Fire Risk Assessment

Property Owner:	MCC
Date:	19/12/2023
Assessor:	Stephen Brennan, TechIOSH, GIFireE, AIFSM, DipFD
Address:	Artillery Court Brunswick Manchester M13 9TU

HUGHES & ASSOCIATES PROPERTY SERVICES LTD

Fire Risk Assessment Report Contents

Issue and Revision Record 3

Nomenclature 4

Executive Summary 7

- Building Summary 7
- Building Information 7
- Location Information 7
- Management and Operations 7
- Building Features 8
- Safety and Evacuation 8
- Security 8
- Recommended Actions 8
- Review 9

1 Introduction 9

- 1.1 Objective 9
- 1.2 Approach 9
- 1.3 Scope 11
- 1.4 Fire Phenomena 12
- 1.5 Identifying Fire Hazards 12
- 1.5.1 Identifying Sources of Ignition 13
- 1.5.2 Identifying Sources of Fuel 13
- 1.5.3 Identifying Sources of Oxygen 13

2 Building Details 14

- 2.1 Building Description 14
- 2.2 Relevant Persons 15
- 2.3 Documentation, Training, Drills and Records 17

3 Estimating Levels of Risk 20

- 3.1 Risk Profiling 20
- 3.2 Required Action and Timescales 21

4 Observations and Overview of Assessment 22

5 Risk Register 27

6 Risk Rating Summary 41

7 Building Plans 43

8 External Wall Details 49

9 Fire Stopping Certification 91

10 Fire Door Certification 95

11 Fire Door Report 97

12 Building Control Sign Off 129

Issue and Revision Record

Revision	Date	Originator	Checker	Description
A	19/12/2023	Stephen Brennan, TechIOSH, GIFireE, AIFSM, DipFD	Callum McLeod, BEng (Hons), AIFireE, MIFSM, CFRAR	Original Production

Information Class: Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Hughes and Associates Property Services Ltd
105 Carrow Rd
Norwich
NR1 1HP

Tel: 0333 335 5330
Company Registration Number: 6950290

Nomenclature

The following abbreviations have been used within this report, the below table provides a brief description of each abbreviation.

Abbreviation	Description
ADB	Approved Document B
BS	British Standard
EVCS	Emergency Voice Communications System
AFP	Active Fire Protection
AFD	Automatic Fire Detection
PFP	Passive Fire Protection
FD(XX)	Fire door rated to XX minutes, i.e. FD30 – Fire Door rated to 30minutes integrity
FD(XX)S	Fire door rated to XX minutes with cold smoke protection, i.e. FD30 – Fire Door rated to 30minutes integrity with cold smoke protection
MSFD	Motorised Smoke and Fire Damper
RRO	Regulatory Reform (Fire Safety) Order 2005
EL	Emergency Lighting
GEEP	General Emergency Evacuation Plan
PEEP	Personal Emergency Evacuation Plan
MIP	Mobility Impaired Persons
OV	Opening Vent
AOV	Automatic Opening Vent
ASET	Available Safe Egress Time
FRA	Fire Risk Assessment
RRO	Regulatory Reform Order 2005
RAMS	Risk Assessment and Method Statements
RP	Responsible Person
PTW	Permit to Work
DSEAR	Dangerous Substances and Explosive Atmosphere
COMAH	Control of Major Accidents and Hazards
ARC	Alarm Receiving Centre
FS	Fire Safety or Firestopping

Document Overview

Section	Content
Executive Summary	Overview of the assessed premises and risk assessment findings
Introduction	States the objectives and approach taken to produce this Fire Risk Assessment
Building Details	States relevant building specifications and relevant people at risk
Estimated Levels of Risk	Details how levels of risk and timescales are determined
Observations and Overview of Assessment	Systematically reviews various fire safety aspects of the buildings' fire safety
Risk Register	Displays risks observed whilst on site, along with recommended actions and timescales
Risk Rating Summary	Provides an overall risk rating for the building

Relevant Fire Safety Standards

Regulation and Guidance

Regulation
The Regulatory Reform (Fire Safety) Order 2005. London: HM Government, 2005
The Fire Safety (Scotland) Regulations 2006
The Building Regulations 2010
The building (Scotland) Regulations 2004
Equality Act 2010
Health and Safety (Safety Signs and Signals) Regulations 1996 [3] in regard to safety signs at work
EC Directive 92/58/EEC
Health and Safety at Work etc Act 1974
Housing Act 2004
Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
The Dangerous Substances and Explosive Atmospheres Regulations 2002
The Health and Safety (Safety Signs and Signals) Regulations 1996

Standards and Codes of Practice

Standard	BSI Standards and Codes of Practice
BS 9999:2017	Fire Safety in the design, management, and use of buildings - Code of practice.
BS 9991:2015	Fire safety in the design, management, and use of residential buildings – Code of practice
Approved Document B, The Building Regulations 2010, Fire Safety Volume 1: Dwelling Houses.	
BS 9997:2019	Fire Risk Management Systems
BS 5266-1:1999	Emergency Lighting

BS 5499-10:	Emergency lighting. Code of practice for the emergency lighting of premises.
BS 5839-1:2017	Fire detection and fire alarm systems for buildings. Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises.
BS 5839-6: 2013	Fire detection and fire alarm systems for buildings – Part 6: Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises.
BS EN 12101-2:2017	Smoke and heat control systems. Part 2: Natural smoke and heat exhaust ventilators.
BS 7974:2019	Application of fire safety engineering principles to the design of buildings. Code of practice
BS 7671:2018	Requirements for electrical installations. IET Wiring Regulations. Seventeenth edition
BS EN 60947: 2017	Low-voltage switchgear and control gear. Circuit-breakers
BS 7346-8:2013	Components for smoke control systems. Part 8: Code or practice for planning, design, installation, commissioning and maintenance.
BS 8519: 2010	Selection and installation of fire-resistant power and control cable systems for life safety and firefighting applications – Code of practice
ASFP	Association of Fire Safety Specialists
BS 8214:2016	Timber-based fire door assemblies - Code of practice.
EN 1125: 2008	Building hardware. Panic exit devices operated by a horizontal bar, for use on escape routes. Requirements and test methods
EN 179: 2008	Building hardware. Emergency exit devices operated by a lever handle or push pad, for use on escape routes. Requirements and test methods
BRE. Smoke Shafts protecting Firefighting shafts: their performance and design.	
BS 5306-1:2006	Code of practice for fire extinguishing installations and equipment on premises. Hose reels and foam inlets
BS 5306-3:2017	Fire extinguishing installations and equipment on premises. Commissioning and maintenance of portable fire extinguishers. Code of practice.
BS EN 1634-1:2018	Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware
BS 7346-8: 013	Components for smoke control systems. Part 8 Code of practice for planning, design, installation, commissioning and maintenance
BS 9990:2015	Non-automatic firefighting systems in buildings - Code of practice.
BS 5306-8:2012	Fire extinguishing installations and equipment on premises - Selection and positioning of portable fire extinguishers. Code of practice.
BS 9251:2014	Sprinkler systems for residential and domestic occupancies – Code of practice
BS 8210: 2012	Guide to Building Maintenance Management
PAS 79-1:2020	Fire risk assessment. Premises other than housing. Code of practice
PAS 79-2:2020	Fire risk assessment. Housing. Code of practice
HTM 05-02	Healthcare Technical Memorandum 05-02 Firecode Guidance in support of functional provisions (Fire safety in the design of healthcare premises)

Executive Summary

Hughes and Associates Property Services Ltd conducted a non-invasive Type 1 fire risk assessment at Artillery Court on 19/12/2023. The fire risk assessment identifies fire risks, the occupants at risk from fire, and provides suitable precautionary measures to develop the fire safety of the premises.

Building Summary

Figure 1 – Artillery Court

The building is approximately ~38m in height to the highest occupied floor, sitting in the ADB bracket of '30m<', requiring, 120-minute element of structure fire resistance.

Building Information

Artillery Court is a single building, forming purpose build flats with thirteen floors. The property falls within the purpose group(s) of 'Residential (Dwellings)'. The property is not known to hold a listed building status.

Location Information

Artillery Court is located in Manchester and has an approximate footprint of 20m x 20m.

Management and Operations

It was informed that MCC is the responsible person and that fire safety is managed by S4B.

Relevant persons for Artillery Court include: Residents, Maintenance Staff.

The building is known to have been constructed in the mid 20th century. Currently, the property operates 24/7 and has approximately 100-200 occupants. 62 units are present at the property.

Building Features

The building is constructed of reinforced concrete with a steel framed corrugated roof. There are thirteen floors and a single stairwell. Bins are stored within the main building.

The building does not have any venting in the stair and flat lobby areas, there is an open balcony between the 2 areas.

The ground floor ancillary accommodation includes the laundry room and bin store, and the plantroom is located on the roof.

The external facade is a mixture of construction techniques, see action plan for details (Risk 11). Stacked balconies are constructed from concrete with glass balustrades.

There is an advanced plan in place to add a domestic sprinkler system to this building within 12 months.

Safety and Evacuation

The building has an uncomplicated escape route, affording a single direction of escape. The building operates on a Stay Put evacuation policy. There is a full alarm system in place, including manual call points. Flats contain a Grade D alarm system in an LD3 configuration.

Security

There is a security camera system, lockable front entrance doors in place. External fencing is also present at the property.

Recommended Actions

Please see Section '5 Risk Register' for risk register and actions.

The below list displays the general areas where it is recommended that action is taken within the stated timescale. The specifics of the issues and actions are displayed within Section '5 Risk Register'.

The overall risk to life from fire at these premises are estimated to be: Tolerable Risk

Table 1 - Action Summary

Fire Safety Aspect	Timescale to Complete Actions
Carry out bin chute repairs as appropriate	6 Months
Carry out a fire stopping survey and follow the recommendations of that report	6 Months
Remove combustibles and flammable substances from the building	Immediately
Some doors, such as the laundry room door, should be replaced ASAP with new FD30s self closing doors	6 Months
Fire engineer is to assess the stair ventilation situation via a fire strategy review	6 Months
Ensure the fixed electrical installation test is carried out	6 Months
Carry out PAT testing to electrical items in ancillary areas, including laundry room equipment	3 Months
Move the flammable cabinet to an area away from potential ignition sources.	1 Month
Remove battery buggies from escape route areas. Carry out a feasibility study to see if there is a suitable area within the building for buggy storage and charging	3 Months
Should further proof be required by the fire service for external building construction, then a full intrusive FRAEW survey will be required.	12 Months
Carry out a fire door survey and follow the recommendations of that report. Install fire door certificates attached as per appendix in this report.	3 Months
Install new wayfinding signage to the building	3 Months

Review

It is the responsibility of the 'Responsible Person' RP (as identified by the RRO) to monitor the action points from a risk assessment. It is also their responsibility review the fire risk assessment. Reviews should take place if the RP suspect the FRA is no longer valid or significant changes have taken place that will affect the fire precautions within the building. Other reasons include, inter alia:

- Changes to work activities and equipment
- Changes to work staff numbers and presence of disabled or young persons
- Change of use or layout of the building
- Change in the storage of [fire] hazardous substances
- Failure of a fire precaution system, e.g. fire alarm
- After any real fire incident

It is recommended that the premises should have its risk assessment reviewed at least annually, or next in November 2024.

1 Introduction

1.1 Objective

Hughes and Associates Property Services Ltd were appointed to carry out a non-invasive Type 1 fire risk assessment (FRA) of Artillery Court .
The assessment was undertaken in accordance with the general risk assessment principles set out in The Regulatory Reform (Fire Safety) Order 2005 in order to identify hazards that could contribute to injury of persons working or residing in or near the building. The fire risk assessment was conducted following the recommendations of the UK Government's fire risk assessment guidance suite and PAS 79.

1.2 Approach

The site visit was undertaken on 19/12/2023 by appointed competent person Stephen Brennan, TechIOSH, GIFireE, AIFSM, DipFD, Fire Safety Assessor of Hughes and Associates Property Services Ltd.

An FRA is an assessment of the fire risks to occupants of a building and other people in the immediate vicinity of the building. This is to ensure that those people are safe from the risk of fire and its effects.

It considers the use of, the activities carried out within, and the likelihood that, a fire will start in a premise which could cause harm to the occupants of a building.

An FRA is carried out by a competent person and is reviewed annually thereafter by a responsible person. The responsible person can be an occupant on site, or an appointed individual with the appropriate skill set to undertake an FRA review.

The objectives of the FRA are:

- Identify the fire hazards;
- Reduce the risk of those hazards causing harm to as low as practicably possible;
- Determine which physical fire precautions and management arrangements are required to ensure the safety of the occupants in the building in the event of a fire.

The risk assessment also follows the methodology of PAS 79 and the nine-step method (Table 2).

The non-intrusive survey established any fire hazards, the people at risk from a fire, and any hindrances to the means of (and provisions used to facilitate) escape.

All observations from the survey were noted and given a hazard (anything that has the potential to cause harm) and risk (the chance of that harm occurring) rating to determine their severity, which are to be reported to the management of the building assessed.

Ultimately, the management will implement procedures to eradicate, mitigate, or control any identified risks. This could be proactive management practices or passive fire protection measures.

When considering existing buildings that were constructed prior to the production of modern codes, the following flow chart should be used in the assessment to formulate an effective action plan:

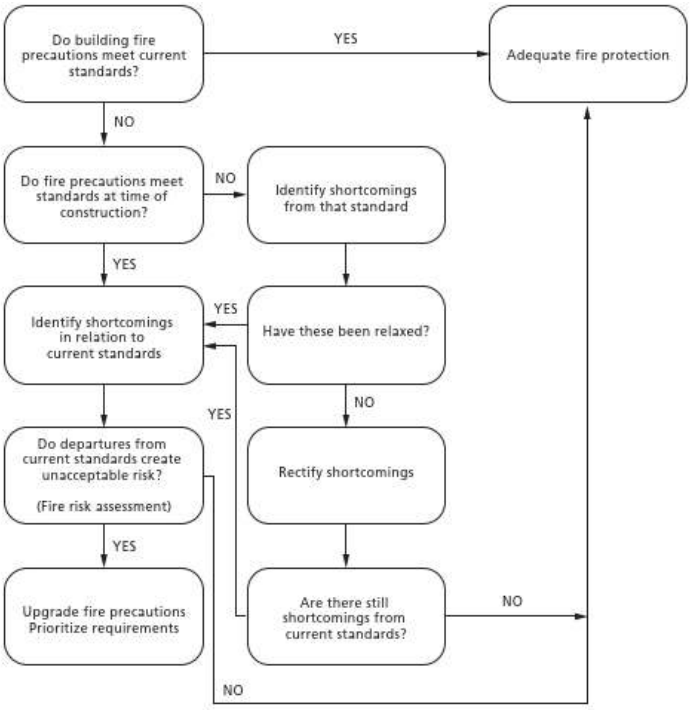


Figure 2 - PAS 79 - Existing Premises Action Plan

Table 2. PAS79 nine steps

Steps	Descriptions
1	Obtain information on the premises, the processes carried out on the premises and the people present, or likely to be present, on the premises.
2	Identify the fire hazards and means for their elimination or control.
3	Assess the likelihood of fire, at least in subjective terms.
4	Determine the fire protection measures currently in the premises.
5	Obtain relevant information about fire safety management.
6	Make an assessment of the likely consequences to people in the event of fire, at least in subjective terms.
7	Make an assessment of the fire risk.
8	Formulate and document an action plan, in which recommended actions are prioritized.
9	Define the date by which the fire risk assessment should be reviewed.

1.3 Scope

The scope of this FRA is limited to the building described in the Building Summary Section.

Clause 9 of the Regulatory Reform (Fire Safety) Order 2005 requires "The responsible person must make a suitable and sufficient assessment of risks to which relevant persons are exposed for the purpose of identifying the general fire precautions he needs to take to comply with the requirements and prohibitions imposed on him by this order."

This report considers life safety aspects associated with fire risks. Although some of these items will have some inherent property protection characteristics, property protection or business continuity protection will not be addressed specifically unless stated.

This report does not include detailed safety procedures or method statements to eliminate any identified risks. This work should be carried out by separate negotiation or contract with an approved third party.

All recommendations are based solely on the findings during the site-wide survey (within the areas that were available at the time of the FRA) and the information presented by the site managers met on the day.

- This fire risk assessment should be reviewed if any of the following occur:
- Any physical changes to the premises (structurally or internally);
- Significant changes to the occupancy/use of the premises;
- Substantial changes to furniture and fixings;
- Change of use, or increase in the storage of hazardous substances;
- The failure of fire precautions, e.g. fire-detection systems, and alarm systems;
- Significant changes to type and quantities and/or method of storage of goods;
- Changes to working hours;
- A significant increase in the number of people present; and
- The presence of people with some form of disability.

It should be noted that this list is not exhaustive and, as such, any modification that impacts the FRA should be addressed by the management.

1.4 Fire Phenomena

To fully understand the risks and hazards associated with fire, it is essential to have an understanding of what fire is and how fires can start. This knowledge forms the basis for how a fire risk assessment is conducted.

Fire is an exothermic chemical reaction between a combustible material and oxygen. To sustain this reaction, oxygen, heat, and a source of fuel must be present, which gives rise to the concept of the fire triangle (Figure 3).

Without one of the three components of the fire triangle, a fire is not sustainable, and the reaction will terminate. This is the foundation of all fire-fighting concepts and procedures.

Figure 3. The Fire Triangle

Figure 4. Fire caused by burning combustibles

The burning process (Figure 4) thermally decomposes the fuel source, producing volatile gases from the fuel surface. These volatiles mix with oxygen which results in combustion which generates heat. The additional heat produces more volatile gases and the process repeats.

1.5 Identifying Fire Hazards

Any sources of ignition, fuel, and oxygen (such as quantity and air flow) are fire hazards. Identifying these hazards and taking precautionary measures to remove or mitigate their severity help to reduce the likelihood of fire occurring. This is step one of the fire risk assessment.

It should be noted that the lists in this section are not exhaustive and, as such, any other sources of ignition, fuel, and oxygen found will be addressed in the Fire Risk Assessment.

1.5.1 Identifying Sources of Ignition

Sources of ignition are typically heat sources which could become hot enough to ignite a material found in the premises including:

- Naked flames, e.g. candles or gas or liquid-fuelled open-flame equipment;
- Hot processes, e.g. welding by contractors;
- Cooking equipment;
- Faulty or misused electrical equipment;
- Accidental ignition sources left within the refuse, e.g. batteries
- Lighting equipment, e.g. halogen lamps too close to stored products;
- Hot surfaces and obstruction of equipment ventilation, and
- Arson.

1.5.2 Identifying Sources of Fuel

Sources of fuel are anything that may burn easily and readily, and that there is sufficient quantity of, and that may spread to other fuel sources. Some common fuels for this type of facility are:

- Textiles such as sports clothing and equipment;
- Flammable-liquid-based products, such as paints, varnishes, thinners and adhesives;
- Flammable liquids and solvents, such as white spirit, methylated spirit, cooking oils and disposable cigarette lighters;
- Flammable chemicals, such as certain cleaning products, photocopier chemicals and dry cleaning that uses hydrocarbon solvents;
- Packaging materials, stationary, advertising material, decorations and display materials;
- Plastics and rubber, such as polyurethane foam-filled furniture;
- Waste products, particularly finely cut items such as shredded paper and wood shavings, off cuts, and dust;
- Flammable gases such as liquefied petroleum gas (LPG);
- Flammable liquids such as petrol for the motorcycles and scooters.
- Diesel for the outside generators;

Additionally, consideration should be given to the materials used to line walls and ceilings, the fixtures and fittings, and how they could facilitate the spread of fire.

1.5.3 Identifying Sources of Oxygen

The main source of oxygen is in the atmosphere, which, in an enclosed building is provided through the ventilation system. Typically, air is provided either naturally (by natural airflow through doors windows) or mechanically (such as air conditioning systems and air handling units). Usually there will be a combination of these systems which introduce and extract air into the building.

Other sources of oxygen include:

- Some chemicals (oxidising materials) which can provide a fire with additional oxygen and so help it burn. These chemicals should be identified on their container by the manufacturer or supplier who can advise as to their safe use and storage;

2 Building Details

2.1 Building Description

Table 3. Building Details

Building Detail	Description
Fire Risk Assessors Name	Stephen Brennan, TechIOSH, GIFireE, AIFSM, DipFD
Owner	MCC
Responsible person	MCC
Fire safety is managed by	S4B
Relevant persons and occupiers	Residents, Maintenance Staff
Time of Construction	in the mid 20th century
Number of Buildings	1
Purpose Group(s)	'Residential (Dwellings)'
Significant Adjacent Properties	N/A
Period of Operation	24/7
Number of Occupants	100-200 occupants
Number of Units	62 units are present at the property.

Table 4. Additional Building Details

Building Detail	Description
Building Construction	reinforced concrete
Listed Building Status	The property is not known to hold a listed building status.
External Fencing	External fencing is also present at the property.
Security	a security camera system, lockable front entrance doors
Bin Stores	Bins are stored within the main building
Building Dimensions	Approximately 20m x 20m
Main Alarm System	There appears to be an addressable alarm system in place

2.2 Relevant Persons

Unless noted otherwise, the risks identified in this report are thought to apply to all potential occupants (relevant persons) of the site. This includes office staff, residents, visitors and mobility-impaired persons, etc.

With reference to BS999:2008, Table 5 provides examples for the different categories of occupants. Table 6 defines fire growth rates and provides examples of conditions and their approximated fire growth rates. The risk profiles are defined in Table 7 and the assessed risk ratings for the occupants of Artillery Court are shown in Table 8. The overall risk ratings are categorised by combining both the occupancy characteristic and the fire growth rate.

Table 5. Occupancy Characteristics, taken from BS9999:2017

Occupant Characteristics	Description	Examples
A	Occupants who are awake and familiar with the building	Offices and industrial premises
B	Occupants who are awake and unfamiliar with the building	Shops, exhibitions, museums, leisure centres, other assembly buildings, etc.
C	Occupants who are likely to be asleep:	
C_i	Long-term individual occupancy	Individual flats without 24h maintenance and management control on site
C_{ii}	Long-term managed occupancy	Serviced flats, halls of residence, sleeping areas or boarding schools
C_{iii}	Short-term occupancy	Hotels

Table 6. Fire Growth Rate, taken from BS9999:2017

Category	Fire Growth Rate	Examples	Fire Growth Parameter [KJ/s^3]
1	Slow	Banking hall, limited combustible materials	0.0029
2	Medium	Stacked cardboard boxes, wooden pallets	0.012
3	Fast	Baled thermoplastic chips, stacked plastic products, baled clothing	0.047
4	Ultra-fast	Flammable liquids, expanded cellular plastics and foam	0.188

Table 7. Risk Profiles, taken from BS9999:2017

Occupancy Characteristics	Fire Growth Rate	Risk Profile
A (Occupants who are awake and familiar with the building)	1 Slow 2 Medium 3 Fast 4 Ultra-fast	A1 A2 A3 A4
B (Occupants who are awake and unfamiliar with the building)	1 Slow 2 Medium 3 Fast 4 Ultra-fast	B1 B2 B3 B4
C (Occupants who are likely to be asleep)	1 Slow 2 Medium 3 Fast 4 Ultra-fast	Ci1, Cii1 or Ciii1 Ci2, Cii2 or Ciii2 Ci3, Cii3 or Ciii3 Ci4, Cii4 or Ciii4

Table 8. Artillery Court Occupant Risk Profiles

Occupant Description	Occupancy Characteristic	Fire Growth Rate	Risk Profile
Residents	Ci Long-term individual occupancy	Medium	Ci2

2.3 Documentation, Training, Drills and Records

Table 9. Documentation

Documentation	Satisfactory (Yes/No/N/A)	Comments
Previous Fire Risk Assessment Outstanding action points Date of previous FRA?	Yes	Some actions not followed up, e.g fire doors
Fixed Main Electrical Installation Inspections in Place?	No	No evidence of fixed mains electrical installation checks were available.
Gas Checks in Place?	Yes	
Evacuation Procedure?	Yes	Stay Put
Are the timings of the drills estimated to be within the ASET?	N/A	
Fire System Maintenance?	Yes	
Fire Safety Defects Reporting Records?	Yes	
Fire warden information up to date?	Yes	Site staff report fire safety training
Is the building under any form of licence?	No	
Is there an RRO notice on the building?	No	None reported
Is there a history of fires in the building?	No	None reported
Is the building fire engineered? Is there a fire strategy?	No	Fire strategy required due to unusual escape layout, no stair smoke venting and no sprinklers.
Is there policy proving the adequate control of contractors? PTWs, RAMS, inductions?	Yes	
Competent person(s) appointed to assist in undertaking the preventive and protective measures (i.e. relevant general fire precautions)?	Yes	
Is there a suitable record of the fire safety arrangements?	Yes	
Are procedures in the event of fire appropriate and properly documented?	Yes	
Are there suitable arrangements for summoning the fire and rescue service?	Yes	
Are there suitable arrangements to meet the fire and rescue service on arrival and provide relevant information, including that relating to hazards to fire-fighters?	Yes	
Are there suitable arrangements for ensuring that the premises have been evacuated?	Yes	
Is there a suitable fire assembly point(s)?	Yes	
Are there adequate procedures for evacuation of any disabled people who are likely to be present?	Yes	Compliant layout

Persons nominated and trained to use fire extinguishing appliances?	N/A	
Persons nominated and trained to assist with evacuation, including evacuation of disabled people?	N/A	
Appropriate liaison with fire and rescue service (e.g. by fire and rescue service crews visiting for familiarization visits)?	Yes	Gerda box in place with keys
Routine in-house inspections of fire precautions?	Yes	

Table 9.1 Training and Drills

Documentation	Satisfactory (Yes/No/N/A)	Comments
Are all staff given adequate fire safety instruction and training on induction?	Yes	No site staff permanently based in building. Caretaker spends small amount of time in office and building. All s4b staff report fire safety training has been carried out with some building specific training including evacuation procedures.
Are all staff given adequate periodic "refresher training" at suitable intervals?	Yes	
Does all staff training provide information, instruction or training on fire risks in the premises?	Yes	
Does all staff training provide information, instruction or training on The fire safety measures on the premises?	Yes	
Does all staff training provide information, instruction or training on Action in the event of fire?	Yes	
Does all staff training provide information, instruction or training on Action on hearing the fire alarm signal?	Yes	
Does all staff training provide information, instruction or training on Method of operation of manual call points?	Yes	
Does all staff training provide information, instruction or training on Location and use of fire extinguishers?	Yes	
Does all staff training provide information, instruction or training on Means for summoning the fire and rescue service?	Yes	
Does all staff training provide information, instruction or training on Identity of persons nominated to assist with evacuation?	Yes	
Does all staff training provide information, instruction or training on Identity of persons nominated to use fire extinguishing appliances?	Yes	

Are staff with special responsibilities given additional training?	Yes	
Are fire drills carried out at appropriate intervals?	No	Call points in place but no requirement for drills to take place
When the employees of another employer work in the premises: Is their employer given appropriate information?	Yes	S4B policy in place
When the employees of another employer work in the premises: Is it ensured that the employees are provided with adequate instructions and information?	Yes	

Table 9.2 Testing and Maintenance

Documentation	Satisfactory (Yes/No/N/A)	Comments
Adequate maintenance of premises?	Yes	
Weekly testing and periodic servicing of fire detection and alarm system?	Yes	Full communal fire alarm system in place
Monthly and annual testing routines for emergency escape lighting?	Yes	
Annual maintenance of fire extinguishing appliances?	Yes	
Periodic inspection of external escape staircases and gangways?	N/A	
Six-monthly inspection and annual testing of rising mains?	Yes	
Weekly and monthly testing, six-monthly inspection and annual testing of fire-fighting lifts?	Yes	
Weekly testing and periodic inspection of sprinkler installations?	N/A	Sprinklers to be installed soon
Routine checks of final exit doors and/or security fastenings?	Yes	
Annual inspection and test of lightning protection system?	Yes	
Are suitable systems in place for reporting and subsequent restoration of safety measures that have fallen below standard?	Yes	

3 Estimating Levels of Risk

3.1 Risk Profiling

The UK Health and Safety code, BS 8800, provides a means of assessing the level of risk in terms of severity by determining the likelihood of a fire occurring and any associated potential harm. This provides the management of the building with a hierarchical list of key areas to address for the purposes of enhancing the fire safety of the building.

A list of terms used in this report to describe the levels of harm and the likelihoods are summarised in Table 10.

Table 10. Risk Profile Term Definitions

Term	Definition
Slightly Harmful	Fire outbreak is unlikely to cause serious injury or death to occupants
Harmful	Fire outbreak could result in injury of one or more occupants though unlikely to cause multiple fatalities
Extremely Harmful	Significant potential for serious injury or death of one or more occupants
Highly Improbable	Hazard is unlikely to cause or impact outbreak of fire, or impede occupant fire egress
Improbable	Hazard may cause or impact fire outbreak or impede occupant fire egress
Probable	High potential for hazard to cause or impact fire outbreak, or impede occupant fire egress

To quantify the levels of harm, Table 11 outlines the criteria for what shall constitute Slightly Harmful, Harmful, and Extremely Harmful.

Table 11. Levels of Harm

Level of Harm	People	Assets	Environmental	Reputation
Extremely Harmful	Fatalities	Major Damage	Long-Term Harm	Considerable Impact
Harmful	Major Injury	Localised Damage	Short-Term Harm	Localised
Slightly Harmful	Lost Time Injury	Minor Damage	Low-Impact	Limited Impact

Tabulating these six terms provides a concise means of assessing the risk of any hazards found on site, ranging from “Trivial Risk” to “Intolerable Risk” (as shown in Table 12).

Table 12. PAS 79 Risk Estimation Table

Likelihood of Harm from Fire	Severity of Harm		
	Slightly Harmful	Harmful	Extremely Harmful
Low	Trivial Risk	Tolerable Risk	Moderate Risk
Medium	Tolerable Risk	Moderate Risk	Substantial Risk
High	Moderate Risk	Substantial Risk	Intolerable Risk

3.2 Required Action and Timescales

Table 13 gives priority ratings, actions, and appropriate timescales to resolve these risks. The management should then use this as a basis targeting and prioritising key areas of development for fire safety within the premises.

Table 13. Priority, Actions, and Timescales to Resolve Risks

Priority			Action	Timescale
	Trivial or Tolerable Risk	3	No major additional controls required. Consideration may need to be addressed to improve the current situation at low or no cost.	No action required for less harmful items. Items which are addressed should be resolved by next risk assessment or in the timespan specified.
	Moderate Risk	2	Efforts must be made to reduce this risk within the associated timescale. Further assessments should be made for levels of moderate risk which are considered Extremely Harmful to determine the likelihood of harm occurring.	Items should be addressed and completed within the timespan specified.
	Substantial or Intolerable Risk	1	The building is not safe and should be evacuated. Considerable measures will need to be implemented to significantly reduce the levels of risk. Occupants must not return until the issue(s) is/are resolved.	Should be addressed immediately and works should be completed within the short timespan specified.

