



Managing Fire Integrity Projects in Healthcare

provelio

- A GUIDE FOR EFFECTIVELY MANAGING AND IMPLEMENTING FIRE SAFETY PROJECTS WITHIN THE UK HEALTH SECTOR

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Preface

- In recent years, most notably since the ‘The Grenfell Tragedy’ of 2017, fire safety has become justifiably re-prioritised and under scrutiny. Although many of the more recent legislative documents, such as 2021’s Fire Safety Act, relate to domestic property, those in sectors such as Healthcare have also taken the opportunity to reflect on the provisions across their own estates.

Upon this reflection, many Estates professionals have discovered that they have varying levels of fire safety compliance, and with specific regard to Healthcare, the issues are compounded by the estate often being aged (and aging) with finite budget resources to be able to improve matters.

There appears to be no ‘hard and fast’ guidance on how a fire safety compliance or ‘fire integrity’ project in Healthcare is best run. This document seeks to provide supplementary guidance on how to effectively manage a fire integrity project in Healthcare and share some lessons learned from doing so as a trusted Project Management Consultancy.

The Regulatory Reform (Fire Safety) Order 2005 applies to all premises other than single private dwellings, and some other exceptions that are not relevant to Healthcare. The Order imposes that the “Responsible Person” (usually the hospital Trust) take such general fire precautions as will ensure, so far as is reasonably practicable, the safety of

employees and any other “Relevant Persons” (anyone lawfully on, or in the vicinity of the premises). Many of the key steps to successful project management are already known, as shown in the “Project Management - Key Points for Each Stage” guide. Experience of working on fire related projects has highlighted five key lessons learned which anyone looking to undertake similar projects would benefit from considering. These can be summarised as:

1. Build your supporting project team
2. Understand the requirements of legislation and guidelines
3. Set the baseline/starting point
4. Establish the risk tolerance of the organisation
5. Maintain a systematic and measured approach to the project

Further guidance surrounding each of these points is explored below.

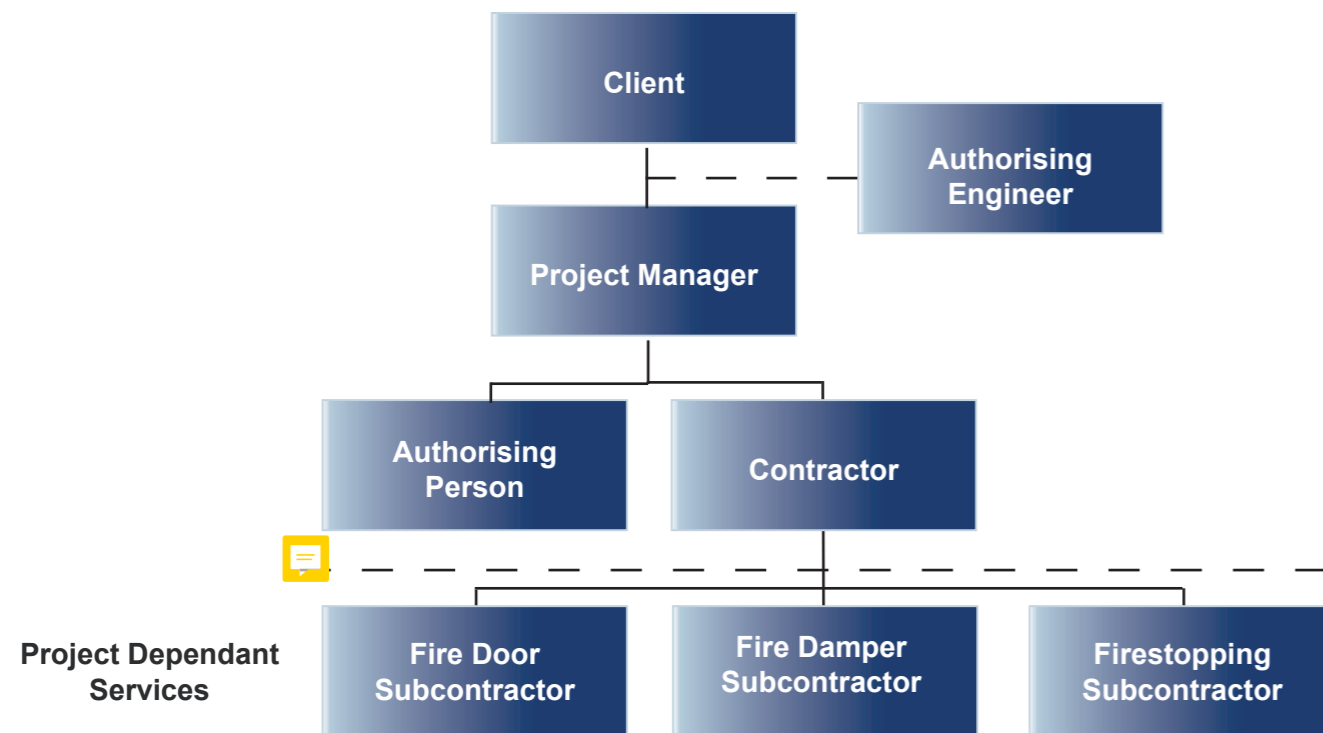


1. BUILD YOUR SUPPORTING PROJECT TEAM

- **The appointment of a decent project team is crucially important to the success of any project. This is arguably even more the case when the project is associated with legislative compliance and health and safety regulations.**

Healthcare environments add further complexities as the stakeholders of the project include patients of varying vulnerability. There is not much that is more destructive than fire and the consequences of fire can be devastating. With our hospitals and healthcare settings relied upon so heavily, it is crucial that fire safety improvements and repairs are carried out with minimal delay and disruption, to the required standards, and whilst remaining commercially sensitive to the implications of government funded projects (public money).

