



WILLMOTT DIXON

SINCE 1852

Fire Safety Requirements Policy

Version 9 - December 2019



**EVERYTHING
COMPLETED WITH
PRIDE**



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1. INTRODUCTION

Since the issue of Briefing Note 10 in September 2018, there have been a number of important further announcements from the Government, including a pledge to implement all of the recommendations put forward in the Hackitt Review.

We have already seen this commitment result in:

- The publication in December 2018 of an amendment to Approved Document B
- Updated Building Regulations published in April 2019
- Substantial further changes made to both Part B Volume 1 and Volume 2 in July 2019 which was withdrawn and re-issued in September 2019.

Further legislative change is likely in the near future. **Although some of the changes to the Building Regulations only apply to England, our position is that these higher standards must be met across all of our projects as a minimum in order to protect our own position, our customers, and satisfy our Group Insurers.**

It is important that we pro-actively respond to what continues to be a rapidly changing landscape.

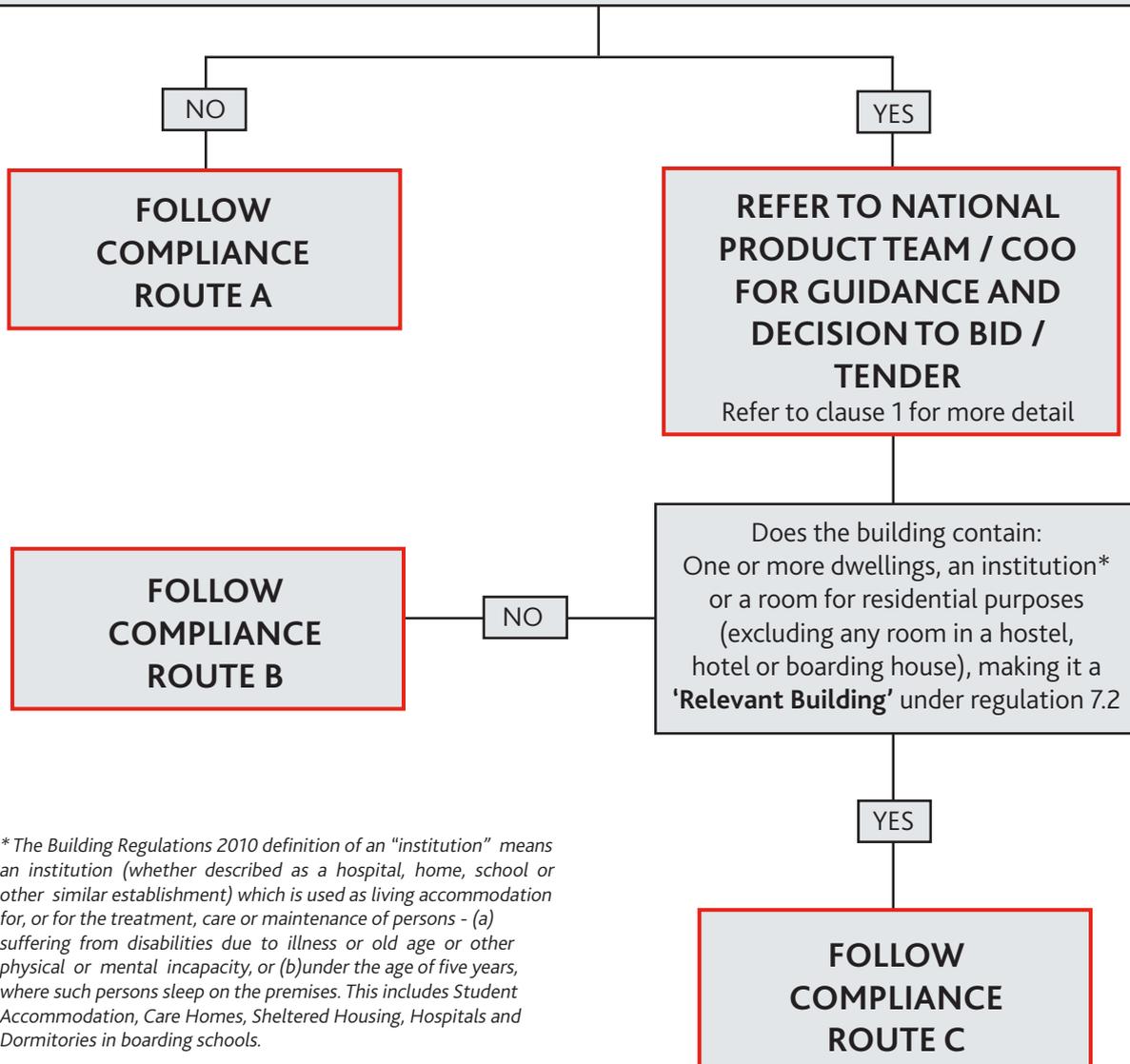
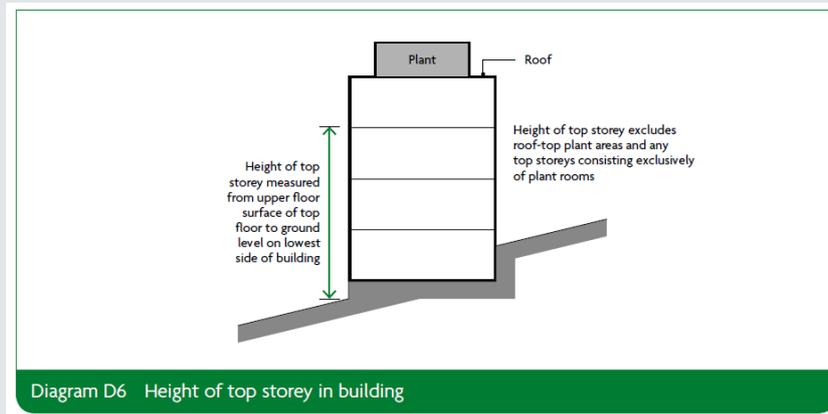
This Policy therefore reflects our current position on Fire Safety Requirements and Compliance - and supersedes COO's Briefing Note 10 (September 2018) and all previous iterations of this Policy.

