


Fire Risk Appraisal of External Walls

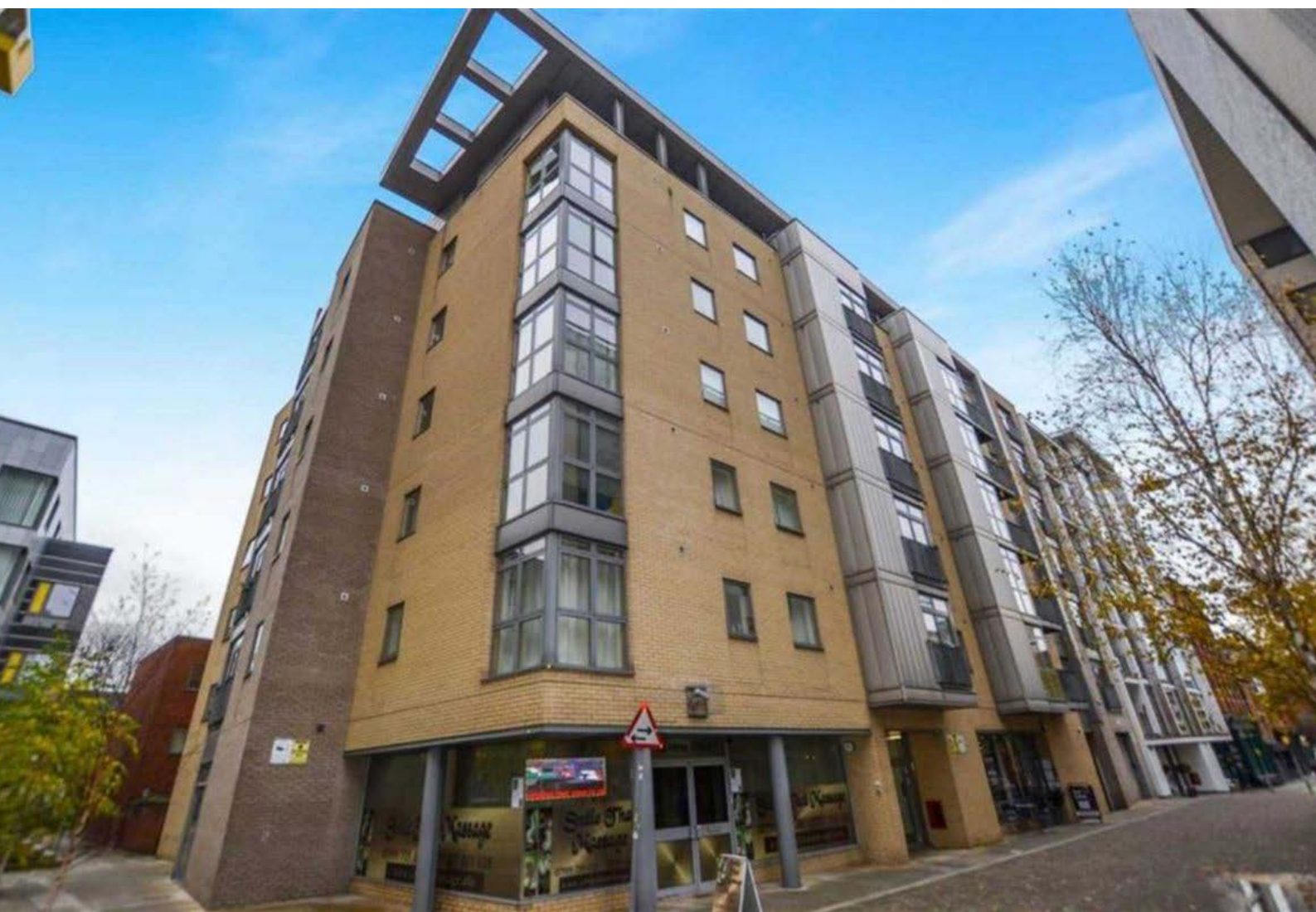
The Garden House, 114 High Street, Manchester, M4 1HQ
Riverside Group
22 August 2022

FRAEW REVIEW

0.0 Document Verification

Job Title	The Garden House Manchester	Job Number	F1048		
Document Title	Fire Risk Appraisal of External Walls	File Reference	F1048_The Garden House ORSA FRAEW 220822.docx		
Document Information					
Revision	Issue Date	Filename	F1048_The Garden House ORSA FRAEW 220822.docx		
A	22/08/22	Description	Initial Fire Risk Appraisal of External Walls to align to PAS9980:2022		
			Prepared By	Checked By	Approved By
		Name	C.A. Bucknall	P. Barry	C.A. Bucknall
		Signature			
		Date	22/08/22	22/08/22	22/08/22
Revision	Issue Date	Filename			
		Description			
			Prepared By	Checked By	Approved By
		Name	Name	Name	Name
		Signature			
		Date	dd/mm/yy	dd/mm/yy	dd/mm/yy
Revision	Issue Date	Filename			
	dd/mm/yy	Description			
			Prepared By	Checked By	Approved By
		Name	Name	Name	Name
		Signature			
		Date	dd/mm/yy	dd/mm/yy	dd/mm/yy





0.0 Document Verification	2	Appendix 1 Elevations	11
1.0 Executive Summary	5	Appendix 2 Risk Rating Review	12
1.1 This Fire Risk Appraisal of External Walls.....	5	Appendix 3 Report Terms & Definitions	13
1.2 Key Point Summary.....	5	Appendix 4 About ORSA	15
1.3 Key findings.....	5	Appendix 5 External Walling Systems	16
1.4 EWS Applicability.....	5	What is the EWS1 process/form?.....	16
1.5 Recommendations.....	6	Update @ January 2022.....	16
2.0 Things to Consider	6	Why is the Consolidated Advice Note withdrawn?.....	16
2.1 Limitations.....	6	Which blocks does EWS apply to?.....	16
2.2 Legislative context.....	6	What happens after the EWS1 is completed?.....	16
2.3 Fire Risk Assessment.....	6	Does the publication of the revised EWS1 form render any existing completed EWS1 forms obsolete?.....	17
2.4 FRAEW.....	6	Does each flat/ apartment have to get an individual EWS1 form for selling, buying, or re-mortgaging?.....	17
2.5 Application.....	7	How does the EWS1 form factor into the buying, selling or re- mortgaging of a flat/ apartment?.....	17
2.6 Wall build-ups within the scope of PAS9980.....	7	The EWS Certificate.....	17
3.0 Building External Walling Key Data	7	If the building owner will not undertake the required assessment, what can the owner/lender/ valuer do?.....	17
3.0.1 Planning Submission 060739/FO/CITY1/00.....	7	Who carries out the EWS assessment, and what is their expertise?.....	17
3.0.2 Planning Submission 076649/FO/2005/C.....	7	How is an assessment carried out?.....	18
3.1 Data Reviewed.....	7	Why is an EWS assessment required every five years?.....	18
3.2 Location.....	8	What happens if the EWS assessment identifies that remedial works are required?.....	18
3.3 Building height/height above ground.....	8	Does the EWS assessment cover general fire safety measures?.....	18
3.4 Building size, including number of flats.....	8	Does a nil valuation mean a flat is worthless?.....	18
3.5 Type of occupancy.....	8	Why are lenders asking for EWS1 forms below 18m?.....	19
3.6 Type of construction.....	8	Appendix 6 What is PAS 9980?	19
3.7 Age and design code applied at the time of construction or renovation.....	8	PAS 9980 frequently asked questions.....	19
3.8 External wall construction build up.....	8	Will PAS 9980 require additional surveys to take place?.....	19
3.9 Cavity barrier fire performance and locations.....	9	Will every building require PAS 9980?.....	19
3.9.1 Masonry Walls.....	9	Will PAS 9980 lead to expensive remediations?.....	20
3.1.2 Insulated Aluminium Panels.....	9		
3.10 Fire strategy and fire safety design.....	9		
4.0 Comments & Conclusions	9		
4.1 Factors relating to fire performance and how these factors influence risk.....	9		
4.1.1 Masonry Walling.....	9		
4.1.2 Insulated Aluminium Panels.....	9		
4.2 Factors relating to façade configuration, external walling materials and how these factors influence risk.....	10		
4.3 Fire safety design and fire strategy for the building, including fire hazards and fire and rescue service response, and how these factors influence risk.....	10		
5.0 Limitations and clarifications	11		
5.1 Limitations.....	11		
5.2 Clarification.....	11		



