Clarion Housing Group

Active and Passive Fire Safety Works Specification

1 GENERAL TERMS AND CONDITIONS

1.1 Before submitting a tender price document, contractors should:

- Conduct a detailed review of all this specification and relevant documentation supplied and ensure that prices submitted in your tender submission include for all points stipulated within the Active and Passive Fire Safety Work Specification (This Document and the Clarion (CHG) Schedule of Rates.
- Seek clarifications on any ambiguous or unclear points.
- Consult with legal or technical experts if necessary.

This ensures alignment with the client's requirements and protects the contractor's interests throughout the project's execution.

1.2 Compliance with The Building Regulations 2010 and The Building Safety Act 2022

The Contractor shall ensure that all works carried out under this contract fully comply with the requirements of the Building Regulations 2010 and the Building Safety Act 2022, including any subsequent amendments or associated statutory requirements. It is the responsibility of the Contractor to familiarise themselves with both regulations and adhere to these regulations, maintaining the highest standards of workmanship and safety throughout the contract term if successful.

The Contractor must also work in close collaboration with relevant authorities, consultants, and other stakeholders to ensure that all stages of the construction process meet regulatory compliance. Any deviation or non-compliance must be immediately reported and rectified at the Contractor's expense, subject to the approval of the Employer and the relevant authorities.

By submitting a tender, the Contractor confirms their capability, understanding, and commitment to execute the works in full accordance with both the above Regulations and the Clarion Active and Passive Fire Safety Work Specification (this document).

1.3 Clarion Housing Group - Policy on Non-Disclosure Agreements (NDAs)

Clarion Housing Group maintains a transparent and collaborative approach in all its dealings. As part of this commitment to openness, it is our policy not to sign Non-Disclosure Agreements (NDAs) in relation to primary test door data. Our preference is to work within the framework of mutual trust and any existing legal or regulatory confidentiality requirements. As such, you must ensure that all suppliers (Namely door suppliers) will have to submit **all** primary test data (Not selected sections of data) without the need for an NDA, and the data shared will be available for scrutiny and or stored as part of the Golden Thread Information on Clarion's storage facility. Any supplier not willing to accept these terms and conditions will not be able form part of this contract, **please ensure this has been considered before pricing.**

1.4 Health & Safety

Contractors will be responsible for ensuring that all works are to be carried out in line with all relevant Health and Safety regulations and statutory duties and with particular attention to the requirements: of:

- The Health & Safety at Work Act 1974
- Control of Substances Hazardous to Health (COSHH) Regulations 2002
- Environmental Protection Act 1990
- Contractors will need to complete and pass the Clarion Health & Safety appraisal prior to the contract award.

Contractors are subject to H&S review at periods of no less than 18 months to ensure continued compliance with required standards.

The Contractor will provide Clarion with their Health and Safety Policy, Risk Assessments, COSHH Assessments, training for employees on the annual anniversary of the contract.

1.5 Clarion Policies

Contractors must comply with the following Clarion Policies

- Appendix 1 –Supplier Code of Conduct
- Appendix 2 – Clarion Data Protection
- Appendix 3 – Complaints Policy
- Appendix 4 – Safeguarding
- Appendix 5 – Whistleblowing Policy
- Appendix 6 – Access for Contractors Policy

1.6 Golden Thread Requirements – To be included as part of the tendered rates

The **Golden Thread of Information** is a key concept under the **Building Safety Act 2022** in England, designed to ensure the safety and accountability of higher-risk buildings throughout their lifecycle. It emphasises maintaining up-to-date, accurate, and easily accessible data regarding a building's design, construction, and management. Contractors, as well as other duty holders, have specific responsibilities under the Building Safety Act and associated regulations. (*HRB: higher-risk buildings are defined as buildings with at least two residential units, care homes, and hospitals which are at least 18 metres in height or have at least 7 storeys).*

Details of the golden thread requirements are set out in regulations and will apply to all buildings within this contract; therefore, you will be required to understand and comply with all relevant requirements, including, but not limited to, recording data electronically **as part of your tendered rates**. This will entail generating reports that identify works pre, mid and completion with relevant context specific to the job. Once completed, these will need to be uploaded to the Clarion shared system.