4 Observations and Overview of Assessment

4.1 Occupants

Line Item	Observation	Yes/No/N/A	Comments
4.1.1	Sleeping occupants	Yes	
4.1.2	Disabled occupants	Yes	
4.1.3	Young persons (under 18s)	Yes	
4.1.4	Lone workers	Yes	
4.1.5	Other groups	No	

4.2 Fire Hazards and Controls

Line Item	Observation	Yes/No/N/A	Comments
4.2.1	Have reasonable measures been taken to prevent fires of electrical origin?	No	No evidence of fixed mains electrical installation checks was available and PAT appears overdue
4.2.2	Have reasonable measures been taken to prevent fires because of smoking?	Yes	
4.2.3	Have security measures been implemented to address unauthorised access to the premises to mitigate the risk of arson?	Yes	a security camera system, lockable front entrance doors
4.2.4	Is the use of portable heaters avoided as far as is practicable?	N/A	
4.2.5	Is the heating system regularly inspected?	Yes	Records available that confirm that the heating system is subjected to regular checks.
4.2.6	Are there reasonable measures taken to avoid fires, as a result of cooking?	No	
4.2.7	Is the standard of housekeeping adequate?	No	Items stored in common areas

Line Item	Observation	Yes/No/N/A	Comments
4.2.8	Are the premises free from an accumulation of combustible waste (refuse)?	Yes	
4.2.9	Are there any other significant hazards that warrant consideration?	Yes	See Risk Register.

4.3 Means of Escape

Line Item	Observation	Yes/No/N/A	Comments
4.3.1	Is the escape route layout deemed satisfactory and uncomplicated?	Yes	
4.3.2	Are there any dead-end situations within the premises?	No	
4.3.3	Are there alternative routes of escape sufficiently separated by either direction or space?	Yes	
4.3.4	Are travel distances deemed satisfactory?	Yes	
4.3.5	Are there any inner room situations?	No	
4.3.6	Is there a suitable coverage of emergency lighting within the premises?	Yes	
4.3.7	Is it considered that the premises are provided with reasonable arrangements for the means of escape for disabled persons?	Yes	
4.3.8	Are doors used for means of escape purposes provided with emergency locking devices that can be easily and immediately opened without the use of a key?	Yes	
4.3.9	Are doors on escape routes that are fitted with electronic locking systems fitted with automatic door release mechanisms that will disable in a fire?	Yes	
4.3.10	Are internal, exterior and final exit fire escape doors in good condition and regularly inspected with compliant hardware? Suitable fire assembly point?	Yes	
4.3.11	Are all gangways and escape routes free from obstruction or other fire risks?	No	
4.3.12	Does the escape signage appear to comply to BS 5499?	No	Fire service and fire exit signage missing
4.3.13	Is there a reasonable standard of fire safety signs and notices?	No	
4.3.14	Have any PEEPS or GEEPS been produced for the premises?	Yes	
4.3.15	Are there any refuge points within the premises? If yes do these contain an EVS?	No	

Line Item	Observation	Yes/No/N/A	Comments
4.3.16	Are there external stairwells in place? If yes, are these in a good condition and free from trip/slip hazards?	N/A	

4.4 Measures to Limit Fire Spread/Development

Line Item	Observation	Yes/No/N/A	Comments
4.4.1	Are there reasonable limitations of lining materials that may promote fire?	Yes	
4.4.2	Are the buildings' fire doors in an acceptable condition?	No	Communal doors are poor, flat doors appear to be compliant
4.4.3	Does the existing fire stopping to service ducts and fire compartments appear to be satisfactory for preventing the spread of fire, heat or smoke?	No	Defects observed
4.4.4	Are there fire dampers in place where required? If yes, is there any maintenance documentation in place?	No	Bin chute damper is in poor condition
4.4.5	Are self-closing devices provided on fire doors where required, if so are they in working order?	Yes	
4.4.6	External fire spread – Is the building in close proximity to others?	No	N/A
4.4.7	Is there a lighting protection system? If yes, does it appear to be in a good condition and undamaged?	Yes	

4.5 Firefighting Systems

Line Item	Observation	Yes/No/N/A	Comments
4.5.1	Are the existing smoke clearance provisions satisfactory?	No	No vents in stair or lift lobby - fire engineer to assess
4.5.2	Is there sufficient number and type of extinguishers?	Yes	
4.5.3	Are extinguishers in date and have wall mounted signage?	Yes	
4.5.4	Are there fire blankets is kitchens? Are these adequately placed?	Yes	
4.5.5	Are there hose reels or other systems, appropriate and tested?	N/A	

4.6 Fire Detection and Alarm

Line Item	Observation	Yes/No/N/A	Comments
4.6.1	Are the capabilities of the installed fire alarm and detection system considered satisfactory?	Yes	Communal and flat system
4.6.2	Is the alarm automatic detection and warning?	Yes	
4.6.3	What is the current fire alarm category (L1, LD3, P1, M etc.)		Unknown specification

Line Item	Observation	Yes/No/N/A	Comments
4.6.4	What is the fire alarm grade? (A, B, C, D etc.)		
4.6.5	Is the extent and coverage of alarm system deemed satisfactory?	Yes	
4.6.6	Have any detector faults been noted?	No	
4.6.7	Is the building fire alarm connected to an Alarm Receiving Centre (ARC)?	Yes	

4.7 Fire Precaution Records

Line Item	Observation	Yes/No/N/A	Comments
4.7.1	Are test and maintenance records available to confirm that the fire alarm and detection system is in full working order?	Yes	
4.7.2	Emergency Plan: Has an Appropriate Emergency Plan been prepared for the premises?	Yes	
4.7.3	Is the evacuation strategy simultaneous, defend in place, phased?	-	Stay Put
4.7.4	Is there suitable contact with the fire service are fire brigade wallet and keys available?	Yes	Gerda box in place

4.8 Fire Service Facilities

Line Item	Observation	Yes/No/N/A	Comments
4.8.1	Are the facilities for the fire service adequate? Is the access for fire appliances to the workplace/premises satisfactory?	Yes	
4.8.2	Is the access for fire appliances to the workplace/premises satisfactory?	Yes	
4.8.3	Is there suitable supply of firefighting water?	Yes	
4.8.4	Are there firefighting shaft(s) and dry riser(s)? If so, is there any maintenance documentation in place displaying that the dry riser(s) are fit for purpose?	Yes	
4.8.5	Is there a firefighting lift? If so is there any maintenance documentation in place displaying that the lift is fit for purpose?	Yes	
4.8.6	Are other switches and control devices like AOV, mechanical ventilation, fuel shut off in place? If yes, is there maintenance documentation for these systems?	No	No AOV

4.9 External Walls

Line Item	Observation	Yes/No/N/A	Comments
4.9.1	What is the building's external wall construction?	-	Various techniques and materials, see action plan and appendix
4.9.2	Has the building been subject to an EWS1 survey?	No	
4.9.3	If EWS has been carried out, state the result of this survey, if no, is one required?	No	FRAEW may be required, see action plan
4.9.4	Are there any clear non-compliances / damage to the external wall system?	No	

4.10 Other

Line Item	Observation	Yes/No/N/A	Comments
4.10.1	Is the site COMAH or DSEAR 2002?	No	
4.10.2	Were there any unchecked areas in the building due to access restriction?	No	
4.10.3	Do the fire precautions in place meet the standards of the time of construction?	Yes	

5 Risk Register

RISK 1 DESCRIPTION

The damper in the bin chute appears to be defective

RISK CATEGORY

4.4 Measures to Limit Fire Spread/Development

REMEDIAL(S) DESCRIPTION

Carry out bin chute repairs as appropriate

RISK RATING

Moderate

REMEDIAL(S) TIMESCALE

6 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 14.Emergency routes and exits, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 12.Elimination or reduction of risks from dangerous substances

PHOTOGRAPHIC EVIDENCE

RISK 2 DESCRIPTION

Firestopping in the gas riser does not appear to be adequate

RISK CATEGORY

4.4 Measures to Limit Fire Spread/Development

REMEDIAL(S) DESCRIPTION

Carry out a fire stopping survey and follow the recommendations of that report

RISK RATING

Moderate

REMEDIAL(S) TIMESCALE

6 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 14.Emergency routes and exits

PHOTOGRAPHIC EVIDENCE

RISK 3 DESCRIPTION

Combustibles and flammable substances are stored in roof area

RISK CATEGORY

4.2 Fire Hazards and Controls

REMEDIAL(S) DESCRIPTION

Remove combustibles and flammable substances from the building

RISK RATING

Moderate

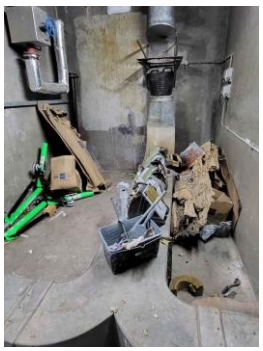
REMEDIAL(S) TIMESCALE

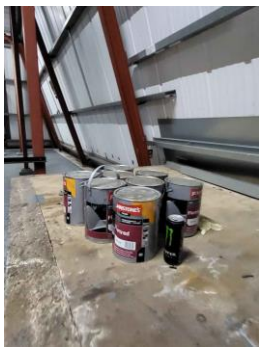
Immediately

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 12.Elimination or reduction of risks from dangerous substances

PHOTOGRAPHIC EVIDENCE





RISK 4 DESCRIPTION

Timber lid is in place on corridor and lift shaft

RISK CATEGORY

4.4 Measures to Limit Fire Spread/Development

REMEDIAL(S) DESCRIPTION

Carry out a fire stopping survey and follow the recommendations of that report

RISK RATING

Tolerable

REMEDIAL(S) TIMESCALE

6 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance

PHOTOGRAPHIC EVIDENCE

RISK 5 DESCRIPTION

Defects were observed to communal fire doors

RISK CATEGORY

4.4 Measures to Limit Fire Spread/Development

REMEDIAL(S) DESCRIPTION

Some doors, such as the laundry room door, should be replaced ASAP with new FD30s self closing doors

RISK RATING

Moderate

REMEDIAL(S) TIMESCALE

6 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 14.Emergency routes and exits

PHOTOGRAPHIC EVIDENCE

RISK 6 DESCRIPTION

The bin chute is open to the escape route. Stairs do not have ventilation and rely on the refuse lobby space for fresh air

RISK CATEGORY

4.7 Fire Precaution Records

REMEDIAL(S) DESCRIPTION

Fire engineer is to assess the stair ventilation situation via a fire strategy review

RISK RATING

Moderate

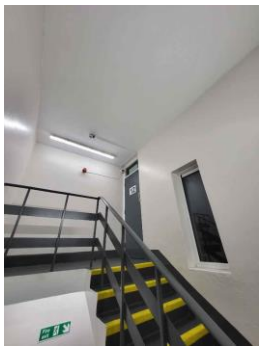
REMEDIAL(S) TIMESCALE

6 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 14.Emergency routes and exits

PHOTOGRAPHIC EVIDENCE



RISK 7DESCRIPTION

The fixed electrical installation is overdue for testing

RISK CATEGORY

4.2 Fire Hazards and Controls

REMEDIAL(S) DESCRIPTION

Ensure the fixed electrical installation test is carried out

RISK RATING

Tolerable

REMEDIAL(S) TIMESCALE

6 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 12.Elimination or reduction of risks from dangerous substances, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance

PHOTOGRAPHIC EVIDENCE

RISK 8 DESCRIPTION

PAT testing in the caretakers room appears to be out of date

RISK CATEGORY

4.2 Fire Hazards and Controls

REMEDIAL(S) DESCRIPTION

Carry out PAT testing to electrical items in ancillary areas, including laundry room equipment

RISK RATING

Tolerable

REMEDIAL(S) TIMESCALE

3 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 12.Elimination or reduction of risks from dangerous substances, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance

PHOTOGRAPHIC EVIDENCE

RISK 9 DESCRIPTION

Mobile buggy machine is stored in lobby space

RISK CATEGORY

4.2 Fire Hazards and Controls

REMEDIAL(S) DESCRIPTION

Remove battery buggies from escape route areas. Carry out a feasibility study to see if there is a suitable area within the building for buggy storage and charging

RISK RATING

Moderate

REMEDIAL(S) TIMESCALE

1 Month

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 12.Elimination or reduction of risks from dangerous substances, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance

PHOTOGRAPHIC EVIDENCE

RISK 10 DESCRIPTION

Mobile buggy machine stored in lobby space

RISK CATEGORY

4.2 Fire Hazards and Controls

REMEDIAL(S) DESCRIPTION

Remove battery buggies from escape route areas. Carry out feasibility study to see if there is a suitable area within the building for buggy storage and charging

RISK RATING

Moderate

REMEDIAL(S) TIMESCALE

3 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 12.Elimination or reduction of risks from dangerous substances, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance, LEGAL: Regulatory Reform

PHOTOGRAPHIC EVIDENCE

RISK 11 DESCRIPTION

The external facade has been updated since 2017. Old solid walls are in situ with a covering of insulation and render. New window and balcony door fenestration systems, some non load bearing facade system. Parts of the external wall form connected vertical sections. Building is applicable to regulation 7.2 of the building regulations and the fire safety act

RISK CATEGORY

4.4 Measures to Limit Fire Spread/Development

REMEDIAL(S) DESCRIPTION

All documents are available at S4B Polygon offices or Silkin Court offices. Appendix is attached with some of the pertinent documents. Documents show details of materials used and construction techniques used. Documents show cavity barriers in place horizontally and vertically. Documents show sign off by building control. No further action is currently recommended. Should further proof be required by the fire service then a full intrusive FRAEW survey will be required.

RISK RATING

Moderate

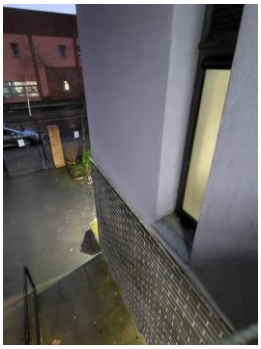
REMEDIAL(S) TIMESCALE

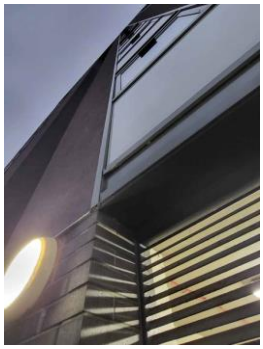
12 Months

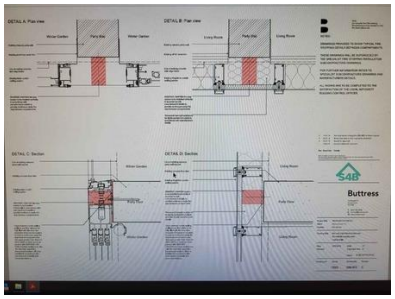
RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 12.Elimination or reduction of risks from dangerous substances, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 14.Emergency routes and exits, LEGAL: The

PHOTOGRAPHIC EVIDENCE







RISK 12 DESCRIPTION

Only 1 flat entrance door was inspected. Doors must be inspected regularly in accordance with Fire Safety Act. Doors are consistent with being fire doors

RISK CATEGORY

4.4 Measures to Limit Fire Spread/Development

REMEDIAL(S) DESCRIPTION

Carry out a fire door survey and follow the recommendations of that report. Installation fire door certificates attached as per appendix in this report.

RISK RATING

Moderate

REMEDIAL(S) TIMESCALE

3 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance, LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 14.Emergency routes and exits, LEGAL: Fire Safety Act 2021 - 18m+ Scope

PHOTOGRAPHIC EVIDENCE

RISK 13 DESCRIPTION

There is no escape route signage displayed on escape route and no luminescent finding signage in the building stairs or lobby.

RISK CATEGORY

4.8 Fire Service Facilities

REMEDIAL(S) DESCRIPTION

Install new wayfinding signage to the building

RISK RATING

Moderate

REMEDIAL(S) TIMESCALE

3 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Fire Safety Act 2021 - 18m+ Scope

PHOTOGRAPHIC EVIDENCE

RISK 14 DESCRIPTION

Sprinklers are not fitted in the building which is over 30m tall

RISK CATEGORY

4.5 Fire Fighting Systems

REMEDIAL(S) DESCRIPTION

An advanced plan is in place to install a domestic sprinkler system to building flats. This is an excellent plan and will substantially reduce the risk to life in the building.

RISK RATING

Trivial

REMEDIAL(S) TIMESCALE

12 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 13.Fire-fighting and fire detection, LEGAL: The Building Regulations: B1, LEGAL: The Building Regulations: B2, LEGAL: The Building Regulations: B3, LEGAL: The Building

PHOTOGRAPHIC EVIDENCE

6 Risk Rating Summary

Taking into account the fire prevention measures observed at the time of this risk assessment, it is considered that the risk of fire occurring is;

The likelihood of a fire occurring has been assessed to be **Low.**

The consequences for life safety in the event of fire are estimated to be **Harmful.**

The overall risk to life from fire at these premises are estimated to be **Tolerable Risk.**

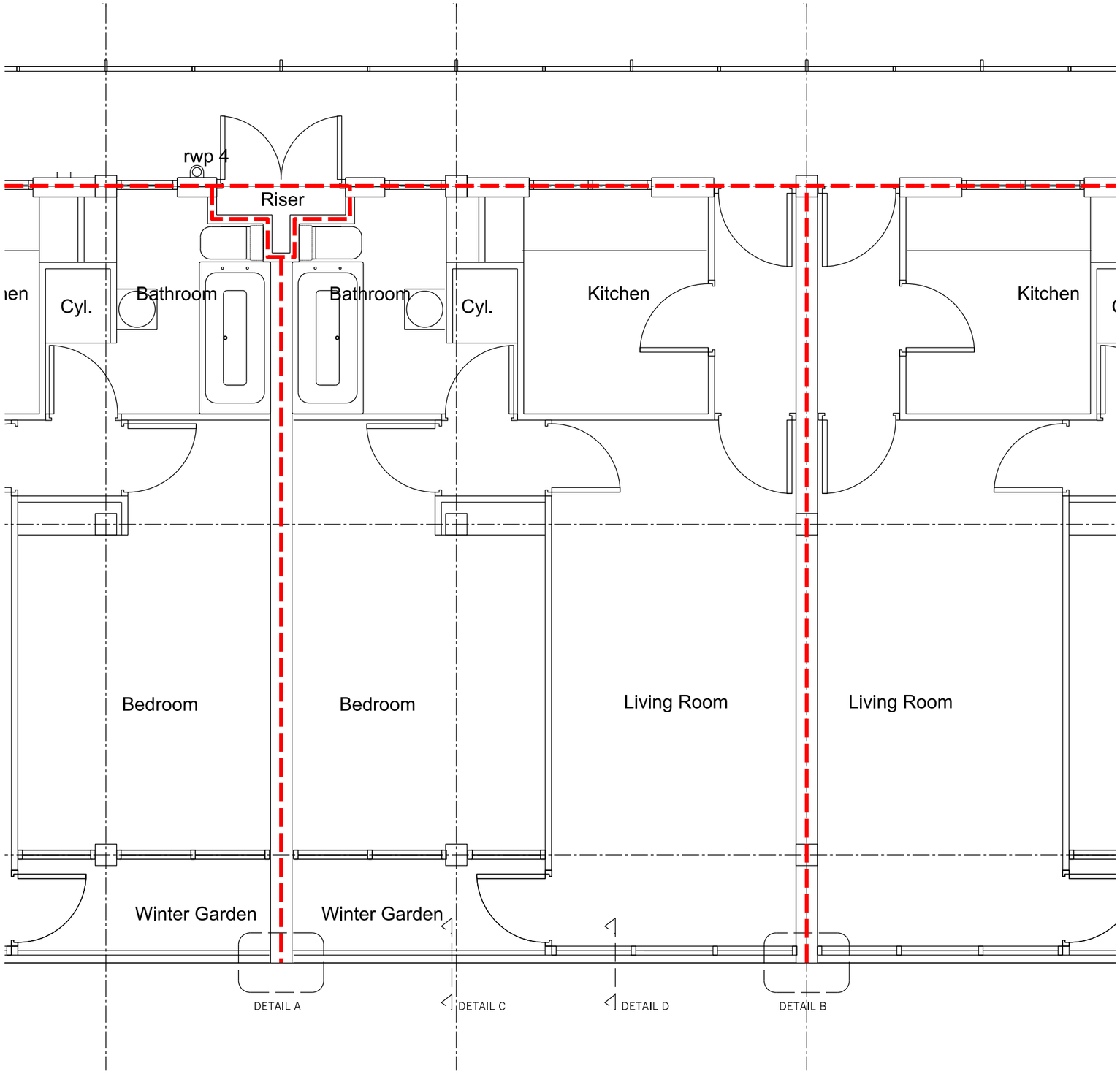
The purpose of this section is to place fire risk into context. The ratings above are subjective and are for guidance purposes only. The hazards and deficiencies identified in this report should be addressed by implementing all the recommendations contained in the following section.

Using the estimation of risk levels in Section 3, and the observations in Section 4, and the Risk Rating Summary in section 5; the number of risks (categorised by their priority rating) can be created.

The risk register is shown in Section 5 and shows observations from the site visit. Providing photographic evidence from the survey of the risks and offer proposed risk reduction methods for management to help improve/resolve these issues.

END OF REPORT

7 Building Plans



Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

DRAWINGS PROVIDED TO SHOW TYPICAL FIRE STOPPING DETAILS BETWEEN COMPARTMENTS.

THESE DRAWINGS WILL BE SUPERCEDED BY THE SPECIALIST FIRE STOPPING INSTALLATION SUBCONTRACTORS DRAWINGS.

FOR FURTHER INFORMATION REFER TO SPECIALIST SUBCONTRACTORS DRAWINGS AND MANUFACTURERS DETAILS.

ALL WORKS ARE TO BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY BUILDING CONTROL OFFICER.

60 MINUTE FIRE COMPARTMENT LINE

Rev	Date/Intls	Details
A	03.07.18	Issued for approval
-	13.06.18	Issued to Mears for comment

Buttress

41 Bengal St
Manchester
M4 6AF

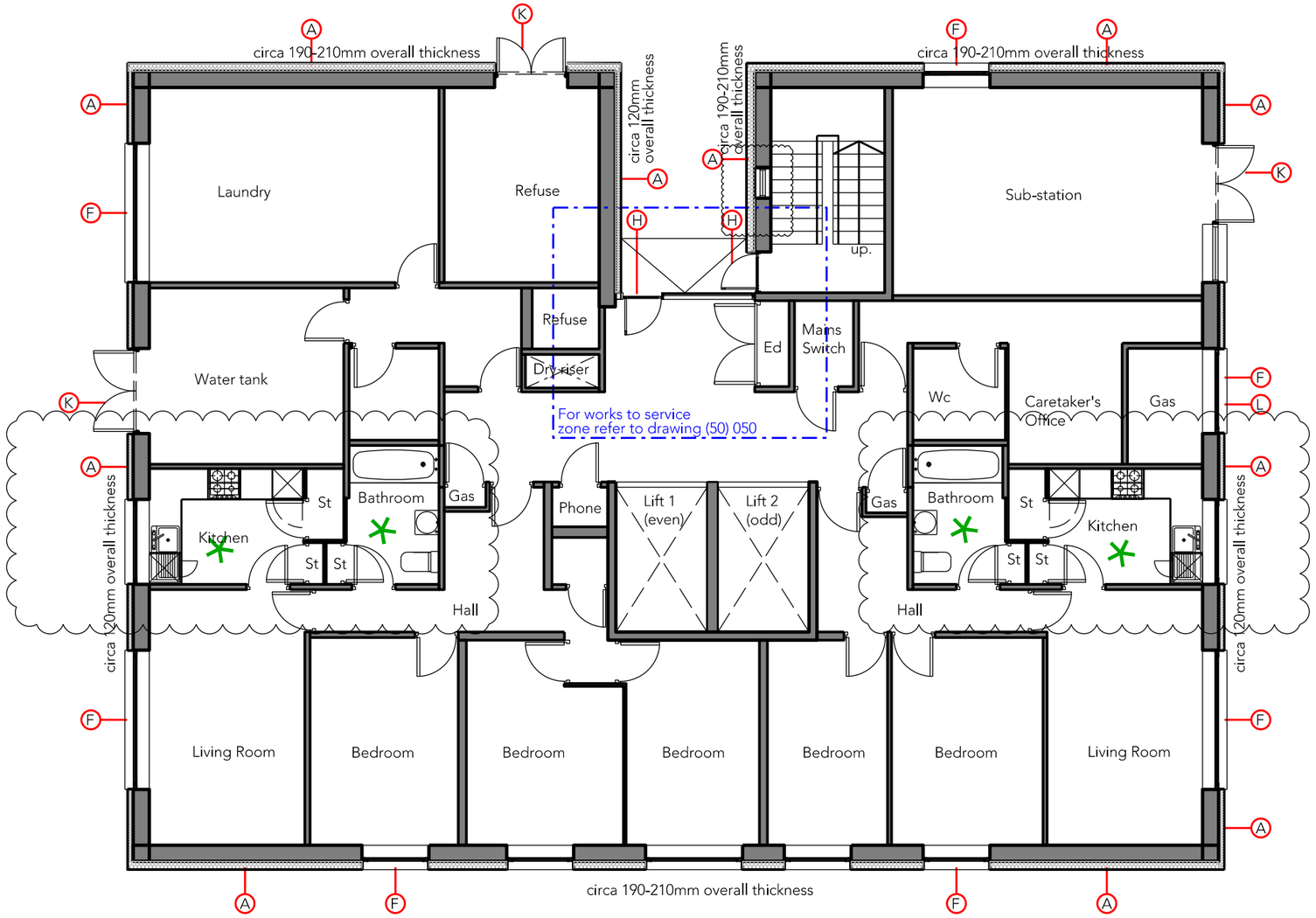
T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK REVERSALS
Client	Mears Group PLC
Location	Manchester
Drawing Title	Brunswick High Rise Refurbishment Remedial fire stopping works Typical apartment plan
Date	12/06/2018
Checked	BT
Scale	1/50
Orig Paper Size	A3
Status	FOR APPROVAL

Drawing ref	Job No	Drawing No	Revision
	7862	**(08) 010**	**A**

Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

Note: Line of setting out of brick slips to be dicatated by line of setting out of render above. Insulation to be varied at ground floor to achieve flush finish between the 2 materials



For ground Floor kitchen and bathroom layouts refer to drawing (50) 040

Key to External Materials

- (A) Facing brick slips. Colour: Dudley blue with dark grey mortar - T14 by Tarmac
- (B) Curtain Walling - Aluminium Frame Colour: RAL 7012 (Dark grey)
- (C) EWIS render finish. Colour: 2151 (Mauve)
- (D) EWIS render finish. Colour: 2325 (White)
- (E) Coloured glass balustrade
- (F) UPVC windows & doors. Colour: RAL 7012 (Dark grey)
- (G) UPVC windows & doors.
- (H) Aluminium doors. Colour: RAL 7012 (Dark grey)
- (J) Masonry paint. Colour: White
- (K) Solid core timber doors & Windows (to match existing) Colour: 7012 (Dark grey)
- (L) UPVC louvres to GF. Colour: 7012 (Dark grey)

Rev	Date/Intls	Details
P1	15/12/15 LB	Issued for Planning NMC
A	22/10/15 LW	Kitchen/ bathroom similar to existing arrangement Stair window retained

Buttress
41 Bengal St
Manchester
M4 6AF

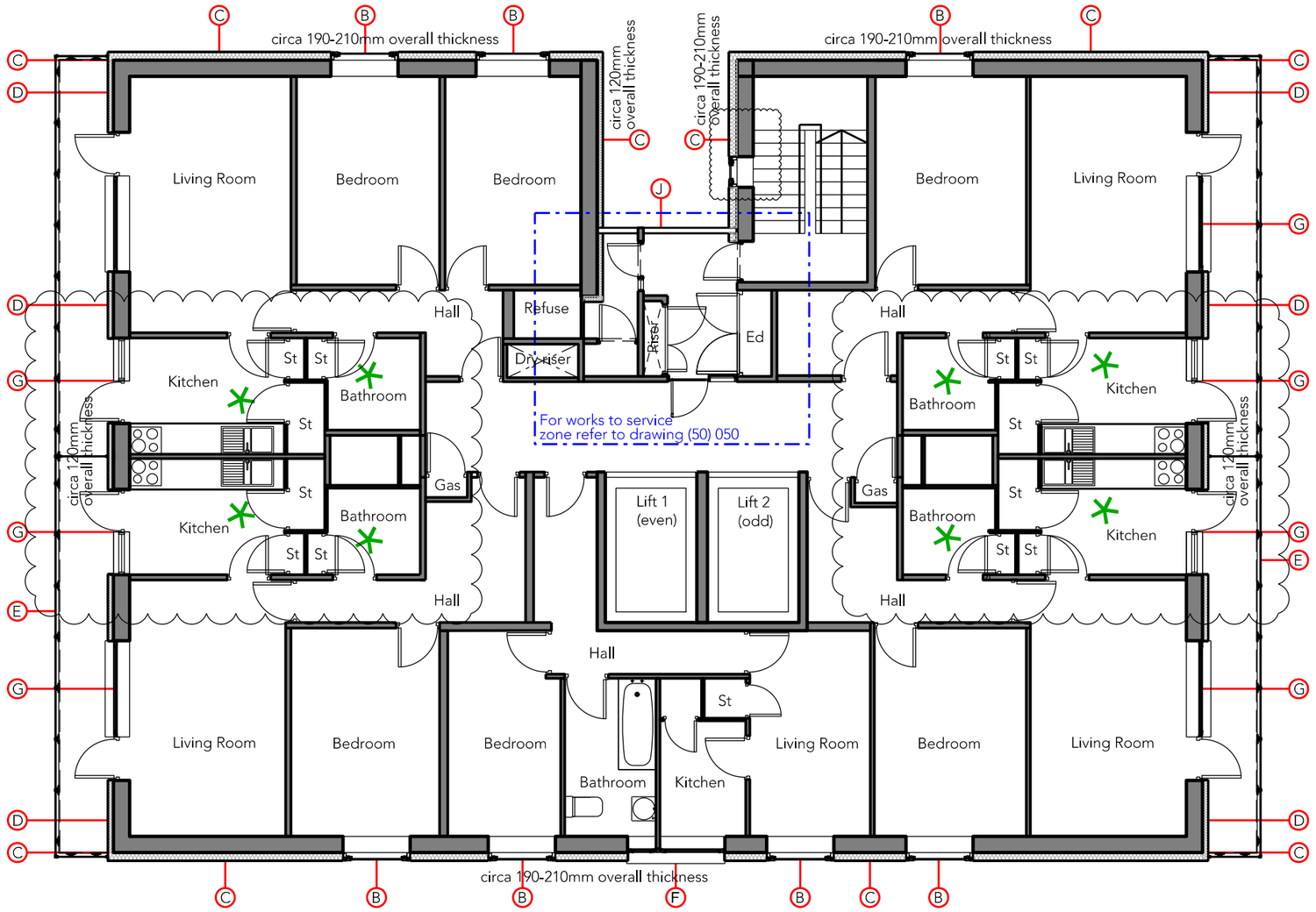
T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK - ARTILLERY COURT
Client	Mears Group PLC
Location	Manchester
Drawing Title	Proposed Ground Floor Plan -
Date	14.05.15
Checked	MG
Scale	1:100
Orig Paper Size	A3
Status	PLANNING