1.0 Executive Summary

This Fire Risk Appraisal of External Walls is written to align to PAS9980:2022 [Publicly Available Specification] whilst also aligning to RICS EWS Guidance issued 16 March 2022.

The date of this report, the associated EWS consultant letter of reliance and EWS Certificate are all dated to align to ORSA's initial and main site survey and investigations.

The property is The Garden House, 114 High Street, Manchester, M4 1HQ.

The Garden House is a 7-storey high rise multi-tenanted residential building with a retail unit at Ground floor. The property is situated on High Street, Manchester, bounded by similar residential and commercial buildings.

Previous investigations of the external facade have identified issues with combustible materials present in the wall build up and the lack of fire cavity barriers.

For the purposes of EWS the building is rated as B2 due to the presence of combustible cladding, combustible insulation, and the lack of fire cavity barriers on the external facades of the building.

The external walls assessed as part of the FRAEW are:

- EWS Type 1 - Masonry Walls
- EWS Type 2 - Insulated Aluminium Panels used on 7th floor, around the bay projections, between full height fenestration, above the undercroft.
- EWS Type 3 - Balconies
- EWS Type 4 - Juliette Balconies


1.1 This Fire Risk Appraisal of External Walls



This EWS1 forms associated with report is a set way for a building owner to confirm to valuers and lenders that an external wall system [EWS] or attachments, such as a balcony, on buildings containing flats has been assessed by a suitable expert for likelihood of proportionate remediation to address fire safety risk.

This EWS1 forms associated with report is for the external wall system only. It is not a life safety certificate. It should not be taken as confirmation that other works relating to fire safety in other parts of the building are not required.

1.2 Key Point Summary

We set out below our key point summary which should be read and considered in conjunction with the body of this report and its appendices. For ease of reference, we have provided a colour-coded priority status for general guidance and to aid focus against each key point item. Our colour coding is:-


Critical Issues/ Action/High Risk	Resolution or clarification required prior to a legal commitment to transact	
--------------------------------------	--	---


Important Issues / Actions/ Medium Risk	To be considered within the proposed transaction and addressed when appropriate	
No Current Issues/Low Risk	No further action is presently considered necessary within the transaction	


1.3 Key findings


In the formulation of this Fire Risk Assessment External Walling, ORSA has been provided with desktop design and construction information, in addition to which full onsite testing and survey was conducted over the period

The risk rating for each of the external wall systems on the building is as follows:

EWS Type 1 - Masonry Walls	It is ORSA opinion that the masonry walls do not correspond with ADB's Diagram 32 and subsequently do not benefit from the exemption granted in Table 13. We therefore consider that cavity barriers are required in a number of critical locations, including at junctions between:-	
	<ul style="list-style-type: none"> ▪ External walls and compartment floor ▪ External walls and compartment walls ▪ Edges of cavities [including around openings] 	

EWS Type 2 - Insulated Aluminium Panels used on 7 th floor, around the bay projections, between full height fenestration, above the undercroft.	During our and other investigations no cavity barriers were identified along compartment floors or compartment walls. Cavity barriers were also found to be missing within the full height column adjacent to the bin store.	
--	---	---

EWS Type 3 - Balconies	The balconies have timber decking – this should be updated to the buildings fire risk assessment and means of control of sources of ignition should be implemented. Consideration should be given to replacement of timber with non-combustible alternatives.	
---------------------------	--	---

EWS Type 4 - Juliette Balconies	No matters arising	
------------------------------------	--------------------	---

As a result, ORSA believe that the overall risk rating of the buildings is rated B2 or intolerable.

1.4 EWS Applicability

Although outside the technical remit of an FRAEW ORSA has considered the general applicability of the requirement for EWS1 Certification.

- For the purposes of EWS all addresses are rated B2.



Criteria	Requirement	Does this apply
1. For buildings over six storeys	a. There is cladding or curtain wall glazing on the building, or	Yes
	b. There are balconies that stack vertically above each other and either both the balustrades and decking are constructed with combustible materials [e.g. timber] or the decking is constructed with combustible materials and the balconies are directly linked by combustible material	Yes
2. For buildings of five or six storeys	a. There is a significant amount of cladding on the building [for the purpose of this guidance, approximately 25% of the whole elevation estimated from what is visible standing at ground level is a significant amount], or	Not Applicable
	b. There are ACM, MCM or HPL panels on the building, or	Not Applicable
	c. There are balconies that stack vertically above each other and either both the balustrades and decking are constructed with combustible materials [e.g. timber], or the decking is constructed with combustible materials and the balconies are directly linked by combustible materials	Not Applicable
3. For buildings of 4 storeys or fewer	a. There are ACM, MCM or HPL panels on the building	Not Applicable

1.5 Recommendations

Remedial action is needed:-

- Outputs of this evaluation should be captured or referenced in the buildings fire risk assessment and suitable control measures put in place.
- EWS Type 1 - Masonry Walls - Ensure are present, or install cavity barriers in critical locations, including between external walls and compartment floor, external walls and compartment walls and edges of cavities [including around openings].
- EWS Type 2 Insulated Aluminium Panels - The insulated aluminium panels and stacked spandrel panels located at window locations are classified as high risk and need to be replaced with alternative non- combustible materials, ensuring that as part of these works appropriate cavity barriers are put in place.
- Missing Cavity Barriers - Missing within the full height column adjacent to the bin store - ensure are present or install.
- Fire stopping to the compartmentation between apartments inside the building are not of a reasonable standard especially between apartments and common corridors at ceiling level and at riser locations – this needs to be rectified.

2.0 Things to Consider

2.1 Limitations

This Type 1 Fire Risk Appraisal of External Walls is intended primarily to inform the building’s fire risk assessment, it cannot warrant absolute safety, as it will be risk-based and therefore reliant on professional judgement by competent persons.

This Type 1 Fire Risk Appraisal of External Walls is not specifically intended to address protection of firefighters; nor is intended to address property protection.

This Type 1 Fire Risk Appraisal of External Walls can only be based on available industry knowledge at the time of the FRAEW and, more definitive information on the fire performance of external wall construction might come to light subsequently.