Here is a breakdown of the policy and contractor requirements:

Golden Thread: Key Principles

Digital Format: The information must be stored digitally, enabling easy updates, and sharing.

Accessible and Secure: The information should be accessible to those who need it but protected from unauthorized access.

Up to Date: Data must reflect the current state of the building.

Contractors' Responsibilities

Contractors must ensure that the information they provide is:

- Accurate and Verifiable:
- Supply verified information related to design, materials, and construction methods.
- Maintain compliance with the Building Regulations.
- Provided at Key Stages:
- During design: Share plans, specifications, and fire safety strategies.
- During construction: Update as-built records, installation details, and any deviations from the design.
- At handover: Provide a complete and verified dataset, including Operation and Maintenance (O&M) manuals, fire safety information, and testing records.
- Collaborative Data Exchange (Where required):
- Work with other duty holders, such as the Principal Designer CDM, Principal Contractor, and the Accountable Person/client, to ensure seamless information flow.
- Fire and Structural Safety Focus:
- Contractors must prioritise data on fire safety systems, materials used, and any design changes that impact the building's structural or fire safety integrity.

Key Takeaway for Contractors

To comply with the Golden Thread requirements, contractors must:

1. Plan for data management as an integral part of their work.
2. Use technology to streamline data capture and sharing.
3. Engage with other duty holders to ensure that the information aligns with the building's safety and operational needs.

1.7 Higher Risk Building control applications (Building Safety Regulator)

As part of the HRB remediation, your tendered prices **will include** for the commitment to comply with the **Building Safety Act and all relevant regulations made under it**, it is essential that all contractors involved in this contract actively assist in providing accurate and timely information for Building Control purposes.

The Act places significant emphasis on ensuring safety and accountability throughout the construction process. To meet these obligations, Clarion will require your cooperation as the Principal Contractor for Higher Risk Building (HRB) projects. You will also need to act as Principal Designer under the Building Safety Act for HRB projects, providing relevant documentation, drawings, certification and or any other details required for a notifiable project. This information is critical to prevent delays in the building control application process.

Please ensure that:

1. All necessary records and information are readily available and submitted when requested.
2. Any queries or clarifications from Building Control are addressed promptly.
3. Your team understands the importance of maintaining thorough documentation for the work you perform.
4. You and your team fully understand and can comply with competence requirements placed on duty holders (including contractors and designers).

1.8 Survey and Reports

This statement confirms that the **surveys and reports** related to the project will be integrated into the tendering process/schedule of rates and treated as part of the contractual obligations. Here is a detailed breakdown of what this might mean:

Inclusion in Tender Pricing:

- The cost of conducting or providing surveys and reports throughout the contract must be factored into the tendered prices submitted by bidders.
- Bidders should account for these requirements when preparing their financial proposals.

Contractual Obligation:

- The surveys and reports will be included as part of the deliverables under the contract.
- The appointed contractor will be responsible for ensuring that the surveys and reports meet the specifications and quality standards defined in the contract.

Accountability and Compliance:

- The contractor may need to demonstrate that the surveys and reports are completed accurately and in compliance with applicable regulations or project requirements.

1.9 SOR Terms and Conditions

All schedule of rates submitted under this contract shall include for, when or where required, but not limited too - preliminaries, site set up, welfare cost, Personal Protective Equipment, tools and safety equipment, management fees, CDM, Building Control Applications and associated documents (HRB), Overheads and profit, parking fees, vehicle fees, reports and surveys and materials and labour.

2 REPLACEMENT TIMBER INTERNAL, EXTERNAL, COMMUNAL FIRE DOORS

2.1 Overview

A timber **fire door** is a vital component in a building's passive fire protection system. Its primary function is to limit the spread of fire and smoke between different compartments in a building, enabling safe evacuation and providing time for firefighting efforts. Fire doors must meet rigorous fire resistance standards, performance requirements, and regulatory compliance to ensure they work as intended in the event of a fire.

