WILLMOTT DIXON

SINCE 1852

Fire Safety Requirements Policy

Version 11 - July 2021

EVERYTHING COMPLETED WITH PRIDE

Building on BETTER

CONTENTS

INTRODUCTION

Since version 10 of this policy issued in May 2020, the Government has updated the Building Regulations to mandate the use of sprinklers in residential type buildings above 11m.

At the time of publication of this policy, we are still awaiting the full outcome of the Part B consultation that closed in the summer of 2020 and the uncertainty relating to the proposal to extend the ban on the use of combustibles in the external facade of Relevant Buildings from 18m to buildings of 11m.

This Fire Policy sets out how we will deliver compliant buildings to our Customers, which ensure the safety of all occupants and building resilience in the event of a fire.

It responds to the concerns of a volatile insurance market and reduces the Groups exposure to the commercial, regulatory and reputational risks associated with fire.

This Policy therefore reflects our current position on Fire Safety Requirements and Compliance - and supersedes all previous revisions of this Policy.

Notes:

1. If you require a tracked changes version of this policy, please click **here**.
2. For a list of Frequently Asked Question please log in to the Yellow Book:Design and click **here**.
3. If you have any questions or require advice please email **yellowbook@willmottdixon.co.uk.**

POLICY REQUIREMENTS

The following requirements apply to ALL current projects and to ALL future enquiries, but not to projects in the defect liability period:

All projects being delivered under a main works build contract must be reviewed against the latest version of this policy.

Any non-compliances must be reviewed by the Director responsible for delivery with any agreed actions, or decisions to accept a deviation derogation recorded in the projects Fire Policy Tracker.

All projects not under a main works build contract at the time of issue of this policy, must comply with this policy and any exceptions must be agreed with Group, via the National Product Team.

With this version of the policy we have created a new **Fire Policy Tracker** in PowerApps to assist teams' understanding of their projects compliance with this Fire Safety Requirements Policy, and to record any comments and manage any actions.

The Fire Compliance Book is now mandatory on all projects to record and track the products used and the competancy of installers to meet our Regulation 38 obligations.

REF	COMPLIANCE REQUIREMENT
1.	**INTERNAL NOTIFICATION** - All projects, regardless of height must be recorded with the National Product Team at the earliest stage for their review and guidance using the Project Notification process which can be accessed **here** or from the **Yellow Book: Design**. Project Teams are responsible for their projects complying with this policy. The National Product Team must be contacted as soon as it becomes apparent that a derogation may be required - to review any proposed exceptions or derogations to this policy, prior to acceptance by Group. Initial contact is to be made through the **Project Notification process** to ensure that all information is recorded. On all high rise residential buildings – those which are 10 storeys or higher – the decision to bid, tender and execute contracts **must** be referred to the COO at the respective LCO board.
2.	**FIRE CONSULTANT APPOINTMENT** - On all projects, we must appoint a suitably qualified fire consultant to our agreed Scope of Services before we commit to a Contract Sum. This is to ensure a Fire Consultant has reviewed the scheme so we understand the route to compliance and any potential risks from Fire. All appointments should cover all RIBA Work Stages, including retrospective liability provision where appropriate. A standard Scope of Services is available in CS-CON-008 Appendix B2 via the Company Secretary's section of **The Hub**. Please refer to the Fire Responsibility Flow Chart **Appendix i** for clarification regarding the potential scenarios and the appointment strategy required in each.

