

FRAEW - Fire Risk Appraisal of External Walls (note can include attachments and to be carried out by a suitably competent person as defined in PAS 9980: 2022).

Material of limited combustibility - (Taken from BS 9991: 2015) either:

a) a non-combustible material: or

b) any material of density 300kg/m cubed or more, which, when tested in accordance with BS 476-11, does not flame and the rise in temperature on the furnace thermocouple is not more than 20 deg C; or

c) any material with a non-combustible core of 8mm thick or more, having combustible facings on one or both sides) not more than 0.5mm thick; or

d) a material classified as class A2-s3, d2 in accordance with BS EN 13501-1, when tested in accordance with BS EN ISO 1182 or BS EN ISO 1716 and BS EN 13823.

Non combustible - Not capable of undergoing combustion under specified conditions (i.e. A1 class to BS EN 13501-1).

Simultaneous evacuation - A system of evacuation in which an entire building is evacuated immediately on receiving an evacuation signal (ie fire alarm) or an evacuation alert signal from an evacuation alert system for use by the fire and rescue services, or an instruction to evacuate (e.g. given to residents of dwellings by a firefighter).

Stay put strategy - Strategy normally adopted in blocks of flats and maisonettes whereby, when fire occurs in a flat or maisonette, the occupants of all other dwellings can safely remain in their dwellings unless directly affected by heat and smoke or otherwise directed by the fire and rescue service to leave.

Note: In a building with a stay-put policy, residents can leave their flats at any time they wish and are able to do so (i.e. if they feel unsafe), but to do so might, under some circumstances, place them at greater risk than remaining in their flats.

Waking Watch - A system whereby suitably trained persons continually patrol all floors and the exterior of the perimeter of the building in order to detect a fire, raise the alarm and carry out the role of evacuation management.

APPENDIX I

REFERENCES

- The Ministry of Housing, Communities and Local Government (MHCLG) Advice for building owners of multi storey, multi-occupied residential buildings. (withdrawn on 12-01-2022)
- RICS Guidance Note - 1st Edition March 2021 - Valuation of properties in multi-storey, multi-occupancy residential buildings with cladding
- RICS Cladding for Surveyors - Supplementary Information Paper, 1st Edition March 2021
- PAS 9980 - Fire Risk Appraisal of External Wall Construction and Cladding of Existing Blocks of Flats - Code of Practice 2022
- The Regulatory Reform (Fire Safety) Order 2005
- The Building Regulations 2000/2002/2010 (as amended)
- The Building etc. (Amendment) Regulations 2022 (current)
- Building Act 1984
- The Housing Act 2004 (Housing Health & Safety Rating System)
- The Construction (Design & Management) Regulations 1994/2007/2015
- The Building Safety Act 2022
- The Fire Safety Act 2021
- Equality Act 2010
- The Control of Asbestos Regulations 2002/2006/2012
- The Management of Health & Safety at Work Regulations 1999
- Building Regulations Approved Document B : Fire Safety - 2000/2002/2006/2010/2018/2020/2022 as amended
- BS 9991:2015: Fire Safety in the Design, Management & Use of Residential Buildings - Code of Practice
- BS 9999:2017 Fire safety in the design, management and use of buildings - code of practice.
- BS 5588-1:1990 (withdrawn)
- PAS 79-2:2020 (withdrawn)
- Workplace (Health, Safety & Welfare) Regulations 1992 - into CDM 2015

- Health & Safety (Safety Signs & Signals) Regulations 1996
- The Furniture & Furnishings (Fire Safety) (Amendment) Regulations 1988/1989/1993/2010
- BS 476-22:1987 - Fire Tests on Building Materials and Structures, Methods for Determination of the Fire Resistance of Non-Load-Bearing Elements of Construction
- BS EN 13501-1 - Fire Classification of Construction Products and Building Elements: Classification using Data from Reaction to Fire Tests 2007/2009/2018
- BS 8414-1:2015 + A1 2017 Fire Performance of External Cladding Systems. Test Methods for Non-Load-Bearing External Cladding Systems Applied to the Masonry Face of a Building.
- Building Control Alliance - Technical Guidance Note 18 2015 - Use of Combustible Cladding Materials on Buildings Exceeding 18m in Height.
- Local Government Association guide - Fire Safety in Purpose-Built Blocks of Flats: Reissued Home Office 2021.
- National Fire Chiefs Council (NFCC) guidance and amended on 1-10-20 with NFCC and The Institution of Fire Engineers (IFE) “Simultaneous Evacuation Guidance” for temporary arrangements.