Drawing ref	Job No	Drawing No	Revision
	7862	(50) 021	P1

Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

Note: Line of setting out of brick slips to be dicatated by line of setting out of render above. Insulation to be varied at ground floor to achieve flush finish between the 2 materials



For First - twelfth Floor kitchen and bathroom layouts refer to drawing (50) 042

Key to External Materials

- A Facing brick slips. Colour: Dudley blue with dark grey mortar - T14 by Tarmac
- B Curtain Walling - Aluminium Frame Colour: RAL 7012 (Dark grey)
- C EWIS render finish. Colour: 2151 (Mauve)
- D EWIS render finish. Colour: 2325 (White)
- E Coloured glass balustrade
- F UPVC windows & doors. Colour: RAL 7012 (Dark grey)
- G UPVC windows & doors.
- H Aluminium doors. Colour: RAL 7012 (Dark grey)
- J Masonry paint. Colour: White
- K Solid core timber doors & Windows (to match existing) Colour: 7012 (Dark grey)
- L UPVC louvres to GF. Colour: 7012 (Dark grey)

Rev	Date/Intls	Details
P1	12/15/15 LB	ISSUED FOR PLANNING_NMC
A	22/10/15 LW	Kitchen/ bathroom similar to existing arrangement Stair window retained

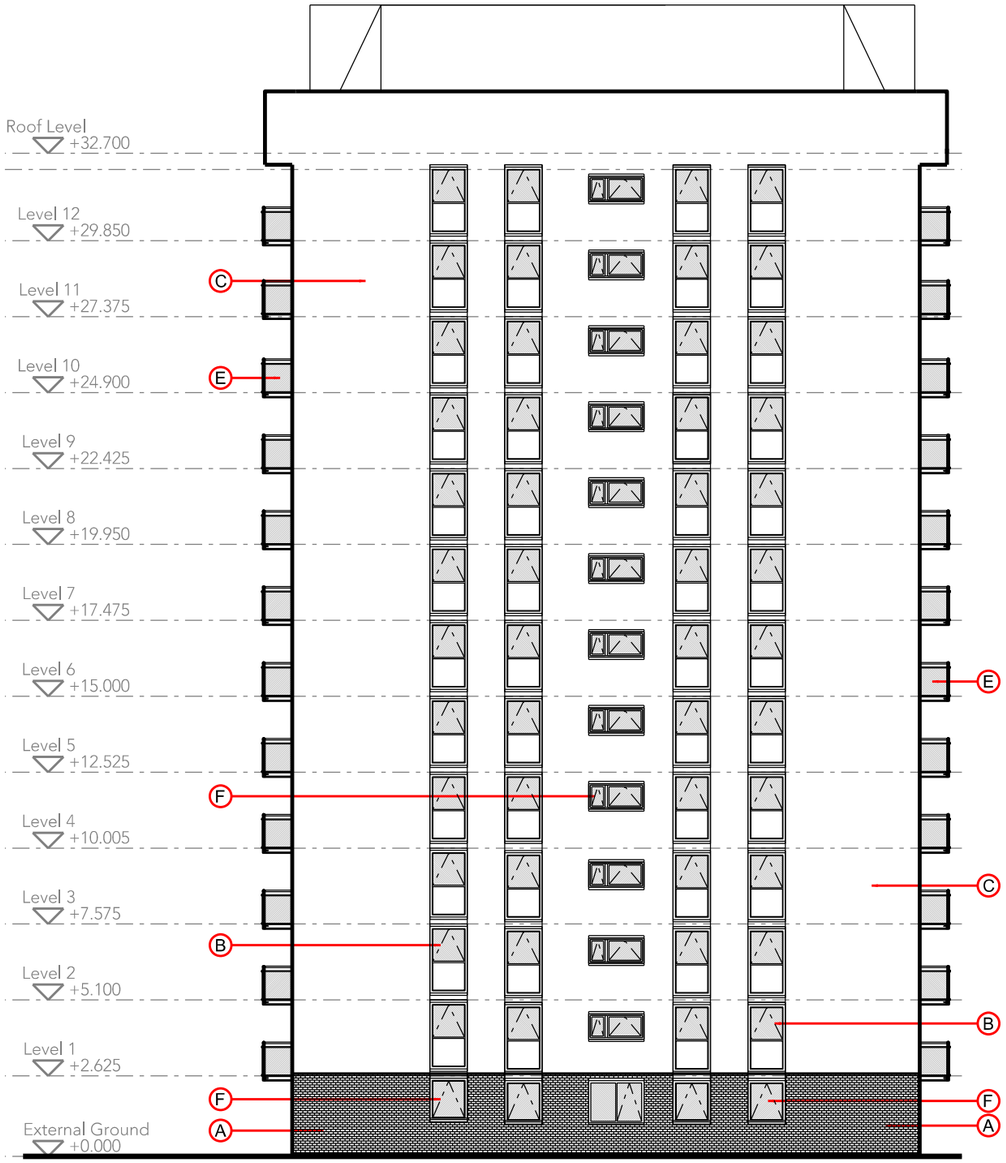
Buttress

41 Bengal St
Manchester
M4 6AF

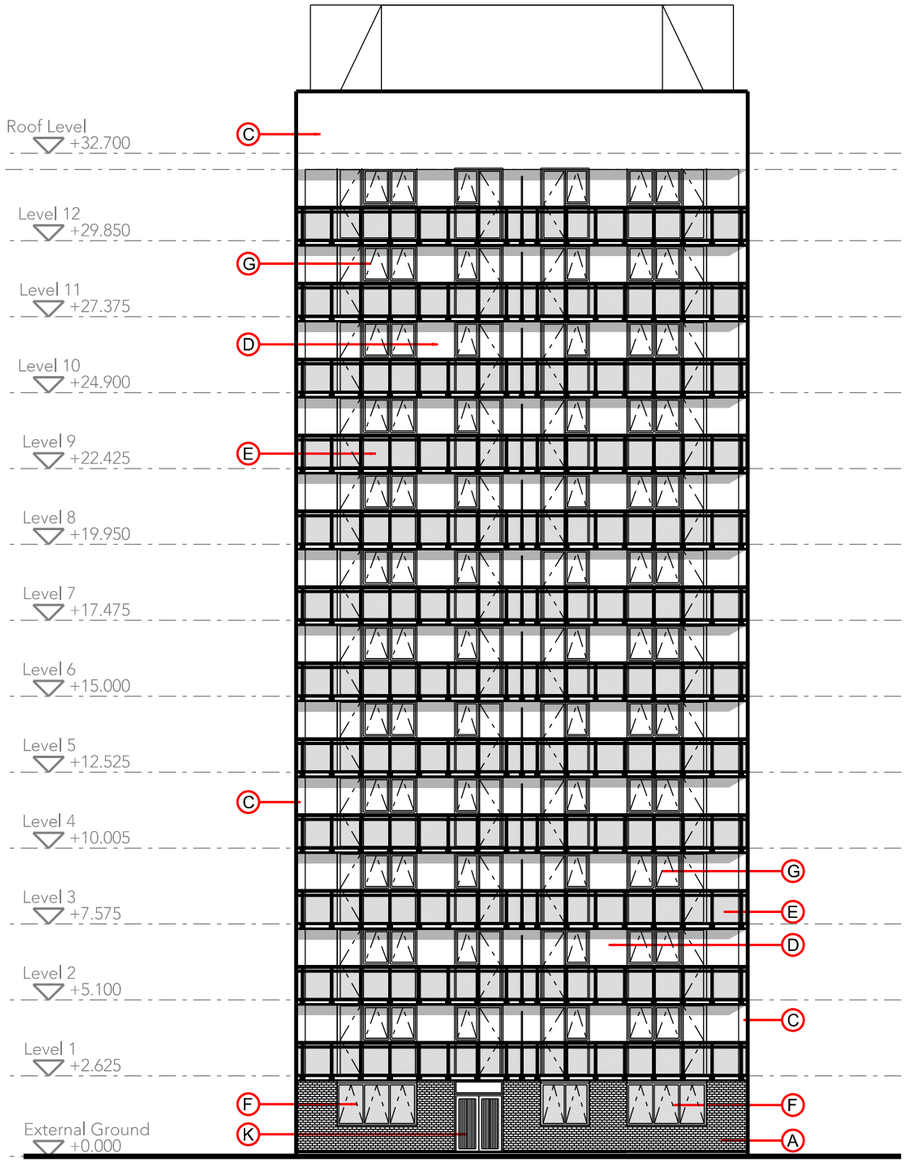
T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK - ARTILLERY COURT
Client	Mears Group PLC
Location	Manchester
Drawing Title	Proposed First - Twelfth Floor Plans (Proposed Kitchen Reconfiguration) -
Date	14.05.15
Checked	MG
Scale	1:100
Orig Paper Size	A3
Status	PLANNING

Drawing ref	Job No	Drawing No	Revision
	7862	(50) 023	P1



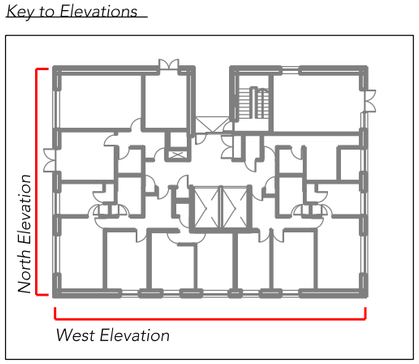
Proposed West Elevation



Proposed North Elevation

West Elevation

Key to Elevations



Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

Key to External Materials

- A Facing brick slips. Colour: Dudley blue with dark grey mortar - T14 by Tarmac
- B Curtain Walling - Aluminium Frame Colour: RAL 7012 (Dark grey)
- C EWIS render finish. Colour: 2151 (Mauve)
- D EWIS render finish. Colour: 2325 (White)
- E Coloured glass balustrade
- F UPVC windows & doors. Colour: RAL 7012 (Dark grey)
- G UPVC windows & doors.
- H Aluminium doors. Colour: RAL 7012 (Dark grey)
- J Masonry paint. Colour: White
- K Solid core timber doors & Windows (to match existing) Colour: 7012 (Dark grey)
- L UPVC louvres to GF. Colour: 7012 (Dark grey)

Rev	Date/Intls	Details
P1	15/12/15 LB	KITCHEN WINDOW / DOOR AMENDED TO SUIT EXISTING LAYOUT-NMC

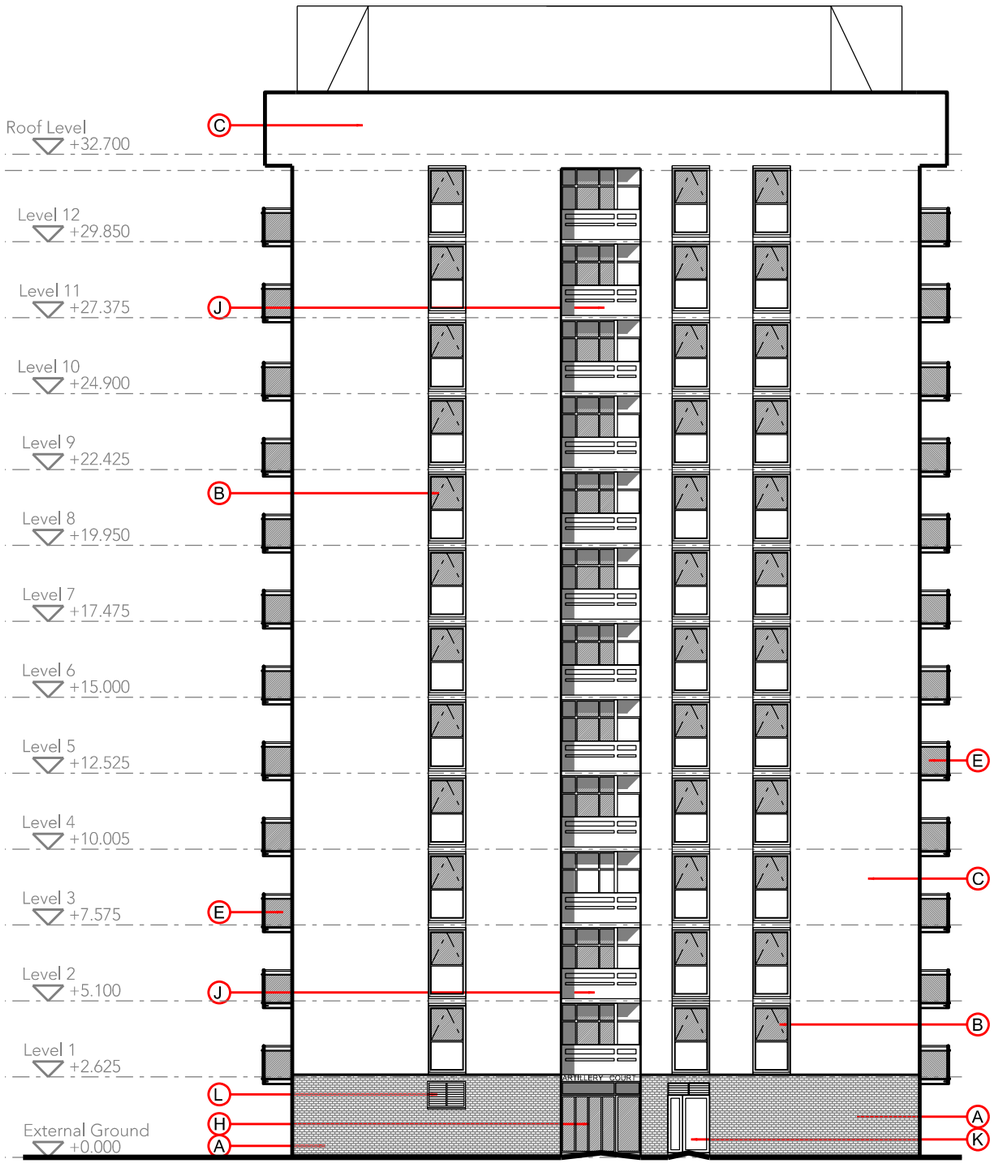
Buttress

41 Bengal St
Manchester
M4 6AF

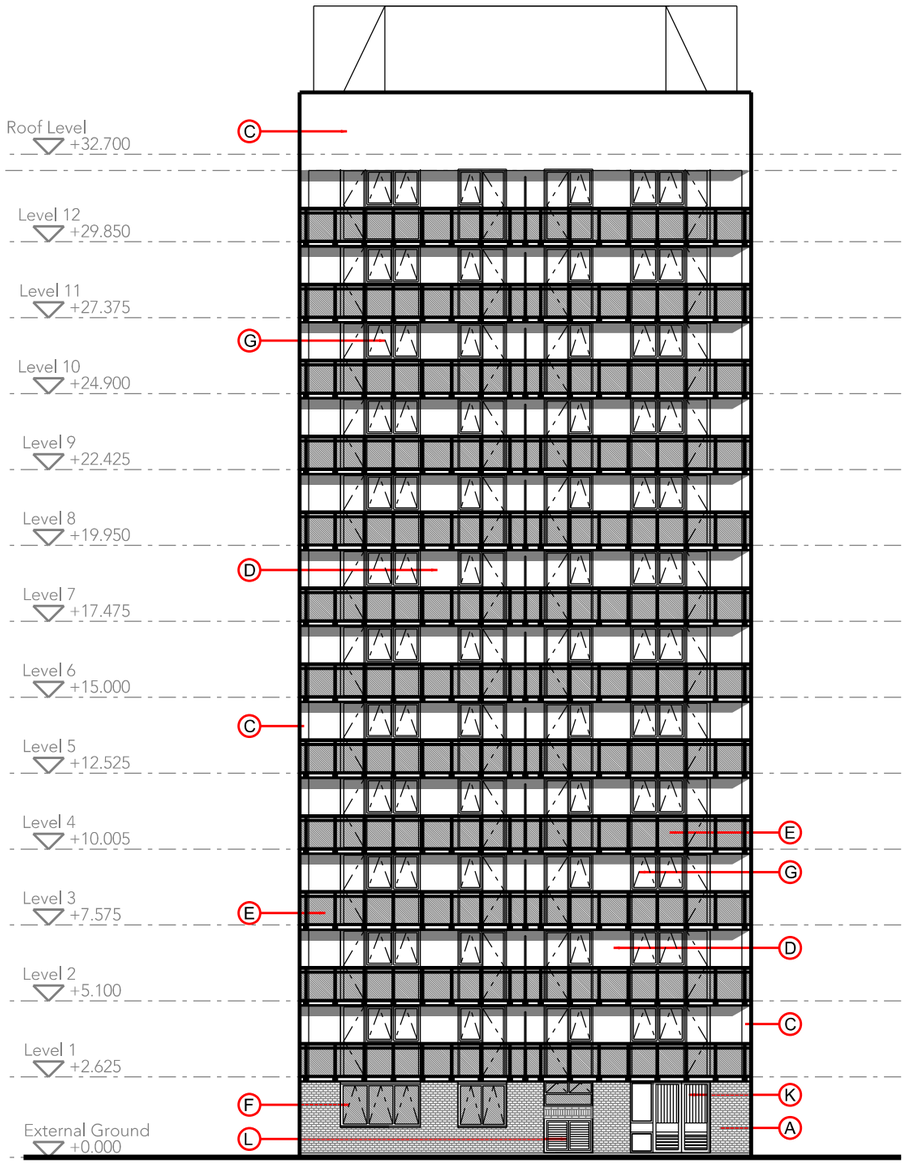
T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK - ARTILLERY COURT
Client	Mears Group PLC
Location	Manchester
Drawing Title	Proposed West & North Elevations -
Date	14.05.15
Checked	MG
Scale	1:200
Orig Paper Size	A3
Status	PLANNING

Drawing ref	Job No	Drawing No	Revision
	7862	**(50) 026**	**P1**

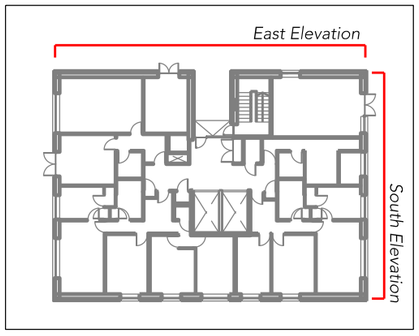


Proposed East Elevation



Proposed South Elevation

Key to Elevations



Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

Key to External Materials

- A Facing brick slips. Colour: Dudley blue with dark grey mortar - T14 by Tarmac
- B Curtain Walling - Aluminium Frame Colour: RAL 7012 (Dark grey)
- C EWIS render finish. Colour: 2151 (Mauve)
- D EWIS render finish. Colour: 2325 (White)
- E Coloured glass balustrade
- F UPVC windows & doors. Colour: RAL 7012 (Dark grey)
- G UPVC windows & doors.
- H Aluminium doors. Colour: RAL 7012 (Dark grey)
- J Masonry paint. Colour: White
- K Solid core timber doors & Windows (to match existing) Colour: 7012 (Dark grey)
- L UPVC louvres to GF. Colour: 7012 (Dark grey)

Rev	Date/Intls	Details
P1	15/12/12 LB	ISSUED FOR PLANNING_NMC
A	22/10/15 LW	UPVC spec altered

Buttress

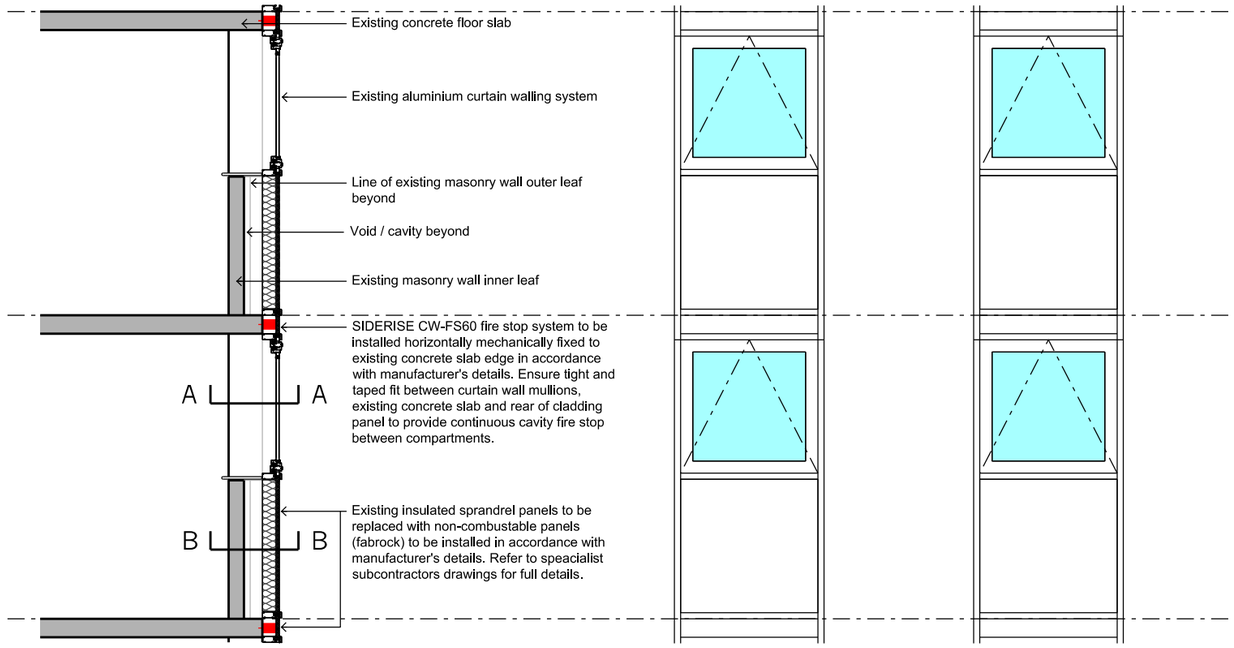
41 Bengal St
Manchester
M4 6AF

T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK - ARTILLERY COURT
Client	Mears Group PLC
Location	Manchester
Drawing Title	Proposed East & South Elevations -
Date	14.05.15
Checked	MG
Scale	1:200
Orig Paper Size	A3
Status	PLANNING

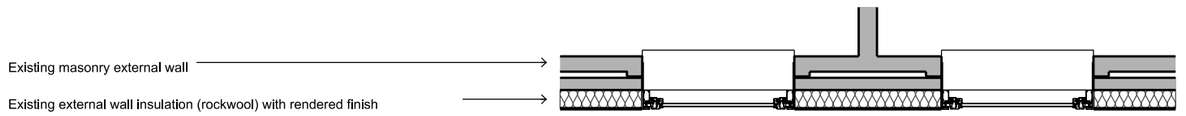
Drawing ref	Job No	Drawing No	Revision
	7862	**(50) 028**	**P1**

8 External Wall Details



Typical Section

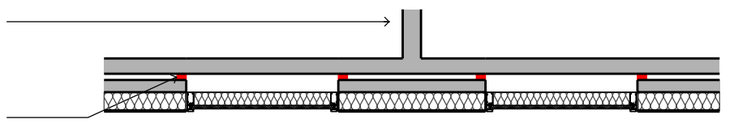
Typical Elevation



Plan AA (above window cill level)

Existing compartment party wall construction and junction detail unknown. To be investigated on site, if no existing cavity fire barrier is present then Rockwool TCB cavity fire stops (30 fire rating) are to be installed to the existing cavity below window cill level to provide 60min fire protection between compartments.

Fire stops to be fitted vertically in accordance with manufacturers details. Ensure tight fit to form continuous fire barrier with existing masonry return above and existing concrete slab below.



Plan BB (below window cill level)

Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

NOTES:

DRAWINGS PROVIDED TO SHOW TYPICAL FIRE STOPPING DETAILS BETWEEN COMPARTMENTS.

THESE DRAWINGS WILL BE SUPERCEDED BY THE SPECIALIST FIRE STOPPING INSTALLATION SUBCONTRACTORS DRAWINGS.

FOR FURTHER INFORMATION REFER TO SPECIALIST SUBCONTRACTORS DRAWINGS AND MANUFACTURERS DETAILS.

ALL WORKS ARE TO BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY BUILDING CONTROL OFFICER.

Rev	Date/Intls	Details
A	25.10.18	Rockwool TCB cavity barrier specification added
-	19.10.18	Issued to Mears for comment

Buttress

41 Bengal St
Manchester
M4 6AF

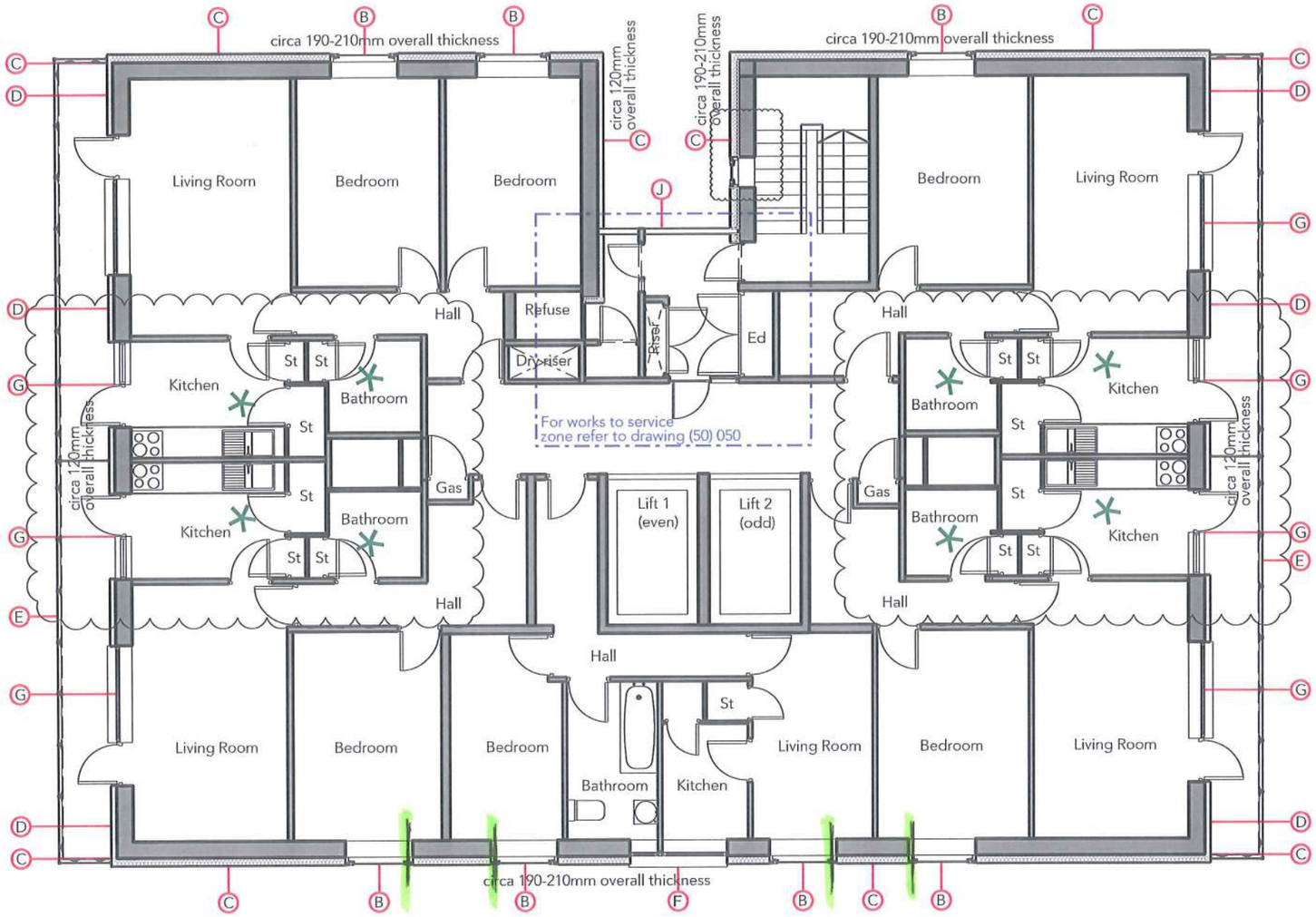
T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK REVERSALS
Client	Mears Group PLC
Location	Manchester
Drawing Title	Brunswick High Rise Refurbishment Remedial fire stopping works Typical details (Artillery Court)

Date	19/10/2018	**Scale**	1/50
Checked	LB	**Orig Paper Size**	A3
		Status	FOR COMMENT

Drawing ref	Job No	Drawing No	Revision
	7862	**(08) 021**	**A**

Note: Line of setting out of brick slips to be dicatated by line of setting out of render above. Insulation to be varied at ground floor to achieve flush finish between the 2 materials



For First - twelfth Floor kitchen and bathroom layouts refer to drawing (50) 042

Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

Key to External Materials

- (A) Facing brick slips. Colour: Dudley blue with dark grey mortar - T14 by Tarmac
- (B) Curtain Walling - Aluminium Frame Colour: RAL 7012 (Dark grey)
- (C) EWIS render finish. Colour: 2151 (Mauve)
- (D) EWIS render finish. Colour: 2325 (White)
- (E) Coloured glass balustrade
- (F) UPVC windows & doors. Colour: RAL 7012 (Dark grey)
- (G) UPVC windows & doors.
- (H) Aluminium doors. Colour: RAL 7012 (Dark grey)
- (J) Masonry paint. Colour: White
- (K) Solid core timber doors & Windows (to match existing) Colour: 7012 (Dark grey)
- (L) UPVC louvres to GF. Colour: 7012 (Dark grey)