2.2 Legislative context

In the case of existing buildings, the context in which the fire risk posed by external wall construction is to be considered is the ongoing legislative control applicable to occupied buildings.

Cognisance of the requirements of building regulations and the recommendations of supporting guidance, and the differences between what is applicable now to new buildings and what would have been applicable at the time of construction of the building under consideration, is also important.

The risk-based approach advocated in this Type 1 Fire Risk Appraisal of External Walls meets the fundamental underlying philosophy underpinning the Fire Safety Order.

Accordingly, this FRAEW is intended to support the building’s fire risk assessment in establishing the level of risk and the preventive and protective measures needed to satisfy the Fire Safety Order.

2.3 Fire Risk Assessment

In the past, the external wall construction of blocks of flats was not routinely included in the fire risk assessments required under the Regulatory Reform [Fire Safety] Order 2005 [the “Fire Safety Order”]. The Fire Safety Act 2021 has now established that external walls fall within the scope of the Fire Safety Order.

It follows, therefore, that any fire risk assessment of a multistorey, multi-occupied residential building needs to include consideration of the potential for fire spread via the external walls of the building.

2.4 FRAEW

The purpose of a fire risk appraisal of external walls [FRAEW] is to assess the risk to occupants from a fire spreading over or within the external walls of the building, and to decide as to whether, in the specific circumstances of the building, remediation or other mitigating measures to address the risk are considered necessary.

It is applicable where the risk is known, or suspected, to arise from the form of construction used for the external wall build-up, such as the presence of combustible materials.

The outcome of an FRAEW is intended to inform fire risk assessments [FRAs] of multistorey, multi-occupied residential buildings.



2.5 Application

PAS applies predominantly to multistorey blocks of flats, but also includes the following types of buildings if, from the perspective of general fire strategy and means of escape design, and specifically evacuation strategy, they are similar in nature to a purpose-built block of flats:

- Student accommodation
- Sheltered and other specialized housing; and
- Buildings converted into flats.

2.6 Wall build-ups within the scope of PAS9980

- External walls incorporating a rainscreen cladding system, with or without insulation within any associated cavity.
- External thermal insulation composite systems [ETICS], particularly those comprising rendered insulation.
- Composite panels, including insulated core [“sandwich”] panels.
- Glazed façades with infill/spandrel panels.
- Substrates or backing walls, including concrete blockwork, brick, steel/or structural framing systems [SFS], timber framing and structural insulated panels [SIP]; and
- Curtain walling.
- Attachments to the external walls of buildings.

3.0 Building External Walling Key Data

3.0.1 Planning Submission 060739/FO/CITY1/00

Mixed use development comprising café/bar [A1/A3 use] at basement and ground floor levels with 33 self-contained flats on upper floors. Decision dated 15 March 2001.

3.0.2 Planning Submission 076649/FO/2005/C

Elevational alterations to form new window opening to Apartment 4 56 High Street City. Validated dated 17 November 2005.

3.1 Data Reviewed

- Fire Risk Assessment by Savills dated 31 August 2019 Ref 9501101440
- Arcus Consulting LLP Cladding Investigation report dated November 2018
- Preliminary Report for External Wall Systems Investigation by Philip Pank Partnership dated December 2019
- Performance Specification for remedial works by Alan Brookes Consultants dated September 2020
- 114 High Street Cladding Investigation - Report by Fill UK dated March 2021
- Elevation Drawings by Fill UK dated March 2021
- Technical Submittals for refurbishment works by Fill UK
- Fill UK Limited drawing 21-M224-EL-200 Rainscreen Refurbishment Elevations 1&2 dated 16 March 2021.
- Fill UK Limited drawing 21-M224-EL-201 Rainscreen Refurbishment Elevations 3&4 dated 16 March 2021.
- Fill UK Limited drawing 21-M224-EL-202 Rainscreen Refurbishment Elevations 5&6 dated 16 March 2021.
- Fill UK Limited Garden House Cladding Investigation – Report dated March 2021.
- External Walling System Report by ORSA dated 29 September 2021.
- Type 4 Fire Risk Assessment by ORSA dated 28 September 2021.
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 2/10 First Floor Plan
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 3/10 Second Floor Plan
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 4/10 Third Floor Plan
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 5/10 Fourth Floor Plan
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 6/10 First Floor Plan
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 9/10 Elevations



- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 10/10 Elevations
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 8/10 Elevations

3.2 Location

The property is The Garden House, 114 High Street, Manchester, M4 1HQ

3.3 Building height/height above ground

- The overall height of the building, including plant room is 21.31m [Elevation drawing] the EWS height which is [G+7] 18.65m.

3.4 Building size, including number of flats

The development at 114 High Street has a gross internal floor area [GIA] of 5,364 sq. m. including all ground floor plant and bin stores etc.

The Garden includes 47 residential apartments.

3.5 Type of occupancy

The premises is residential.

3.6 Type of construction

The building is concrete frame with concrete floors.

External facades comprise a masonry wall system and a ventilated cladding system with insulated aluminium panels [also commonly referred to as ‘composite’ or ‘sandwich’ panels].

The building has several steel framed projecting balconies in the internal courtyard with metal balustrading and timber decking. There are also bolt on metal frame Juliette balconies to most elevations.

3.7 Age and design code applied at the time of construction or renovation

- The Building Regulations 2000
- The Regulatory Reform [Fire Safety] Order 2005

3.8 External wall construction build up

Wall Type	Wall Composition	Fire Rating
EWS type 1 - Masonry Walls	<ul style="list-style-type: none"> ▪ External 102.5mm brick skin, supported by a metal shelf [located at two storey intervals] ▪ Un-insulated cavity [of varying widths] 	

Wall Type	Wall Composition	Fire Rating
	<ul style="list-style-type: none"> ▪ SFS¹ Lightweight steel frame, fixed to outer edge of the building’s concrete floors ▪ Black Board with fibrous core [formed of pressed flammable material] - this combustible board is the weather face of the SFS structure and has been fitted everywhere where we have brickwork, circa 70% of the elevations. ▪ SFS Lightweight steel frame ▪ Vapour control layer ▪ Internal plaster board lining 	
EWS type 2 - Insulated Aluminium Panels used on 7 th floor, around the bay projections, between full height fenestration, above the undercroft	<ul style="list-style-type: none"> ▪ cladding panels consisting of coated aluminium sheets ▪ 25mm extruded polystyrene foam [Styrofoam] adhered to the internal surface of cladding panel ▪ cladding panels are set between similarly coated aluminium cladding rails, secured to a frame of aluminium [and isolated areas of timber] ▪ The cladding framework is secured to a variety of boards, which in addition to those previously discussed above, include 6mm to 12mm plywood, cement particle board and Suparlux boards ▪ The boards are secured to a 150mm SFS system ▪ Loose insulation between studs 	

¹ SFS is a component-supply, structural, stud façade system which is extremely versatile and can be used to provide solutions to many different types of building

construction, from external wall infill panels to internal high bay separating walls and continuous superstructure solutions.



Wall Type	Wall Composition	Fire Rating
	<ul style="list-style-type: none"> ▪ Internal layer of standard Knauf wallboard 	
EWS type 3 - Balconies	<ul style="list-style-type: none"> ▪ Metal frame balcony ▪ Metal frame balustrading ▪ Timber decking 	
EWS type 4 - Juliette Balconies	<ul style="list-style-type: none"> ▪ Metal frame bolted Juliette balconies 	

3.9 Cavity barrier fire performance and locations

3.9.1 Masonry Walls

ADB in force at the time of construction required that buildings containing flats, every floor and every wall separating flats from other parts of the building should be constructed as compartment walls or compartment floors.