APPENDIX J

PROFESSIONAL INDEMNITY INSURANCE CERTIFICATE

Brunel PROFESSIONS

BRISTOL OFFICE
The Quorum
Bond Street South
Bristol
BS1 3AE
T: +44 (0)117 450 4199

LONDON OFFICE
40 Lime Street
London
EC3M 7AW
T: +44 (0)203 475 6663

MANCHESTER OFFICE
The Lightwell
61 & 63 Brown Street
Manchester
M2 4AF
T: +44 (0)161 850 5194

PERTH OFFICE
Caledonian House
West Kinfauns
Kinfauns
Perth, PH2 7XZ
T: +44 (0)1738 472044

E: contactus@brunelpi.co.uk | W: www.brunelpi.co.uk | T: +44 (0)117 450 4199 | DX: 7817 Bristol

Certificate of Insurance

To whom It May Concern	Date:	21 October 2022

Class:	Professional Indemnity
Insured(s):	Bailey Partnership (Consultants) LLP
Insurer(s):	***Primary layer of Insurance *** 69% QBE UK Ltd 31% QBE Casualty Syndicate 386 *** Excess of Loss GBP 2,000,000*** 100% Ascot Syndicate 1414 via Wimsure Underwriting limited
Policy Number(s):	37800/112605
Limit of Indemnity:	GBP 5,000,000.00 Any One Claim

Period of Cover:	21 October 2022 to 20 April 2024 both days inclusive

The policy is subject to Insurers acceptance and the insuring clauses, exclusions, endorsements, conditions and declarations therein.

The above is accurate at the date shown and no obligation exists on Brunel Professions Limited to advise any alterations other than at the request of our client.

On behalf of Brunel Professions Limited

APPENDIX K

PRODUCT DATA SHEETS AND BBA CERTIFICATES

Product Data Sheet

Gyproc® WallBoard 12.5mm

Gyproc WallBoard 12.5mm is a basic plasterboard in 12.5mm thickness.

Where to use

Use it in a single layer for most wall and ceiling applications where minimal levels of fire, structural and acoustic performance are specified, or in multiple layers for higher performance.

Certifications

Environmental Product Declaration (EPD) available Click here.

Product information

Composition

The plasterboard is made of a gypsum core between paper liners.

Colour

Face colour: Ivory.
Reverse colour: Brown.

DIMENSIONS AND WEIGHTS								
PRODUCT SIZES (mm)	900 X 1800	900 X 2400	1200 X 2300	1200 X 2400	1200 X 2500	1200 X 2700	1200 X 3000	1200 X 3600
Nominal thickness (mm)	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Minimum weight (kg/m^2)	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Edge options	Tapered, Square	Tapered, Square	Tapered edge only	Tapered, Square	Tapered, Square	Tapered, Square	Tapered, Square	Tapered edge only
Number of tapered edges	2	2	2	2	2	2	2	2
Maximum width tolerance (mm)	+0	+0	+0	+0	+0	+0	+0	+0
Minimum width tolerance (mm)	-4	-4	-4	-4	-4	-4	-4	-4
Maximum length tolerance (mm)	+0	+0	+0	+0	+0	+0	+0	+0
Minimum length tolerance (mm)	-5	-5	-5	-5	-5	-5	-5	-5
Maximum taper width (mm)	80	80	80	80	80	80	80	80
Minimum taper width (mm)	40	40	40	40	40	40	40	40
Maximum taper depth (mm)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Minimum taper depth (mm)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Squareness: 900mm width boards (maximum difference in diagonal measurements), 4mm, 1200mm width boards (maximum difference in diagonal measurements), 5mm								

NB: Dimensional tolerances. Quality controls are set to meet customer requirements between these maximum and minimum tolerances.

Product Data Sheet

Gyproc® WallBoard 12.5mm

Performance

Here we only provide performance information related to the product. Please see the White Book for system-dependent performance.

Standards

EN 520:2004+A1:2009, Type A.

Declarations of Performance (DoP) available Click here.

Reaction to fire	A2-s1, d0
Thermal conductivity (W/mK)	0.19
Water vapour permeability (μ)	10
Maximum continuous temperature exposure (°C)	49

Installation

Effect of condensation

The thermal insulation and ventilation requirements of national Building Regulations aim to reduce the risk of condensation and mould growth in new buildings. However, designers should take care to eliminate all possibility of problems caused by condensation, particularly in refurbishment projects.