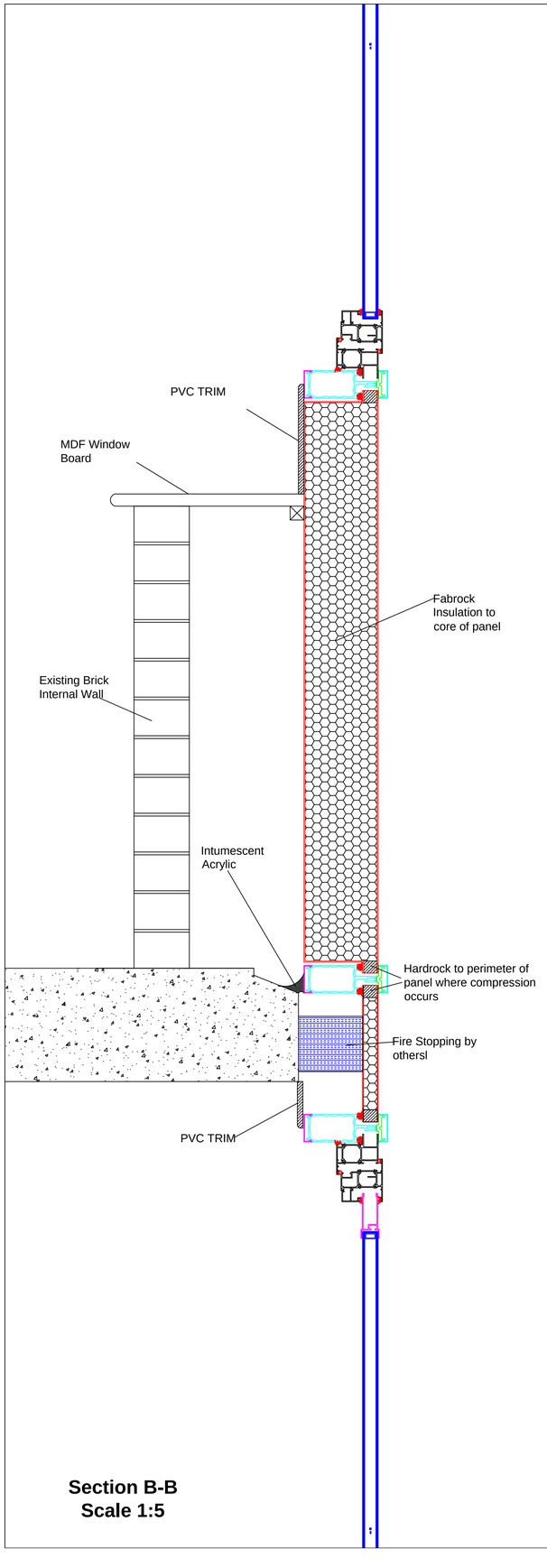
Rev	Date/Intls	Details
P1	12/15/15 LB	ISSUED FOR PLANNING_NMC
A	22/10/15 LW	Kitchen/ bathroom similar to existing arrangement Stair window retained

Buttress
41 Bengal St
Manchester
M4 6AF
T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK - ARTILLERY COURT
Client	Mears Group PLC
Location	Manchester
Drawing Title	Proposed First - Twelfth Floor Plans (Proposed Kitchen Reconfiguration)

Date	14.05.15	Scale	1:100
Checked	MG	Orig Paper Size	A3
		Status	PLANNING

Drawing ref	Job No	Drawing No	Revision
	7862	(50) 023	P1



Section B-B
Scale 1:5

Section A-A
Scale 1:5

Panel Specification

- 1.5mm aluminium face PPC to match existing.
- Main Filling - Rock wool fab rock A1
- Perimeter edge filling - Rock Wool hard rock A1
- 1.5mm aluminium top hat mill finish
- Bonded with A8520 BLU SKY Spray adhesive and D2655 Green Polyurethane Adhesive

FOR COMMENT

Revisions
-**A** 05/07/18 - Revised to include vertical panels to same specification as slab panels
-
-

Mears
Brunswick PFI

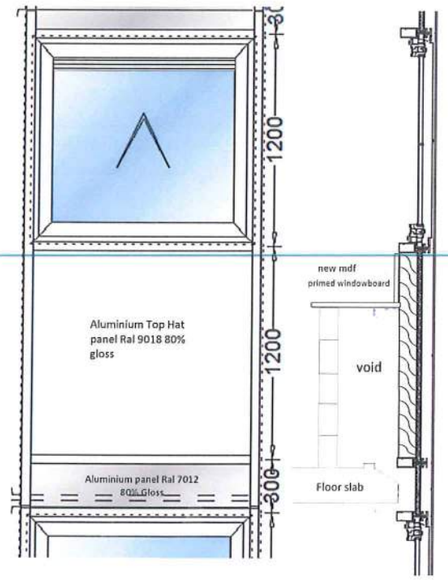
Kingfisher Commercial

Kinfisher Commercial
Valley Mills, Whitehall Road
Drighlington
BD11 1NQ
0113 2854985

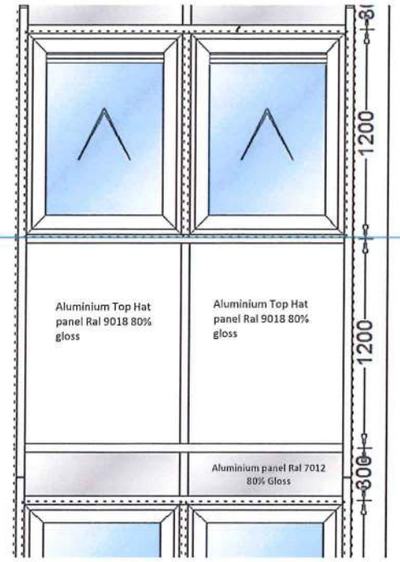
Drawn By - LB	
Issue Date - 12/06/2018	Drawing No - 1 REV - A

New Panel Detail

Single curtain walling



Lounge Curtain walling



Staircore Curtain Walling to be reviewed at a later date

New window opening configuration & operation type different from existing, not like for like

RAL 7012 external - 80% Gloss +/-5% - 40 Microns thick,RAL 9016 internal - Satin - 70% +/- 5% - 40 microns thick

Senior Architectural Systems SF52 Curtain walling - all sections to be as required from structural engineers calculations, SF52 Tested by SAS to CWCT Sequence B (part 3) Air, Water & Wind, please note SAS Sequence B test has been tested with a standard perimeter seal however, this detail may differ for this particular project and due to variety of perimeter seals from project to project, this perimeter detail is not to the CWCT test. Design wind load deflection (calculated span/200), fixings and bracketry as Structural engineer calculations not CWCT Part 2. Curtain walling maximum floor to floor expansion/contraction of 5mm tolerance max - Capping's as SF52 system

SPW600 Open Out Top hinged casements - Chrome Key locking handles - Shootbolt Locking, Feretic hinges opening to maximum 27 degrees

1st auto latch spring restrictor at 50-60mm clear opening, 2nd restrictor Key Locking jack lock at 16 degrees - Both overidable to meet purge ventilation

SPW600 tested by SAS to BS6375-1 only, windows not to CWCT, PAS24, BS EN1627 or LPS1175

N.B. -We have partially mitigated 'the risk of slamming' as the windows can be locked out in the night vent position providing some ventilation. However we cannot totally mitigate the risk in all open positions because the ironmongery manufacturers specific test data that would support and demonstrate compliance does not exist.

Glass to opening sash

4mm Annealed - black warm edge spacer Argon Gas - 4mm Annealed Planitherm - Gaskets to system vulcanised corners or continuous - glass not to BS EN 12600

under opening sash (overall panel thickness tbc) top hat panel

Panel 1.5mm Aluminium faced RAL 9018 (80% gloss+/- 5%) external - 25mm insulated core 1.5mm Aluminium faced RAL 9016 Satin - 70% gloss +/- 5% internal

Floor slab Level panel

28mm Panel 1.5mm Aluminium faced RAL 7012 (80% gloss+/- 5%) external - 25mm insulated core -1.5mm Aluminium flat – Mill finish internal

** 2 hour Lamatherm Linear gap seal at floor slab level

Over glass vent carrier bar to opening sash as outerframe too narrow for trickle vent mounting

NB, - Because there is no bespoke anti-whistle trickle vent currently on the market we cannot demonstrate full compliance with that part of the output spec, we have partially mitigated 'avoid whistling' as we include brookvent SM1400 Severe weather rated trickle vents, which have acoustic properties of upto 39 db. Dne W in the closed position and up to 32db Dne W in the open position. We cannot totally mitigate the risk 'avoid whistling' as the manufactures cannot offer test data or guarantee no whistling due to the nature of allowing air into the property in accordance with building regulations.

Thermal performance lower than required 1.8w/m2 k calculated using Logikal Software

The system has no acoustic or moisture test/data to CWCT part 5, BS EN 410 or any other standard

EPDM to the full perimeter of curtain walling, pressings by others

Design Windload 1331PA in accordance with our Structural engineer to BS EN 1191-1-4

N.B- Cleaning from inside is not available to these products, an alternative cleaning strategy by Mears is required to meet the output specification

Manufactured in accordance with Senior Architectural Manual, no test data in Kingfishers name

NO SBD or PAS 24 or LPS1175 to these products as on the rear of building

- Curtains and blinds taken down at install, refixed by resident

- tilt & turns to top hung push out casements- opening configuration and product type changed from existing

- Internal Finish By Mears -Secondary glazing removed by Mears External Pressings by others

Part 5 – Moisture/Vapour control – we are unable to prove compliance as in order to calculate this we would require from you; internal and external temperatures, relative humidity and saturation vapour point per property. This information would need to be issued at design stage by you to enable calculations to be performed which may lead to alternative specification. if this information was provided a calculation could be performed and possibly arrive at a new specification, however there is no certainty that we can mitigate against moisture occurring due to the unpredictable nature of the data and its subjectivity to individual lifestyle and living environment.

The system has no fire performance/resistant properties or test data in accordance with CWCT or any other standard

Due to amount of steps within Curtain walling the panels maybe susceptible for to staining which will need cleaning as part of the cleaning strategy

Max permitted tolerance & Mechanical fixings in accordance with Senior Architectural Systems Fabrication manual

No soft body impact loads to curtain walling as NBS Location and class N/A. Glass N/A as above 1.5m of ground.

Windload fatigue test not included as TBC

Aluminium extruded to BS EN 755 or BS EN 12020 dependent upon system, PPC BS6496

The test and certification of BS6375-1 & CWCT Sequence B are in Senior Architectural Systems name, Kingfisher to manufacture and install in accordance with where possible.

Low Modular Silicone - Curtain wall joint sealing - As systems company fabrication manuals

- Warranty 10 years profile, 5 years on glass, 12 months hardware

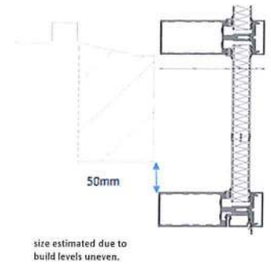
- CWCT Part 7 Design Life - Aluminium 30 years, Powder coating 30 years Components 10 years, thermal barrier 10 years, Gaskets 20 years. (for hardware please refer to O&M manual) Tolerances and workmanship in accordance with systems suppliers

There is no acoustic test data for overall combined products ie profile, glass and vents together, however the glass by itself has simulation calculation data of the following:- Db rating of glass alone 30db RW 4-20-4

No on site or project specific test/certification, site/specific testing not included and would be additional

Working to Revised NBS Specification issued 14-5-15

Floor Slab Detail

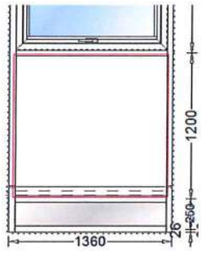


size estimated due to build levels uneven.

Vent Carrier Bar

Cill Section

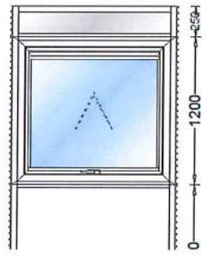
Dimension TBC



250mm

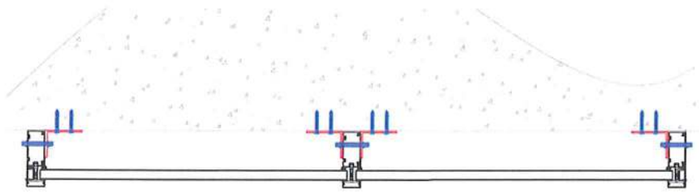
Head detail

Dimension TBC

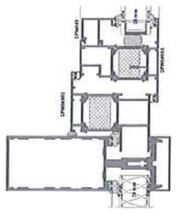


250mm

Floor Slab Fixing Detail Lounge Windows



Mid Transom Level



Rev

panel colour changes 13-8-15

Kingfisher Commercial

Valley Mills, Whitehall Road

Drighlington BD11 1NQ

0113 2854985

S4B

04/09/2015

Artillery Court Curtain Walling

CW.01.ART.JR Rev - 2

SIDERISE CW range: Perimeter barriers & fire stops for curtain walling

Market leading solutions that meet fire and smoke stop, and sound barrier requirements in all architectural cladding panel applications.

Application

SIDERISE CW-FS perimeter barrier and fire stop systems offer an extensive range of solutions for fire stop, smoke stop and sound barrier requirements in all architectural cladding panel applications.

Based on the experience gained through being the premier supplier to the UK curtain walling market, the products represent an unrivalled combination of fully qualified performance, practical installation and service benefits.

The primary function of the CW system is to maintain continuity of fire resistance by sealing the void between the compartment floors or walls and the external curtain wall both horizontally and vertically.

No. 1 in the UK for 25 years

Third-party approved : 'Certifire CF563'

Fully compliant to UK, EU & UAE regulations

Tested to BS 476 and EN 1364-4 in accordance with ETAG 026 and ASFP Guidelines

Benefits

- Market leading fire resistance and smoke seal
- Suitable for horizontal and vertical application
- Patented product construction provides unique ability to accommodate facade movement
- Fully qualified acoustic performance
- Simple and quick to install

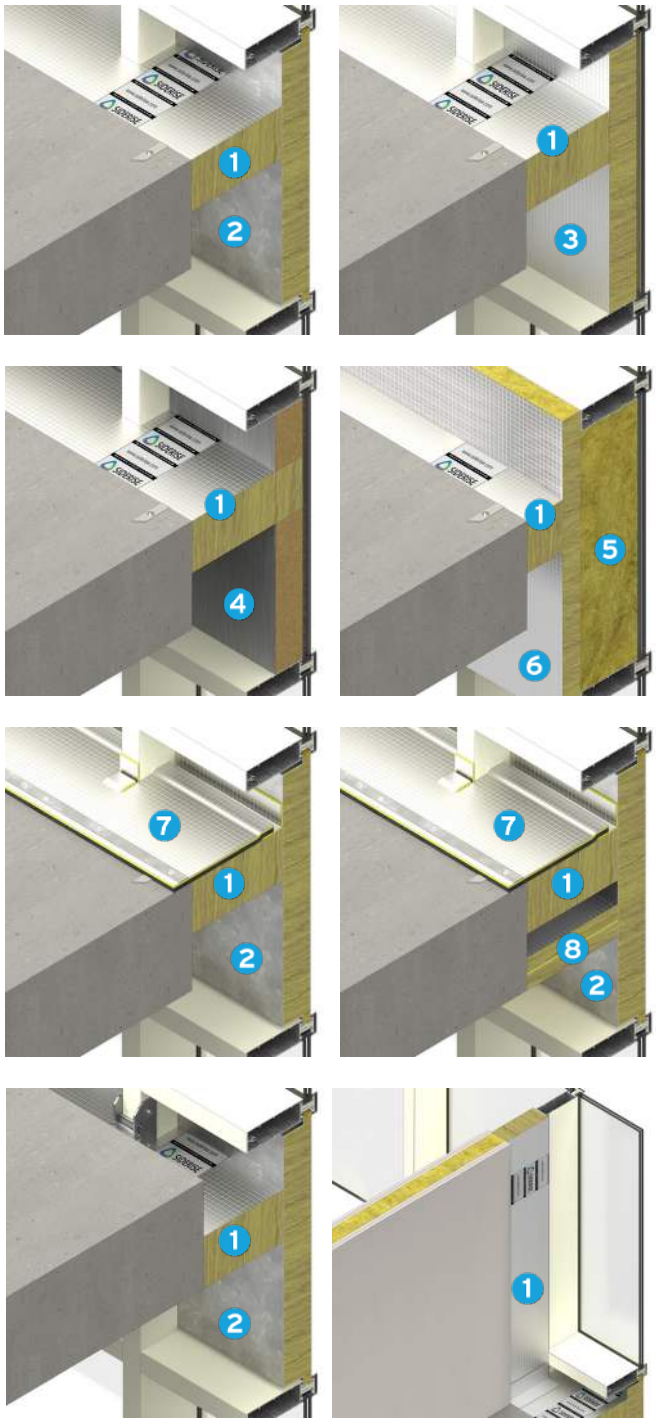
Product description

SIDERISE perimeter barriers and fire stops for curtain walling use a patented method of manufacture that provides a resilient lateral compression. This facilitates installation, ensures the requisite tight fit and enhances fire integrity.

Throughout the range, the materials comprise a one-piece product with a pre-compressed non-combustible stonewool core. The products also have integral aluminium foil facings to provide an overall Class A1 rating and excellent resistance to smoke.

The systems can offer tested fire rating options ranging from 30mins to 5 hours and can accommodate void widths up to 1200mm. For voids in excess of 400mm contact our Facades technical team for advice.

In addition to providing an effective seal against the passage of smoke and fire the products will also function as an effective acoustic barrier and plenum lining.



1. SIDERISE Cavity Barrier (CW-CB) or SIDERISE Fire stop (CW-FS)
2. Metal spandrel panel with SIDERISE Nexus 'Core'
3. SIDERISE Nexus 'Fusion'
4. Insulation other than Class A1
5. SIDERISE Nexus or Stonewool slab
6. SIDERISE CW-FB Curtain Wall FireBoard
7. SIDERISE Acoustic Barrier Overlay
8. SIDERISE Acoustic Void Barrier

Standard systems

The materials can be either supplied as pre-cut units to suit a quoted void size or in sheet form for cutting on site.

Standard sheet products are supplied 1200 x1200 mm which may prove beneficial when the actual void size is not known or where it varies significantly. (Please note that when ordered in sheet form, the requisite quantity of fixing brackets needs to be purchased separately.)

Pre-cut products are available in 1mm increments of width so as to provide a tight compressive fit within the void.

Each pre-cut CW unit is supplied with fixing brackets to locate the material into position.

The standard fixing brackets are supplied in 1mm galvanised mild steel in flat form that is complete with a prenotched facility for folding on site.

All holes are to be drilled to suit the varying site conditions. Different size brackets are available according to the cavity size – see Table 1.

All fixing brackets are to be mechanically secured to the substructure with suitable non-combustible fixings.

Fire performance

SIDERISE CW-FS perimeter barrier and fire stop systems have been tested and assessed on proven fire performance to BS 476 :Part 20, and tested to EN 1364-4.

SIDERISE perimeter barriers and fire stops provide continuity of fire resistance across the void when aligned with fire rated elements so as to maintain compartmentation.

The correct system is simply selected by matching the fire resistance requirements to the CW system type and void size.

Table 1 summarises the nominal fire rating for horizontal and vertical applications together with confirmation of void size limitation and standard dimensions.

Table 1: Horizontal and vertical application: Fire ratings, void size and bracket types

Product Type	Barrier Size	Fire Performance	Void height limitation & bracket requirements				
	Thickness (mm)	Insulation & Integrity (mins)	50 - 150 (mm)	151 - 240 (mm)	241 - 400 (mm)	401 - 600 (mm)	601 - 1200 (mm)
CW-CB30	75	30	2 no B65/110	2 no B195	2 no B335	N/A	N/A
CW-FS60	90	60	2 no B65/110	2 no B195	2 no B335	N/A	N/A
CW-FS60-X	120	60	N/A	N/A	N/A	4 no B355	N/A
CW-FS60-SB	120	60	N/A	N/A	N/A	N/A	3 no B900
CW-FS120	120	120	2 no B65/110	2 no B195	2 no B355	N/A	N/A
CW-FSH20-X	175	120	N/A	N/A	N/A	4 no B355	N/A
CW-FS120SB	175	120	N/A	N/A	N/A	N/A	3 no B900
CW-FSH300	175	300	2 no B65/110	2 no B195	2 no B355	N/A	N/A

NOTE:*CW-FS300 system is provided with 75mm rebated joints as standard.

Table 2: SIDERISE CW Cavity Barriers and Fire Stops - BS 476: Part 20 - Floor slab to external facade assembly applications

Gap Width (mm)	Product	Seal Width (mm)	Compression		Performance to BS 476: Part 20		Cover Length (mm)	Bracket Requirement
			%	Minimum (mm)	Integrity (mins)	Insulation (mins)		
20 to 50	CW-CB15	57	n/a	10	30	15	1200	No brackets required
	CW-CB30	75	n/a	10	30	30	1200	
	CW-FS60	90	n/a	10	60	60	1200	
	CW-FS120	120	n/a	10	120	120	1200	
	CW-FS300	175	n/a	10	300	300	1125	
51 to 100	CW-CB15	57	n/a	10	30	15	1200	2No. Standard brackets per length fixed at 600mm nominal centres
	CW-CB30	75	n/a	10	30	30	1200	
	CW-FS60	90	n/a	10	60	60	1200	
	CW-FS120	120	n/a	10	120	120	1200	
	CW-FS300	175	n/a	10	300	300	1125	
101 to 400	CW-CB15	57	10	n/a	30	15	1200	2No. Standard brackets per length fixed at 600mm nominal centres
	CW-CB30	75	10	n/a	30	30	1200	
	CW-FS60	90	10	n/a	60	60	1200	
	CW-FS120	120	10	n/a	120	120	1200	
	CW-FS300	175	10	n/a	300	300	1125	
401 to 600	CW-FS60-X	120	10	n/a	60	60	1200	4No. Standard brackets per length fixed at 300 mm nominal centres
	CW-FS120-X	175	10	n/a	120	120	1125	
601 to 1200	CW-FS60-SB	120	n/a	60	60	60	1200	3No. Structural brackets per length fixed at 400 mm nominal centres
	CW-FS120-SB	175	n/a	60	120	120	1125	

Table 3: SIDERISE 'CW-FS' Firestops BS EN 1364-4* - Floor slab to external facade assembly applications

Gap Width (mm)	Product	Seal Width (mm)	Compression		Performance to BS EN 1364-4		Cover Length (mm)	Bracket Requirement
			%	Minimum (mm)	Integrity (mins)	Insulation (mins		
20 to 50	CW-FS120	120	n/a	10	120	120	1200	No brackets required
	CW-FS180	150	n/a	10	300	300	1125	
51 to 100	CW-FS120	120	n/a	10	120	120	1200	2No. Standard brackets per length fixed at 600mm nominal centres
	CW-FS180	150	n/a	10	300	300	1125	
151 to 250	CW-FS120	120	10	n/a	120	120	1200	2No. Standard brackets per length fixed at 600mm nominal centres
	CW-FS180	150	10	n/a	300	300	1125	

NOTES:
* in Compliance with ETAG 026 GUIDLINE FOR EUROPEAN TECHNICAL APPROVAL of Firestopping and Fire Sealing Products Part 3 Linear Joint and Gap Seals - Annex D.
All fixing brackets are to be mechanically fixed to structure.

Acoustic performance

The CW-FS range additionally provides an effective sound barrier as the material construction and inherent properties of the mineral fibre core afford the CW exceptional acoustic performance.

Also, the foil facings and the additional sealing of joints with foil tape all serve to provide improved air tightness.

Sound reduction between floors

The installation of the CW systems within an external curtain wall cavity will significantly increase the floor-to-floor attenuation.

As an example, the installation of 120mm thick CW-FS120 within the cavity will increase the transmission loss via the tortuous sound path by approximately 25dB.

The precise value will depend upon the specifics of the construction.

Table 2 confirms values for Weighted Sound Reduction Index (Rw) based on laboratory tests to determine airborne sound transmission in accordance with BS EN ISO 140-3 : 1995, BS 2750 Pt 3 :1995.

ENHANCED ACOUSTIC PERFORMANCE AB ACOUSTIC BARRIERS

SIDERISE offer a range of complementary acoustic mass overlay materials which can further enhance the overall acoustic performance of the construction.

AB barriers are extremely quick and easy to install and are suitable for improving sound performance within all curtain walling environments.

The AB acoustic barriers are factory produced multi-layer composite materials consisting of a Class 0 foil faced polymeric layer bonded to a flexible acoustic foam. The products are available in two grades depending on the acoustic performance requirement, namely AB5 and AB10 whenever façade deflection is anticipated.

Table 4: CW acoustic performance

Weighted Sound Reduction Index		
Product Type	Thickness (mm)	Rw (dB)
CW-FS30	75	21
CW-FS60	90	22
CW-FS120	120	25
CW-FS300	175	27

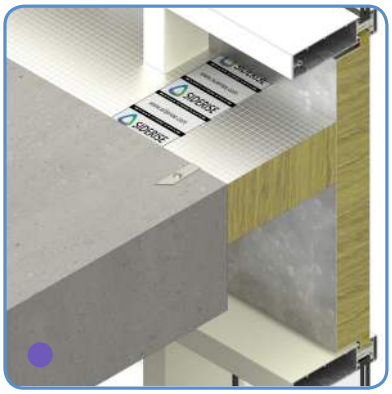
Table 5: AB acoustic performance

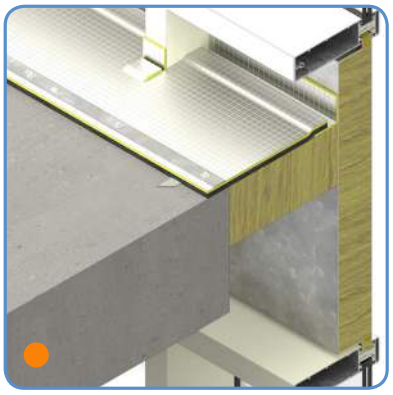
Weighted Sound Reduction Index		
Product Type	Surface mass (mm)	Rw (dB)
AB5	5 kg/m^2	25
AB10	10 kg/m^2	28

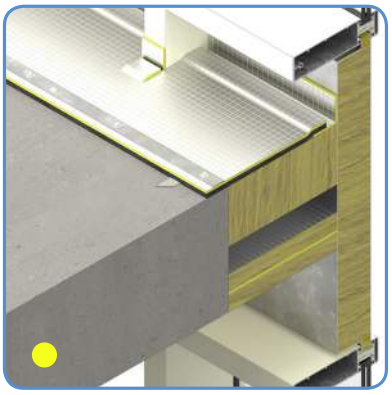
Table 6: The table below illustrates typical CW and AB acoustic performance of a range of different curtain wall fire stopping products, including products manufactured by SIDERISE.

Product	21 - 30dB Rw		31 – 35dB Rw		36 - 50dB Rw		50dB Rw +	
	Rw	Rw + Ctr	Rw	Rw + Ctr	Rw	Rw + Ctr	Rw	Rw + Ctr
SIDERISE CW-FS60	23	21	-	-	-	-	-	-
SIDERISE CW-FS120	25	23	-	-	-	-	-	-
SIDERISE CW-FS60 + AB5 Overlay	-	-	33	27	-	-	-	-
SIDERISE CW-FS120 + AB5 Overlay	-	-	33	27	-	-	-	-
SIDERISE CW-FS60 + AB10 Overlay	-	-	-	-	36*	31*	-	-
SIDERISE CW-FS120 + AB10 Overlay	-	-	-	-	37	32	-	-
SIDERISE CW-FS120 + AB10 Overlay + CVB/C10 below	-	-	-	-	-	-	51	45
SIDERISE CW-FS120 + 2mm Steel Plate Overlay + CVB/ C10/75 below	-	-	-	-	-	-	53	45

NOTE: *Assessed values by either UKAS accredited Laboratories or IOA registered Acoustic Engineers







Installation recommendations

For all installations the cut strips are located with fixing brackets which are impaled into the material at mid-thickness, at nominal 600mm fixing centres i.e. 300mm from each end.

For horizontal applications, the cut strips are then inserted within the void with the fixing brackets located over the edge of the concrete floor slab.

The brackets must be mechanically fixed to the compartment floor, or wall, with suitable non-combustible fixings.

Build the CW into the void to provide the necessary compression.

See Tables 2 and 3.

Ensure that there are no gaps and that all joints, including the intersections of horizontal / vertical installation, are tightly abutted and sealed with RFT 120/45 to ensure the integrity of the smoke barrier. As a minimum the topside is only sealed with RFT 120/45. The juncture between facade and floor or wall need not be sealed.

Fixing brackets

A range of support brackets for SIDERISE CW-FS horizontal perimeter barriers are available for void widths of up to 1200mm (see Table 1 for appropriate type and quantity).

The fixing brackets should be trimmed, if necessary, to approximately 75% of the cavity width. The standard fixing brackets are supplied in 1mm galvanised mild steel in flat form that is complete with a pre-notched facility for folding on site. All holes are to be site drilled to suit the varying site conditions.

Where the void is smaller than the section available, the CW-CB/CW-FS can be trimmed on site with a sharp serrated knife providing that the compression allowance is maintained. Also, if used in sheet form, the product must be cut to provide the requisite compression fit.

INSTALLATION PRINCIPLES

The CW material must be installed with the unfaced mineral fibre in contact with the sides of the cavity, the aluminium foil smoke barrier facings will be positioned top and bottom i.e. remains visible to the installer. For all installations the CW seals are to be sized to provide the correct compression allowance.

See Tables 2 and 3.

Installation considerations

As standard, the CW material must be compressed within the void to maintain the integrity of the seal.

For vertical applications, where the façade deflection may be up to 15mm, we recommend that you calculate the design deflection of the external façade system in both positive and negative wind load situations. Then followTables 2 and 3. + the design deflection of the system.

Additional material allowances should be included whenever facade deflection is anticipated. For example:

CW-CB/CW-FS + Deflection + Compression

CW-CB/CW-FS to suit void + 15mm + 10mm = CW-CB/CW-FS to suit void + 25mm

Therefore for 120mm void = 120mm + 15mm + 10mm = 145mm of CW-CB/CW-FS

INSTALLATION DETAILING

For the interface with the mullion condition we recommend that the CW-FS is trimmed to accommodate mullion with the joint between adjacent product being along the centre line of the mullion.

For curtain wall systems with mullion centres in excess of 1200mm we recommend the use of standard 1200mm CW-CB/CW-FS trimmed to accommodate mullion, together with a smaller section of CW-CB/CW-FS trimmed to accommodate mullion.

Please note that the smaller 300mm CW-CB/CW-FS length is secured with two fixing brackets. We specify that all small portions of CW-CB/CW-FS are fixed with two fixing brackets as part of the system.

For the interface with the spandrel panel at the mullion position we recommend the use of a cut portion of CW product to suit the void (cut oversize to maintain compression). This is then bonded into position with SIDERISE fire and acoustic gap sealant.

Smaller voids and/or particularly difficult situations can be treated by the additional application of SIDERISE fire and acoustic gap sealant to make good joints, areas of missing material or complex details.

The CW material is easily cut on site with a sharp serrated knife to form a tight resilient seal around mullion details and structural brackets etc.

Movement characteristics

Curtain walling and external facade deflection

The qualification of proprietary fire stop systems are typically limited by the condition that they must be installed in a static environment.