On site investigations confirmed the use of an unidentified mineral wool cavity barrier. However, a sporadic approach to the use of cavity barriers was frequently observed, with cavity barriers missing at compartment lines, along the edges of cavities and around openings.

Where present, it was noted that cavity barriers had been installed in a piecemeal fashion, with gaps between individual sections frequently observed

Gaps between the barriers and compartment floors were also observed at the time of inspection. As a result, there are potential paths for the unseen spread of fire and smoke were frequently observed.

ORSA acknowledge that cavity barriers around openings can be formed by window frames, several inspected windows incorporated a cavity barrier. ORSA consider that the presence of insulant within the window frame may have resulted in the decision to incorporate cavity barriers.

3.9.2 Insulated Aluminium Panels

ADB in use at the time of construction states that cavity barriers should be installed within the void behind the external face of rainscreen cladding at every floor, and on the line of compartment walls abutting the external wall, of buildings, which have a floor 18m or more above ground level.

During investigations no cavity barriers were identified along compartment floors or compartment walls. Cavity barriers were also found to be missing within the full height column adjacent to the bin store.

3.10 Fire strategy and fire safety design

It has been identified that the fire strategy for the building was originally based on a 'defend in place' policy in the event of a fire. This has since been altered to a "one out all out policy"

4.0 Comments & Conclusions

4.1 Factors relating to fire performance and how these factors influence risk

The facing brick is present from ground to 5th floor and is approximately 70% of the façade. Insulated Aluminium Panels have been used on 7th floor, around the bay projections, between full height fenestration, above the undercroft, it accounts for 25% of the façade.

Spandrel panels are located at floor slab edge located between stacked window modules and is 5% of the façade.

4.1.1 Masonry Walling

Inspection of the interlocking board [Black Board] uncovered a fibrous core, which is considered unlikely to achieve the required A2 classification.

It is ORSA opinion that the masonry walls do not correspond with ADB's Diagram 32 and subsequently do not benefit from the exemption granted in Table 13.

We therefore consider that cavity barriers are required in a number of critical locations, including at junctions between:-

- External walls and compartment floor
- External walls and compartment walls
- Edges of cavities [including around openings]

4.1.2 Insulated Aluminium Panels

The Insulated Aluminium Panels consist of coated aluminium sheets, with a 25mm extruded polystyrene foam [Styrofoam] adhered to the internal surface. The panels are set between similarly coated aluminium cladding rails, secured to a frame of aluminium [and isolated areas of timber].

The cladding framework is secured to a variety of boards, which include 6mm to 12mm plywood, cement particle board and Suparlux boards. The boards are in turn secured to a 150mm SFS with loose insulation.

Similar to the masonry wall construction some elements of walling incorporate a Black Board with fibrous core [formed of pressed flammable material], there is also Styrofoam insulation and 6mm plywood liner.

It is ORSA's opinion that ADB in use at the time of construction reflected the importance placed on compartmentation with regard



to the design of multi-unit residential buildings, which is also echoed by Advice Note 14², albeit Advice Note 14 is now repealed.

During investigations no cavity barriers were identified along compartment floors or compartment walls. Cavity barriers were also found to be missing within the full height column adjacent to the bin store.

4.2 Factors relating to façade configuration, external walling materials and how these factors influence risk

Previous investigations of the external facade by Fill UK have identified issues with combustible materials present in the wall build up and the lack of fire cavity barriers.

The current fire risk has been identified as being associated with the Insulated Aluminium Panels and the stacked spandrel panels located at window locations. These are both are classified as high risk of contributing to fire spread in the event of a fire and need to be replaced with alternative non-combustible materials.

In the masonry walling the combustible sheathing board can remain in place on the condition that cavity barriers are installed where absent. The board is the weather face of the SFS structure and has been fitted everywhere where we have brickwork, circa 70% of the elevations.

The original evacuation principle for the building was “defend in place” so that only the apartment of fire origin evacuates whilst all other apartments can remain in place.

However, due to the extent of combustible materials present in the external facades together with combustible insulation present and the absence of fire cavity barriers it is understood that at the present time the evacuation strategy has been amended to simultaneous evacuation in the interim in agreement with the local fire authority until remediation of the existing facades has been carried out.

The simultaneous evacuation strategy requires full evacuation of the building in the event of activation of the fire alarms in the building.

4.3 Fire safety design and fire strategy for the building, including fire hazards and fire and rescue service response, and how these factors influence risk

The fire detection and alarm systems installed in the building appeared to have been installed in accordance with relevant requirements.

The fire stopping to the compartmentation between apartments inside the building did not appear to be of a reasonable standard especially between apartments and common corridors at ceiling level and at riser locations.

The elements of structure in the building provide the required standard of fire resistance of 90-minutes for a building of this height albeit compromised by poor fire stopping.

The protected corridors of the flats provide 60 minutes compartmentation as recommended in ADB but issues are present with the fire stopping.

Flat entrance doors and the fire doors enclosing the stairway and risers are notional fire door-sets that would provide 30 minutes fire resistance. Cold smoke seals and intumescent strips are provided where necessary. The fire doors are fitted with self-closing devices where necessary or are kept locked shut.

Generally, the fire doors throughout the building appeared to be in good condition.

Internal wall and ceiling linings will not promote rapid fire spread.

Missing cavity barriers and closers have been identified.

4.3 Conclusion on overall assessment of risk and the determination of the need for remedial action

For the purposes of EWS the building is rated as B2 and remedial action is needed to address:-

- EWS Type 1 - Masonry Walls - Cavity barriers are required in a number of critical locations, including at junctions between:-
 - External walls and compartment floor
 - External walls and compartment walls
 - Edges of cavities [including around openings]
- EWS Type 2 - During our and ‘other’ investigations no cavity barriers were identified along compartment floors or compartment walls.
- Cavity barriers have been found to be missing within the full height column adjacent to the bin store.
- Fire stopping to the compartmentation between apartments inside the building are not of a reasonable standard especially between apartments and common corridors at ceiling level and at riser locations.

² Advice Note 14 was published with an aim of providing guidance for building owners with non-ACM materials in their external wall systems, including cladding and insulation. While not a legal requirement, the note gives strong guidance to owners of buildings above 18m to take “general fire precautions” in their buildings and to make sure that external wall systems are “safe”.

The definition of ‘safe’ in the advice note is two-fold. First, all materials must be safely installed and maintained. Second, the external wall systems [including cladding and insulation] must contain materials that are of limited combustibility or be a system that has achieved the Building Research Establishment’s BR 135 classification.



5.0 Limitations and clarifications

5.1 Limitations

- The data obtained in the investigation is limited to the findings in each precise location of inspection and cannot be used to confirm absolute consistency of the façade in its entirety.
- Where the product information is absent, or where sampling could not be undertaken, ORSA states the expected combustibility rating based on the known characteristics of the materials in use.
- Where product branding is absent or ambiguous, ORSA will refer to as built drawings and specification contained in the O&M manuals [where available], but this does not constitute confirmation of the brand and certification of the products used in construction
- The supporting evidence provided in this report has been selected to substantiate the statements made within its content. Additional photographs and endoscope video footage is available upon request.