REF	COMPLIANCE REQUIREMENT
3.	**FIRE CONSULTANT SCOPE** - The Fire Consultant is required to review, develop and agree the scheme with the full design team to achieve a solution that is satisfactory to the relevant authorities, and to produce the Fire Safety Strategy report. Please refer to the Fire Safety Strategy Guidance appended in **Appendix ii**. In addition to other duties set out in the agreed scope of services, their services must include: • A review of the external wall build up (design principles / compliance), considering the intended occupancy of the building • At the appropriate RIBA stage, and ahead of signing the main build contract, the Fire Consultant must formally verify that the design follows the agreed Fire Safety Strategy, and that all active and passive fire protection products currently specified are suitable for their intended use on the project. • Inspecting the façade against the agreed façade specification to include a minimum of 30% of the cavity barrier locations, if the Fire Consultant is unable to carry out these inspections, another suitably qualified party must be appointed.
4.	**RESIDENTIAL LENDERS** - On residential projects, we must ask our Customers if they require the **EWS1 form** to be completed as this will become their responsibility as the building owner. From the date of this policy we **must not** accept responsibility for obtaining an EWS1 form as part of our contracted works. Due to the requirement to confirm that cavity barriers are installed in the required locations to an appropriate standard, the Customers' appointed person for the EWS1 form should be involved during the build stage. This may be an additional service that our appointed Fire Consultant may be able to offer to our Customer under a separate direct appointment, not through Willmott Dixon.
5.	**PROFESSIONAL INDEMNITY INSURANCE** - When appointing designers or supply chain partners with design responsibility, we must ascertain any limitations of liability, or exclusions in their insurances with respect to fire and/or cladding so that appropriate mitigation measures can be put in place (refer CS-GR-006 on the Company Secretary's section of **The Hub**). We must also ask if they have any existing or foreseeable claims which might adversely affect any 'in the aggregate' limitations of their policy. The decision to proceed with the appointment of a consultant where there are restrictions relating to PI cover is the responsibility of the Commercial Director.

REF	COMPLIANCE REQUIREMENT
6.	**TIMBER STRUCTURE INSURANCE NOTIFICATION -** Projects with a structural timber element (including Glulam, CLT, Timber Frame and derivatives) are not automatically covered under our Contractors All Risk (CAR) insurance policy, which covers us during the build stage. There are two scenarios where you will need to notify the Group Insurance Team of a project which utilises a structural timber element. • If the total contract value is more than £5m, or comprises of any building over 3 storeys in height (with a structural timber element), our insurers will wish to collect basic information in order to understand their exposure. The questionnaire **here** must be completed at least two weeks before work commences on site. • If the total contract value is more than £15m a Project Specific Construction All Risks Insurance will be required. The questionnaire **here** must be completed at the earliest stage possible in the tender process to confirm that the project can be insured, and to establish any additional project premium. For all other projects involving structural timber outside of these two scenarios, no notification to the Insurance Team needs to be made. The Internal Project Notification as clause 1 still needs to be made. Please refer to CS-GR-009 on the Company Secretary's section of **The Hub**.
7.	**USE OF APPROVED INSPECTORS** - We must use Local Authority Building Control (LABC) for building control approvals, unless an exception is granted by Group via the National Product Team. An exception may be granted if other protections have been put in place, such as the Customer agreeing to take the risk of the Approved Inspectors failure. Due to the tightening insurance market, there is an increased risk to our projects through the use of Approved Inspectors. In the event that an Approved Inspector fails, Willmott Dixon will usually be liable for any costs or delays associated when the project reverts back to LABC as required by law.
8.	**BUILDING INSURANCE CONSULTATION** - At the earliest possible stage we must request to undertake a Building Insurance Consultation process with our Customers and where possible their Insurers. This must include collectively agreeing which of the principles of the '**RISC Authority Design Guide for the Fire Protection of Buildings**' are to apply, and will help ensure our Customers can economically insure their buildings. Ahead of the meeting an information design pack should be formally issued to the Customer. A suggested template for recording the agreed outcomes of this Consultation can be downloaded **here**. If the customer refuses to engage with this process or is unable to facilitate, it should be recorded in the Project Meeting Minutes and the Fire Policy Tracker. All agreed requirements must then be included within the Fire Safety Strategy, the Main Contract, and 'stepped down' to our Supply Chain and designers via their Sub-Contract Orders and Deeds of Appointment.