However, for curtain walling applications it is imperative that the installed seal is able to function effectively with due regard to all designed movement serviceability limits. SIDERISE recognise that curtain walling and cladding façade systems will deflect due to:

- Positive windload
- Negative windload
- Occupational live load

The above are covered by EN 13116:2001

Typically, a project may stipulate that the curtain walling system may have the following allowable deflection limits:

Under the declared wind loads the maximum frontal deflection of the curtain walling's framing members shall not exceed L/200 or 15mm, whichever is the less, when measured between the points of support or anchorage to the building's structure in compliance with EN 13116. [Extract from EN 13830]

These factors may inevitably combine to preclude the suitability and therefore, use of certain systems e.g. high density material slab products.

However, the CW-FS fire stop systems are very effective for their function within curtain walling as the unique material construction can accept the cyclical negative and positive wind and live loads imposed on the façade.

CONSIDERATIONS

Design considerations

Important factors for the application of fire stops within curtain wall façades:

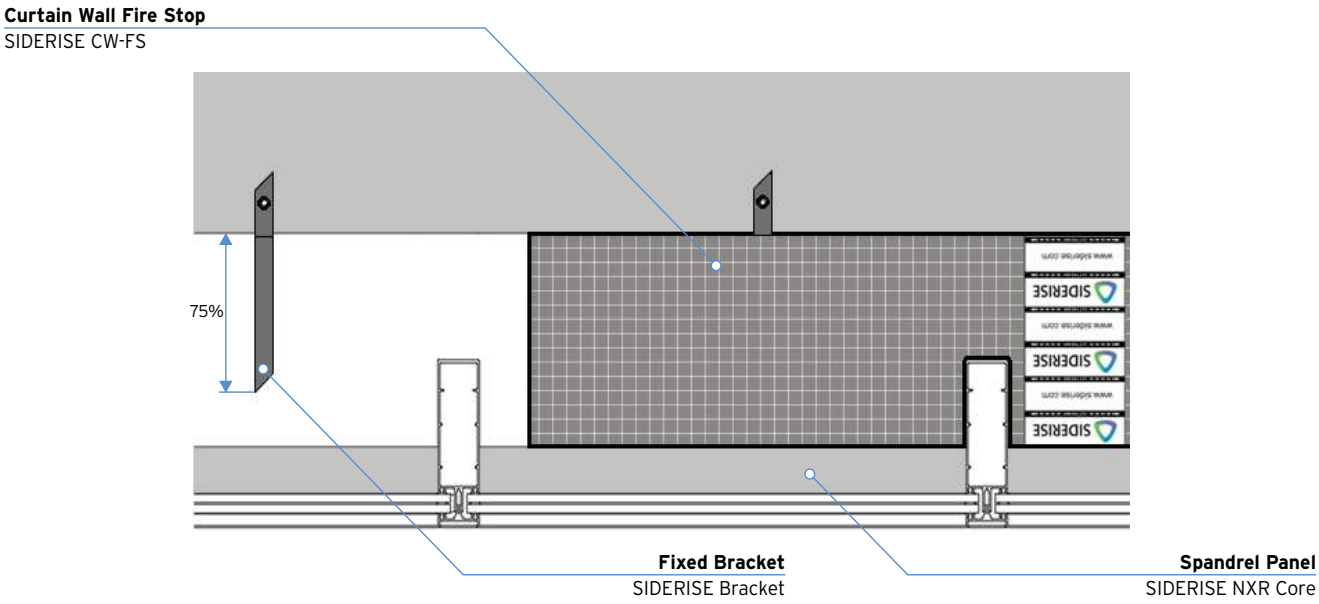
- Review the position of fire stop and distance from fixing bracket connection.
- Ensure the structural engineer specifies the façade deflection.
- Review the curtain wall expansion and any floor slab/ building movement.
- Review transom/mullion deflection

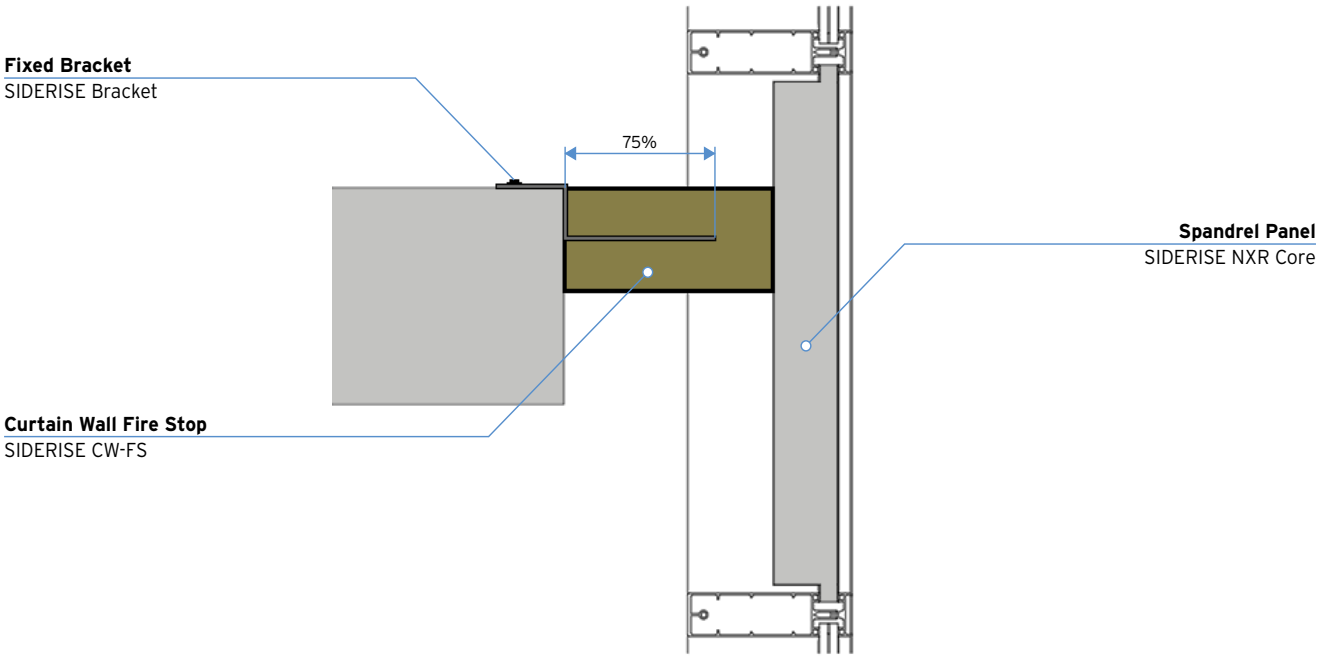
Upon confirmation and consideration of the above parameters, the required fire stop compression factor can be assessed for the specific project application.

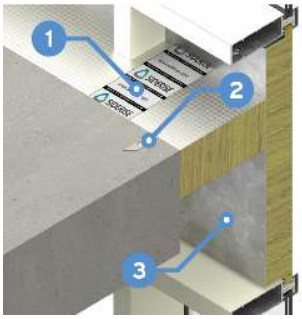
Note 1: SIDERISE CW vertical fire stop systems can accommodate façade deflection due to their unique construction. However, installation of the correct material size is important so as to ensure that integrity is maintained.

Note 2: On a project basis, consider both inward and outward deflection requirements for the system

Horizontal perimeter barrier installation: CW-FSH-01-A







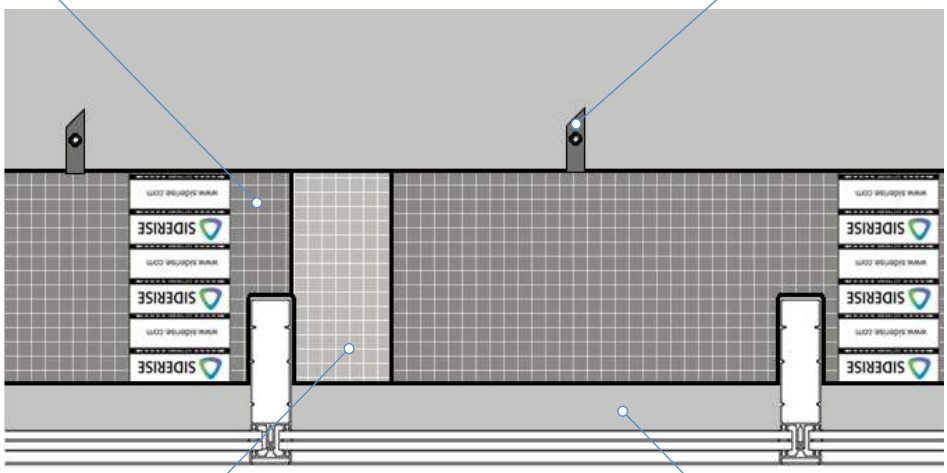
PRODUCTS USED

1. SIDERISE curtain wall fire stop CW-FS
2. SIDERISE support brackets
3. SIDERISE Nexus lamella boards

Horizontal perimeter barrier installation: CW-FSH—02—A

Curtain Wall Fire Stop
SIDERISE CW-FS

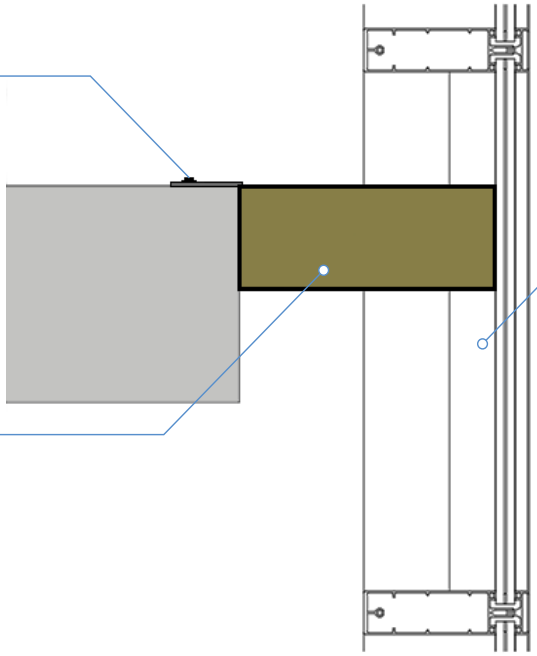
Fixed Bracket
SIDERISE Bracket



Foil Tape
SIDERISE FT 120/45

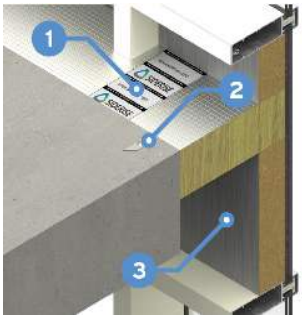
Spandrel Insulation
Non Fire Rated

Fixed Bracket
SIDERISE Bracket



Spandrel Insulation
Non Fire Rated

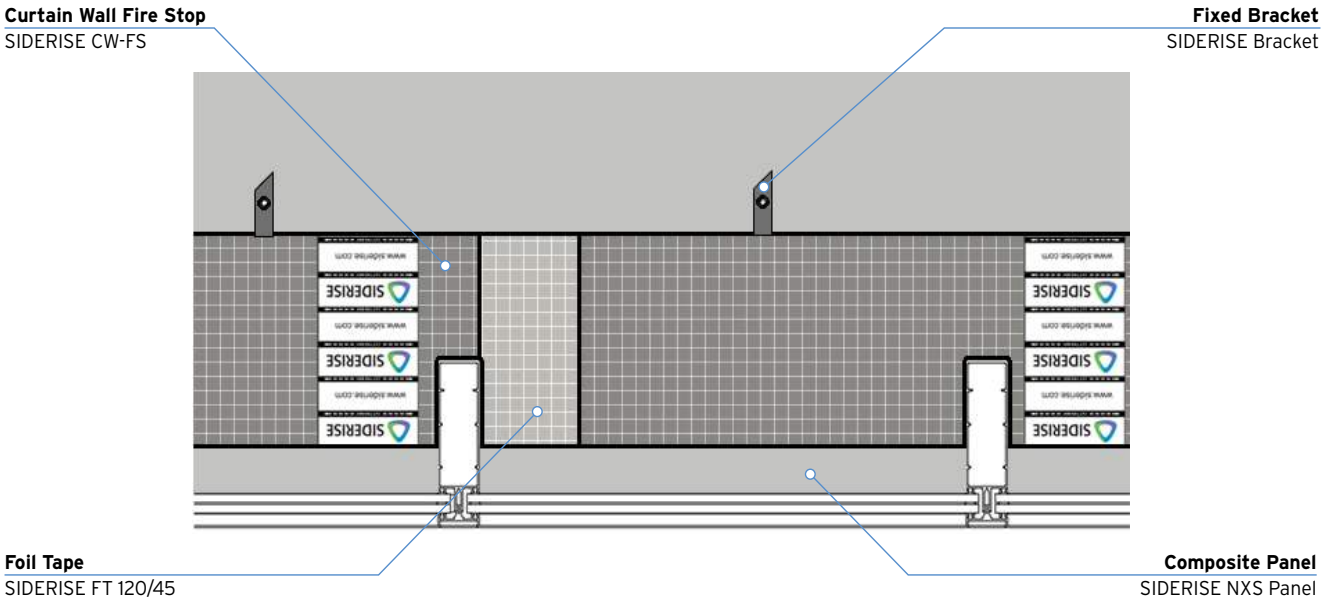
Curtain Wall Fire Stop
SIDERISE CW-FS

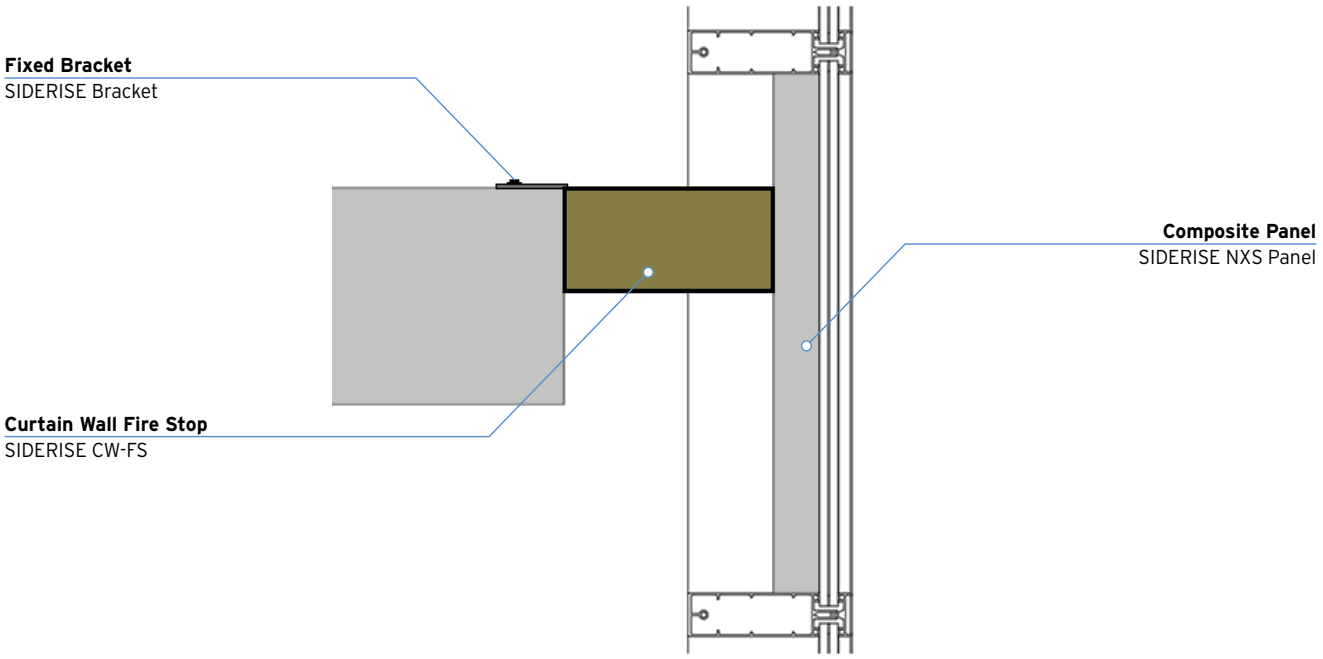


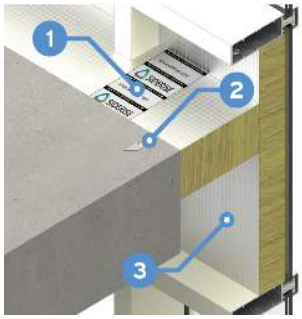
PRODUCTS USED

1. SIDERISE curtain wall fire stop CW-FS
2. SIDERISE support brackets
3. Spandrel insulation

Horizontal perimeter barrier installation: CW-FSH—03—A



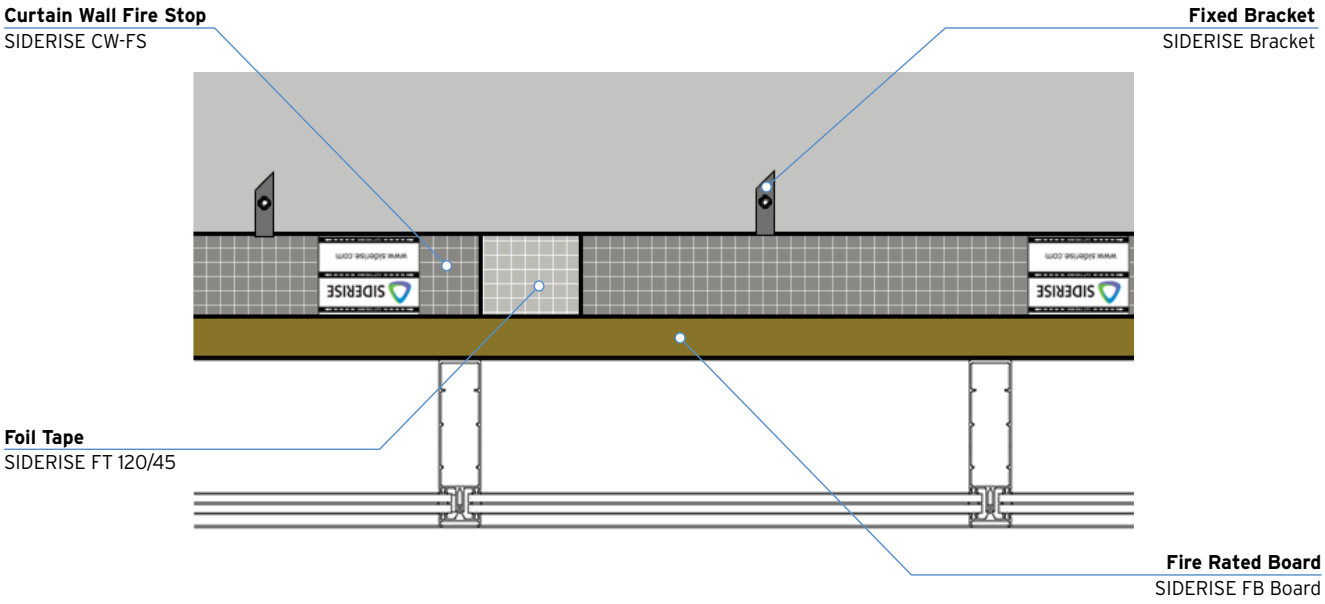


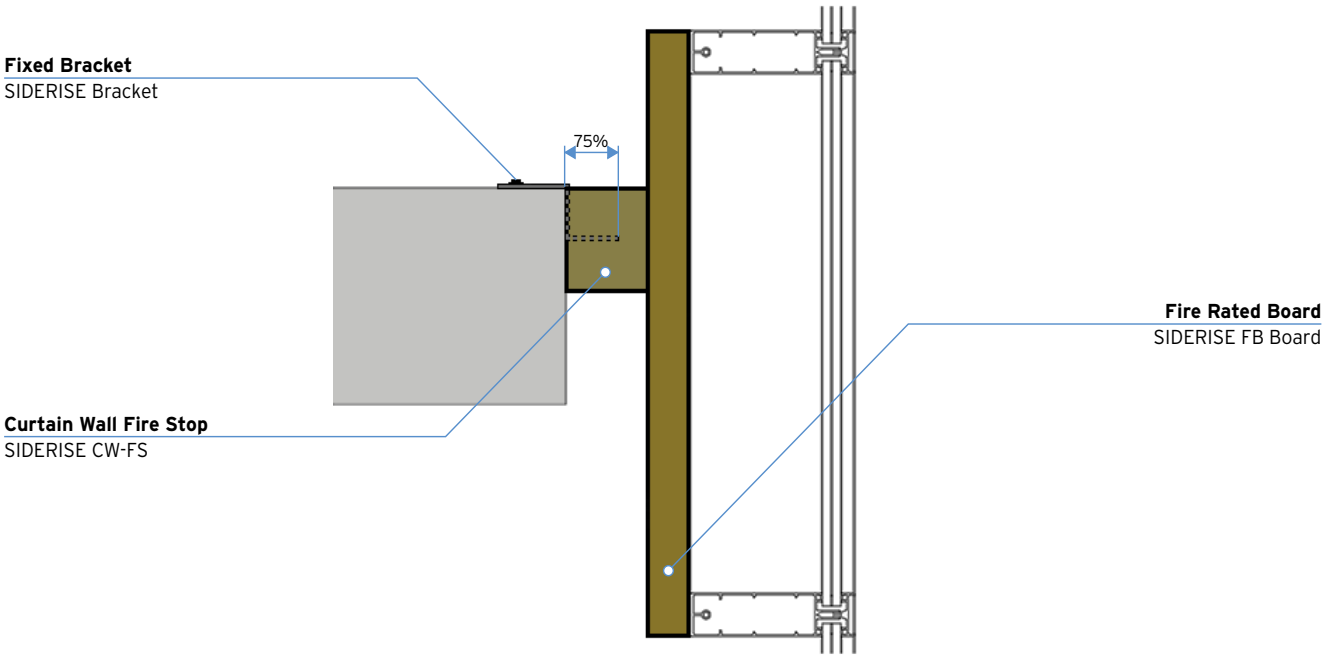


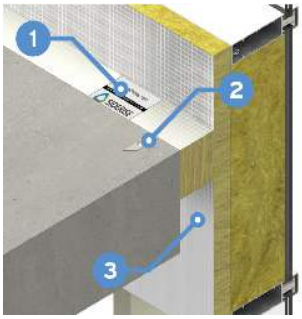
PRODUCTS USED

1. SIDERISE curtain wall fire stop CW-FS
2. SIDERISE support brackets
3. SIDERISE Nexus llamella boards

Horizontal perimeter barrier installation: CW-FSH—04—A



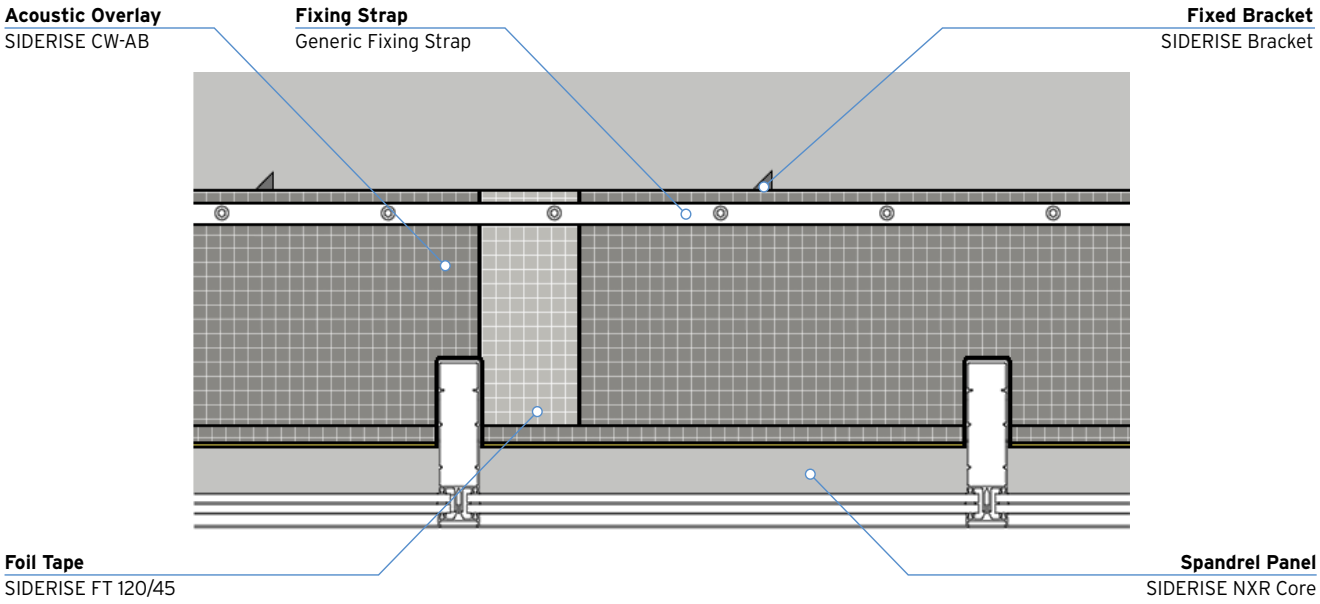


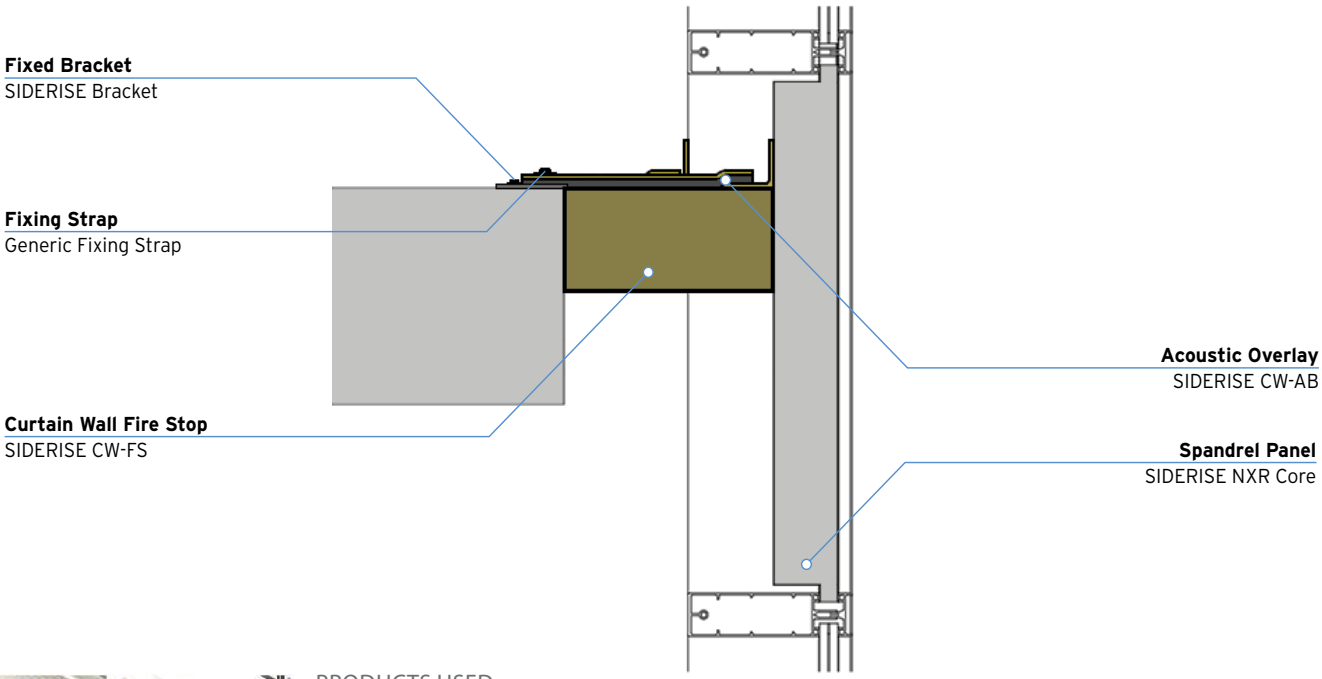


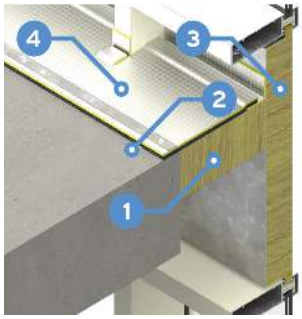
PRODUCTS USED

1. SIDERISE curtain wall fire stop CW-FS
2. SIDERISE support brackets
3. Spandrel insulation

Horizontal perimeter barrier installation: CW-FSH—05—A



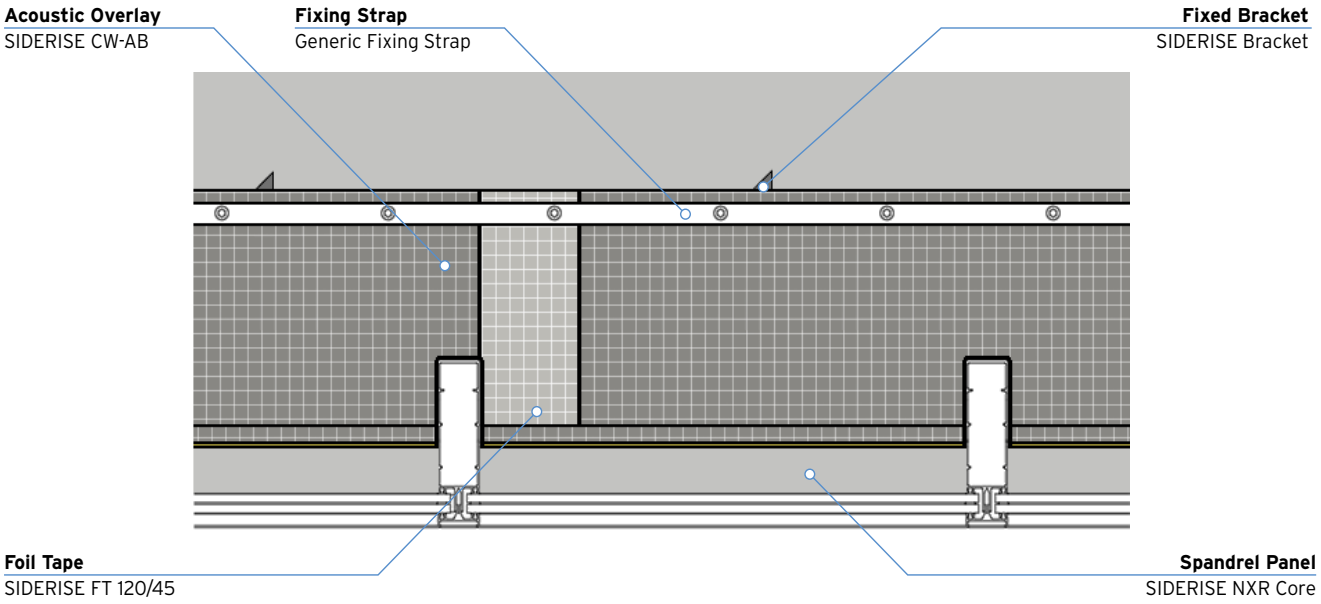


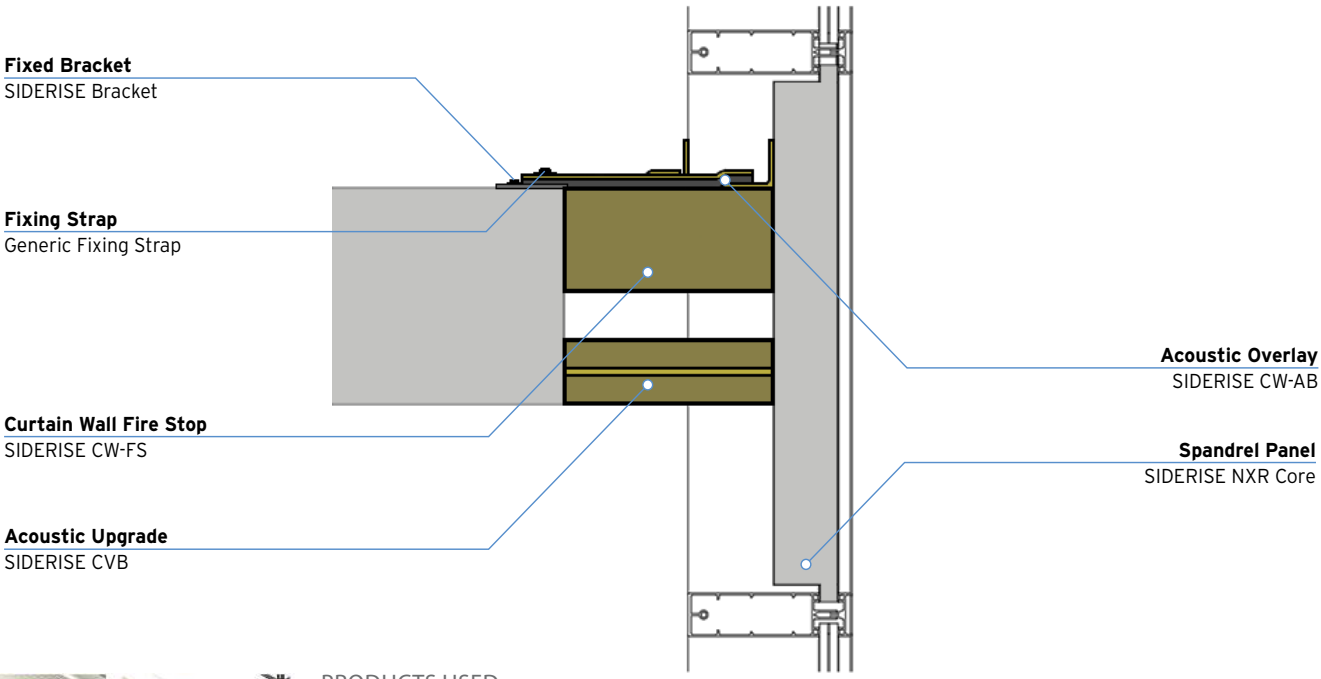


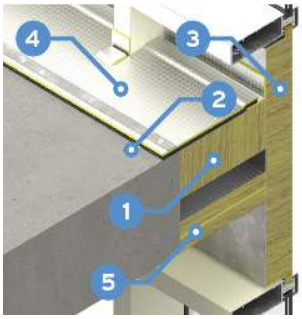
PRODUCTS USED

1. SIDERISE curtain wall fire stop CW-FS
2. SIDERISE support brackets
3. SIDERISE Nexus llamella boards
4. SIDERISE acoustic barrier overlay