Fire doors are one element of several that help to provide a fire-rated 'compartment' designed to withstand fire for a length of time. An incorrect installation can render a fire door effectively useless and drastically reduce the fire protection performance. A modern (FD30S) fire-resisting door has intumescent strips and cold smoke seals fitted along its side and top edges (or within the frame in these locations). Letter boxes should be of a type incorporating intumescent materials to protect the opening. The door should be fitted with an overhead self-closing device or a concealed closer in the door jamb. The door-set, the complete entity incorporating door hardware and furniture, should be tested for its performance as a whole.

It is essential that, fire-resisting flat entrance doors, and doors provided to protect common corridors, lobbies and stairways, should be fitted with suitable positive action self-closing devices. The self-closing device should be capable of closing the door in its frame from any angle and overcoming the resistance of any latch.

Any new or replacement doors within an existing block of flats should meet current standards for fire-resisting doors (BS 476-22 or BS EN 1634 parts 1, 2 and 3). Similarly, any letterboxes that are fitted should be of a protected type, e.g. lined with intumescent material to seal the opening when exposed to fire.

The following is the **minimum performance specification** for timber fire doors that Clarion Housing Group will accept as part of the contract award, along with relevant factors to ensure that the door set remains compliant in its entirety.

2.2 Minimum Performance Standard

Timber fire doors must be **primary tested** **by the intended supplier with full test evidence to align with the application the door is to be fitted within. All fields of application/Extended fields of application (All test evidence) must be in the same name as the manufacturer supplying the door set.** The door set must be tested and certified to meet the required fire resistance standard, which indicates how long the door can withstand exposure to fire before failure. The fire resistance ratings in the UK are typically:

- **FD30S** – 30 minutes of fire resistance and smoke control (44mm door leaves are to be fitted where FD30S doors are stipulated).
- **FD60S** – 60 minutes of fire resistance and smoke control (54mm door leaves are to be fitted where FD60S doors are stipulated).

Clarion will not accept 54mm door sets for Front Entrance Doors unless the risk determines otherwise and with prior agreement.

2.3 Regulatory Compliance & Codes of Practice

- **The Building Regulations 2010.**
- **Regulatory Reform (Fire Safety) Order 2005** (England and Wales).
- **Building Regulations (Part B - Fire Safety)**.
- **Building Regulations (Part L – Thermal Insulation**).
- **BS EN 1634-1**: Fire resistance and smoke control tests for door and shutter assemblies.
- **BS EN 1634-3:** British and European standards for smoke leakage testing.
- **BS 8214:2016**: Code of practice for fire door assemblies.
- **PAS 24:** Secure By design certified.
- **UKCA Certified:** For external door sets.
- **BS EN 10077-1**: Thermal performance of windows, doors, and shutters
- **BS ISO 10140-2:** Acoustic performance for doors etc.
- **BS9991** Fire safety in the design, management, and the use of residential buildings – Code of practice.

2.4 Manufacture and Materials for Door Sets:

The timber door set must be made up of the equal elements that were tested to achieve the relevant fire and smoke integrity (Equal to the primary test data only and no global certificated alternative components) and there should be no material alternatives utilised unless the suppliers' own fields of application will allow alternative components; this includes for but not limited to, the door leaf, door frame, sidelights, fanlight/transom light, architraves, all associated ironmongery and fire stopping to the aperture and door frame.

Door Set to be factory finished (Fully decorated).

Timber utilised to manufacture door sets must be sourced from a sustainable recognised source, and clearly certified and marked accordingly e.g. Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) or equal or approved.

2.5 Labelling and Certification

Fire doors must be clearly labelled with the following information to ensure proper identification and compliance:

- **Fire Resistance Rating** (e.g., FD30, FD60).
- **The manufacturer's name** and logo.
- **Test standard compliance** (e.g. BS EN 1634-1).
- **Date of manufacture** or **certification number**.
- **CE Mark** or **UKCA Mark** (where applicable), indicating compliance with the relevant product standards.
- **Unique door identifier (Asset Tag) as agreed with Clarion**

The label should be durable and placed in an accessible location on the door or frame.