Notes:

1. At the time of writing, the Welsh Building Regulations have not been updated to reflect the changes in landscape post-Grenfell. Our policy is to adopt the more stringent requirements of the English Building Regulations on all projects.
2. **If you require a tracked changes version of this policy, please click [here](#).**
3. This policy has been renumbered to follow the typical sequence through the lifecycle of our projects.

2. COMPLIANCE ROUTE FLOWCHART

Does the building have an upper storey (excluding storeys consisting exclusively of plant rooms) greater than 18m above external ground level when measured from the lowest ground level adjoining the outside of a building to the top of the floor surface of the storey? Note: This diagram is only in relation to the external wall build up.



* The Building Regulations 2010 definition of an "institution" means an institution (whether described as a hospital, home, school or other similar establishment) which is used as living accommodation for, or for the treatment, care or maintenance of persons - (a) suffering from disabilities due to illness or old age or other physical or mental incapacity, or (b) under the age of five years, where such persons sleep on the premises. This includes Student Accommodation, Care Homes, Sheltered Housing, Hospitals and Dormitories in boarding schools.

3. COMPLIANCE ROUTE MATRIX

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

REF	COMPLIANCE REQUIREMENT	APPLIES TO ROUTE		
		A	B	C
1.	<p>On all projects with an upper storey greater than 18m above the lowest external ground level, the project must be discussed with the National Product Team for their review and guidance.</p> <p>On all High Rise Residential Buildings (HRRBs) – those which are 10 storeys or higher – the decision to bid, tender and/or execute contracts must be referred to the COO and the National Product Team.</p>	N/A	YES	YES
2A.	<p>On all projects we must ensure that a suitably qualified fire consultant is appointed to our agreed Scope of Services. It is our preference that the Fire Consultant is appointed through the Architect with a Sub-Consultant Collateral Warranty in favour of Willmott Dixon (this is a condition of payment). All appointments should cover all RIBA Work Stages, including retrospective liability provision where appropriate.</p> <p>A standard Scope of Services is available via the Company Secretary's section of The Hub.</p> <p>Please refer to the Fire Responsibility Flow Chart appended for clarification regarding the potential scenarios and the appointment strategy required in each.</p>	YES	YES	YES
2B.	<p>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.</p> <p>Their service must include a review of the external wall build up (design principles / compliance), consider the intended occupancy of the building, inspecting the façade against the agreed façade specification to include a minimum of 30% of the cavity barrier locations and other duties set out in the agreed Scope of Services.</p>	YES	YES	YES
2C.	<p>When appointing designers or supply chain partners with design responsibility, we must ascertain any limitations of liability in their insurances with respect to fire so that appropriate mitigation measures can be put in place.</p> <p>We must also ask if they have any existing or foreseeable claims which might adversely affect any 'in the aggregate' limitations of their policy.</p>	YES	YES	YES