REF	COMPLIANCE REQUIREMENT
9.1	**EXTERNAL WALL REQUIREMENTS - All externals walls are to be constructed with non-combustible materials classed A2-s3, d2 or better.** This includes **principal elements** such as the outer finishes, insulation, sheathing board, inner leaf and external wall structure including any attachments to the wall such as balconies, brise soleil and vertical PV panels. **External wall ancillaries** such as: DPC's, cavity trays, thermal breaks, plastic insulation retaining clips, tube washers, EPDM, VCL's, breather membranes, air bricks, weep vents, localised pattressing, gaskets, waterproofing membranes applied to the face of non-combustible parapet walls up to 1100mm from the finished roof surface, laminated glass, sealants and similar are not part of this requirement. For further clarification on external wall components not listed above please contact the National Product Team.
9.2	**LIMITED EXCEPTIONS - Wherever possible, we will adopt non-combustible materials for the principal elements in external walls at any height, as outlined in 9.1 above.** This means that we must not specify the use of combustible materials where we are in control of the design. Where a project is received and the design already contains combustible materials, or where we are in control of the design and as part of an options appraisal the Customer chooses to use combustible materials in external walls, the exceptions set out in **Appendix iii** may be granted where they are captured in the Fire Safety Strategy, and this is included as contact document as clause 16 of this policy. The National Product Team must be contacted to approve and register any exceptions as set out in clause 1, prior to agreement with Group. No exceptions will be granted where the project is greater than 3 storeys, or has an upper storey greater than 11m* unless agreed with the business unit MD, the National Product Team and Group through the Project Notification process.
9.3	**RELEVANT BUILDINGS - In addition, multi-occupancy buildings where people sleep which have an upper storey greater than 18m* are classified as 'Relevant Buildings' as defined in the Building Regulations .** Regulation 7(2) of the Building Regulations sets out rigid requirements in respect of external walls to 'Relevant Buildings' (both for new build & change of use, such as an office conversion to residential). 'Relevant Buildings' include those that contain one or more dwellings, an institution such as a hospital, care home, student accommodation, or rooms for residential purposes. With the exception of materials listed in Regulation 7(3) see clause 11, the specification of all materials used in all external wall build-ups and parapets of 'Relevant Buildings' must be Class A2-s1, d0 or better. NOTE: Willmott Dixon also require the above to be applied to Hotels, Hostel or Boarding Houses with an upper storey greater than 18m*.
The upper storey is measured from lowest external ground level adjoining the outside of the building to the floor surface of the uppermost storey (excluding storeys consisting exclusively of plant rooms) as per diagram D6 from Approved Document B.	

REF	COMPLIANCE REQUIREMENT
9.4	**EXTERNAL WALL SURFACES** - In addition to the above, the external surface of the outermost material used in external wall build-ups must also meet the reaction to fire performance requirements. These are set out in **Table 10.1** of Approved Document B - Volume 1 or **Table 12.1** of Approved Document B - Volume 2 as applicable in relation to the overall building height (as measured in accordance with Diagram D4) taking into account any relevant boundaries. Please refer to Approved Document B for the definition of relevant boundaries.
9.5	**CAVITY BARRIERS -** On all buildings, propriety cavity barriers must be designed, specified and installed to the full perimeter of all openings, junctions of compartment walls, compartment floors and to subdivide extensive cavities as set out in Approved Document B. Cavities are considered to be any concealed space that could provide a route for the spread of smoke and flame. In masonry to masonry external walls that are fully filled with non-combustible insulation (i.e. no cavity), Willmott Dixon will allow cavity barriers to be omitted at the junctions of compartment walls and compartment floors (as there is no cavity to close) but proprietary cavity barriers are still required to the perimeter of all openings to act as the cavity closer. Willmott Dixon will not permit the use of non-proprietary cavity barriers formed from steel, timber, mineral wool, calcium silicate, cement based or gypsum boards unless specifically agreed with National Product Team. Where a warranty is required on the project (e.g. NHBC, Premier Guarantee, LABC Warranty), they may have additional specific requirements for cavity barriers which must also be followed.
10.	**ROOMS IN A ROOF -** In buildings where people sleep regardless of height, the envelope forming rooms in a roof at any pitch must use non-combustible insulation (A2-s1, d0 or better). Timber roof structures are still acceptable subject to careful detailing of abutments with compartment walls following the guidance set out in **section 5.11-5.16** of Approved Document B - Volume 1 or **section 8.25-8.29** of Approved Document B - Volume 2.