2.6 Thermal Efficiency and U-value for external door sets

The **U-value** (W/m^2K) measures the rate of heat transfer through a material. For fire doors, the U-value indicates how well the door insulates against heat transfer. A U-value of <**1.8 W/m^2K** is the requirement external fire doors and meets many building regulations for thermal efficiency under Approved Document L.

- Lower U-value = better thermal insulation.
- For external fire doors, maintaining a balance between thermal efficiency and fire safety is crucial.

It is important that any glazed components used as part of a UKCA external door sets i.e. Fanlight windows and sidelight windows also achieve equal or better U values to the door set and maintains the PAS 24 secure by design standard.

2.7 Glazing Within Fire Door Sets

Glass that is to be utilised within a door set must achieve the relevant EI (Integrity and Insulation) in accordance with environment it is to be sited within e.g. internal communal areas will require FEDS to be EI 30/30. Refer to Approved document B volume 1 Table B5 & B3 for the specific application requirements.

2.8 Door Closers

Where non automated/active door closers are utilised e.g. flat entrance doors and communal doors, they must be 2 stage closing devices meeting the requirements of BS EN 1154.

2.9 Fire Door Signage

Where applicable, fire door signage must be fitted in accordance with BS 5499 part 10, and signage must be in accordance with BS ISO 3864-1 e.g. Mandatory fire door keep locked signs must be blue with contrasting white text and white perimeter edge.

2.10 Installation of the Door Set

Priced submissions must allow for the full installation of the door set, i.e. the finished article. Including but not limited to, the primary door set, all ironmongery, sidelights or fanlights where applicable, Mechanical fixings, architraves and fully finished decoration to the inside and outside of a dwelling, and or finished accordingly to both sides of communal doors and service area doors.

The door frame that will form part of the door set will be suitably sized for any aperture it is to be sited within i.e. the depth of the frame should be wide enough to cover a cavity wall gap, and therefore the potential for variable frame depths must be allowed for as part of the tender submission for each singular door set.

The installation of the door set must be carried out by a third party approved installer of fire doors e.g. BM Trada Q Mark, FIRAS, Blue Sky etc.

2.11 Approved Document M

Due to the unknown vulnerability of the residents, where front entrance doors are to be fitted all threshold heights must be in accordance with Approved Document M i.e. the threshold must be no higher than 15mm from both the exit and entrance side of the property. Always endeavour to ensure the threshold is less than 15mm where possible. When full height 15mm thresholds are fitted, ensure there is a hardwood/metallic chamfer to one or both sides of the threshold to prevent tripping.

3 Fire Stopping Products and Installation Criteria

3.1 Fire Stopping General

Proprietary fire-stopping products must be used in Clarion buildings, and must be fitted or applied in accordance with the supplier's installation/specification instructions, to achieve equal or greater levels of fire integrity and Insulation than the compartment lines they are to be sited within, this includes but not limited to: compartment walls, service risers, door frames, ceilings, ceiling voids, floor voids, floor slabs, roof void compartmentation lines etc.

Engineered solutions will be accepted with the relevant test evidence to ensure that the correct levels of fire and smoke integrity and insulation are being achieved to the compartmentation line they are to be sited within e.g. FSI, Nullifire, Quelfire, Firefly etc.

3.2 Fire Stopping Installer

All fire stopping work on site will be carried out by a third-party accredited fire stopping installer e.g. BMTrada Q-mark, Firas, Bluesky etc.

3.3 Labelling

All penetrations that are sealed/fire stopped must receive a label identifying the location, fire resistance period, location reference/unique ID, Installer name and products used. All data will be recorded as part of the golden thread.

3.4 Finishing Of Products

Where fire stopping takes place to penetrations, or timber construction breaches a new formation wall, allow in your tender rates to tape/mask around each and every penetration so that the intumescent products utilised are finished neatly (Squared off) for aesthetics purposes.