REF	COMPLIANCE REQUIREMENT	APPLIES TO ROUTE		
		A	B	C
3.	<p>Due to the tightening insurance market, there is an increased risk to our projects through the use of Approved Inspectors.</p> <p>In the event that an Approved Inspector no longer has the insurance cover required to trade, regardless of the project stage a new application would be required with LABC potentially exposing the project to differences in interpretation, the application of new regulations and potentially opening up the works.</p> <p>It is therefore agreed that on all projects from 16th December 2019, where the formal appointment of building control has not been made, we <u>must</u> use LABC for all building control approvals, unless approved by the National Product Team and Group Company Secretary.</p>	YES	YES	YES
4A.	<p>The use of Aluminium Composite Materials (ACMs) is banned, irrespective of core material or height.</p> <p><i>Note: ACM is a thin aluminium sheet composite panel with a plastic or mineral core, often attached to a sub-frame used as a drained and ventilated rain screen cladding system. They provide a decorative and protective façade over external insulation. We do not include steel insulated sandwich panels within this definition.</i></p>	YES	YES	YES
4B.	<p>Whilst the use of High Pressure Laminate panels (HPL's) are not currently banned, we are aware of insurance restrictions being placed on this material and we should substitute for an alternative cladding product classed as BS EN 13501 Class A2-s3, d2 or better wherever possible.</p> <p><i>Note: High Pressure Laminate or HPL panels are layers of paper saturated with phenolic resin which is fused together under heat and pressure, the curing process transforms the resin into plastic by a cross linking process that converts the paper sheets into a single, rigid laminated sheet.</i></p>	YES	YES	YES
5.	<p>At the earliest possible stage we must undertake a Building Insurance Consultation process with our Customers and where possible their Insurers.</p> <p>This must include collectively agreeing which of the principles of the 'RISCAuthority Design Guide for the Fire Protection of Buildings' are to apply, and will help ensure our Customers can economically insure their buildings.</p> <p>A suggested template for recording the agreed outcomes of this Consultation can be downloaded here.</p> <p>All agreed requirements must then be included within the Main Contract, and 'stepped down' to our Supply Chain and designers via their Sub-Contract Orders and Deeds of Appointment.</p>	YES	YES	YES