Cutting

Either cut the board with a plasterboard saw, or score the front face paper with a sharp knife, snap it over a straightedge, then cut the back face paper. Cut holes for things like socket boxes using a utility saw.

Screw fixing

Fix the boards with the decorative side facing outwards to receive finishes. Install the fixings at least 13mm from the cut edges and 10mm from the bound edges. Position cut edges at internal angles wherever possible. Stagger horizontal and vertical joints between layers by at least 600mm.

Adhesive fixing

Fix the boards with the decorative side facing outwards to receive finishes. Install using Gyproc DriWall Adhesive, following the application instructions for either DriLyner Dab or DriLyner Fix system.

Finishing

After fixing the board, start finishing it as soon as you can to limit the risk of damage or UV degradation to the paper liner.

Plastering

You can finish the board using Thistle® or ThistlePro® plaster.

Jointing

You can finish the board using Gyproc jointing products.

Painting

Decoration should start as soon as possible after the finishing system is dry. Jointing systems should be finished with Gyproc Drywall Sealer before application of wallcoverings.

Wallpapering

Decoration should start as soon as possible after the finishing system is dry. Jointing systems should be finished with Gyproc Drywall Sealer before application of wallcoverings.

Snagging and minor repairs

For minor damage and dents, check that the board core isn't shattered. If it's intact, fill the damaged area with Gyproc EasiFill 60, allow it to set, then apply a second coat if you need to. When it's dry, sand it to a finish before redecorating the area.

For a damaged core, broken edges or extensive damage, repair and replacement procedures differ depending on the number of board layers and fire resistance of the system; please contact our Technical Support Team for specific advice.

Sitework

Storage

Keep boards dry, and make sure floor or ground surfaces are flat and strong enough to support them.

Handling

Please refer to the HSE Manual Handling Operations Regulation for best practice guidance when handling or installing this product.

Safety Data Sheet

Safety Data Sheet (SDS) available. Click here.

Packaging overview

Supplied on a reusable wooden pallet.

Environmental

Recyclability

You can recycle this product as long as it has minimal contamination from non-gypsum materials.

Disposal

Segregate from non-gypsum waste for recycling where possible. Disposal should be in accordance with local authority requirements.

BES 6001 classification

Excellent.

SAINT-GOBAIN

British Gypsum

Head Office, East Leake,
Loughborough,
Leicestershire, LE12 6HX
T: 0115 945 1000

british-gypsum.com

bsi. ISO 9001 Quality Management FM550533 | ISO 45001 Occupational Health and Safety Management OHS550586 | ISO 14001 Environmental Management EMS543324 | ISO 50001 Energy Management ENMS606206

DECLARATION OF PERFORMANCE

No.: 002-5

METEON® STD

Unique identification code of the product-type	METEON® STD
Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer	Compact laminate panels for external wall and ceiling finishes Type EDS according to EN438 part 6
Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5)	TRESPA International B.V. Wetering 20 / NL – 6002 SM Weert
System or systems of AVCP (=assessment and verification of constancy of performance)	System 3
Name and identification number of the notified body	NB 1173 / WFRGENT N.V.

Declared performance

Essential characteristics	Performance	Harmonized technical specification
Reaction to fire	D-s2,d0	EN 438 – 7:2005
Fire Resistance	NPD	
Water vapour permeability	NPD	
Resistance to fixings	6 mm ≥ 2.000 N 8 mm ≥ 3.000 N ≥ 10 mm ≥ 4.000 N	
Direct airborne sound insulation	NPD	
Flexural strength	≥ 120 MPa	
Flexural modulus	≥ 9000 MPa	
Thermal resistance / conductivity	NPD	
Resistance to climatic shock	Appearance ≥ 4 Ds ≥ 0.80 / Dm ≥ 0.80	
Durability: Resistance to wet conditions	Mass Increase ≤ 3 % Appearance surface rating ≥ 4 Appearance edge rating ≥ 3	
Density	≥ 1,35 g/cm^3	

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Gilles Rabot (CEO) Weert, The Netherlands, January 2023

A fully signed copy of this document can be requested at: certification@trespa.com

TCB & PWCB CAVITY BARRIERS

Fire Protection for timber/steel frame & masonry cavity walls

ROCKWOOL TCB & PWCB cavity barriers are manufactured from non-combustible stone wool, encapsulated within a resilient polythene sleeve which eliminates the need for weather protection during installation. The sleeves are also colour-coded to differentiate between the two products, TCB's being red and PWCB's white.