REF	COMPLIANCE REQUIREMENT
11.	**EXEMPTED MATERIALS** - For 'Relevant Buildings' under clause 9.3, **Regulation 7(2)** requires that all materials which become part of an external wall or specified attachment achieve class A2-s1, d0 or class A1, other than those exempted by **Regulation 7(3)** listed below with Willmott Dixon clarification / requirements shown in italics: • Cavity trays *only* when used between two leaves of masonry • Any part of a roof pitched at an angle of less than 70 degrees to the horizontal *(but insulation must meet the requirements of clause 10)* • Door frames and doors • Electrical installations • Insulation and water proofing materials used below ground level *(any waterproofing or insulation used above ground level, such as within 250mm, must be agreed at project level with Building Control, the Fire Consultant and any EWS1 surveyor appointed by the Customer)* • Intumescent and fire stopping materials • Membranes *that are used as part of the external wall construction above ground level (breather membranes, VCL's, EPDM's etc.) must achieve a minimum classification of BS EN 13501 Class B-s3,d0* • Seals, gaskets, fixings, sealants and backer rods • Thermal break materials where the inclusion of the materials is necessary to meet the thermal bridging requirements of Part L of Schedule 1 • Window frames and glass, *however, spandrel panels and/or other opaque glazed insulated panels are not exempted in regulation 7(3).* These exempted materials also apply to the additional buildings included by under clause 9.3. Willmott Dixon broadly follows the **CWCT Technical guidance** as set out in the Yellow Book for interpretation in relation to the external walls and specified attachments. Further clarification will be required where a 3rd party warranty provider is involved e.g. NHBC, Premier Guarantee, LABC Warranty etc, as they have specific interpretations of the Regulations.
12.	**ATTACHMENTS TO EXTERNAL WALLS** - For buildings that contain one or more dwellings, an institution, hotel or a room for residential purposes, all attachments fixed to external walls (e.g. balconies, solar shading or solar panels) on buildings at any height **must** be fully constructed from materials classed as **BS EN 13501 A2-s1, d0** or better. The use of combustible accessories on balconies such as laminated glass, thermal breaks, waterproofing and abutments must be agreed with Building Control, our Customer, any warranty provider such as NHBC and captured in the Fire Safety Strategy.
13.	**ACM CLADDING** - The use of Aluminium Composite Materials (ACMs) for external wall cladding or soffits is **banned**, irrespective of core material or height. This includes products such as Alucobond, Vitrabond and Alpolic. We do not include steel insulated sandwich panels within this definition.
14.	**HPL CLADDING** - The use of High Pressure Laminate panels (HPL's) for external wall cladding or soffits is **banned** irrespective of core material or height. This includes products such as Trespa, Bauclad-Max, Prodema-Prodex, Resopal.

REF	COMPLIANCE REQUIREMENT
15.	**DESKTOP ASSESSMENT FOR FAÇADES** We will **not** accept Desktop assessments or BS 8414 or BR 135 tests to support the use of combustible materials on any part of the façade/envelope of a building. However, BS8414 tests can be used to support the use of non-combustible ancillary products such as cavity barriers where other tests standards do not cover their use e.g. facade cavity barriers to a sheathed SFS wall. See clause 18.
16.	**FIRE SAFETY STRATEGY** - The Fire Safety Strategy (FSS) must be included as part of the Main Contract, at the highest possible level in terms of contractual hierarchy to provide a clear position to all parties - refer to **CS-GR-008** on the Company Secretary's section of **The Hub** on this matter. The FSS must be submitted as part of the Building Regulations full plans submission. Building Control conditional approval (and the fire officer where applicable) must be obtained prior to signing the main build contact, unless the Customer accepts all risks of any potential changes.
17.	**MATERIAL SUBSTITUTION** - After Main Contract execution, no design or element involving fire rating, fire protection, or any life safety systems can be substituted for an alternative unless that change has been approved in writing by our Fire Consultant, Building Control and acknowledged by the Customer. The Fire Safety Strategy is a live document and must track any changes or revisions as and when they are agreed.
18.	**PRODUCTS** - All fire protection products and systems (specified by our Designers and those Supply Chain Partners with design responsibility) **must** hold third party certification by a UKAS accredited body to an appropriate product or performance standard (e.g. BS EN 13501 or BS 476, BS EN 1366, Certifire, etc.) for the context within which they are to be used ('right product for the right location'). Where no product testing standard exists, either: • The product must be covered by an extended field of application (EXAP)* produced by a UKAS accredited testing body, or • Other supporting test evidence from the manufacturer or system provider to support its use, or an engineering judgement, with full acceptance and agreement from our Fire Consultant. **All fire test reports relate only to the exact design configuration that was tested. It is impractical to test all potential variations for all applications and an EXAP is often necessary to establish whether variations from tested details are acceptable.*