5.2 Clarification

Note the FRAEW should be reviewed if:

- if significant changes/repairs have been made to the external wall; and/or
- in the event of a fire incident, if the fire involved the external wall construction; and/or
- if there are any circumstances, depending upon the nature of the construction, the extent of available knowledge in relation to the particular materials, components and systems used on the building or the degree of uncertainty over the findings, that suggest review is appropriate. In these cases, the report should include a clear explanation as to why periodic review is necessary and include a suggested review date.

Appendix 1 Elevations

- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 9/10 Elevations
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 10/10 Elevations
- Storm Tempest Measured Survey drawing 3957-11-20 Drawing No. 8/10 Elevations



Appendix 2 Risk Rating Review

External wall system	Perceived risk	Remediation proposal
EWS Type 1 - Masonry Walls	<p>Cavity barriers are required in a number of critical locations, including at junctions between:-</p> <ul style="list-style-type: none"> o External walls and compartment floor o External walls and compartment walls o Edges of cavities [including around openings] <p>n.b. the combustible sheathing board [see 4.1.1] can remain in place on the condition that cavity barriers are installed where absent.</p>	<p>Ensure are present, or install cavity barriers in critical locations, including between external walls and compartment floor, external walls and compartment walls and edges of cavities [including around openings].</p>
EWS Type 2 Insulated Aluminium Panels	<p>No cavity barriers were identified along compartment floors or compartment walls.</p> <p>The insulated aluminium panels consist of coated aluminium sheets, with a 25mm extruded polystyrene foam (Styrofoam) adhered to the internal surface. The panels are set between similarly coated aluminium cladding rails, secured to a frame of aluminium (and isolated areas of timber).</p> <p>The cladding framework is secured to a variety of boards, which include 6mm to 12mm plywood, cement particle board and Suparlux boards.</p> <p>The boards are in turn secured to a 150mm SFS with loose insulation. Some elements of walling incorporate a Black Board with fibrous core [formed of pressed flammable material], there is also Styrofoam insulation and 6mm plywood liner.</p>	<p>The insulated aluminium panels and stacked spandrel panels located at window locations are classified as high risk and need to be replaced with alternative non-combustible materials, ensuring that as part of these works appropriate cavity barriers are put in place.</p>
Missing Cavity Barriers	<p>Cavity barriers have been found to be missing within the full height column adjacent to the bin store</p>	<p>Ensure are present or install.</p>
Fire stopping to the compartmentation	<p>Fire stopping to the compartmentation between apartments inside the building are not of a reasonable standard especially between apartments and common corridors at ceiling level and at riser locations</p>	<p>Ensure that there are or install.</p>

External wall system	Perceived risk	Remediation proposal
Fire Risk Assessment	<p>Buildings FRA should be updated to take account of preceding and any provisional protection measures i.e. change of evacuation policy etc. and then again at end of works</p>	<p>Documentation and strategy need updating to take account of present situation and then at end of remediation.</p>



Appendix 3 Report Terms & Definitions

- **Aluminium composite material [ACM]** two thin aluminium skins bonded together to a polyethylene or polyethylene/mineral core material
 - Category 1 ACM is one in which in screening tests based on BS EN ISO 1716, the calorific value is ≤ 3 MJ/kg.
 - Category 2 ACM is one in which in screening tests based on BS EN ISO 1716, the calorific value is > 3 MJ/kg and ≤ 35 MJ/kg.
 - Category 3 ACM is one in which in screening tests based on BS EN ISO 1716, the calorific value is > 35 MJ/kg.
- **Automatic opening vent [AOV]** is part of a smoke control system, which opens automatically when smoke is detected by smoke detectors
- **Cavity barriers** product used to close or separate a concealed space, the purpose of which is to restrict the spread of smoke and/or fire non-loadbearing element designed to provide fire separation within or at the edges of a concealed space [cavity] by forming a tight seal [possibly under compression] between the inner and outer surfaces of the cavity
- **Open state cavity barrier** Non-loadbearing 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 closes when exposed to a developing fire
- **Cladding** system of one or more components that are attached to, and might form part of the weatherproof covering of, the exterior of a building

Such systems are normally attached to the primary structure of a building to form non-structural, non-loadbearing external surfaces and can comprise a range of facing materials/cladding panels, including metal composite panels or non-loadbearing masonry, along with insulating materials, rendered insulation systems [ETICS] and insulated core sandwich panels, which are attached to a substrate.

The cladding system also encompasses the supporting rails and bracketry, as applicable, to attach the cladding to the building, and cavity barriers where applicable.

Systems that constitute the entire thickness of the external wall, by definition, cease to be cladding systems and are the external wall, e.g. curtain walling.
- **Combustible** not classed as A1 or A2 in accordance with BS EN 13501-1:2018, and not meeting the definitions for material of limited combustibility
- **Combustion modified** performance of a material modified or specifically formulated to improve performance in fire
- **Compartmentation** subdivision of a building by fire-resisting walls and/or floors for the purpose of limiting fire spread within the building.

- **Competent 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
- **Evacuation alert system for use by the fire and rescue service** system intended for installation in a building containing flats or maisonettes to enable the fire and rescue service to initiate an evacuation alert signal by means of evacuation alert devices within the flats or maisonettes, using manual controls incorporated within the control and indicating equipment
- **External wall construction** range of different forms of construction used for the entirety of the external walls of a building, from inside to outside, including both internal and external finishes
- **Fire barrier** Separating element that exhibits fire integrity or fire stability or thermal insulation, or a combination thereof, for a period under specified conditions

Fire engineering Application of scientific and engineering principles to the protection of people, property and the **environment** from fire hazard OR source, situation, or act with potential to result in a fire.
- **Fire load** quantity of heat that could be released by the complete combustion of all the combustible materials in a volume, including the facings of all bounding surfaces
- **Fire resistance** ability of an item to fulfil for a stated period the required loadbearing capacity and/or integrity and/or thermal insulation, and/or other expected duty specified in a standard fire resistance test
- **Fire risk** combination of the likelihood of the occurrence of fire and likely consequence[s] of a fire
- **Fire risk assessment [FRA]** process of identifying fire hazards and evaluating the risks to people arising from them, considering the adequacy of existing fire precautions, and deciding whether the fire risk is acceptable without further fire precautions
- **Fire stop** seal provided to close an imperfection of fit or design tolerance between elements or components to restrict the spread of fire and smoke
- **Fire stopping** provision of a fire stop. In the context of external wall construction, anything that connects compartment floors and walls onto the inside face of the external walls is fire stopping and would be expected to provide the same fire resistance as the floor/wall.
- **Fire strategy** set of fire safety objectives and the measures to be taken to meet those objectives
- **General needs** <of housing> intended for occupation by members of the public and not solely or predominantly for occupation by a specific demographic
- **High-rise building** with any storey with a floor located at not less than 18 m above ground level, or at least seven storeys [i.e. more than a ground plus five upper storeys], whichever is the lower. In this context, the height of the top storey is measured



from the upper floor surface of the top floor [excluding roof-top plant areas and any uppermost storeys consisting exclusively of plant rooms] to ground level on the lowest side of the building.