- Easy to install
- Fire resistance up to 60 minutes (EI)
- Reduce acoustic flanking transmission
- Improves air leakage & heat loss
- Unaffected by building movement
- Suitable for vertical and horizontal applications
- Site durable & weather protected

Preventing fire spreading through concealed voids is essential for improving safety and property protection.

One of the best ways to achieve this is to correctly specify and install cavity barriers.

Pencoed, Bridgend CF35 6NY
Tel: (+44) 1656 862 621 • technical.solutions@rockwool.com

ROCKWOOL TCB & PWCB

APPLICATIONS

ROCKWOOL TCB & PWCB Cavity barriers can be used in both vertical and horizontal applications, providing an effective fire, acoustic and thermal barrier within external wall cavities and separating party walls.

All ROCKWOOL Cavity barriers are 1200mm long and are designed to be compression fitted within the cavity (min 10mm-15mm compression). The barriers do not rely on the polythene flanges to hold them in place in the event of a fire. It is essential that the correct cavity barrier size is specified to suit the as-built cavity width. TCB & PWCB cavity barriers are available in a range of thicknesses to suit cavity widths (refer to the tables at the end of the data sheet for more information).

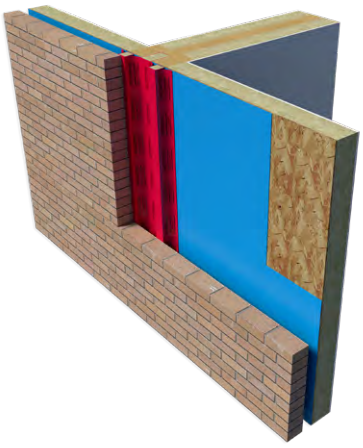


Figure 1
TCB

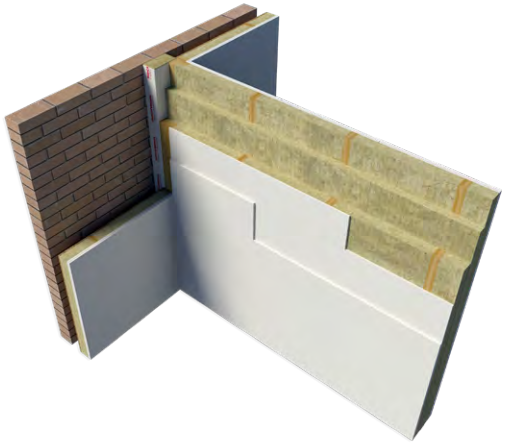


Figure 2
PWCB

ROCKWOOL TCB & PWCB

PERFORMANCE

Fire performance

The use of ROCKWOOL Cavity Barriers satisfies the requirements of:

- Approved Document B (Domestic) B3 - Section 6: Concealed spaces (Cavities)
- Approved Document B (Non-domestic) B3 - Section 9: Concealed spaces (Cavities)
- Scottish Technical Handbook Section 2 - Fire Section 2.4: Cavities
- NI Technical Booklet E - Section 3: Provision of cavity barriers.

ROCKWOOL TCB & PWCB Cavity Barriers are tested and assessed to BS 476: Part 20:1987 to provide up to 60 minutes Integrity and 60 minutes insulation (Table 1 & 2)

ROCKWOOL TCB Cavity Barriers are tested to BS EN 1366-4:2006 +A1 2010 to provide up to 180 minutes Integrity and 90 minutes insulation when installed vertically and horizontally (Table 3 & 4)

Table 1 PWCB - based on data from BS 476: Part 20: 1987

Cavity width (mm)	PWCB size (mm)	Fire resistance per construction
50-55	200x65	60min integrity / 60min insulation
75-80	200x90	60min integrity / 60min insulation
90-100	200x110	60min integrity / 60min insulation
101-110	200x120	60min integrity / 60min insulation
111-120	200x130	60min integrity / 60min insulation
121-130	200x140	60min integrity / 60min insulation
131-140	200x150	60min integrity / 60min insulation
141-150	200x160	60min integrity / 60min insulation