3.5 Relevant UK and European Standards

- **BS EN 1366**: A suite of standards outlining fire resistance tests for service installations. Key parts include:
- **BS EN 1366-3**: Fire resistance tests for service penetrations seals, covering how materials should be tested to stop fire spreading through walls, floors, and ceilings.
- **BS EN 1366-4**: Fire resistance tests for linear joint seals, which are used in gaps or joints between fire-rated construction materials.
- **BS EN 13501-2**: Classification of fire resistance for elements of construction. This specifies how fire-stopping products are classified based on their resistance to fire, including criteria for integrity and insulation.
- **Building Regulations (Approved Document B V1 B3)**: In England, Approved Document B (Fire Safety) provides guidance on fire safety in building design and includes fire-stopping requirements for compartmentalization.
- **BS991** Fire safety in the design, management, and the use of residential buildings – Code of practice.

3.6 Regulatory Compliance

- **The Building Regulations 2010**

4 External Balcony Composite Doors (External Use Only)

4.1 Overview

A Composite **fire door** is a vital component in a building's passive fire protection system. Its primary function is to limit the spread of fire and smoke between different compartments in a building, enabling safe evacuation and providing time for firefighting efforts. Fire doors must meet rigorous fire resistance standards, performance requirements, and regulatory compliance to ensure they work as intended in the event of a fire.

The following is the **minimum performance specification** for composite fire doors that Clarion Housing Group will accept as part of the contract award, along with relevant factors to ensure that the door set remains compliant in its entirety.

4.2 Minimum Performance Standard

Composite fire doors must be **primary tested** **by the intended supplier with full test evidence to align with the application the door is to be fitted within. All fields of application/Extended fields of application (All test evidence) must be in the same name as the manufacturer supplying the door set.** The door set must be tested and certified to meet the required fire resistance standard, which indicates how long the door can withstand exposure to fire before failure. The fire resistance ratings in the UK are typically:

- **FD30S** – 30 minutes of fire resistance and smoke control (44mm door leaves are to be fitted where FD30S doors are stipulated).
- **FD60S** – 60 minutes of fire resistance and smoke control (54mm door leaves are to be fitted where FD60S doors are stipulated).

Clarion will not accept 54mm door sets for Front Entrance Doors unless the risk determines otherwise.

4.3 Regulatory Compliance & Codes of Practice:

- **The Building Regulations 2010.**
- **Regulatory Reform (Fire Safety) Order 2005** (England and Wales).
- **Building Regulations (Part B - Fire Safety)**.
- **Building Regulations (Part L – Thermal Insulation**).
- **BS EN 1634-1:2014**: Fire resistance and smoke control tests for door and shutter assemblies.
- **BS EN 1634-3:** British and European standards for smoke leakage testing.
- **BS 8214:2016**: Code of practice for fire door assemblies.
- **PAS 24:** Secure By design certified.
- **UKCA Certified:** For external door sets.
- **BS EN 10077-1**: Thermal performance of windows, doors, and shutters
- **BS ISO 10140-2:** Acoustic performance for doors etc.
- **BS9991** Fire safety in the design, management, and use of residential buildings – Code of practice.

4.4 Manufacture and Materials for Door Sets:

The composite door set must be made up of the equal elements that were tested to achieve the relevant fire and smoke integrity (Equal to the primary test data only and no global certificated alternative components) and there should be no material alternatives utilised unless the suppliers' own fields of application will allow alternative components; this includes for but not limited to, the door leaf, door frame, sidelights, fanlight/transom light, architraves, all associated ironmongery and fire stopping to the aperture and door frame.

4.5 Labelling and Certification

Fire doors must be clearly labelled with the following information to ensure proper identification and compliance:

- **Fire Resistance Rating** (e.g., FD30, FD60).
- **The manufacturer's name** and logo.
- **Test standard compliance** (e.g. BS EN 1634-1).
- **Date of manufacture** or **certification number**.
- **CE Mark** or **UKCA Mark** (where applicable), indicating compliance with the relevant product standards.
- **Unique door identifier (Asset Tag) as agreed with Clarion**

The label should be durable and placed in an accessible location on the door or frame.

4.6 Thermal Efficiency and U-value for external door sets

The **U-value** (W/m^2K) measures the rate of heat transfer through a material. For fire doors, the U-value indicates how well the door insulates against heat transfer. A U-value of <**1.8 W/m^2K** is the requirement external fire doors and meets many building regulations for thermal efficiency under Approved Document L.

- Lower U-value = better thermal insulation.
- For external fire doors, maintaining a balance between thermal efficiency and fire safety is crucial.