- **Infill panel** forming part of a curtain wall or window assembly system, excluding vision glazing
- **Insulation** any material or product that is intended as, or capable of, significantly reducing the transfer of heat. Insulants which do not provide this function for the building as a result of the manner in which they have been installed [e.g. discrete sections of insulation which would fail to insulate as heat might pass through gaps between them] still fall within this definition of insulation, as they contribute to fire safety in the manner of an insulant in any event.
- **Interim measure** Temporary measure that is put in place to address an unacceptable risk to occupants of a building
- **Material** substance, or mixture of substances, that is entirely homogenous
- **Material of limited combustibility** either a non-combustible material or product; or any material or homogenous product of density 300 kg/m³ 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 °C; or any product with a non-combustible core of 8 mm thick or more, having combustible facings [on one or both sides] not more than 0.5 mm thick; or a material or product classified as Class A2-s3, d2 in accordance with BS EN 13501-1:2018, when tested in accordance with BS EN ISO 1182 or BS EN ISO 1716 and BS EN 13823
- **Mitigation measures** to reduce an identified risk until significant issues relating to the fire risk posed by the external wall construction and cladding are resolved
- **Multistorey** <of blocks of flats> comprising at least a ground floor and one upper floor, with one or more separate dwellings on each storey
- **Non-combustible** either any material classified as Class A1 in accordance with BS EN 13501-1:2018; or products classified as non-combustible under BS 476-4:1970; or any material which when tested in accordance with BS 476-11, does not flame nor cause any rise in temperature on either the centre [specimen] or furnace thermocouples; or totally inorganic materials such as concrete, fired clay, ceramics, metals, plaster and masonry containing not more than 1% by weight or volume of organic material; or concrete bricks or blocks meeting BS EN 771-3:2003
- **Pre-occupation fire safety assessment** process of identifying fire precautions in a newly constructed or refurbished building, considering the approved fire strategy, and deciding whether the new or refurbished premises are likely to be fit for occupation
- **Product item** that is formed of one or more materials
- **Simultaneous evacuation** system of evacuation in which an entire building is evacuated immediately on receiving an

evacuation signal [e.g. from a fire detection and fire alarm system] or an evacuation alert signal from an evacuation alert system for use by the fire and rescue service, or an instruction to evacuate [e.g. given verbally to the residents of each dwelling by firefighters]

- **Spandrel panel** infill panel that is located between the sill of a window and the head of the window below, or that spans the floor slab area in a curtain wall system

A spandrel panel commonly spans a compartment floor boundary and, therefore, is significant in terms of the scope for the fire to bypass fire barriers between floors.

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

In a building with a stay put strategy, residents can leave their flats at any time if they wish and are able to do so [e.g. if they feel unsafe], but to do so might, under some circumstances, place them at greater risk than remaining within their flats.

“Stay put” is sometimes referred to as “defend in place” or “stay safe”.

- **Substrate** construction onto which other materials or products are attached or applied. NOTE In the case of a cladding system, its substrates typically include masonry and lightweight framing systems, such as an SFS.
- **Surface** outside part or uppermost layer
- **Thermoplastic material** polymer that can be melted and recast almost indefinitely
- **Waking watch** system whereby suitably trained persons continually patrol all floors and the exterior perimeter of the building to detect a fire, raise the alarm, and carry out the role of evacuation management

Abbreviated terms

- ACM aluminium composite material
- ADB The Building Regulations 2010 – Approved Document B: Fire safety

The abbreviation “ADB” is used for all editions of Approved Document B; the bibliographic references indicate which edition is relevant at any given point.
- AOV automatic opening vent
- CCM copper composite material
- CLT cross-laminated timber
- CP cement particle
- DPC damp-proof course
- EPS expanded polystyrene



- ETICS external thermal insulation composite system FRA fire risk assessment
- FRAEW fire risk appraisal of external walls
- HPL high pressure laminate
- HRR heat release rate
- IRMP integrated risk management plan
- MCM metal composite material
- OSB oriented strand board
- PIR polyisocyanurate
- PUR polyurethane
- SIP structural insulated panel
- SFS steel framing system
- XPS extruded polystyrene
- ZCM zinc composite material

Appendix 4 About ORSA

- ORSA is a specialist compliance consultancy whose fire related services are led by Phil Barry and Adrian Brown.
- Phil Barry is a BSc in Fire Engineering and is a Member of the Institute of Fire Engineers [membership no. 18506] Phil is a highly experienced fire safety professional with 30 years' experience as a fire safety officer in UK local authority fire services.

Phil has specialised in fire safety since 1999 developing and delivering the highest standard of fire safety training for The Fire Service College & Fire Protection Association.

He completed three secondments as a senior instructor in fire safety at the UK Fire Service College between 1999 & 2010.

Phil is an associate tutor for The Fire Service College, The Fire Protection Association and The Chartered Institute of Environmental Health continuing to develop and deliver the highest standard of fire safety training.

Phil advises clients on a wide variety of fire safety projects, new build consultations, risk assessments and reviews for a diverse range of buildings and is a technical consultant for The Fire Protection Association carrying out fire risk assessments and fire safety related projects on their behalf.

- ORSA's Adrian Brown is the former Global Director Fire Performance Engineering for Meinhardt and has worked for Ministry of Housing, Communities and Local Government [UK].

Adrian's key skills include Leadership, Strategic Management, Technical Expertise, and Communication.

Adrian is a Sr MIES, Senior Member of Engineers Singapore, GFireE, Member of the Institution of Fire Engineers. MEI – Member of the Energy Institute, Member of Canadian Association of Fire Investigators and CIBSE – Associate Chartered Institute of Building Services Engineers.

Adrian has sat on the committees for FSH_14 BS999, FSH_14 BS9999 – Editorial board and Committee member and FSH_24 PD7974 where he was a Part 8 Committee member

- ORSA as a business is owned by Christian A. Bucknall. Chris has a BSc [Hons] Construction and MSc Energy in Built Environment and is a Member of the Chartered Institute of Building [membership no. 1179233] and a Member of the Royal Institution of Chartered Surveyors [membership no. 1167233].
- ORSA is a RICS registered company.
- ORSA is a business accredited to ISO9001:2015 [CertNo CN/16051IQ], ISO 14001:2015, [Cert No CN/16051IE], OHSAS 18001:2007 [Cert No CN/16051IHS], and ISO 45001:2018 [Cert No CI/16051IHS] by SOCOTEC.



Appendix 5 External Walling Systems

After the Grenfell Tower fire in June 2017 there was a focus on removing aluminium composite material [ACM] from buildings over 18 metres.

Over time, focus broadened to take in other types of combustible cladding. In December 2018 the Government issued Advice Note 14 containing guidance for building owners on the steps to take to tackle non-ACM materials on the external walls of high-rise buildings.

Recently this Guidance was revoked and replaced with the more comprehensive and holistic guidance included in Publicly Available Specification PAS9980.

What is the EWS1 process/form?

- The EWS1 form is designed to be used for residential properties such as blocks of flats [including those owned by housing associations and social housing providers as well as privately owned], student accommodation, dormitories, assisted living, care homes and Houses in Multiple Occupation.
- The EWS1 form is not specifically designed for use of short-term accommodation such as hotels.
- EWS1 does, however, apply to an entire building or block so where required, may also be relevant to mixed use.
- The EWS process, and resulting form, is a set way for a building owner to confirm that an external wall system on residential buildings has been assessed for safety by a suitable expert, in line with Government guidance.
- The EWS1 process delivers assurance for lenders, valuers, residents, buyers, and sellers.
- The process was developed through extensive consultation with a wide range of stakeholders including fire engineers, lenders, insurers, valuers, and other cross industry representatives.
- The process itself involves a "qualified professional" conducting a fire-risk assessment on the external wall system, before signing an EWS1 form, which is valid for the entire building for five years.