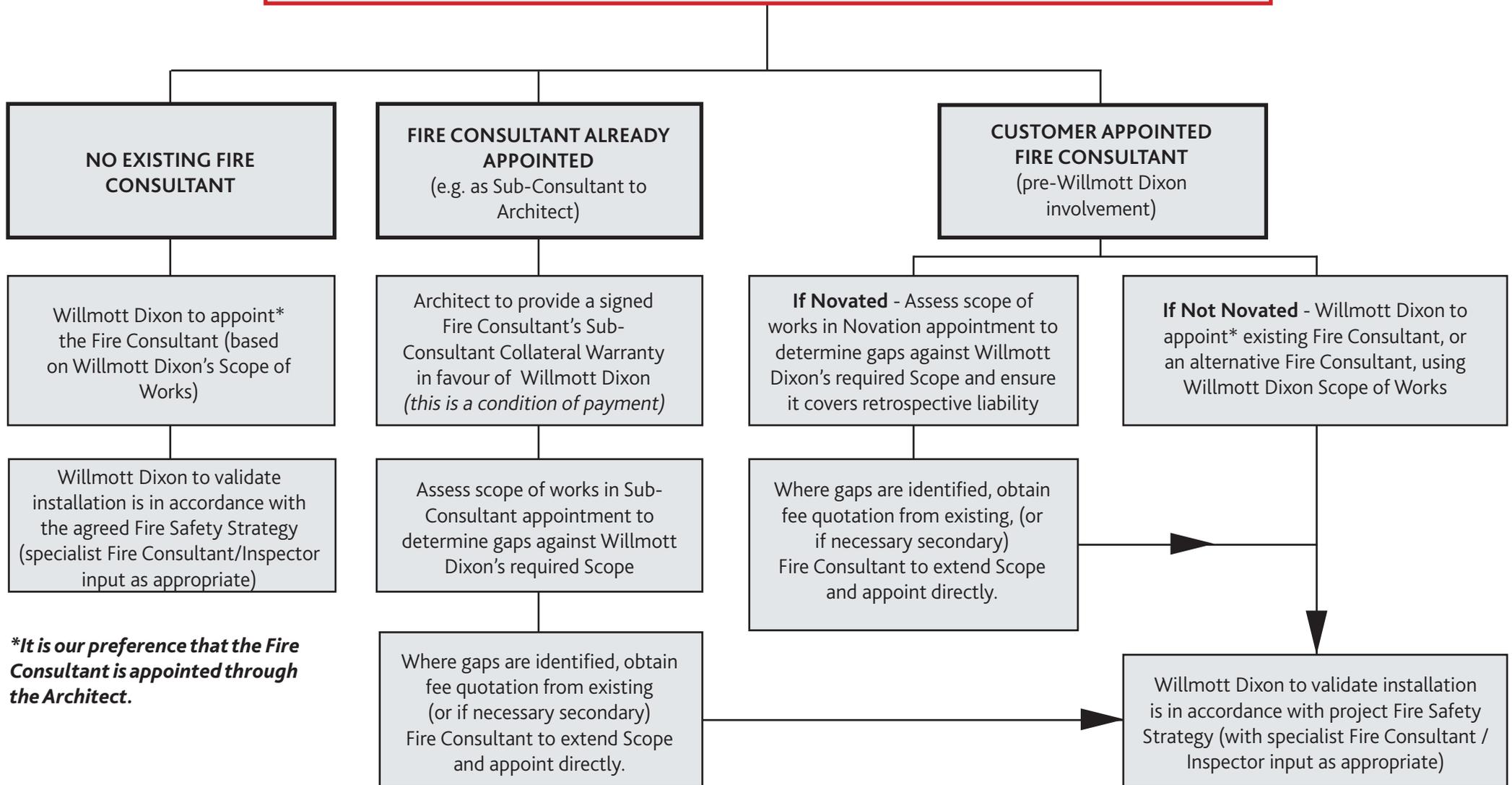
REF	COMPLIANCE REQUIREMENT	APPLIES TO ROUTE		
		A	B	C
6A.	For buildings below 18m storey height, where we are in control of the design and specification, it is our preference that materials classed as BS EN 13501 Class A2-s3, d2 or better are used for the principle elements of the external wall build up such as inner leaf, insulation, external leaf/cladding. Accessories such as DPC trays, plastic insulation retaining clips, EPDM, VCL's, air bricks, weep vents are not part of this requirement. Should any materials worse than BS EN 13501 Class A2-s3, d2 be proposed, then they should be captured in the Fire Safety Strategy and clause 8 of this policy must be followed.	YES	N/A	N/A
6B.	For buildings above 18m storey height, other than those described in regulation 7(2) of the Building Regulations, the specification of all materials used in all external wall build-ups for the entire height of the building must be classed as BS EN 13501 Class A2-s3, d2 or better .	N/A	YES	N/A
6C.	Regulation 7(2) of the building regulations sets requirements in respect of external walls and specified attachments in ' relevant buildings ' (new build & change of use). The specification of materials used in all external wall build-ups for the entire height of the building must be classed BS EN 13501 Class A2-s1, d0 or better .	N/A	N/A	YES
6D.	In addition, the external surface of the outermost material used in external wall build-ups must also meet the reaction to fire performance requirements of Table 10.1 of ADB - Volume 1 or Table 12.1 of ADB - Volume 2 as applicable in relation to the overall building height and any relevant boundaries.	YES	YES	YES
7A.	<p>The requirements of 6B and 6C extends to all materials that become part of an external wall or a specified attachment as defined in Regulation 2.</p> <p>1. It does not apply to:</p> <ul style="list-style-type: none"> • cavity trays when used between two leaves of masonry; • any part of a roof (unless enclosing a habitable floor with a pitch greater than 70° e.g. mansards); • door frames and doorsets; • electrical installations; • insulation and water proofing materials used below ground level; • intumescent and fire stopping materials; • membranes (but note that under Approved Document B membranes as part of the external wall construction must achieve a minimum classification of BS EN 13501 Class B-s3,d0; • Seals, gaskets, fixings, sealants and backer rods; • thermal break materials; and/or • window frames and glass. <p>Further clarification will be required where a 3rd party warranty provider is involved e.g. NHBC, as they have specific interpretations of the Regulations.</p>	N/A	YES	YES