It is important that any glazed components used as part of a UKCA external door sets i.e. Fanlight windows and sidelight windows also achieve equal or better U values to the door set and maintains the PAS 24 secure by design standard.

4.7 Glazing Within Fire Door Sets

Glass that is to be utilised within a door set must achieve the relevant EI (Integrity and Insulation) in accordance with environment it is to be sited within e.g. external escape route areas will require all elements of the FEDS/sidelights to be EI 30/30 below 1.1m whilst adhering to the relevant UKCA requirements above. Refer to Approved document B volume 1 Table B5 & B3 for the specific application requirements.

4.8 Door Closers

Where non automated/active door closers are utilised e.g. flat entrance doors and communal doors, they must be 2 stage closing devices meeting the requirements of BS EN 1154.

4.9 Fire Door Signage

Where applicable, fire door signage must be fitted in accordance with BS 5499 part 10, and signage must be in accordance with BS ISO 3864-1 e.g. Mandatory fire door keep locked signs must be blue with contrasting white text and white perimeter edge.

4.10 Installation of the Door Set

Priced submissions must allow for the full installation of the door set, i.e. the finished article. Including but not limited to, the primary door set, all ironmongery, sidelights or fanlights where applicable, Mechanical fixings, architraves and fully finished decoration to the inside and outside of a dwelling, and or finished accordingly to both sides of communal doors and service area doors.

The door frame that will form part of the door set will be suitably sized for any aperture it is to be sited within i.e. the depth of the frame should be wide enough to cover a cavity wall gap, and

therefore the potential for variable frame depths must be allowed for as part of the tender submission for each singular door set.

The installation of the door set must be carried out by a third party approved installer of fire doors e.g. BM Trada Q Mark, FIRAS, Blue Sky etc.

5 Fire Door Repairs and Remediation

5.1 Carpenter Requirements

Carpenters carrying out repairs and remediation to Fire Doors will be required to be part of a third party approved Fire Door Maintenance Scheme E.g. Q-Mark or Blue sky etc. The methods used on site to remediate fire doors must be in accordance with the methodologies taught under the any of the third party approved schemes. All Installers are Third Party UKAS Accredited Installers Accreditation such as FIRAS/BM Trada or equivalent and use Third Party. Fire Doorsets installers shall be Manufacturers Approved Installers and carry Third Party Accredited Installers Accreditation such as FIRAS, QMARK, BMTRADA or Equivalent.

5.2 Primary Tested Door Maintenance

Where primary test evidence is available for a fire door requiring repairs, remediation will be carried out to restore the door to the original specification. Certification will be required and issued as part of the golden thread of information.

Fire Doorsets shall be compliant to the requirements of the Building Regulations and

have all relevant test reports for the following:

- BS 476 Part 22 1987 or EN1634-1 - Fire
- BS476 Part 31.1 or EN1634-3- Smoke
- PAS 24- Security
- BS 6375 Part 1 and 2- Weathering
- EN ISO 10077- Thermal
- BS EN ISO 10140-Acoustics

5.3 Notional and Nominal Fire Doors

Where remediation is required to notional and nominal fire doors, Clarion understand that certification cannot be issued for doors without Primary test data. However, where instructed the successful contractors will still be required to carry out remediation to non-primary tested doors in accordance with the third-party certificated scheme methodology. Clarion accepts the residual risk for unknown components, integrity, and insulation. Door remediation to such doors will be based on risk and agreed by Clarion personnel.

6 Loft Compartmentation Work

6.1 Methods of Compartmentation

When compartmentation work is carried out in roof/loft voids, the most practical solution must be sought in line with the challenges met within those areas. Additionally, the most cost-effective solution must be applied that will not compromise the quality or compliance of the installation.

6.2 Safe Working in Roof/Loft Voids

When working in loft spaces, specific Risk Assessments and Method Statements will need to be supplied to ensure operatives understand the risks present within those zones, particularly around the risk of slips, trips and falls through ceilings. The correct health and safety equipment must be allowed for as part of the schedule of rates e.g. folding crawl boards, ventilation, electrical lighting etc. where required.