REF	COMPLIANCE REQUIREMENT
19.	**DOORSETS** - We **must** only purchase and install certified Fire Doorsets and never separate the procurement of doors and frames. With regards to ironmongery we will only install products compatible with the doorset's fire door certification. We must never post-fix any item to a fire doorset or carry out any modification (vision panels, permanent door protection, holes for services etc.) which will invalidate its fire certification. If in doubt written approvals must be obtained from our Fire Consultant, our Mandated Doorset Supplier and all relevant Manufacturers/ Suppliers. Timber fire doorsets are typically only tested to the weakest side (door opening into the furnace) which is acceptable. Any Composite/GRP fire doors must hold relevant fire test data from **both sides of the door.**
20.	**SUPPLY CHAIN COMPETENCE** - Everyone in our Supply Chain responsible for the installation of fire protection products/systems **must** be appropriately trained, and documentary evidence provided for each relevant individual. At company level, we insist upon evidence of third party certification from a UKAS accredited body for all Supply Chain Partners installing fire protection products/systems. It is the responsibility of the commercial team to ensure that this is checked prior to any orders being placed. The business requires that all existing SCP's working on our projects from August 2021 will have certification in place. All new Supply Chain Partners (who do not have an order history with Willmott Dixon) must obtain certification (or provide evidence that they are working towards formal accreditation - for example being enrolled on a scheme and awaiting assessment). Please refer to the Training and Competency requirements in **Appendix iv**.
21.	**REGULATION 38** - In accordance with Regulation 38 of Approved Document B (Volume 1 and Volume 2) , a 'Fire Safety Strategy' document **must** be developed by the Fire Consultant with the input of the full design team and Customer during the design development process, monitored during the construction phase by our Operational Teams, and then provided to our Customer prior to Practical Completion; in order to enable our Customer to progress their own statutory obligations. Any changes must be approved by the Fire Consultant, relevant authorities (including Building Control, Warranty providers) and the Customer, with an updated Fire Safety Strategy produced by the Fire Consultant.

REF	COMPLIANCE REQUIREMENT
22.	**INSTALLATION QUALITY** - As part of our Regulation 38 submission and O&M manual production, we must validate that the Fire Safety Strategy has been implemented correctly.; The following evidence of fire protection installations **must** be collated by the project team and issued to our Customer at practical completion: • Photographic evidence** of ALL fire stopping penetrations, linear gap seals (including to the perimeter of all fire doors and screens), fire barriers, cavity barriers, fire dampers and fire collars noting its location. • External facade cavity barrier inspection reports as required by clause 3. • Fire stopping to penetrations must have a physical label located on the most accessible side confirming who installed it, what materials are used, location reference and the fire rating performance. • Door schedule indicating all fire doors and their performance and evidence of their compliant install i.e. QD Checklists. • All certification that supports the use of the products selected and installed (fire doorsets, cavity barriers, fire-rated expanding foam, fire dampers, fire collars, facade materials, etc.) to be provided by our supply chain partners. • Test and commissioning certificates for all fire life safety systems (film thickness for intumescent coatings, sprinklers, Automatic Opening Vents (AOV) systems, emergency lighting etc.) • Any derogations from the original Fire Safety Strategy must be identified and the relevant approval evidenced (Fire Officer, Fire Consultant, Building Control, etc.) • With regards to the Fire Detection and Alarm System, a signed and approved G1 design certificate prior to the installation phase, together with signed and approved G2 and G3 certificates on completion of the installation and commissioning stages for the same (M&E or Specialist Supply Chain Partner to provide).
	The Willmott Dixon project team are to lead on, and take overall responsibility, for the above validation process and record the evidence using the Fire Compliance Book**.** All active and passive systems will require some degree of periodic inspection or maintenance which we **must** advise our Customers. Operation and maintenance instructions must be provided including inspection regimes for all Fire life Safety systems. If during the after-care period we become aware that critical maintenance has not been carried out we must inform the Customer in writing. ***The photographic records must be made via the Willmott Dixon licenced Field View. Any evidence collected by 3rd party systems (such as Bolster, Firetronic, etc.) must be uploaded to the QD checklist as a PDF on the Willmott Dixon licence Field View. This information will serve as a record for the future maintenance of the life safety systems in our buildings.***

Appendix i

FIRE CONSULTANT APPOINTMENT FLOWCHART

NO EXISTING FIRE CONSULTANT

Willmott Dixon to appoint* the Fire Consultant (based on Willmott Dixon's Scope of Works)

Willmott Dixon to validate installation is in accordance with the agreed Fire Safety Strategy

(specialist Fire Consultant/Inspector input as appropriate)

On Traditional contracts where we have no design responsibilities, or limited to specific Contractors Design Portions, we must still appoint a Fire Consultant, who will act as our advisor on a suitably reduced scope of works.