Horizontal perimeter barrier installation: CW-FSH—06—A



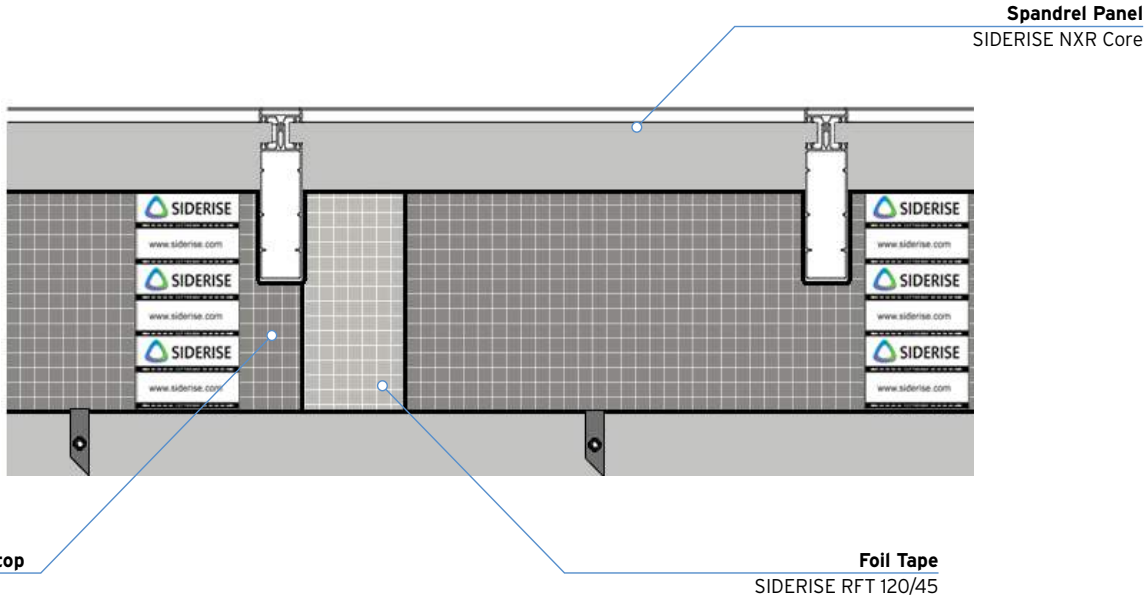


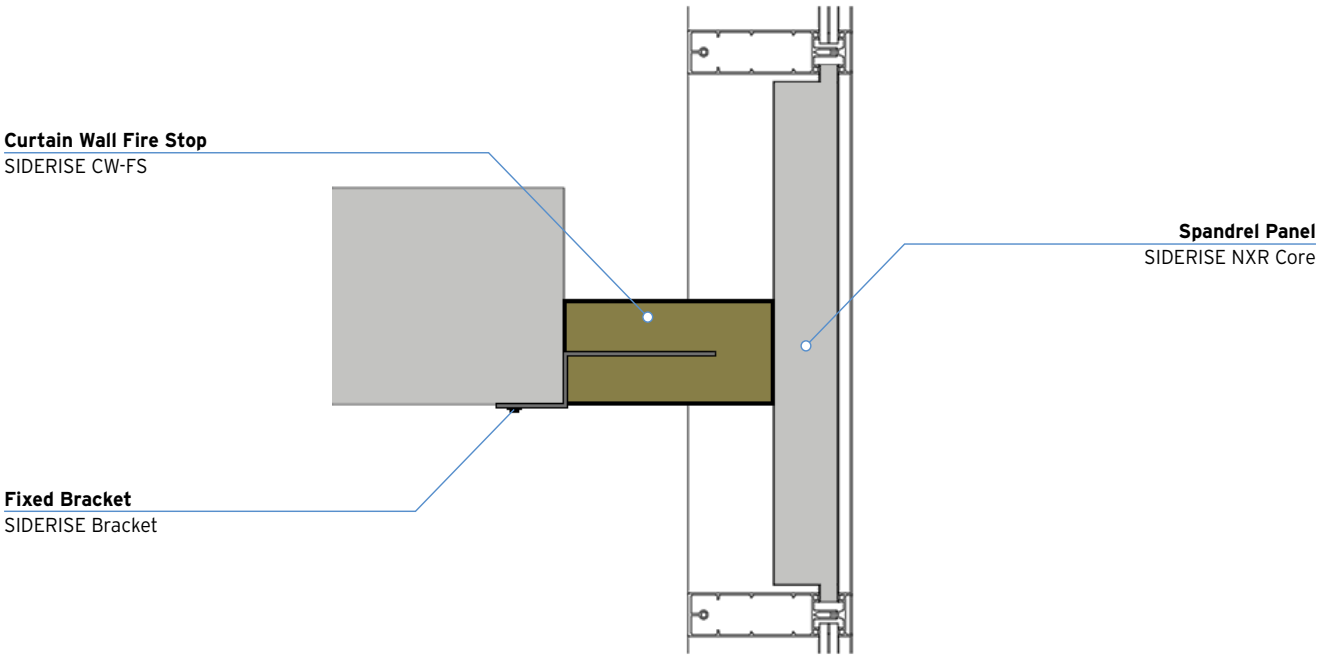


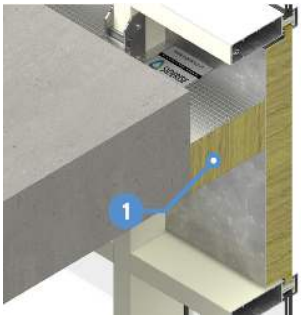
PRODUCTS USED

1. SIDERISE curtain wall fire stop CW-FS
2. SIDERISE support brackets
3. SIDERISE nexus llamella boards
4. SIDERISE acoustic barrier overlay
5. SIDERISE acoustic upgrade CVB

Horizontal perimeter barrier installation: CW-FSH—07—A



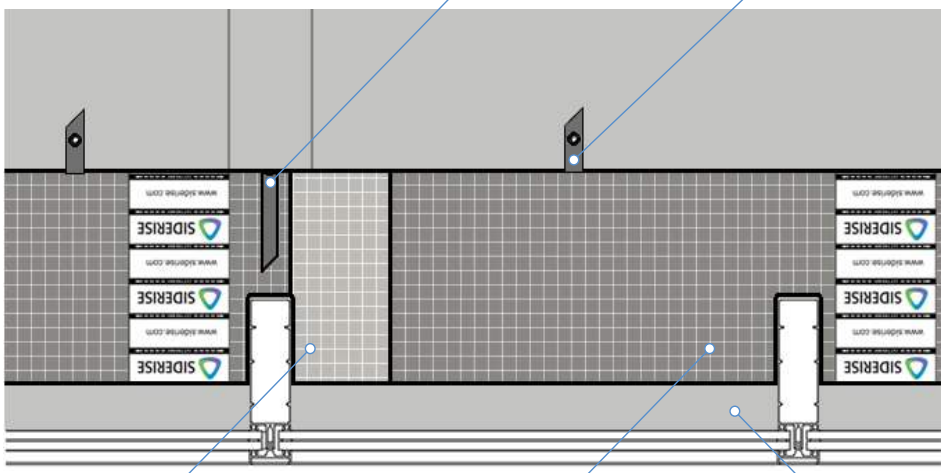


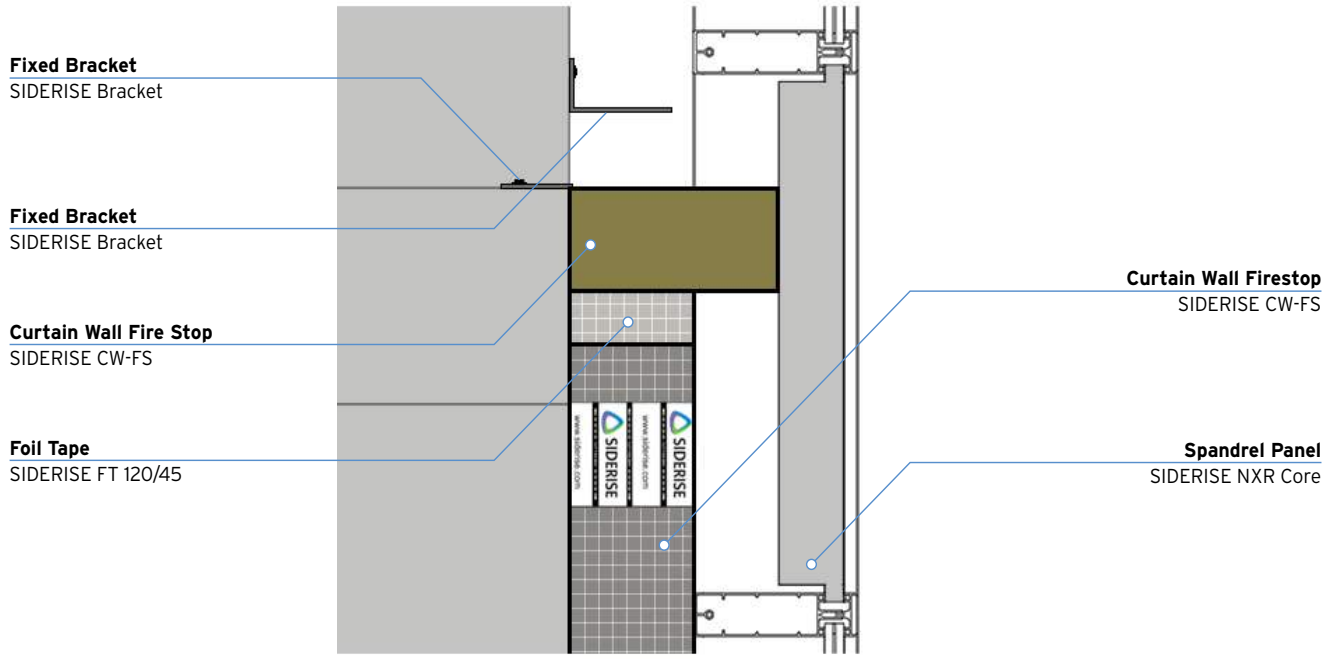


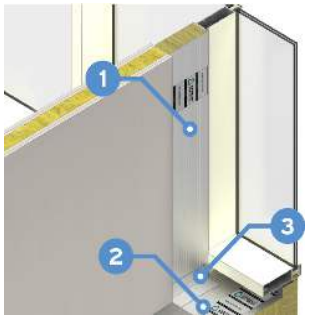
PRODUCTS USED

1 SIDERISE curtain wall fire stop CW-FS

Vertical perimeter barrier installation: CW-FSV—08—A



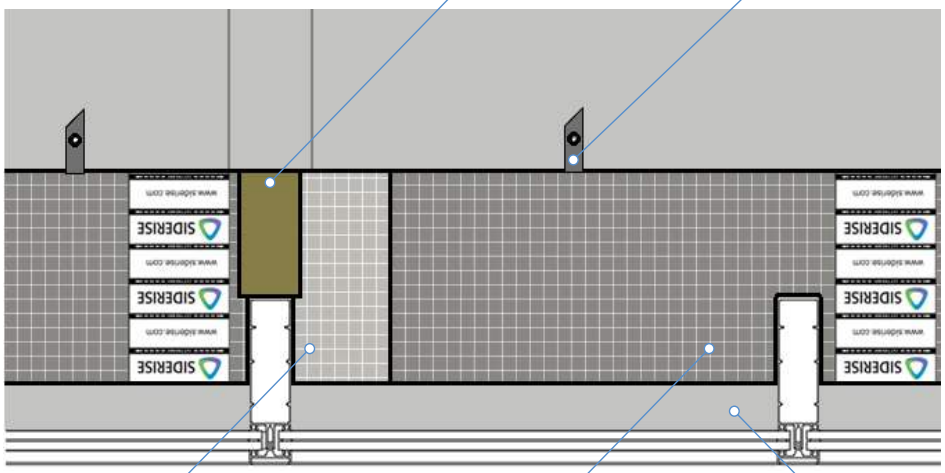


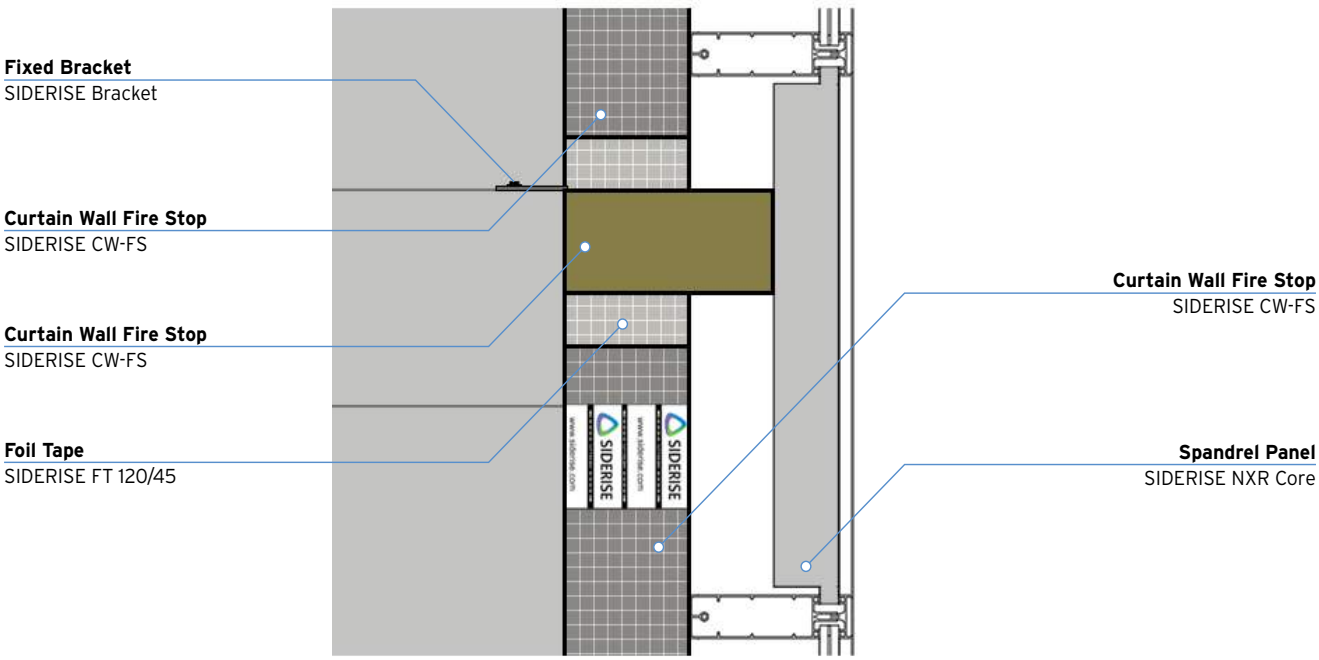


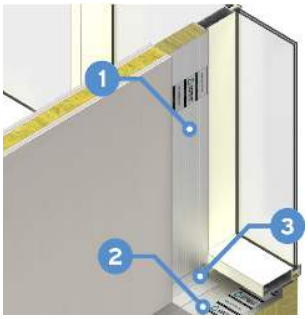
PRODUCTS USED

1. SIDERISE nexus llamella boards
2. SIDERISE curtain wall fire stop CW-FS
3. SIDERISE foil tape: RFT 120/45

Vertical perimeter barrier installation: CW-FS—08—B



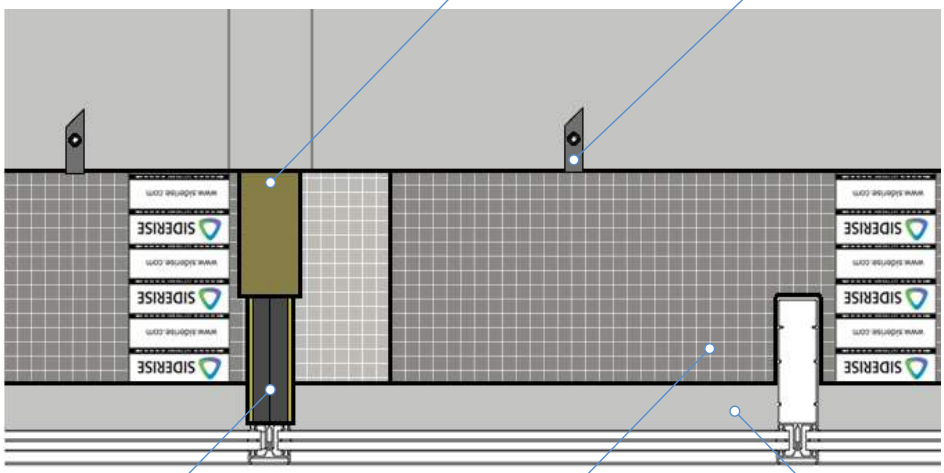


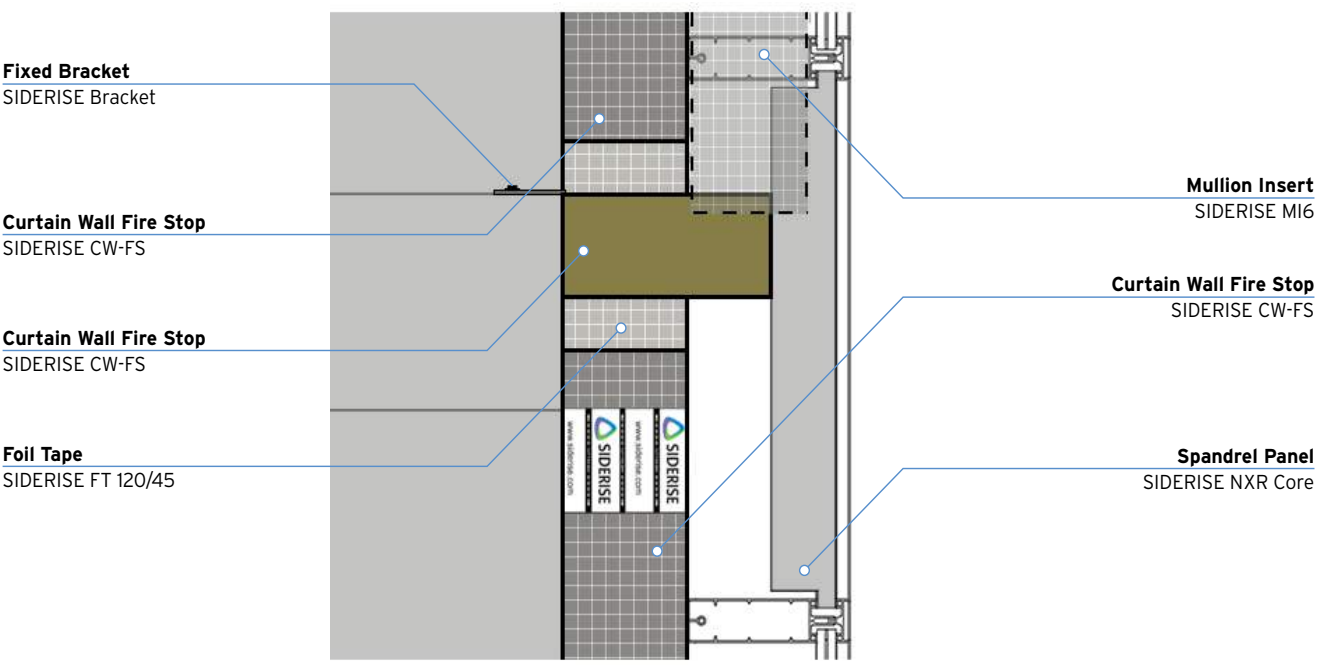


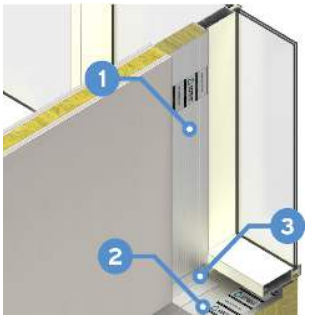
PRODUCTS USED

1. SIDERISE Nexus llamella boards
2. SIDERISE curtain wall fire stop CW-FS
3. SIDERISE foil tape: RFT 120/45

Vertical perimeter barrier installation: CW-FS—08—C







PRODUCTS USED

1. SIDERISE Nexus llamella boards
2. SIDERISE curtain wall fire stop CW-FS
3. SIDERISE foil tape: RFT 120/45

Regulations guidance

Approved Document B to the Building Regulations requires that cavity barriers must have a minimum standard of fire resistance of 30 minutes integrity and 15 minutes insulation with regards to BS 476 : Part 20 : 1987 criteria respectively.

The Loss Prevention Council's 'Design Guide for the Fire Protection of Buildings' states that cavity barriers have 30 minutes integrity and minimum 30 minutes fire insulation.

The 'Standard Performance Criteria' for fire & smoke stopping issued by the Centre for Window and Cladding Technology states:

'There shall be continuity of time temperature rated fire and smoke stopping between the curtain wall and compartment walls and floors. Any spaces or cavities between the two shall be effectively stopped against the spread of smoke and flame. The fire resistance of such stopping shall be equal to that required of the compartment floor or wall against which it abuts.'

SIDERISE CW-FS fire stops are used to maintain the continuity of the fire resistance by sealing the gap between compartment floors (and walls) and the external curtain walling façade or any other external cladding systems.

Cavity barriers … a definition "A construction provided to close a concealed space against penetration of smoke or flame, or provided to restrict the movement of smoke or flame within such a space SIDERISE CW-CB/CW-FS30

Developed in recognition of the more demanding requirements of the 'Design Guide for the Fire Protection of Buildings' as issued by The Loss Prevention Council.

Fire stops … a definition 'Sealing an imperfection of fit or design tolerance between fire rated elements of a building to restrict the passage of fire and smoke for the same period of fire resistance.'

For the purpose of SIDERISE product terminology, the 'imperfection of fit' is considered to be the discontinuity between the edge of the structural frame (slab or wall) and the interface with the external cladding system.

Compartment floors or walls may typically have the following fire ratings: 1 hour, 2 hours, up to 4 hours.

SIDERISE CW-FS60 Is suitable for installation in alignment with a 1 hour rated compartment wall or floor to provide continuity of fire resistance across the cavity.

SIDERISE CW-FS120 Is suitable for installation in alignment with a 90 minute or 2 hour rated compartment wall or floor.

SIDERISE CW-FS300 Is suitable for installation in alignment with a 4 hour compartment wall or floor.

Technical specification

SIDERISE Perimeter Barriers & Fire stops for Curtain Walling

Form supplied	Sheet: 1200mm x 1200mm x thickness; Pre-cut strips 1200mm x (cavity + compression as CF563 Certifire) x thickness (See Table 1.)
Colour	Silver, with coloured identification tape centrally located on the product
Finish	Aluminium foil
Density	Nominal 75Kg/m^3
Thermal conductivity	λ_{20} = 0.039w/mK
Cavities	50mm to 1200mm For voids over 400mm please contact facades@siderise.com
Fire resistance	30 to 300 minutes
Reaction to fire	Class 'A1', Class 'O'

Note: Lamatherm and SIDERISE brands

From 1 January 2005, the operation of Lamatherm Products Ltd and Siderise (Western) Ltd were merged into Siderise Insulation Ltd - formerly Siderise (Western) Ltd.

Both Lamatherm Products Ltd & Siderise Insulations Ltd are members of the Siderise (Holdings) Ltd Group of companies. The ultimate holding of the companies remains with Siderise (Holdings) Ltd.

Siderise Insulation Ltd holds the rights to sole use of all design and intellectual rights related to Lamatherm products developed and tested prior to 1 January 2005.

Further information

PRODUCTS AVAILABLE

The following SIDERISE products are available.

- SIDERISE CW-FS perimeter barriers and fire stops for curtain walling - sheet or pre-cut strip options
- SIDERISE foil tape: RFT 120/45
- SIDERISE fire and acoustic gap sealant

DOCUMENTS AVAILABLE

The following information is available upon request or via download from the website:

- NBS Specification Clause
- Safety Data Sheet
- Cutting and Installation instructions

ENVIRONMENTAL

SIDERISE perimeter barriers and fire stops for curtain walling are environmentally friendly.

- They contain no Volatile Organic Compounds (VOCs) and no very Volatile Organic Compounds (vVOCs).
- Zero Ozone Depleting Potential
- Zero Global Warming Potential
- Recyclable

ORDERING

When ordering please:

- Indicate contract title and location of project.
- Specify product type required, e.g. sheet form.
- Specify fire rating or thickness required.
- Specify void height or schedule of sizes for each product type.
- Confirm total linear metres required for each size.
- Specify bracket type and quantity required
- Specify foil tape quantity requirement: RFT 120/45 (or RF/SFT100/10 for a high specification tape).
- Order SIDERISE fire and acoustic gap sealant 310ml cartridge

SPECIFICATION

SIDERISE offer specifiers support from initial enquiry and technical consultation to project realisation. NBS draft specifications are provided for standard products and applications and can be tailored to suit specific project performance requirements.

TECHNICAL SUPPORT

For further information please contact our Facades technical team at the address below.