Table 2 TCB - based on data from BS 476: Part 20: 1987

Cavity width (mm)	TCB size (mm)	Fire resistance per construction	
		Timber to timber	Masonry to masonry
50-55	65x65	30min integrity / 30min insulation	60min integrity / 30min insulation
56-65	75x75	60min integrity / 30min insulation	60min integrity / 30min insulation
75-80	90x90	60min integrity / 30min insulation	60min integrity / 60min insulation
90-100	110x110	60min integrity / 60min insulation	60min integrity / 60min insulation
101-110	120x120	60min integrity / 60min insulation	60min integrity / 60min insulation
111-120	130x130	60min integrity / 60min insulation	60min integrity / 60min insulation
121-130	140x140	60min integrity / 60min insulation	60min integrity / 60min insulation
131-140	150x150	60min integrity / 60min insulation	60min integrity / 60min insulation
141-150	160x160	60min integrity / 60min insulation	60min integrity / 60min insulation

Table 3 Wall - based on data from BS EN 1366-4: 2006 +A1 2010 (TCB only)

Cavity size (mm)	TCB range (mm)	Masonry to masonry (mins)	Masonry to steel (mins)	Masonry to timber (mins)	Masonry to ROCKWOOL (100Kg/m^3) (mins)
50-285	Min: 65x150 Max: 300x150	Integrity: 60 Insulation: 30	Integrity: 180 Insulation: 30	Integrity: 45 Insulation: 45	Integrity: 120 Insulation: 20

Table 4 Floor - based on data from BS EN 1366-4: 2006 +A1 2010 (TCB only)

Cavity size (mm)	TCB range (mm)	Masonry to masonry (mins)	Masonry to steel (mins)	Masonry to timber (mins)
50-285	Min: 65x150 Max: 300x150	Integrity: 120 Insulation: 90	Integrity: 120 Insulation: 20	Integrity: 60 Insulation: 20

ROCKWOOL TCB & PWCB

PWCB cavity barrier - All ROCKWOOL PWCB's are 200mm wide, and are specifically designed for use at party wall/external wall cavity junctions. PWCB's also achieve the requirements for fire safety, acoustic flanking and thermal bypass in one single product.

Thermal: party wall thermal bypass - PWCB meets the requirements for an effective party wall perimeter edge seal, by restricting air flow around the exposed edges of party wall cavities.

Fire: acts as an effective cavity barrier - PWCB is non-combustible and exceeds minimum fire resistance requirements for cavity barriers as set out within the Building Regulations.

Acoustic - ROCKWOOL PWCB provides an excellent acoustic absorber by reducing flanking transmission between adjoining properties, (as required by Approved Document E and Robust details).

If installed correctly, ROCKWOOL PWCB will help minimise the thermal party wall bypass effect, by restricting air leakage and heat loss between the party wall cavity and the external cavity.

Thermal bypass effect - Approved Documents L1A & L2 A of England and Wales's Building Regulations and Section 6 of Scotland's Building standards (domestic), have recognised that considerable heat loss can occur where party wall cavities interface with external cavity walls. A key feature of a SAP calculation is that Building Regulations now assign a U-value of 0.5 W/m2K to be taken for a separating party wall cavity unless specific action is taken to improve its performance.

Ways to limit heat Loss - Perimeter edge sealing only: Thermal regulations allow a U-value of 0.20W/m^{2}K to be claimed when effective perimeter edge sealing is used around all exposed edges of the party wall.

Perimeter edge sealing plus fully filling the party wall cavity - A U-value of zero can be claimed if the party wall cavity is fully filled with appropriate mineral wool insulation, and effective perimeter edge sealing is provided around all exposed edges.

Acoustic performance

ROCKWOOL TCB & PWCB Cavity Barriers comply with the generic description for cavity closers to prevent flanking noise transmission, along concealed cavities in both external and separating walls.

Table 5

Cavity type in party wall	U-value claim for SAP
Unfilled cavity with no effective edge sealing	0.5 W/m^{2}K
Unfilled cavity with effective edge sealing only	0.20 W/m^{2}K
Fully filled cavity and effective edge sealing	0.00 W/m^{2}K

PRODUCT INFORMATION

Property	Description
Length	1200mm
Width	TCB – Up to 150mm / PWCB – 200mm
Thickness	TCB – Up to 300mm / PWCB – Up to 160mm
Cavity sizes	TCB – Up to 285mm / PWCB – Up to 150mm
Reaction to fire	Euroclass A1 (ROCKWOOL Core)
Fire resistance	Up to EI 60 when tested to BS 476: Part20: 1987 / Up to EI 180/90 when tested to BS EN 1366-4: 2006 +A1 2010