FIRE CONSULTANT ALREADY APPOINTED

(e.g. as Sub-Consultant to Architect)

Architect to provide a signed Fire Consultant's Sub-Consultant Collateral Warranty in favour of Willmott Dixon

(this is a condition of payment)

Assess scope of works in Sub-Consultant appointment to determine gaps against Willmott Dixon's required Scope

Where gaps are identified, obtain fee quotation from existing (or if necessary secondary)

Fire Consultant to extend Scope and appoint directly.

CUSTOMER APPOINTED FIRE CONSULTANT

(pre-Willmott Dixon involvement)

If Novated - Assess scope of works in Novation appointment to determine gaps against Willmott Dixon's required Scope and ensure it covers retrospective liability

Where gaps are identified, obtain fee quotation from existing, (or if necessary secondary)

Fire Consultant to extend Scope and appoint directly.

If Not Novated - Willmott Dixon to appoint* existing Fire Consultant, or an alternative Fire Consultant, using Willmott Dixon Scope of Works

Willmott Dixon to validate installation is in accordance with project Fire Safety Strategy (with specialist Fire Consultant / Inspector input as appropriate)

Appendix ii

FIRE SAFETY STRATEGY GUIDANCE

A Fire Safety Strategy document is required to present the Building Regulations Fire Safety Strategy for a project.

The document is intended to:

- Establish the strategy employed to meet the Building Regulations regarding fire safety along with any Customers insurance requirements and those of Willmott Dixon.
- Be incorporated into the building contract to record the agreed strategy at point of contract
- Support a Building Regulations submission for a project
- Inform the design team and supply chain partners of the key fire safety requirements for the building to enable further detailed design and to assist in the planning and costing of a project
- Form part of the Fire Safety Information, as required by the Regulatory Reform (Fire Safety) Order 2005 and should be issued to the Responsible Person in accordance with Regulation 38 of the Building Regulations 2010.

When it is required?

A Fire Safety Strategy **must** be completed for all projects and incorporated into the building contract.

The main aims of the fire strategy will be to address:

- Life safety with regard to the proposed arrangements for the buildings
- The development brief for the project

With respect to the Building Regulations, the fire strategy will address the key fire safety design aspects specifically related to Approved Document B (Volume 1 and 2) parts B1 to B5 and consequently cover:

- Requirement B1: Means of warning and escape
- Requirement B2: Internal fire spread (linings)
- Requirement B3: Internal fire spread (structure)
- Requirement B4: External fire spread
- Requirement B5: Access and facilities for the fire service

Who compiles the Strategy?

The Fire Consultant is responsible for compiling the Fire Safety Strategy and issuing it to the project Architect who, as Lead Designer, has overall PI responsibility for ensuring design compliance.

Limitations of the Strategy

The document should address life safety requirements only. Where property protection or business continuity measures are required, the enhancements should be included within this document as discussed and agreed through the Building Insurance consultation with our Customer's insurers.

Structure of the Strategy

The document should be presented following the general format of the Building Regulations, i.e. Sections B1 to B5 with a specific section on the proposed management strategy of the building.

Where fire engineering has been adopted, the key principles and results of the alternative approach must be presented in the main body of the document. Where necessary, fire engineering concepts can be further supported by detailed calculations contained within appendices.

Typical Areas to address in a Fire Safety Strategy

1. Introduction

This section should include:

- Set the scene of the report and identify key stakeholders such as Customer, Designers, Principal Designer, Building Control body etc.)
- Provide an overview of the project (explanation of the buildings, the layout, proposed use and arrangement of accommodation and areas)
- Identify the aims of the strategy, the performance requirements and approach to fire safety design (e.g. Approved Document B, BS 9999 or Fire Engineering compliance), and the boundaries for the strategy
- State all the proposed occupancies of the project (commercial, residential, parking, energy centre, etc.)
- All assumptions in the design of the fire safety systems (such as fire load) and for the management of the building, any risk assessments or risk analysis.
- The evacuation philosophy for the project (stay-put or full evacuation, etc.)
- An outline cause and effect matrix/strategy for the building
- When working in or adjacent to occupied buildings, the Fire Engineer must engage with the responsible person and ensure that the existing fire safety requirements are considered in relation to the proposed works and captured in the Fire Safety Strategy.