Update @ January 2022

The document 'Building safety advice for building owners, including fire doors' [also known as the Consolidated Advice Note] brought these documents together.

The Consolidated Advice Note provided guidance on how to assess a building's external walls, smoke control systems and identified the types of short-term interim measures that could be put in place if significant risks to life safety were identified.

The Consolidated Advice Note and all subsequent documents here [including the Supplementary note to building safety advice for building owners] are now withdrawn and should be treated as historical reference documents.

Why is the Consolidated Advice Note withdrawn?

The Consolidated Advice Note has been wrongly interpreted and has driven a cautious approach to building safety that goes beyond what we consider necessary.

The Consolidated Advice Note is therefore being withdrawn to ensure that it is not used to justify disproportionate assessments.

Additional guidance with regards to other aspects of the CAN including fire doors and smoke control systems will be published later this year by the Home Office.

Where a detailed assessment of external walls of existing multi-storey, multi-occupied residential building is deemed necessary it should now be carried out in accordance with the more comprehensive and holistic guidance included in Publicly Available Specification PAS9980.

Which blocks does EWS apply to?

Requesting an EWS1 for buildings where there is no visible cladding or a low risk of remediation work creates long and unnecessary delays to the buying, selling, or re-mortgaging of such properties.

It also prevents the limited pool of competent experts from focussing their assessments on properties where there is a significant risk to the safety of occupants.

A valuer should always have a rationale to justify the request for an EWS1 form.

This relates to consolidated Government guidance issued in January 2020: Advice for Building Owners of Multi-storey, Multi-occupied Residential Buildings which says, "The need to assess and manage the risk of external fire spread applies to buildings of any height."

On 21 November 2020 an agreement between RICS, UK Finance, the Building Societies Association and Government was announced such that an EWS1 form will no longer be needed for sales or re-mortgages on flats in blocks with no cladding. Supplementary guidance on fire risk assessments was issued on 21 November.

On 8 March 2021, RICS published a new guidance note which provides further guidance on the criteria where an EWS1 form should be required.

This guidance note is not intended to be, nor should it ever be used as, a substitute for or part of a professional life safety fire risk assessment of any building.

This updated guidance is purely to help valuers understand when an EWS1 form is required due to visible cladding and it is likely, under current government guidance, that remedial works affecting the value of the property would be needed to remedy any defects with that cladding.

The EWS1 form is not a safety certificate and the fact that an EWS1 form is not required for a particular building does not mean that the building may not require some form of remediation in the future.

What happens after the EWS1 is completed?

There are five possible results from an EWS assessment.



Category A applies where buildings have external wall primary materials that are of limited combustibility or better [i.e. Euroclass A1 or A2 only], and when cavity barriers are installed to an appropriate standard in relevant locations [i.e. in accordance with Approved Document B]. Under this category, it is the attachments to the external wall that are decisive.

- RICS states that A1 and A2 findings “are not likely to lead to any further action.”
- An A3 finding means that remedial work may be needed on attachments to the external wall, such as balconies.
- Category B applies where combustible primary materials within the external wall build-up are clearly present.
- A B1 rating means the engineer has decided that the fire risk is low, and no remedial work is required.
- A B2 finding means that there isn't an adequate standard of fire safety and remedial work/interim measures are required.

Does the publication of the revised EWS1 form render any existing completed EWS1 forms obsolete?

- No, they remain valid until such time as a new EWS1 form is completed.
- Please note that EWS1 forms completed before the above version was made available will remain valid until such time that a new EWS1 form is completed.

Does each flat/ apartment have to get an individual EWS1 form for selling, buying, or re-mortgaging?

- No. Each EWS1 form is valid for an entire block/ building. It is valid for five years.

How does the EWS1 form factor into the buying, selling or re-mortgaging of a flat/ apartment?

- The EWS [external wall system] process, is agreed by representatives for developers, managing agents, fire engineers, lawyers, lenders, insurers, and valuers, and has been adopted across the industry.
- Its purpose is to ensure that a valuation can be provided for a mortgage or re-mortgage on a property which features an external wall cladding system of uncertain make up, something that has both safety implications, and which may affect value if remediation is required due to the fire risk associated.
- The process results in a signed EWS1 form per building, with two options/ outcomes:
 - [A] external wall materials are unlikely to support combustion
 - [B] Combustible materials are present in an external wall with sub options of either, fire risk is sufficiently low that no remedial works are required, or fire risk is high enough that remedial works are required.
- The EWS1 form itself certifies that the external wall cladding system has been assessed by someone who is suitably qualified to do so.

- While the form applies to residential buildings, changes in Government advice introduced in January 2020, mean that all residential buildings of any height with a wall system may need to be risk assessed.
- There is guidance to help valuers decide when an EWS1 form should be required.

The EWS Certificate

- A completed EWS Certificate is not a life safety certificate. It is only for the use of a valuer and lender in determining if remediation costs affect value.
- Where a building is found to need remedial works, this will need to be carried out by the building owner, to ensure safety of the building, before a mortgage can proceed unless the lender agrees otherwise.
- ORSA welcomed the Secretary of State announcement in February 2021, on the additional funding for the removal of dangerous cladding in all qualifying residential properties over 18m.
- Government funding is something ORSA has long called for, and whilst we recognise the complexity of the funding mechanisms, it is critical that any loan scheme for sub-18m blocks should be affordable and viable.

If the building owner will not undertake the required assessment, what can the owner/lender/ valuer do?

- If the building owner does not acknowledge their responsibility and refuses to undertake the necessary assessment, the local council can provide further advice, or it should be referred to the Fire and Rescue Service.
- No one should be living in a building which is unsafe, and the building owners are the only ones who can progress this.
- Building owners have a clear responsibility reinforced by MHCLG advice to arrange for the wall system to be checked and therefore have a route to remediation where needed.
- Leaseholders should continue to engage with the building owner or their managing agent to ensure this happens.
- The Fire Safety Bill, which is due to gain Royal Assent in 2021 will go further in dealing with this.

Who carries out the EWS assessment, and what is their expertise?

- The EWS1 form must be completed by a fully qualified member of a relevant professional body within the construction industry with sufficient expertise to identify the relevant materials within the external wall cladding and attachments, including whether fire resisting cavity barriers and fire stopping have been installed correctly.
- Buildings over 18m or those which are high risk and require specialist testing require a qualified fire safety engineer.
- UK banks and building societies have robust measures in place to protect people against fraud, which would pick up any EWS1 form that is suspicious, but ORSA encourage everyone to check



the signatory on a form with the profession's institution or with ourselves at fire@orsa.uk

- If an RICS member is completing your EWS1 form, you can check their membership with us on our website.
- There is a list of suggested bodies to contact to source fire experts. This list is not exhaustive, nor does it constitute an endorsement or approval from RICS, UKF or BSA, and other bodies with relevant expertise may be able to assist.
- Anybody instructing an EWS1 form must be satisfied that the signatory meets the requirements as described above.