SIDERISE

SIDERISE GROUP
Forge Industrial Estate,
Maesteg, UK, CF34 0AY
T: +44 (0)1656 730833
F: +44 (0)1656 812509
E: facades@siderise.com
W: www.siderise.com

Institute of Acoustics sponsoring organisation

ASFP

NBS Plus

NBS BIM

Project	Artillery Court Siderise
Client	Mears
Date	2018-12-14T17:40:08
Operative	Ihor Krynytskyy

Seal ID	Rating	Level	Location	Seal Type	X	Y	Additional Quantity	Comments	Photo
1487	60 Min F/S	1	West elevation	Detail A	1000	60	0		
1488	60 Min F/S	1	West elevation	Detail A	1000	60	0		
1489	60 Min F/S	1	West elevation	Detail A	1000	60	0		
1490	60 Min F/S	1	West elevation	Detail A	100	60	0		
1491	60 Min F/S	2	West elevation	Detail A	1000	60	0		
1492	60 Min F/S	2	West elevation	Detail A	1000	60	0		
1493	60 Min F/S	2	West elevation	Detail A	1000	60	0		
1494	60 Min F/S	2	West elevation	Detail A	1000	60	0		
1495	60 Min F/S	3	West elevation	Detail A	1000	60	0		
1496	60 Min F/S	3	West elevation	Detail A	1000	60	0		
1497	60 Min F/S	3	West elevation	Detail A	1000	60	0		
1498	60 Min F/S	3	West elevation	Detail A	1000	60	0		

1499	60 Min F/S	4	West elevation	Detail A	1000	60	0	
1500	60 Min F/S	4	West elevation	Detail A	1000	60	0	
1501	60 Min F/S	4	West elevation	Detail A	1000	60	0	
1502	60 Min F/S	4	West elevation	Detail A	1000	60	0	
1503	60 Min F/S	5	West elevation	Detail A	1000	60	0	
1504	60 Min F/S	5	West elevation	Detail A	1000	60	0	
1505	60 Min F/S	5	West elevation	Detail A	1000	60	0	
1506	60 Min F/S	5	West elevation	Detail A	1000	60	0	
1507	60 Min F/S	6	West elevation	Detail A	1000	60	0	
1508	60 Min F/S	6	West elevation	Detail A	1000	60	0	
1509	60 Min F/S	6	West elevation	Detail A	1000	60	0	
1510	60 Min F/S	6	West elevation	Detail A	1000	60	0	
1511	60 Min F/S	7	West elevation	Detail A	1000	60	0	
1512	60 Min F/S	7	West elevation	Detail A	1000	60	0	

1513	60 Min F/S	7	West elevation	Detail A	1000	60	0	
1514	60 Min F/S	7	West elevation	Detail A	1000	60	0	
1515	60 Min F/S	8	West elevation	Detail A	1000	60	0	
1516	60 Min F/S	8	West elevation	Detail A	1000	60	0	
1517	60 Min F/S	8	West elevation	Detail A	1000	60	0	
1518	60 Min F/S	8	West elevation	Detail A	1000	60	0	
1519	60 Min F/S	9	West elevation	Detail A	1000	60	0	
1520	60 Min F/S	9	West elevation	Detail A	1000	60	0	
1521	60 Min F/S	9	West elevation	Detail A	1000	60	0	
1522	60 Min F/S	9	West elevation	Detail A	1000	60	0	
1523	60 Min F/S	10	West elevation	Detail A	1000	60	0	
1524	60 Min F/S	10	West elevation	Detail A	1000	60	0	
1525	60 Min F/S	10	West elevation	Detail A	1000	60	0	
1526	60 Min F/S	10	West elevation	Detail A	1000	60	0	

1527	60 Min F/S	11	West elevation	Detail A	1000	60	0	
1528	60 Min F/S	11	West elevation	Detail A	1000	60	0	
1529	60 Min F/S	11	West elevation	Detail A	1000	60	0	
1530	60 Min F/S	11	West elevation	Detail A	1000	60	0	
1531	60 Min F/S	12	West elevation	Detail A	1000	60	0	
1532	60 Min F/S	12	West elevation	Detail A	1000	60	0	
1533	60 Min F/S	12	West elevation	Detail A	1000	60	0	
1534	60 Min F/S	12	West elevation	Detail A	1000	60	0	
1426	60 Min F/S	12	North elevation	Detail D	150	1100	0	
1536	60 Min F/S	12	North elevation	Detail D	150	1100	0	
1427	60 Min F/S	11	North elevation	Detail D	150	110	0	
1428	60 Min F/S	10	North elevation	Detail D	150	1100	0	
1429	60 Min F/S	8	North elevation	Detail D	150	1100	0	
1430	60 Min F/S	7	North elevation	Detail D	150	1100	0	

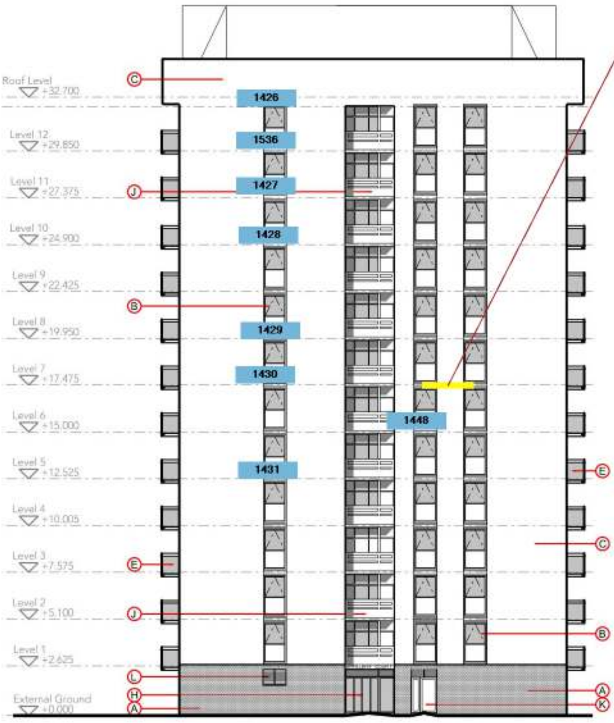
1431	60 Min F/S	5	North elevation	Detail D	150	1100	0	
1432	60 Min F/S	4	North elevation	Detail D	150	1100	0	
1433	60 Min F/S	3	North elevation	Detail D	150	1100	0	
1434	60 Min F/S	1	North elevation	Detail D	150	1100	0	
1435	60 Min F/S	12	North elevation	Detail D	150	1100	0	
1436	60 Min F/S	12	North elevation	Detail D	150	1100	0	
1437	60 Min F/S	12	North elevation	Detail D	150	1100	0	
1438	60 Min F/S	12	North elevation	Detail D	150	1100	0	
1439	60 Min F/S	11	North elevation	Detail D	150	1100	0	
1535	60 Min F/S	11	North elevation	Detail D	150	1100	0	
1440	60 Min F/S	10	North elevation	Detail D	150	1100	0	
1441	60 Min F/S	10	North elevation	Detail D	150	1100	0	
1442	60 Min F/S	9	North elevation	Detail D	150	1100	0	

1443	60 Min F/S	9	North elevation	Detail D	150	1100	0	
1446	60 Min F/S	7	North elevation	Detail C	150	1100	0	
1447	60 Min F/S	7	North elevation	Detail D	150	1100	0	
1448	60 Min F/S	6	North elevation	Detail D	150	1100	0	
1449	60 Min F/S	6	North elevation	Detail D	150	1100	0	
1450	60 Min F/S	5	North elevation	Detail D	150	1100	0	
1451	60 Min F/S	4	North elevation	Detail D	150	1100	0	
1452	60 Min F/S	4	North elevation	Detail D	150	1100	0	
1453	60 Min F/S	3	North elevation	Detail D	150	1100	0	
1454	60 Min F/S	3	North elevation	Detail D	150	1100	0	
1455	60 Min F/S	2	North elevation	Detail D	150	1100	0	
1456	60 Min F/S	1	North elevation	Detail D	150	1100	0	
1457	60 Min F/S	1	North elevation	Detail D	150	1100	0	

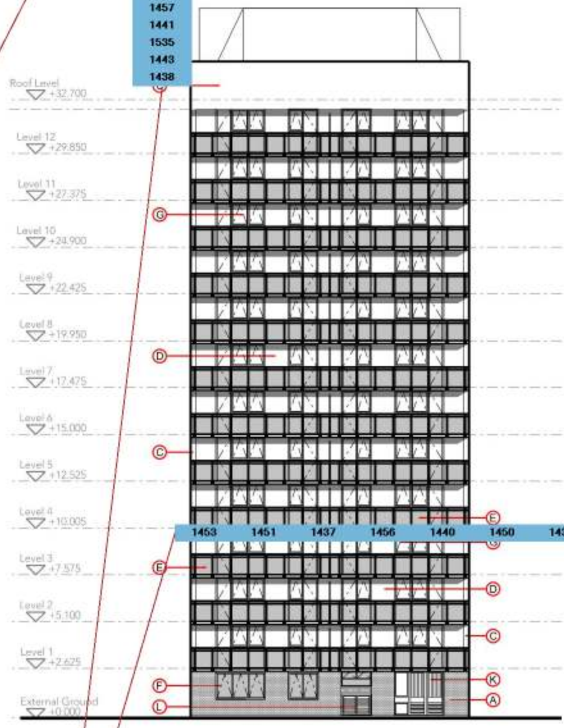
1458	60 Min F/S	12	West	elevation	Detail D	300	2200	0	
1459	60 Min F/S	12	West	elevation	Detail D	450	2920	0	
1460	60 Min F/S	11	West	elevation	Detail D	150	1100	0	
1461	60 Min F/S	11	West	elevation	Detail D	300	1820	0	
1462	60 Min F/S	10	West	elevation	Detail D	300	2200	0	
1463	60 Min F/S	10	West	elevation	Detail D	450	2920	0	
1464	60 Min F/S	9	West	elevation	Detail D	450	2920	0	
1465	60 Min F/S	9	West	elevation	Detail D	300	2200	0	
1466	60 Min F/S	8	West	elevation	Detail D	150	1100	0	
1467	60 Min F/S	8	West	elevation	Detail D	450	2920	0	
1468	60 Min F/S	7	West	elevation	Detail D	300	2200	0	
1469	60 Min F/S	7	West	elevation	Detail D	450	2920	0	
1470	60 Min F/S	6	West	elevation	Detail D	300	2200	0	

1471	60 Min F/S	6	West	elevation	Detail D	450	2920	0	
1472	60 Min F/S	5	West	elevation	Detail D	150	1100	0	
1473	60 Min F/S	5	West	elevation	Detail D	300	1820	0	
1474	60 Min F/S	4	West	elevation	Detail D	300	2200	0	
1475	60 Min F/S	4	West	elevation	Detail D	450	2920	0	
1476	60 Min F/S	3	West	elevation	Detail D	300	2200	0	
1477	60 Min F/S	3	West	elevation	Detail D	450	2920	0	
1478	60 Min F/S	2	West	elevation	Detail D	150	1100	0	
1479	60 Min F/S	2	West	elevation	Detail D	300	1820	0	
1480	60 Min F/S	1	West	elevation	Detail D	300	2200	0	

1481	60 Min F/S	1	West	elevation	Detail D	450	2920	0	



Proposed East Elevation



Proposed South Elevation

Key to Elevations

Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

Key to External Materials

- (A) Facing brick slips. Colour: Dudley blue with dark grey mortar - T14 by Tarmac
- (B) Curtain Walling - Aluminium Frame Colour: RAL 7012 (Dark grey)
- (C) EWIS render finish. Colour: 2151 (Mauve)
- (D) EWIS render finish. Colour: 2325 (White)
- (E) Coloured glass balustrade
- (F) UPVC windows & doors. Colour: RAL 7012 (Dark grey)
- (G) UPVC windows & doors.
- (H) Aluminium doors. Colour: RAL 7012 (Dark grey)
- (J) Masonry paint. Colour: White
- (K) Solid core timber doors & Windows (to match existing) Colour: 7012 (Dark grey)
- (L) UPVC louvres to GF. Colour: 7012 (Dark grey)

Rev	Date/Intls	Details
P1	15/12/12 LB	ISSUED FOR PLANNING_NMC
A	22/10/15 LW	UPVC spec altered

Buttress

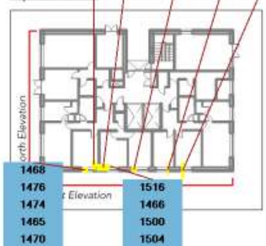
41 Bengal St
Manchester
M4 6AF

T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK - ARTILLERY COURT		
Client	Mears Group PLC		
Location	Manchester		
Drawing Title	Proposed East & South Elevations -		
Date	14.05.15	Scale	1:200
Checked	MG	Orig Paper Size	A3
		Status	PLANNING
Drawing ref	Job No	Drawing No	Revision
	7862	(50) 028	P1

West Elevation

Key to Elevations



Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

Key to External Materials

(A) Facing brick slips. Colour: Dudley blue with dark grey mortar - T14 by Tarmac
(B) Curtain Walling - Aluminium Frame Colour: RAL 7012 (Dark grey)
(C) EWIS render finish. Colour: 2151 (Mauve)
(D) EWIS render finish. Colour: 2325 (White)
(E) Coloured glass balustrade
(F) UPVC windows & doors. Colour: RAL 7012 (Dark grey)
(G) UPVC windows & doors.
(H) Aluminium doors. Colour: RAL 7012 (Dark grey)
(J) Masonry paint. Colour: White
(K) Solid core timber doors & Windows (to match existing) Colour: 7012 (Dark grey)
(L) UPVC louvres to GF. Colour: 7012 (Dark grey)

Rev	Date/Intls	Details
P1	15/12/15 LB	KITCHEN WINDOW / DOOR AMENDED TO SUIT EXISTING LAYOUT-NMC

S4B

Buttress

41 Bengal St
Manchester
M4 6AF

T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title	BRUNSWICK - ARTILLERY COURT
Client	Mears Group PLC
Location	Manchester
Drawing Title	Proposed West & North Elevations
Date	14.05.15
Checked	MG
Scale	1:200
Orig Paper Size	A3
Status	PLANNING
Job No	7862
Drawing No	(50) 026
Revision	P1

MAYPLAS
INSULATION THROUGH INNOVATION

Mayplas
Peel Industrial Estate
Chamberhall Street
Bury
BL9 0LU

Tel: 0161 447 8320
Fax: 0161 447 8333
Email: sales@mayplas.co.uk

Collection Advice Note

Document Number
7094/25115667

Collected by:-

SIGD Manchester
Trafford Point 1
Twining Road
Manchester
Lancashire
M17 1SH

Invoice to:-

SIGD Manchester
Trafford Point 1
Twining Road
Manchester
Lancashire
M17 1SH

Account	Our Operator	Your Reference	Date Required	Order Number
8007187	Violetta Rigby	7187141760	14/12/2018	147636
Site Contact	**Site Phone**	**Site Mobile**	**Del Slot**	**Page**
Andrew Stackhouse			ON	1 of 1

Collections Mon - Thurs 08:00 - 16:00 (12:00 Fri)

Ordered Qty	Product	Qty Delivered	Qty Received
60.0000	MP552 CSS Masonry 2HR To Suit 60mm Cav 75mm x 150mm x 1.20m (20) 10001103 Required: 14/12/2018	3 PK	

*
Customer collecting Friday AM
*

Additional information :-

*
Goods ready for collection Friday AM
Firetech UK Collecting
Please advise your customer to quote o/n 147636 when collecting
*

Supplied by Mayplas

Customer Signature:

Print Name:.....

Volume (M3)
16.2000

SIG standard terms and conditions apply. For full terms and conditions please see our website http://www.sigplc.com/userfiles/file/SIGTradingTermsConditions.pdf

CERTIFICATE OF CONFORMITY
MI5333

This Certificate is issued by the certificated contractor in accordance with the FIRAS Certification Scheme's Regulations and Procedures to indicate the compliance of a fire resistant installation at

Mears

Brunswick PFI, Artillery Court, Brunswick Street, Manchester, Lancashire, M13 9TU

It confirms that the project has been completed having full regards to the requirements of the appropriate product specification and its installation/application instructions and that the claimed performance is substantiated by appropriate test and/or assessment evidence.

This certificate is for installations completed between 18/12/2018 and 19/12/2018

Certificated Contractor

Firetech UK Ltd
Unit 12, Windrush Millennium Centre
70 Alexandra Road
Manchester
M16 7WD

Signed for and on behalf of Firetech UK Ltd

Piotr Korn
employee

Issue Date: 18/12/2018

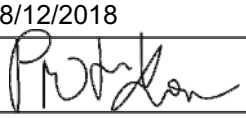
FIRAS Certificate of Conformity - MI5333

Installation Details

Installation Address	Mears Brunswick PFI, Artillery Court, Brunswick Street Manchester Lancashire M13 9TU
Completion Date	19/12/2018
Job Reference	Mears Artillery 2018
Scope of Job	Refurbishment
Products Types Used	Cavity Barriers
Contractors Quality Control	All fire barriers by Firetech have been identified with sequentially numbered firestop labels and recorded on the attached firestopping schedules.
Items outside scope of work of Installation Company and exceptions	Any works not identified with a Firetech sequentially numbered firestop label.

TO ENSURE CONTINUED CONFORMANCE, THIS INSTALLATION SHOULD BE SUBJECT TO ONGOING INSPECTION & MAINTENANCE

Certificated Contractor Details

Company Name and Address	Firetech UK Ltd Unit 12, Windrush Millennium Centre 70 Alexandra Road Manchester M16 7WD
FIRAS Certification Number	KU7404
Telephone	0161 636 7542
Name of Signatory	Piotr Korn (employee)
FIRAS ID	S13619
Certificate Issue Date	18/12/2018
Signature	

This Certificate is issued by the certificated contractor in accordance with the FIRAS Certification Scheme's Regulations and Procedures to indicate the compliance of a fire resistant installation. It confirms that the project has been completed having full regards to the requirements of the appropriate product specification and its installation/application instructions and that the claimed performance is substantiated by appropriate test and/or assessment evidence.

This Certificate only covers work carried out up to the date of issue. Fire protection measures can be degraded over time and it is the legal responsibility of the 'Responsible Person' to ensure that fire protection must be adequately maintained and repaired/replaced over the life of the building. For details on how to carry out a risk assessment to the requirements of the Regulatory Reform (Fire Safety) Order, please contact FIRAS on 01925 646666.

FIRAS Certificate of Conformity - MI5333

Cavity Barriers Details

Manufacturer	Product	Fire Resistance
Siderise	Siderise CW-FS60	60 minutes
Mayplas	MSS 552	60 minutes

9 Fire Stopping Certification

CERTIFICATE OF CONFORMITY
JX5356

This Certificate is issued by the certificated contractor in accordance with the FIRAS Certification Scheme's Regulations and Procedures to indicate the compliance of a fire resistant installation at

Mears Group PLC

Artillery Court Remedial works,, , Manchester, M13 9TU

It confirms that the project has been completed having full regards to the requirements of the appropriate product specification and its installation/application instructions and that the claimed performance is substantiated by appropriate test and/or assessment evidence.

Certificated Contractor

Firetech UK Ltd
Unit 12, Windrush Millennium Centre
70 Alexandra Road
Manchester
M16 7WD

Signed for and on behalf of Firetech UK Ltd

A. Allcock

Anthony Allcock
Employee

Issue Date: 25/10/2017

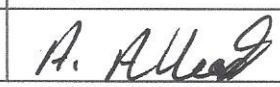
warrington firas certification

FIRAS Certificate of Conformity - JX5356

Installation Details

Installation Address	Mears Group PLC Artillery Court Remedial works, Manchester M13 9TU
Completion Date	26/10/2017
Job Reference	Artillery Court Remedials
Scope of Job	Refurbishment
Products Types Used	Penetration Sealing
Contractors Quality Control	All fire barriers by Firetech have been identified with sequentially numbered firestop labels and recorded on the attached firestopping schedules.
Items outside scope of work of Installation Company and exceptions	Any works not identified with a Firetech sequentially numbered firestop label.
TO ENSURE CONTINUED CONFORMANCE, THIS INSTALLATION SHOULD BE SUBJECT TO ONGOING INSPECTION & MAINTENANCE	

Certificated Contractor Details

Company Name and Address	Firetech UK Ltd Unit 12, Windrush Millennium Centre 70 Alexandra Road Manchester M16 7WD
FIRAS Certification Number	KU7404
Telephone	0161 636 7542
Name of Signatory	Anthony Allcock (Employee)
FIRAS ID	T40207
Certificate Issue Date	25/10/2017
Signature	

This Certificate is issued by the certificated contractor in accordance with the FIRAS Certification Scheme's Regulations and Procedures to indicate the compliance of a fire resistant installation. It confirms that the project has been completed having full regards to the requirements of the appropriate product specification and its installation/application instructions and that the claimed performance is substantiated by appropriate test and/or assessment evidence.

This Certificate only covers work carried out up to the date of issue. Fire protection measures can be degraded over time and it is the legal responsibility of the 'Responsible Person' to ensure that fire protection must be adequately maintained and repaired/replaced over the life of the building. For details on how to carry out a risk assessment to the requirements of the Regulatory Reform (Fire Safety) Order, please contact FIRAS on 01925 646666.

FIRAS Certificate of Conformity - JX5356

Penetration Sealing Details

Manufacturer	Product	Fire Resistance
Rockwool	Ablative Coated Batt	60 minutes
Rockwool	Acoustic Intumescent Mastic	60 minutes
Rockwool	Ablative coat	60 minutes

10 Fire Door Certification

SPECIFICATION CONFIRMATION

Customer:	Mears Group	Quote No:	
Contract:	Brunswick **Artillery Court ONLY**		

General Information:	GRP FD30s in PVC Fire Rated Frame, Chrome Ironmongery

Specification Front

Door Style	FNG01 , FNG 81			Red Blue Green White White Only
Colour	White			
Glass	GW Fire Glass	Pattern	Textured	
Hinges	STD HINGE SET			Chrome Fitted
Letterplate	300mm Sleeved Fire Rated Letterplate			Polished Chrome
Lock	ERA Multipoint Lock	Keeps	Adjustable	Chrome Fitted
Threshold	SS059 Chrome Exitex MDS 25 Sill			Chrome Fitted
Cylinder	ISEO AS Key/Thumb Anti-Snap Cylinder			Chrome Loose
Handles	Trojan Chrome Polished Levers			Chrome Loose
Chain	Era 791-65 Chrome Chain			Chrome Loose
Viewer	180 DEG Chrome Viewer CVPLCH14			Chrome Fitted
Numerals	75mm Polished Chrome			Chrome Fitted
Closer	IG Chrome Overhead Door Closer			Chrome Loose

Special requirements	All units to be labeled.	Price As quote

Signed:	Sally Jones	Date:	21.9.15
Print Name:			

11 Fire Door Report

INSPECTION REPORT ON FLAT DOORS WITHIN THE BRUNSWICK DEVELOPMENT, MANCHESTER

Client: Mears Limited ("Mears")

Site: Brunswick Development ("Brunswick"), Manchester

Survey Dates: 23RD July & 28th August 2019

Report Date: 09Th September 2019

Site Ref: HA-03-006-01

Prepared by;

Hughes and Associates Property Services Ltd ("HAPS")

The Whitehouse,

Waterloo Road

Norwich

NR3 3HY

Tel : 0333 3355 330

e. info@hughesandassociates.co.uk

w. www.hughesandassociates.co.uk

1 CONTENTS

2 EXECUTIVE SUMMARY 2
3 PRELIMINARY NOTES 3
4 REQUIREMENTS FOR FLAT ENTRANCE FIRE DOORS 4
5 DOOR TYPE A 5
6 DOOR TYPE B 7
7 DOOR TYPE C 9
8 DOOR TYPE D 10
9 DOOR TYPE E 12
10 OTHER DOORS 14
11 APPENDICES 15

2 EXECUTIVE SUMMARY

2.1 HAPS were instructed by Mears to carry out an inspection and assessment of flat entrance doors installed under the works carried out by Mears at Brunswick and to provide an opinion, based on the inspections and the documents provided by the suppliers of the doors, IG Doors Limited ("IG"), as to whether the flat doors present could be confirmed as FD30S fire doors.

2.2 Brunswick consists of 4 high rise buildings and 9 maisonette buildings containing a total of 444 flat front doors. The door types identified across Brunswick have been categorised into 5 different types which are denoted from A to E within this report and within Appendix 1 which shows the locations of each door inspected.

2.3 HAPS are instructed that all doors fitted as part of the works carried out by Mears were supplied and fitted by IG and were specified by IG as FD30s fire doors at the time of supply which was in and around 2014 and 2015. Upon inspection, it appears that 20 of the doors within Brunswick were not supplied and installed as part of the works carried out by Mears as they are either older doors which were not replaced or doors that occupiers have fitted themselves. 17 of these are type C doors and three are denoted as 'Other' within appendix 1.

2.4 HAPS are instructed that IG provided the test data and global assessments (see documents listed below) on the basis that they provided adequate evidence that all of the doors supplied to Brunswick were FD30S fire doors.

2.5 It is the conclusion of this report that the data provided is sufficient to confirm that all type A doors are FD30S fire doors. Types B, D and E can be confirmed as nominal fire doors but require further testing to confirm that they meet the requirements of FD30S fire doors. No opinion can be provided with regard to type C doors or the three 'other' doors as no information is available regarding these doors.

2.6 It has also been noted in appendix 1 where there is no requirement for the door inspected to be a FD30S fire door.

3 PRELIMINARY NOTES

3.1 This report has been prepared by Jonny Navarrina of HAPS, who is a Certified Fire Door Inspector registered with the Fire Door Inspection Scheme (FDIS).

3.2 HAPS are a multi-disciplinary practice of Chartered Surveyors, Fire, Mechanical and Electrical Engineers located at The Whitehouse, 153 Waterloo Road Norwich, Norfolk, NR3 3HY. HAPS have the following accreditations:

- Fire Door Inspection Scheme (FDIS)
- Member of Warrington Fire – (FIRAS) Installer certification scheme
- Affiliated member of Institution of Fire Engineers (IFE)
- Registered with the Royal Institute of Chartered Surveyors (RICS)

3.3 Inspections of all 444 doors were carried out over 2 dates across the 4 high rise and 9 maisonette buildings contained within Brunswick which are set out below. Every door was visually inspected from the front and where access could be obtained also from the back. Access was obtained to the back of approximately 10% of the doors inspected which included all door types (A to E).

i) Artillery Court (62 doors)

ii) Lamport Court (59 doors)

iii) Lockton Court (65 doors)

iv) Silkin Court (65 doors)

v) Ardeen Walk (36 doors)

vi) Cherryton Walk (12 doors)

vii) Helmshore Walk (25 doors)

viii) Hursthead Walk (16 doors)

ix) Litcham Close (20 doors)

x) Lockton Close (26 doors)

xi) Mancroft Walk (14 doors)

xii) Merrow Walk (18 doors)

xiii) Skerry Close (26 doors)

3.4 The following documents were provided to HAPS by Mears for the purposes of this report:

i) Warrington Fire Resistance Test Report (407207) prepared for IG Doors Ltd (27th November 2018).

ii) Chiltern Global Assessment Test Report – Number ChiltA09056 (Rev A & C).

iii) IG Door Specification Sheets.

4 REQUIREMENTS FOR FLAT ENTRANCE FIRE DOORS

4.1 Approved Document B - Volume 2: Buildings other than Dwellings Houses is the Approved Document made under the Building Regulations 2010 that applies to fire safety within blocks of flats and Appendix B of the document sets out the requirements for fire doors. The version of this document that was in force in 2014 is the 2006 Edition (incorporating amendments from 2007, 2010 and 2013) which is referenced below.

4.2 Appendix B stipulates that all fire doors should have the appropriate performance when tested to the applicable British or European standard as set out in Table B1 of the appendix. Table B1 requires that a fire door in a compartment wall that separates a flat from a space in common use should meet the FD30S or E30Sa standard respectively which essentially requires that the door provides 30 minutes resistance against fire.

4.3 Appendix B provides further guidance as to the testing standards as follows: “The requirement (in either case) is for test exposure from each side of the door separately, except in the case of lift doors which are tested from the landing side only. Any test evidence used to substantiate the fire resistance rating of a door or shutter should be carefully checked to ensure that it adequately demonstrates compliance and is applicable to the adequately complete installed assembly. Small differences in detail (such as glazing apertures, intumescent strips, door frames and ironmongery etc,) may significantly affect the rating”.

4.4 It should be noted that on 31 August 2018 the Ministry of Housing, Communities and Local Government (“MHCLG”) published an advice note regarding flat entrance fire doors as a result of the failure of a number of composite doors tested following the tragic events at Grenfell Tower. The advice note states as follows: “Flat entrance fire doors should have test evidence demonstrating they meet the performance requirement in

Building Regulations guidance for fire resistance and smoke control from both sides" and that "Test evidence used should be carefully checked to ensure it is to the same specifications of the doorsets being installed".

5 DOOR TYPE A

5.1 IG supplied the fire resistance test report provided by Warrington fire (WF407207) following a test burn carried out on 27th November 2018. The door which was tested was a 6-panel white Glass Reinforced Polyester (GRP) composite doorset with 3 butt hinges, central spyhole, sleeved letterbox, surfaced mounted rutland overhead closer and frame mounted 15mm intumescent strips.

5.2 78 of the doors surveyed within Brunswick were confirmed as the doorset which was subject to testing by Warrington Fire. A photograph of a type A doorset is displayed below as well as the technical drawing provided within the Warrington Fire Report WF407207 and photographs of the doorset subject to the test burn.

5.3 As per the results of the test, it can be confirmed that doorset type A meets the resistance requirements of an FD30S fire door in accordance with BS476 parts 20 and 22.

5.4 The type A doorsets are therefore confirmed as FD30S fire doors and consequently no further action is required with regard to testing these doorsets.

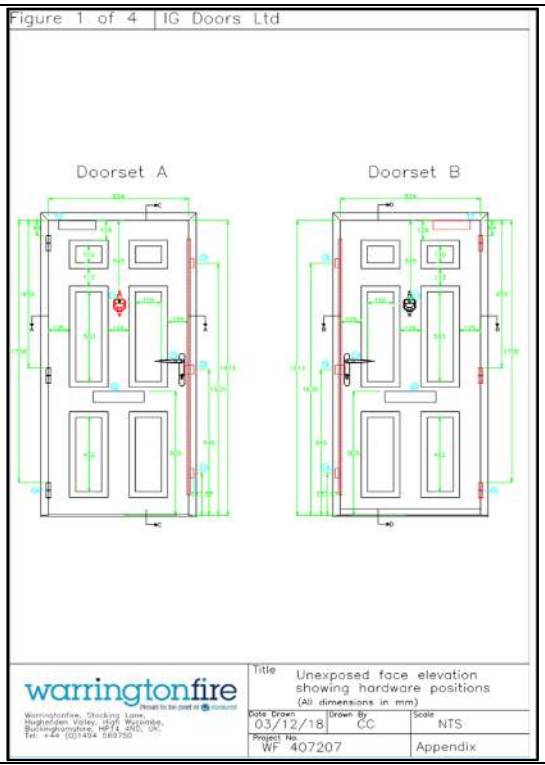


Figure 1 - Doorset Type A	**Figure 2 –** Technical Drawing

Figure 3 - Test Burn photographs

6 DOOR TYPE B

6.1 Door Type B is an 8 vertical panel white GRP composite doorset with 3 butt hinges, leading edge spyhole, sleeved letterbox, surfaced mounted rutland overhead closer and frame mounted 15mm intumescent strips. Each type B door inspected carried a *BM trada* Q mark stamp. A photograph of a type B door identified in the survey is provided below, 315 of the doors surveyed across Brunswick are type B doors.

6.2 The type B doorsets are of a different design and configuration to that which was tested by Warrington Fire so the fire resistance test provided by Warrington Fire cannot therefore be relied upon for door type B doorsets.

6.3 With reference to the Chiltern global assessments provided by IG, the most recent revision provided that was valid for the period applicable for the supply of these doorsets (2012-2017) is revision C.

6.4 The global assessment referred to above relies on pre existing fire resistance test evidence relating to composite doorsets produced by IG. It is stated within the document that the assessment is an evaluation of the potential fire resistance performance, if the elements were to be tested in accordance with BS476-22.

6.5 The global assessment concludes with the opinion that the IG composite door design, constructed in accordance with the specification documented in the global assessment, would provide a minimum of 30 minutes integrity, when tested to BS476-22.

6.6 The global assessment document cannot be relied on for door type B as the actual test burn data has not been supplied and it is not possible to verify the specification set out within the assessment is the same or similar specification to door type B.

6.7 For the reasons stated above, door type B cannot be confirmed as an FD30S fire door. However, based on the inspection carried out it can be confirmed as a ‘nominal’ fire door in accordance with FDIS guidelines.

6.8 If there is insufficient evidence to certify a door as FD30S, it can be deemed to be a nominal fire door if in the opinion of a qualified assessor the doorsets consists of components which would provide a fire resistance of 30 minutes or more.