2. Change Tracker

- List all revisions to the Fire Safety Strategy detailing the change, approving body and date.

3. Means of Warning and Escape (B1)

To meet the Building Regulations Part B1, appropriate provisions for early warning of fire and the means of escape should be made. This is to be identified for all areas/uses/tenures of the building.

- Types and location of detection
- Void detection provision
- Means of escape from rooms and dwellings
- Provisions enabling the evacuation of disabled people
- Escape strategy including the occupant load and capacity of escape routes
- Common areas and muster points
- Separation from fire
- Protection from smoke and travel distances
- Fire doorsets
- Stairs
- Escape from basement/car parks
- Escape from other ancillary areas
- Fire-fighting lifts

4. Internal Fire Spread (Linings) B2

- Classification of lining for ceilings, walls and rooflights

5. Internal Fire Spread (Structure) (B3)

- Load-bearing elements of structure
- Compartmentation
- Unseen fire spread
- Concealed spaces (Cavities)
- Protection of openings and fire stopping

6. External Fire Spread (B4)

- Space separation
- Relevant boundaries
- Surface spread of flame
- Combustibility classification of through wall build up materials
- Combustibility classification of specified attachments
- Combustibility classification of ancillary items (cavity trays, vents, membranes, etc.)

7. Access and Facilities for Fire Service (B5)

- Access to site
- Access within buildings
- Dry/wet rising mains
- External fire hydrant provision
- Fire service information
- Basement/car park ventilation

8. Active Systems

- Sprinkler systems
- Fire and smoke dampers
- Common area smoke ventilation
- Natural smoke shafts
- Mechanical smoke shafts
- Natural smoke ventilation via automatic opening vents (AOV) direct to outside
- Emergency lighting
- Car Park ventilation
- Emergency power

9. Building Management

- Specific Management Requirements
- Fire Safety Management and the Regulatory Reform (Fire Safety) Order 2005
- Construction, Design and Management Regulations
- Extreme Events (arson, terrorist attack, etc.)

10. Confirmation of Compliance

- The Consultant responsible for compiling the Fire Safety Strategy must confirm its compliance with Building Regulations.

Appendix iii

EXTERNAL WALLS
LIMITED EXCEPTIONS

Note: **The following limited exceptions only apply to clause 9.2**

Combustible Insulation (worse than A2-s3, d2) – is only permitted on buildings up to 3 storeys or 11m uppermost storey height* in the following limited situations:

- Masonry to masonry cavity walls, including concrete sandwich panels, with proprietary cavity barriers in accordance with clause 9.5
- Masonry to SFS cavity walls sheathed with an A1 rated board (i.e. calcium silicate, cement fibre board) with proprietary cavity barriers in accordance with clause 9.5
- All cavity barriers must penetrate through the combustible insulation layer.

Combustible Frames - Timber frame, Glulam, Cross Laminated Timber (CLT) or Structural Insulated Panels (SIP's) are only permitted on the following building types up to 3 storeys or 11m uppermost storey height* where non-combustible (**A2-s3,d2 or better**) insulation and façade finishes are used:

- Individual dwelling houses (detached, semi-detached, terraced and maisonettes where each property has individual street access) or
- Any other building types where people do not sleep

An assessment covering the fire risk during construction (separating distances and radiant heat emissions) must be undertaken to comply with HSG168 and the Joint Code of Practice (JCOP) for Fires on Construction Sites.

Insulated Composite Panels – Loss Prevention Council Board (LPCB) or Factory Mutual (FM) approved composite insulated sandwich wall panels with combustible insulation cores are only allowed on the following building types up to 3 storeys or 11m uppermost storey height*

- High bay warehouses and light industrial units
- Cold stores

Timber Cladding - at least 9mm thick may be acceptable on buildings up to 3 storeys or 11m uppermost storey height* subject to complying with clause 9.4 Extarnal Wall Surfaces, 9.5 Cavity Barriers and further mitigation i.e. sprinklers, fire treatment of the cladding etc.