REF	COMPLIANCE REQUIREMENT	APPLIES TO ROUTE		
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7B.	<p>All 'specified attachments' on 'Relevant Buildings' e.g. balconies, canopies, solar shading, etc. must be fully constructed from materials classed as BS EN 13501 A2-s1, d0 or better.</p> <p>The use of laminated glass and other combustible accessories must be agreed with Building Control, our customer, any warranty provider such as NHBC and captured in the Fire Safety Strategy.</p>	N/A	N/A	YES
7C.	<p>We will not accept desktop assessments or BS8414 or BR135 tests for the use of Combustible materials on any part of the façade/envelope of a building above 18m.</p>	N/A	YES	YES
8.	<p>The Fire Safety Strategy 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 Company Secretary's guidance on this matter.</p>	YES	YES	YES
9.	<p>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 and the Customer.</p>	YES	YES	YES
10.	<p>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 BS476, Certifire, etc.) for the context within which they are to be used ("right product for the right location").</p>	YES	YES	YES
11.	<p>We must only purchase and install certified Fire Doorsets and never separate the procurement of doors and frames.</p> <p>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 door or carry out any modification (vision panels etc) which will invalidate its fire certification.</p> <p>If in doubt written approvals must be obtained from our Fire Consultant, our Mandated Doorset Supplier and all relevant Manufacturers/Suppliers.</p>	YES	YES	YES

REF	COMPLIANCE REQUIREMENT	APPLIES TO ROUTE		
		A	B	C
12.	<p>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 operative level, this could consist of a tool box talk on the products being installed. At supervisor level, to sign off the works they are required to hold a relevant NVQ, or other recognised qualification demonstrating competence in the products they are installing.</p> <p>For new orders from 1st January 2020, we will insist upon evidence of third party certification from a UKAS accredited body for all Supply Chain Partners installing fire protection products/systems. Our Supply Chain Partners must obtain certification (or provide evidence that they are working towards formal accreditation - for example being enrolled on a scheme and awaiting assessment).</p> <p>Please refer to the Training and Competency requirements appended.</p>	YES	YES	YES
13A.	<p>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 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.</p> <p>Any changes must be approved by the Fire Consultant, relevant authorities (including Building Control and Warranty providers) and the Customer, and an updated Fire Safety Strategy produced by the Fire Consultant.</p>	YES	YES	YES

REF	COMPLIANCE REQUIREMENT	APPLIES TO ROUTE		
		A	B	C
13B.	<p>To 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:</p> <ul style="list-style-type: none"> • Photographic evidence* of ALL fire stopping penetrations, fire barriers, cavity barriers, fire dampers and fire collars noting its location (fire stopping to penetrations should also have a physical label adjacent confirming who, what and how long the fire rating has been applied). • Door schedule indicated all fire doors and their performance • All certification that supports the use of the products 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, AOV systems 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). <p>The Willmott Dixon project team are to lead on, and take overall responsibility, for the above validation process.</p> <p><i>*The photographic records can be made via Field View or a 3rd party system (such as Bolster, Firetronic, etc.) however this must also be available as standalone information i.e. not accessed via a 3rd party website or platform. A PDF download would be suitable. This information will serve as a record for the future maintenance of the life safety systems in our buildings.</i></p>	YES	YES	YES

4. FIRE RESPONSIBILITY FLOW CHART



5. 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
- 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 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 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, Principle 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. ADB, BS9999 or Fire Engineering), and compliance ,and the boundaries for the strategy.
- State all the proposed occupancies of the project (commercial, residential, parking, energy centre, etc..)
- Fire Safety Principles being following in the strategy
- The evacuation philosophy for the project (stay-put or full evacuation, etc..)

2. 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
- Common Areas
- 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

3. Internal Fire Spread (Linings) B2

- Classification of lining for ceilings, walls and rooflights

4. Internal Fire Spread (Structure) (B3)

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

5. 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..)

6. Access and Facilities for Fire Service (B5)

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

7. Active Systems

- Sprinkler systems
- Common area smoke ventilation
- Natural smoke shafts
- Mechanical smoke shafts
- Natural smoke ventilation via automatic opening vents direct to outside
- Emergency lighting
- Car Park ventilation
- Emergency power

8. 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..)

9. Confirmation of Compliance

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

Typical Appendices

Appendix A – Fire fighting access arrangements

Appendix B – Fire Strategy drawings including compartmentation strategy

Appendix C – CDM Register

6. 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, IFC, BRE etc)
Supervisor or person signing QD Checklist	<ul style="list-style-type: none"> NVQ Level 2 in relevant trade NQV Level 2 in Passive Fire Protection CITB approved course in relevant trade
Installer / Operative	Specific training on the products being installed: <ul style="list-style-type: none"> Tool Box Talk 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 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

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

Passive Fire Protection

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

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. Strict adherence to good practice guidelines for masonry and concrete installation is required to ensure elements are well constructed and meet the generic fire performance data for those structures.

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.