6.9 For the following reasons, door type B can be considered a nominal fire door:

- The furniture present on door type B (hinges, spyhole, intumescent strips, sleeved letterbox and handles) appears identical to that which is present in door type A (which was successfully tested and proved to have the requisite fire resistance).
- The hinges are marked with the IG doors stamp and marked as BS EN 1935 Grade 7.
- The letterbox in door type B is a Norseal Advantage Plus 60-minute fire rated letterbox with its own independent test evidence.
- The intumescent strips are Pyroplex graphite intumescent 15mm strips with their own independent test evidence.
- The door blank used in door type B has the same thickness (44mm) as door type A and by external examination appears to be constructed of the same or similar material as door type A.
- All type B doors have been stamped with BM Trada Q mark ink to the door leaf.

6.10 In order to definitively confirm door type B is a FD30S fire door it will be necessary to conduct a burn test in accordance BS476-22. Alternatively, the doors could be replaced with new FD30S certified fire doors.

Figure 4- Photograph of door type B

7 DOOR TYPE C

7.1 17 of the doors surveyed at Brunswick were identified as door type C. Door type C is a 4-panel timber door with 4 glazed panels forming a half moon at the top of the door. These doors have no IG markings and appear to have been in situ for many years prior to the works at Brunswick being carried out by Mears.

7.2 In light of the above, no information is available with regard to the supplier or the specification of these doorsets and therefore no opinion can be provided as to whether they are a fire door. A photograph of a door type C doorset is provided below.

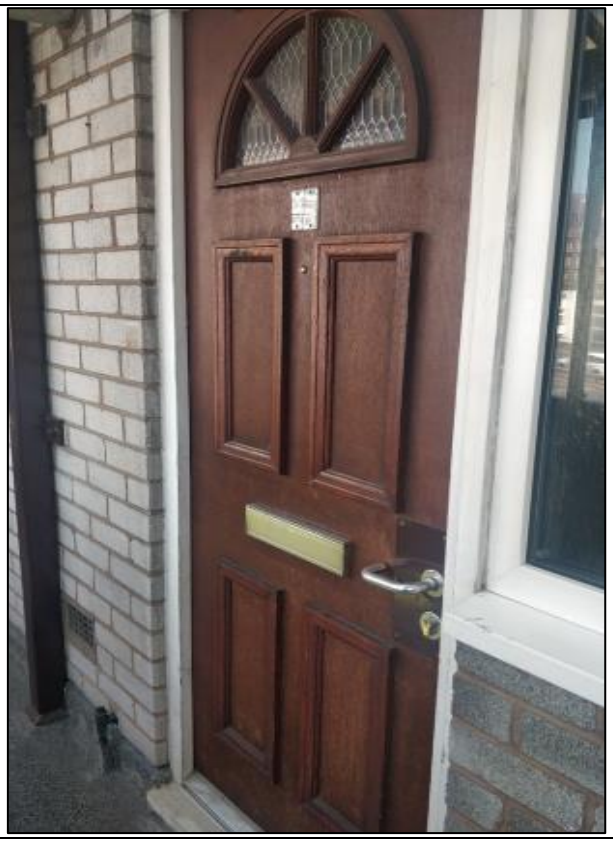


Figure 6 - Photograph of door type C

8 DOOR TYPE D

8.1 Door Type D is a white GRP composite doorset with 3 butt hinges, leading edge spyhole, sleeved letterbox, surfaced mounted rutland overhead closer, frame mounted 15mm intumescent strips and a vertical rectangular glazed vison panel to the leading edge of the door leaf.

8.2 Each type D door inspected carried a BM trada Q mark stamp. A photograph of a type D door identified in the survey is provided below, of the doors surveyed across Brunswick 11 are type D doors.

8.3 The type D doorsets are of a different design and configuration to that which was tested by Warrington Fire so the fire resistance test provided by Warrington Fire cannot therefore be relied upon for door type D doorsets.

8.4 With reference to the Chiltern global assessments provided by IG, the most recent revision provided that was valid for the period applicable for the supply of these doorsets (2012-2017) is revision C.

8.5 The global assessment referred to above relies on pre existing fire resistance test evidence relating to composite doorsets produced by IG. It is stated within the document that the assessment is an evaluation of the potential fire resistance performance, if the elements were to be tested in accordance with BS476-22.

8.6 The global assessment concludes with the opinion that the IG composite door design, constructed in accordance with the specification documented in the global assessment, would provide a minimum of 30 minutes integrity, when tested to BS476-22.

8.7 The global assessment document cannot be relied on for door type D as the actual test burn data has not been supplied and it is not possible to verify the specification set out within the assessment is the same or similar specification to door type D.

8.8 For the reasons stated above, door type D cannot be confirmed as a FD30S fire door. However, based on the inspection carried out it can be confirmed as a ‘nominal’ fire door in accordance with FDIS guidelines.

8.9 If there is insufficient evidence to certify a door as FD30S, it can be deemed to be a nominal fire door if in the opinion of a qualified assessor the doorsets consists of components which would provide a fire resistance of 30 minutes or more.

8.10 For the following reasons, door type D can be considered a nominal fire door:

- The furniture present on door type D (hinges, spyhole, intumescent strips, sleeved letterbox and handles) appears identical to that which is present in door type A (which was successfully tested and proved to have the requisite fire resistance).
- The hinges are marked with the IG doors stamp and marked as BS EN 1935 Grade 7.
- The letterbox in door type D is a Norseal Advantage Plus 60-minute fire rated letterbox with its own independent test evidence.
- The glazed panel within door type D is Pyroshield fire resistant glass with its own independent test evidence.
- The intumescent strips are Pyroplex graphite intumescent 15mm strips with their own independent test evidence.
- The door blank used in door type D has the same thickness (44mm) as door type A and by external examination appears to be constructed of the same or similar material as door type A.

8.11 In order to definitively confirm door type D is a FD30S fire door it will be necessary to conduct a burn test in accordance BS476-22. Alternatively, the doors could be replaced with new FD30S certified fire doors.

Figure 7 - Photograph of door type D

9 DOOR TYPE E

9.1 Door Type E is a GRP composite doorset (of various colours) with 3 butt hinges, central spyhole, sleeved letterbox, surfaced mounted rutland overhead closer, frame mounted 15mm intumescent strips and 4 glazed panels forming a half moon shape at the top of the door.

9.2 Each type E door inspected carried a BM trada Q mark stamp. A photograph of a type E door identified in the survey is provided below, of the doors surveyed across Brunswick 20 are type E doors.

9.3 The type E doorsets are of a different design and configuration to that which was tested by Warrington Fire so the fire resistance test provided by Warrington Fire cannot therefore be relied upon for door type E doorsets.

9.4 With reference to the Chiltern global assessments provided by IG, the most recent revision provided that was valid for the period applicable for the supply of these doorsets (2012-2017) is revision C.

9.5 The global assessment referred to above relies on pre existing fire resistance test evidence relating to composite doorsets produced by IG. It is stated within the document that the assessment is an evaluation of the potential fire resistance performance, if the elements were to be tested in accordance with BS476-22.

9.6 The global assessment concludes with the opinion that the IG composite door design, constructed in accordance with the specification documented in the global assessment, would provide a minimum of 30 minutes integrity, when tested to BS476-22.

9.7 The global assessment document cannot be relied on for door type E as the actual test burn data has not been supplied and it is not possible to verify the specification set out within the assessment is the same or similar specification to door type E.

9.8 For the reasons stated above, door type E cannot be confirmed as a FD30S fire door. However, based on the inspection carried out it can be confirmed as a ‘nominal’ fire door in accordance with FDIS guidelines.

9.9 If there is insufficient evidence to certify a door as FD30S, it can be deemed to be a nominal fire door if in the opinion of a qualified assessor the doorsets consists of components which would provide a fire resistance of 30 minutes or more.

9.10 For the following reasons, door type E can be considered a nominal fire door:

- The furniture present on door type E (hinges, spyhole, intumescent strips, sleeved letterbox and handles) appears identical to that which is present in door type A (which was successfully tested and proved to have the requisite fire resistance).
- The hinges are marked with the IG doors stamp and marked as BS EN 1935 Grade 7.
- The letterbox in door type E is a Norseal Advantage Plus 60-minute fire rated letterbox with its own independent test evidence.
- The glazed panel within door type E is Pyroshield fire resistant glass with its own independent test evidence.
- The intumescent strips are Pyroplex graphite intumescent 15mm strips with their own independent test evidence.
- The door blank used in door type E has the same thickness (44mm) as door type A and by external examination appears to be constructed of the same or similar material as door type A.

9.11 In order to definitively confirm door type E is a FD30S fire door it will be necessary to conduct a burn test in accordance BS476-22. Alternatively, the doors could be replaced with new FD30S certified fire doors.

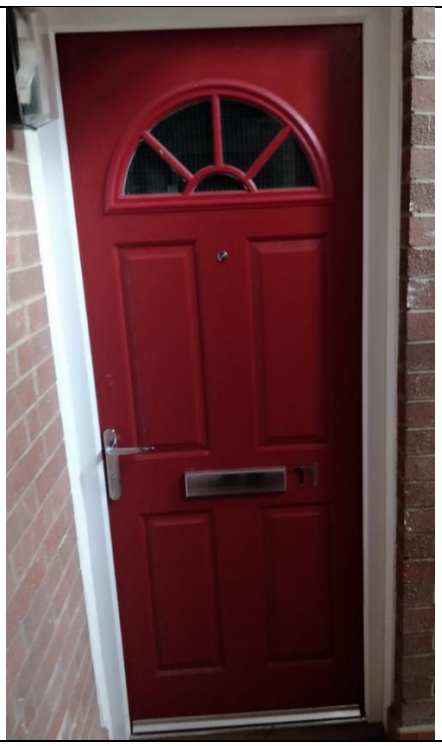


Figure 7 – Photograph of door type E

10 OTHER DOORS

10.1 3 doors inspected in the survey did not fall within any of the 5 categories listed A-E. 2 doors appear to have been installed by the occupants of the properties and 1 door appears to have been in situ for some time. None of the doors carried any IG door marking and were not installed under the works carried out by Mears.

10.2 In the absence of any information regarding these doors, no opinion is provided as to whether these doors are fire doors.

If any further information or clarity is required for the content of this report, please do not hesitate to contact us.

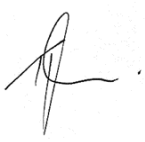
SIGNED

Reported by;

Jonny Navarrina
BSc (Hons)
Building Surveyor

For and on behalf of
Hughes and Associates Property Services Ltd

Confirmed by;



Tim Hughes
BSc (Hons) MRICS
Director

For and on behalf of
Hughes and Associates Property Services Ltd

11 APPENDICES

11.1 **Appendix 1 –** Schedule of Doors

Ardeen Walk

Level	Flat Number	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
0	7	N	Y	Y	E	
1	9	Y		N	A	
0	11	N	Y	Y	E	
1	13	Y		N	A	
0	15	N	Y	Y	D	
1	17	N	Y	Y	E	
1	19	N	Y	Y	E	
0	21	N	Y	Y	E	Power Assist Door
0	35	Y		N	A	
1	37	Y		N	A	
0	39	N	Y	Y	E	
1	41	Y		N	A	
0	43	N	Y	Y	E	
1	45	Y		N	A	
0	47	N	Y	Y	E	
1	49	N	Y	Y	E	
0	51	N	Y	Y	E	
1	53	Y		N	A	
0	55	Y		N	A	
1	57	Y		N	A	
0	65	Y		N	A	
1	67	N	Y	Y	E	
0	69	Y		N	A	
1	71	Y		N	A	
0	73	Y		N	A	
1	75	N	Y	Y	E	
0	77	Y		N	A	
1	79	N	Y	Y	E	
0	81	Y		N	A	
1	83	Y		N	A	
0	85	N	Y	Y	E	
1	87	Y		N	A	
0	89	Y		N	A	
1	91	N	Y	Y	E	
0	93	Y		N	A	
1	95	N	Y	Y	D	
				Total	**36**	

Cherryton Walk

Level	Flat Number	Fire Door FD30S Compliant Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
G	2	N	Y	Y	E	
G	4	N	Y	Y	E	
1	14	N		N	Other	Door is original and does not appear to be installed by Mears
1	16	N	Y	Y	E	
G	6	N	Y	Y	E	
G	8	N	Y	Y	E	
1	20	Y		N	A	
1	18	Y		N	A	
G	12	Y		N	A	
G	10	Y		N	A	
1	24	Y		N	A	
1	22	Y		N	A	
				Total	**12**	

Mancroft Walk

Level	Flat Number	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
G	3	N		N	C	Door does not appear to be installed by Mears, Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	5	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	7	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	9	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	11	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	13	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	15	N		N	C	Door does not appear to be installed by Mears, Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
1	17	N	Y	Y	B	
1	19	N	Y	Y	B	
1	21	N		N	Other	Door does not appear to be installed by Mears
1	23	N		Y	C	Door does not appear to be installed by Mears
1	25	N	Y	Y	B	
1	27	N	Y	Y	B	
1	29	N	Y	Y	B	
				Total	**14**	

Merrow Walk

Level	Flat Number	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
G	1	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	3	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	5	N		N	C	Door does not appear to be installed by Mears, Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	7	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	9	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	11	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	13	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	15	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	17	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
1	19	N	Y	Y	B	
1	21	N	Y	Y	B	
1	23	N		Y	C	Door does not appear to be installed by Mears
1	25	N	Y	Y	B	
1	27	N	Y	Y	B	
1	29	N	Y	Y	B	
1	31	N	Y	Y	B	
1	33	N		Y	C	Door does not appear to be installed by Mears
1	35	N	Y	Y	B	
				Total	**18**	

Litchem Close

Level	Flat Number	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
G	9	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	11	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	13	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	15	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	17	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	19	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	21	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	23	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	25	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	27	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
1	29	N	Y	Y	B	
1	31	N	Y	Y	B	
1	33	N	Y	Y	B	
1	35	N	Y	Y	B	
1	37	N	Y	Y	B	
1	39	N		Y	C	Door does not appear to be installed by Mears
1	41	N	Y	Y	B	
1	43	N	Y	Y	B	
1	45	N		Y	B	
1	47	N		Y	C	Door does not appear to be installed by Mears
				Total	**20**	

Lockton Close

Level	Flat Number	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
G	1	N		N	C	Door does not appear to be installed by Mears, Flats door does not open onto communal shared areas with other tenants and escape routes. No requirement for Fire Door
G	3	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	5	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	7	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	9	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	11	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	13	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	15	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	17	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	19	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	21	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	23	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	25	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
1	27	N	Y	Y	B	
1	29	N		Y	C	Door does not appear to be installed by Mears
1	31	N	Y	Y	B	
1	33	N	Y	Y	B	
1	35	N		Y	C	Door does not appear to be installed by Mears
1	37	N		Y	C	Door does not appear to be installed by Mears
1	39	N		Y	Other	Leaf and Half Composite Door
1	41	N	Y	Y	B	
1	43	N	Y	Y	B	
1	45	N		Y	C	Door does not appear to be installed by Mears
1	47	N	Y	Y	B	
1	49	N	Y	Y	B	
1	51	N	Y	Y	B	
				Total	**26**	

Hursthead Walk

Level	Flat No	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
G	2	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	4	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	6	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	8	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	10	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	12	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	14	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
G	16	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire
1	18	N	Y	Y	B	
1	20	N	Y	Y	B	
1	22	N	Y	Y	B	
1	24	N	Y	Y	B	
1	26	N	Y	Y	B	
1	28	N	Y	Y	B	
1	30	N	Y	Y	B	
1	32	N	Y	Y	B	
				Total	**16**	

Skerry Close

Level	Flat No	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comment
G	1	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	3	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	5	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	7	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	9	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	11	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	13	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	15	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	17	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	19	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	21	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	23	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	25	N		N	Other	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
1	27	N	Y	Y	B	
1	29	N	Y	Y	B	
1	31	N	Y	Y	B	
1	33	N	Y	Y	B	
1	35	N	Y	Y	B	
1	37	N	Y	Y	B	
1	39	N	Y	Y	B	
1	41	N	Y	Y	B	
1	43	N	Y	Y	B	
1	45	N	Y	Y	B	
1	47	N	Y	Y	B	
1	49	N	Y	Y	B	
1	51	N		Y	B	
				Total	**26**	

Helmshore Walk

Level	Flat Number	Fire Door FD30S Compliant Y/N	Nominal Y	Further Testing Required	Door Type	Comments
G	14	N		Y	C	Door does not appear to be installed by Mears, Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	8	N		Y	C	Door does not appear to be installed by Mears, Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	40	N		Y	C	Door does not appear to be installed by Mears, Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	2	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	4	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	6	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	10	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	12	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	16	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	38	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	44	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
G	46	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
1	20	N	Y	Y	B	
1	22	N	Y	Y	B	
1	24	N	Y	Y	B	
1	26	N	Y	Y	B	
1	28	N	Y	Y	B	
1	30	N	Y	Y	B	
1	32	N	Y	Y	B	
1	34	N	Y	Y	B	
1	48	N	Y	Y	B	
1	50	N	Y	Y	B	
1	52	N	Y	Y	B	
1	54	N	Y	Y	B	
1	56	N		Y	B	
				Total	**25**	

Lockton Court

Level	Flat No	Door Type	Certified Fire Door FD30S Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
1	1	Single	N	Y	Y	B	
1	2	Single	N	Y	Y	B	
1	3	Single	N	Y	Y	B	
1	4	Single	N	Y	Y	B	
1	5	Single	N	Y	Y	B	
1	6	Single	N	Y	Y	B	
1	7	Single	N	Y	Y	B	
1	9	Single	N	Y	Y	B	
2	10	Single	N	Y	Y	B	
2	11	Single	N	Y	Y	B	
2	12	Single	N	Y	Y	B	
2	13	Single	N	Y	Y	B	
2	14	Single	N	Y	Y	B	
2	15	Single	N	Y	Y	B	
2	16	Single	N	Y	Y	B	
2	18	Single	N	Y	Y	B	
3	19	Single	N	Y	Y	B	
3	20	Single	N	Y	Y	B	
3	21	Single	N	Y	Y	B	
3	22	Single	N	Y	Y	B	
3	23	Single	N	Y	Y	B	
3	24	Single	N	Y	Y	B	
3	25	Single	N	Y	Y	B	
3	27	Single	N	Y	Y	B	
4	28	Single	N	Y	Y	B	
4	29	Single	N	Y	Y	B	
4	30	Single	N	Y	Y	B	
4	31	Single	N	Y	Y	B	
4	32	Single	N	Y	Y	B	
4	33	Single	N	Y	Y	B	
4	34	Single	N	Y	Y	B	
4	36	Single	N	Y	Y	B	
5	37	Single	N	Y	Y	B	
5	38	Single	N	Y	Y	B	Police Entry Broken Door
5	39	Single	N	Y	Y	B	
5	40	Single	N	Y	Y	B	
5	41	Single	N	Y	Y	B	
5	42	Single	N	Y	Y	B	
5	43	Single	N	Y	Y	B	
5	45	Single	N	Y	Y	B	
6	46	Single	N	Y	Y	B	
6	47	Single	N	Y	Y	B	
6	48	Single	N	Y	Y	B	
6	49	Single	N	Y	Y	B	
6	50	Single	N	Y	Y	B	
6	51	Single	N	Y	Y	B	
6	52	Single	N	Y	Y	B	
6	54	Single	N	Y	Y	B	
7	55	Single	N	Y	Y	B	
7	56	Single	N	Y	Y	B	
7	57	Single	N	Y	Y	B	
7	58	Single	N	Y	Y	B	
7	59	Single	N	Y	Y	B	
7	60	Single	N	Y	Y	B	
7	61	Single	N	Y	Y	B	
7	63	Single	N	Y	Y	B	
8	64	Single	N	Y	Y	B	
8	65	Single	N	Y	Y	B	
8	66	Single	N	Y	Y	B	
8	67	Single	N	Y	Y	B	
8	68	Single	N	Y	Y	B	
8	69	Single	N	Y	Y	B	
8	70	Single	N	Y	Y	B	
8	72	Single	N	Y	Y	B	
0	1A	Single	N	Y	Y	B	
					Total	**65**	

Silkin Court

Level	Flat Number	Fire Door FD30S Compliant Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
1	1	N	Y	Y	B	
1	2	N	Y	Y	B	
1	3	N	Y	Y	B	
1	4	N	Y	Y	B	
1	5	N	Y	Y	B	
1	6	N	Y	Y	B	
1	7	N	Y	Y	B	
1	9	N	Y	Y	B	
2	10	N	Y	Y	B	
2	11	N	Y	Y	B	
2	12	N	Y	Y	B	
2	13	N	Y	Y	B	
2	14	N	Y	Y	B	
2	15	N	Y	Y	B	
2	16	N	Y	Y	B	
2	18	N	Y	Y	B	
3	19	N	Y	Y	B	
3	20	N	Y	Y	B	
3	21	N	Y	Y	B	
3	22	N	Y	Y	B	
3	23	N	Y	Y	B	
3	24	N	Y	Y	B	
3	25	N	Y	Y	B	
3	27	N	Y	Y	B	
4	28	N	Y	Y	B	
4	29	N	Y	Y	B	
4	30	N	Y	Y	B	
4	31	N	Y	Y	B	
4	32	N	Y	Y	B	
4	33	N	Y	Y	B	
4	34	N	Y	Y	B	
4	36	N	Y	Y	B	
5	37	N	Y	Y	B	
5	38	N	Y	Y	B	
5	39	N	Y	Y	B	
5	40	N	Y	Y	B	
5	41	N	Y	Y	B	
5	42	N	Y	Y	B	
5	43	N	Y	Y	B	
5	45	N	Y	Y	B	
6	46	N	Y	Y	B	
6	47	N	Y	Y	B	
6	48	N	Y	Y	B	
6	49	N	Y	Y	B	
6	50	N	Y	Y	B	
6	51	N	Y	Y	B	
6	52	N	Y	Y	B	
6	54	N	Y	Y	B	
7	55	N	Y	Y	B	
7	56	N	Y	Y	B	
7	57	N	Y	Y	B	
7	58	N	Y	Y	B	
7	59	N	Y	Y	B	
7	60	N	Y	Y	B	
7	61	N	Y	Y	B	
7	63	N	Y	Y	B	
8	64	N	Y	Y	B	
8	65	N	Y	Y	B	
8	66	N	Y	Y	B	
8	67	N	Y	Y	B	
8	68	N	Y	Y	B	
8	69	N	Y	Y	B	
8	70	N	Y	Y	B	
8	72	N	Y	Y	B	
G	1A	N	Y	Y	B	
				Total	**65**	

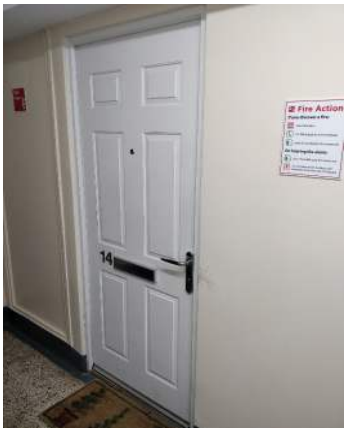
Lamport Court

Level	Flat Number	Fire Door FD30S Compliant Y/N	Nominal Door Y	Further Testing Required	Door Type	Comments
1	1	N	Y	Y	B	
1	2	N	Y	Y	B	
1	3	N	Y	Y	B	
1	4	N	Y	Y	B	
1	5	N	Y	Y	B	
2	10	N	Y	Y	B	
2	11	N	Y	Y	B	
2	12	N	Y	Y	B	
2	13	N	Y	Y	B	
2	14	N	Y	Y	B	
2	15	N	Y	Y	B	
2	16	N	Y	Y	B	
2	17	N	Y	Y	B	
2	18	N	Y	Y	B	
3	19	N	Y	Y	B	
3	20	N	Y	Y	B	
3	21	N	Y	Y	B	
3	22	N	Y	Y	B	
3	23	N	Y	Y	B	
3	24	N	Y	Y	B	
3	25	N	Y	Y	B	
3	27	N	Y	Y	B	
4	28	N	Y	Y	B	
4	29	N	Y	Y	B	
4	30	N	Y	Y	B	
4	31	N	Y	Y	B	
4	32	N	Y	Y	B	
4	33	N	Y	Y	B	
4	34	N	Y	Y	B	
4	36	N	Y	Y	B	
5	37	N	Y	Y	B	
5	38	N	Y	Y	B	
5	39	N	Y	Y	B	Police Break In
5	40	N	Y	Y	B	
5	41	N	Y	Y	B	
5	42	N	Y	Y	B	
5	43	N	Y	Y	B	
5	44	N	Y	Y	B	
5	45	N	Y	Y	B	
6	46	N	Y	Y	B	
6	47	N	Y	Y	B	
6	48	N	Y	Y	B	
6	49	N	Y	Y	B	
6	50	N	Y	Y	B	
6	51	N	Y	Y	B	
6	52	N	Y	Y	B	
6	54	N	Y	Y	B	
7	55	N	Y	Y	B	
7	56	N	Y	Y	B	
7	57	N	Y	Y	B	
7	58	N	Y	Y	B	
7	59	N	Y	Y	B	
7	60	N	Y	Y	B	
7	61	N	Y	Y	B	
7	63	N	Y	Y	B	
8	64	N	Y	Y	B	
8	65	N	Y	Y	B	
8	66	N	Y	Y	B	
G	1A	N	Y	Y	B	Flats door does not open onto communal or shared areas with other tenants and escape routes. No requirement for Fire Door
				Total	**59**	

Artillery Court

Level	Flat Number	Fire Door FD30S Compliant Y/N	Nominal Door Y	Further Testing Required	Door Type	Comment
0	1	Y		N	A	
0	2	Y		N	A	
1	3	Y		N	A	
1	4	Y		N	A	
1	5	N	Y	Y	D	
1	6	N	Y	Y	D	
1	7	Y		N	A	
2	8	Y		N	A	
2	9	Y		N	A	
2	10	Y		N	A	
2	11	Y		N	A	
2	12	N	Y	Y	D	
3	13	Y		N	A	
3	14	Y		N	A	
3	15	Y		N	A	
3	16	Y		N	A	
3	17	Y		N	A	
4	18	Y		N	A	
4	19	Y		N	A	
4	20	Y		N	A	
4	21	Y		N	A	
4	22	Y		N	A	
5	23	Y		N	A	
5	24	Y		N	A	
5	25	Y		N	A	
5	26	Y		N	A	
5	27	Y		N	A	
6	28	Y		N	A	
6	29	Y		N	A	
6	30	Y		N	A	
6	31	Y		N	A	
6	32	Y		N	A	
7	33	N	Y	Y	D	
7	34	Y		N	A	
7	35	Y		N	A	
7	36	Y		N	A	
7	37	Y		N	A	
8	38	Y		N	A	
8	39	Y		N	A	
8	40	Y		N	A	
8	41	Y		N	A	
8	42	Y		N	A	
9	43	Y		N	A	
9	44	Y		N	A	
9	45	Y		N	A	
9	46	Y		N	A	
9	47	Y		N	A	
10	48	Y		N	A	
10	49	Y		N	A	
10	50	Y		N	A	
10	51	N	Y	Y	D	
10	52	N	Y	Y	D	
11	53	Y		N	A	
11	54	Y		N	A	
11	55	Y		N	A	
11	56	N	Y	Y	D	
11	57	Y		N	A	
12	58	N	Y	Y	D	
12	59	N	Y	Y	D	
12	60	Y		N	A	
12	61	Y		N	A	
12	62	Y		N	A	
				Total	**62**	

Door Types

Type A	Type C	Type E
		
Type B	**Type D**	
		

11.1 **Appendix 2** - Nominal door observations of door types B,D,E.

Q Mark Stamp	IG Hinges	Overhead Closer
		

Sleeved Letterbox


12 Building Control Sign Off

MANCHESTER CITY COUNCIL

Building Control

Telephone:
0161 234 4340
w.timperley@manchester.gov.uk

PO Box 532 Town Hall
Manchester M60 2LA

Mr Jason Smithies
Mears Group PLC
Hendham Vale Unit 2A
Vale Park Way
Manchester
M8 0AD

Date: 13 November 2020

Our Ref: DALFP/14/00146

Dear Sir/Madam,

The Building Regulations 2010 (as amended)
Refurbishment of 839 existing homes
Artillery Court, M13 9TU ONLY
Brunswick Neighbourhood Bounded by Wadeson Road, Stockport Road, Grove Village, Upper Brook Street & Mancunian Way, Manchester, M13
Application Number DALFP/14/00146

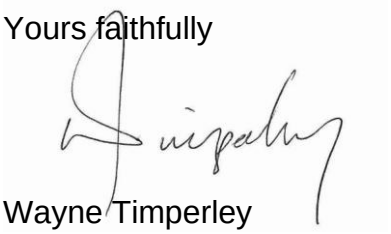
I would like to take this opportunity to thank you for using the service of Manchester City Council for your Building Control requirements. My apologies for not having sent this to you earlier.

Please find enclosed the Completion Certificate relating to the project mentioned above.

It is recommended that these documents be kept with your deeds in a secure location as it may cause complications if they cannot be produced in the future, when required.

I trust that the service you have received has been to your satisfaction and that you will return to us for your future work.

Yours faithfully



Wayne Timperley
Building Control Manager

Copy to applicant Mr Graig Nemeth, Galliford Try Partnerships North West
Innovation House, Kelburn Court, Birchwood
Warrington, WA3 6UT

MANCHESTER CITY COUNCIL

Building Control

PO Box 532, Town Hall
Manchester M60 2LA

Building Regulations Certificate of Completion

The Building Act 1984 (as amended)
The Building Regulations 2010 (as amended)

Reference Number: DALFP/14/00146

Builder:
Mears Group PLC, Hendham Vale Unit 2A
Vale Park Way, Manchester, M8 0AD

Description of Work:
Refurbishment of 839 existing homes
Artillery Court, M13 9TU ONLY

Location of Building:
Artillery Court, M13 9TU ONLY
Brunswick Neighbourhood Bounded by Wadeson Road, Stockport Road, Grove Village, Upper Brook Street & Mancunian Way, Manchester, M13

Deposit of Particulars:
A Full plans application was deposited on 4th February 2014 under the Building Regulations Section 1(3) of the Building Act 1984.

Work Completed on: 27th October 2020

Compliance with the Building Regulations as stated in Regulation 17:
The above-mentioned work has been inspected by the Building Control Section of Manchester City Council and as far as can be ascertained the work has been carried out so that the relevant provisions of the Building Regulations have been complied with.

Limitations of the Certificate:
This document does not convey approval under any other legislation other than the Building Regulations and associated legislation. A 'Certificate of Completion' is evidence (but not conclusive evidence) that the requirements specified in the certificate have been complied with. A 'Certificate of Completion' is not an approval of the quality of the work carried out.

Authority:
This Completion Certificate is authorised by **Julie Roscoe**, Director of Planning, Building Control & Licensing.

Signature: 

Date: **13th November 2020**

LABC