Green walls - are only be permitted on non-residential type buildings up to 3 storeys or 11m uppermost storey height* in the following limited situations:

- Where the external wall finishes and insulation are non-combustible, and
- With approval from Building Control, and
- Where they are automatically irrigated, or
- A management strategy is created in conjunction with the Customer (pre-contract) outlining the ongoing maintenance requirements to avoid the wall becoming a fire risk.

The upper storey is measured from lowest external ground level adjoining the outside of the building to the floor surface of the uppermost storey (excluding storeys consisting exclusively of plant rooms) as per diagram D6 from Approved Document B.

Appendix iv

TRAINING AND COMPETENCY REQUIREMENTS

Competency requirements for fire protection product and services

The training, qualification and certification provision in the UK is currently varied, uncoordinated, poorly controlled and loosely regulated. For Willmott Dixon to be able to demonstrate that Supply Chain Partners, Supervisors and Operatives are competent to install fire protection products and systems, we require the following levels of training and certification.

TYPE	WHAT IS REQUIRED
Supply Chain Partner	Company appropriately certified through a UKAS accredited certification body (FIRAS, IFCC, BRE LPCB, BM Trada Q Mark etc.)
Supervisor or person signing QD Checklist	• NVQ Level 2 covering the installation of the specific fire protection products or services applicable, or • CITB approved course in relevant trade, such as the AEME's Fire resisting ductwork, fire & smoke dampers course, or • The Supervisor is specifically named within their company's certified accreditation scheme as being a competent supervisor.
Installer / Operative	Specific training on the products being installed: • Tool Box Talk, or • Manufacturer training

Any unfamiliar information submitted as evidence of certification or qualification should be reviewed and investigated prior to acceptance. Please contact the National Product Team or your local Quality Managers for further advice.

Where fire protection products or systems are being installed by a subcontractor to our Supply Chain Partner, it is the specialist subcontractor that requires the certification rather than the Supply Chain Partner. For example, where an M&E Supply Chain Partner (SCP) employs a specialist fire damper installer, we require evidence of competency from the fire damper installer.

Fire Protection Products and services that requires proof of the competency of the Operatives, Supervisors and Supply Chain Partners

Whilst the following list is a guide to the most common fire protection products and systems we encounter, it is not exhaustive and any company and operative supplying and installing elements that could be described as fire protection should be appropriately trained and certified.

Active Fire Protection

- Active fire curtains and smoke curtains
- Automatic Opening Vents (AOV's) Fire alarms including disabled refuge systems
- Fire door hold open/activate open devices
- Fire-fighting lifts and evacuation lifts
- Fire shutters
- Fire suppression systems (kitchens, science labs, server rooms etc.)
- Smoke fans
- Sprinkler system (including water mist systems)

Passive Fire Protection

- Cavity barriers (rainscreen façade, masonry walls, internal voids such as access floors and soffits)
- Dry and Wet Risers
- Fire curtains (non-active)
- Fire dampers, smoke dampers and associated damper supports (company accreditation to LPS 1531 Appendix 6)
- Fire doors (timber, steel, glass and composite)
- Fire rated access panels
- Fire rated ductwork (company accreditation to Loss Prevention Standard LPS 1531 Appendix 5)
- Fire rated glazed partitions
- Fire rated movable walls
- Fire rated partitions and linings
- Fire stopping at junction of compartment wall and compartment floor and other walls (linear seals)
- Fire stopping to service penetrations through fire rated walls and floors (including pipe collars, ablative batt, intumescent wrap, intumescent pillows, intumescent mastic, proprietary fire stopping products, fire rated foam)
- Intumescent paint
- Lifts with fire rated doors
- Putty pads to electrical components that penetrate fire rated walls (including refuge call points, media plates and other large electrical components)

Although masonry and concrete elements form fire rated walls, partitions and floors, the nature of the material means that further accredited certification in relation to fire protection is not required by this policy.

Separate certification and competence **is required** for cavity barriers in masonry and any fire stopping installed within a concrete frame (movement joints) as noted above.

Where accreditation schemes do not currently exist for the installation of certain fire protection products and systems (spandrel panels, panelised building systems, cast in fire collars etc..) strict adherence to good practice guidelines for installation is required to ensure elements are well constructed and meet the generic fire performance data for those structures. A toolbox talk must be carried out on the products being installed.