ROCKWOOL TCB & PWCB

STANDARDS AND APPROVALS

Certificate
TCB & PWCB Cavity Barriers have been tested and assessed BS476: Part 20: 1987 and can achieve a fire resistance rating of up to 60 minutes (EI).
TCB Cavity Barriers have been tested to BS EN 1366-4: 2006 +A1 2010 using the general principles of BS EN 1363-1:2012 achieving a fire resistance rating of up to 60 minutes (EI).
TCB & PWCB Cavity Barriers are manufactured using non-combustible stone wool which is classified A1 in accordance with BS EN 13501-1: 2007 +A1 2009.
TCB Cavity Barriers tested and assessed to BS476 Part 20 are third party approved for performance and quality by the Loss Prevention Council Certification Board (LPCB) and are listed in their Fire and Security 'Red Book' – certificate no: 022b (3).
TCB Cavity Barrier tested to BS EN 1366-4 are 3rd party approved with Certifire ref: CF 5861

INSTALLATION

All joints between adjacent cavity barriers and intersections should be closely butted to ensure that a continuous fire seal is maintained.

In vertical applications, both flanges of the Cavity Barrier can be fixed to the inner leaf at 150mm centres, using staples or clout nails prior to compression fitting by outer cavity wall.

In horizontal applications, only the top flange of the polythene sleeve should be fixed.

Fully filled cavities in external walls

Where the external wall cavity is fully filled external cavity barriers are generally not required in the outer wall.

Partially filled cavities in external walls

Where partial fill insulation is used in the external wall, the insulation should be cut back to permit the cavity barrier to be compression fitted between the inner and outer leaves. The head of the cavity wall should be closed at eaves level with the ROCKWOOL TCB Cavity Barrier.

SPECIFICATION CLAUSES

ROCKWOOL TCB & PWCB Cavity Barriers are associated with the following NBS specification clauses:

F30 Accessories/sundry items for brick/block stone walling
180 Cavity Closers
K10 Gypsum board dry linings/partitions/ceilings
530 Cavity barriers within partitions/wall linings
P10 Sundry insulation/proofing work
420 Sleeved mineral wool small cavity barriers

ROCKWOOL TCB & PWCB

DISCLAIMERS

ROCKWOOL Limited, its affiliates, its agents and employees and all persons acting on its or their behalf (collectively "ROCKWOOL"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Usage of the information remains under the sole responsibility of the purchaser and/or user.

ROCKWOOL makes no warranty, representation or guarantee regarding the information contained in the data sheet, the suitability of the products for any particular purposes or the continuing production of any product. To the maximum extent permitted by applicable law, ROCKWOOL disclaims (i) any and all liability arising out of the application, use of any product, misuse or inability to use the product (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Information contained in this data sheet is up-to-date as at the date of issue. As ROCKWOOL Limited cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. To the maximum extent permitted by law, ROCKWOOL Limited will not be responsible for damages of any nature resulting from the use or reliance upon the information contained in this data sheet. No express or implied warranties are given other than those implied by law.

SUPPORTING INFORMATION

For further information relating to any aspect of the FIREPRO range, please refer to the applicable ROCKWOOL standard details at **www.rockwool.com/uk** or contact the ROCKWOOL technical solution team on 01656 868490 or **technical.solutions@rockwool.com**.

SUSTAINABILITY

As an environmentally conscious company, ROCKWOOL promotes the sustainable production and use of insulation and is committed to a continuous process of environmental improvement.

All ROCKWOOL products provide outstanding thermal protection as well as four added benefits:


Fire resistance


Acoustic comfort


Sustainable materials


Durability

HEALTH & SAFETY

The safety of ROCKWOOL stone wool is confirmed by current UK and Republic of Ireland health & safety regulations and EU directive 97/69/EC:ROCKWOOL fibres are not classified as a possible human carcinogen.

A Material Safety Data Sheet is available and can be downloaded from **www.rockwool.com/uk** to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

ENVIRONMENT

Made from a renewable and plentiful naturally occuring resource, ROCKWOOL insulation saves fuel costs and energy in use and relies on trapped air for its thermal properties.

ROCKWOOL insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

ROCKWOOL is approximately 97% recyclable. For waste ROCKWOOL material that may be generated during installation or at end of life, we are happy to discuss the individual requirements of contractors and users considering returning these materials to our factory for recycling.