How is an assessment carried out?

- This is up to the expert undertaking the assessment, but it must include evidence of the fire performance of materials used in the cladding.
- While paperwork submitted by the building's original developer and/or owner can form part of the evidence, it cannot be solely relied upon. Photo evidence of the cladding will be required, or a physical inspection where this is not available or inconclusive.
- In some cases - even where all attempts to establish the cladding system have been taken - the make-up and composition of the external wall system may still be unclear. In such instances intrusive tests may be required, alongside a more detailed review by a professional of a higher level of expertise.
- Such tests may involve a hole being drilled into the wall or a section of cladding to identify the external wall system materials and their composition. It is crucially important to identify the whole make-up of an external wall system and how it has been installed.
- ORSA follow a simple 6 stage process:-
 - **Stage 1 Desktop Review** - Initial review of the building, inspection requirements and subject to receipt of any O&M documentation, expected construction arrangements.
 - **Stage 2 Site Visit & Enabling Works** - Determine basic construction arrangements, apparent product substitution and to prepare for any intrusive and semi-intrusive investigations.
 - **Stage 3 Site Investigation** - Intrusive investigations to determine the 'as-built' construction, to determine any product substitution and consider any fire stopping and condition issues. 2 samples per property and or elevation as necessary - if there is a material difference in the form of construction.
 - **Stage 4 Assessment & Analysis** - Assessment of Attachments - Inspect a Sample number of attachments and check that there is a suitable risk assessment.
 - **Stage 5 Report & Recommendations** - Completion of EWS1 certificate and report, albeit the report is for our records. De-brief of the findings and guidance regarding any required next steps.
 - **Stage 6 Issue EWS Certificate**

Why is an EWS assessment required every five years?

- An EWS assessment is required every five years for each building or block.
- This means multiple sellers located in one block can use the same assessment to assist with the sale of their property.
- Five years is intended to capture any renovation or adaptation work done to the building, as well as maintenance over that period.
- However, a new EWS assessment may be required within the five-year period if substantial works have been completed to a property, affecting the original conclusions.

What happens if the EWS assessment identifies that remedial works are required?

- If an external wall system requires remedial work, then we would expect the valuer to take this into consideration in their valuation.
- A valuation will only be possible if there is clarity on cost of the work and a timeline for works to be completed. Lenders are unlikely to lend until remedial work has been completed, but some may choose to do so with retentions and the like based on their own risk appetite.
- The EWS assessment is for the building owner to oversee, but the resulting form should be available on request to all occupants in that block in the interests of transparency.

Does the EWS assessment cover general fire safety measures?

- The EWS1 form assessment is carried out for valuation purposes only.
- It captures the details of the safety of different types of external wall systems used in residential buildings and will determine whether remedial works are required.
- It is not designed to assess other fire safety features or risks and should never be used to determine the overall risk of fire to a building. It is not a life safety certificate.
- The person responsible for the building [Responsible Person under the Regulatory Reform [Fire Safety] Order 2005] should have a fire risk assessment [FRA] for the building as this is an independent legal requirement that is already in place and does not commonly incorporate assessment of external wall materials.
- Note this will change with the Fire Safety Bill coming into force in England and FRA will then need to cover the external cladding.

Does a nil valuation mean a flat is worthless?

- No.
- 'Nil valuations' are used in the process of valuing a property for mortgage lending purposes, where a valuer is unable to provide a value at that moment in time i.e. when the valuers' inspection takes place due to insufficient information being available.



- Often a nil valuation signals that the lender requires further information before a valuation can be made, rather than a property being unsellable.

Why are lenders asking for EWS1 forms below 18m?

- Changes in Government advice in January 2020, bringing all residential buildings into scope, mean some residential buildings below 18m may now require an EWS1 form.
- For buildings of five or six storeys, there could be a significant amount of cladding on the building, or a check could be due to the types of panels on the building.
- For buildings of four storeys or fewer, there may be present the most dangerous types of cladding present.
- The guidance note for Valuers provides information on criteria where an EWS1 should be required.
- A valuer should always have a rationale to justify the request for the EWS1 form.

Appendix 6 What is PAS 9980?

The PAS 9980 has been developed by the British Standards Institution drawing on expert advice from professionals across industry and followed a rigorous development process, including a public consultation.

PAS 9980 provides new guidance on how to assess the risk of fire via an external wall of an existing multi-storey, multi-occupied residential building.

PAS 9980 sets out steps that can be taken to identify and assess risk factors as well as mitigation steps that might improve the risk rating of a building via a holistic and fact-based assessment of a building's construction.

Where it is determined that a detailed assessment of an external wall is required, PAS 9980 should now be used for these assessments.

It does not contain 'off the peg' solutions to specific wall types and materials but is intended to enable a consistent approach to evaluating the fire risk when considering the external walls of buildings.

PAS 9980 frequently asked questions

Will PAS 9980 require additional surveys to take place?

Whole building fire risk assessments are already required in England for residential premises including common parts under the Regulatory Reform Fire Safety Order 2005 [FSO].

PAS 79 [which has been in existence for several years] sets out how to do a standard whole building fire risk assessment, which would apply to all blocks of flats.

Buildings with cladding materials which could pose a fire risk should do a more detailed assessment of their external wall system, and PAS 9980 sets out how to do that and will complement best practice guidance for these whole building fire risk assessment [which are already covered by PAS 79].

Will every building require PAS 9980?

PAS 9980 is a methodology to carry out fire risk appraisals of the external wall of multi-storey, multi-occupied residential buildings.

Of buildings that do require fire risk assessments, not all will require a detailed review of their external walls.

In many cases it will be manifestly obvious to a competent fire risk assessor that the risk to life from external fire spread is not such as to warrant a PAS 9980 assessment.

This is particularly true in buildings with brick or masonry external walls or low risk buildings which do not present any significant risk of fire spread.

In these cases, the fire risk assessor will normally address compliance of external wall construction with the Fire Safety Order as part of the routine Fire Risk Assessment process.

Therefore, many buildings will not require a PAS 9980 appraisal.



Will PAS 9980 lead to expensive remediations?

Where a PAS 9980 assessment is needed the guidance will enable more proportionate assessments rather than the binary ones that have become prevalent since the Grenfell Tower tragedy in which any presence of combustible wall materials is thought to automatically need expensive replacement/remediation.

PAS 9980 is clear that some combustible materials can be retained and managed safely in the external walls of existing buildings.

Owners were advised to check “general fire precautions” and ensure that external wall systems were “safe”.





ORSA Fire Limited
134 Wigmore Street
London W1U 3SE
+44 (0) 203 884 8004



This document is for the sole use of the person or organisation for whom it has been prepared under the terms of an invitation or appointment by such person or organisation. Unless and to the extent allowed for under the terms of such invitation or appointment this document should not be copied or used or relied upon in whole or in part by third parties for any purpose whatsoever.

If this document has been issued as a report under the terms of an appointment by such person or organisation, it is valid only at the time of its production ORSA Fire Limited does not accept liability for any loss or

damage arising from unauthorised use of this document.

If this document has been issued as a 'draft', it is issued solely for the purpose of client and/or team comment and must not be used for any other purpose without the written permission of ORSA Fire Limited.

ORSA Fire Limited is a limited company registered in England and Wales, number 13295494.

© Copyright subsists in this document.