The Project Manager cannot and should not deliver a 'Fire Integrity' project alone, it is important to utilise a supporting project team. Project Managers are qualified to efficiently manage the process of a project, fostering collaboration and communication along the way, but there needs to be third party input from those that are specialists in the field of fire safety. A typical (and recommended) Fire Integrity project team consists of the following:



Client

The Client is the key stakeholder of the project and the beneficiary of the project works. Their main role is to make reasonable budget available for the fulfilment of the project, facilitate suitable access to working areas and allow sufficient time for the works to be completed to the required standard. Ideally, there is one point of contact for any escalations and approvals, but it is to be recognised that there will be a requirement for engagement between the various clinical teams and building users as the project progresses.

Project Manager

The Project Manager is responsible for co-ordination and delivery of the project in line with the project brief, programme and budget. The PM can also assist with the procurement of the project and selection of the wider project team.

Authorising Engineer (Fire)

The Authorising Engineer (Fire) or (AE Fire) is an external independent advisor to the Client and project team. The AE Fire applies an engineering, scientific-based approach to ensuring compliance is achieved. The AE Fire assesses the existing fire strategies (or can help produce one if one does not previously exist), monitors performance of fire safety management, undertakes annual audits and can also be instrumental in the appointment of Authorising Persons (Fire). Crucially, and as defined in the associated Healthcare Technical Memorandum (HTMs), the AE Fire is a "chartered fire engineer, or a chartered member of an appropriate professional body, with extensive experience in healthcare fire safety".

Authorising Persons – Fire (AP Fire)

The Authorising Persons (or APs) hold the day-to-day responsibility for fire safety management of the Client's premises or Estate. APs are generally internally appointed and it is common for ex-fire officers and fire service personnel to fill this role. Referencing the relevant HTMs, the Fire Safety Adviser/AP Fire is "a person who has sufficient training and experience or knowledge and other qualities to enable them to properly assist in undertaking preventative and protective measures". It is not the role of the AP Fire or Fire Advisers to advise on building design, but instead they carry out fire risk assessments and facilitate fire safety training. This often means they are well placed to offer practical and current advice about some of the more operational specifics of the estate, its buildings and protocols.

Contractors

Numerous contractors will be required to bring their specialisms and expertise together to execute the required construction-related works thus bringing the estate or premises back to a suitable level of compliance. It is prudent to appoint a main contractor who can assist in the day to day running of the project works and help co-ordinate the various trades. This provides a 'chain of command' and allows the Project Manager to have one point of contact for all matters related to the physical site works. Depending on the scope and extent of works required, there may be numerous specialist subcontractors required to fulfil the project works. As with the selection of the supporting consultants, experience of working in the healthcare sector is crucial when looking for suitable contractors. Each subcontractor should be suitably vetted, qualified, and ideally third-party accredited for the works they are employed to undertake. Some examples include:

- **Fire Door Subcontractors** – responsible for undertaking repairs to existing fire doors and/or replacement of fire doorsets where required. Key accreditations include FIRAS, IFC and BM Trada. New doorsets should be supplied by suppliers who are IFC or Certifire accredited for added reassurance.
- **Firestopping Subcontractors** – responsible for carrying out fabric repairs to walls, ceilings and suchlike to maintain suitable fire compartmentation and resistance. Works can include the installation of intumescent sealants, pipe collars and ablative insulation products. Key accreditations for this discipline include FIRAS, UKAS or BM Trada.
- **Fire Damper Subcontractors** – Responsible for the installation, maintenance, and repair of dampers/shutters in ventilation systems that resist and prevent the spread of fire and smoke through ductwork etc. At the time of writing, there is a lack of third-party accreditations for fire damper works; instead association with bodies such as FPA (the Fire Protection Association) should be sought.

Healthcare Trusts and providers should already have Fire Safety Officers or Advisors appointed, and these are a good first port of call for understanding the existing situation of how fire safety is managed and what measures are already in place (as well as how robust and compliant they already are).



2. UNDERSTAND THE LEGISLATION AND GUIDELINES

- **The myriad of guidelines, regulations and legislation surrounding fire safety can seem to be a minefield. It is therefore important, at the outset of such a project, to take time to research and take stock of the key legislative pieces governing the scope of works. Being experts in the field, this is often best done in consultation with the appointed Authorising Engineer for fire.**

The project brief should be written in conjunction with this research so that the project delivers in achieving compliance, and resources are allocated efficiently. Two key pieces of legislation and guidelines relevant to fire safety in Healthcare include:

Regulatory Reform (Fire Safety) Order 2005

This legislation is specific to non-domestic premises (including Hospitals) and sets out the roles and responsibilities of the Responsible Person, which in the healthcare scenario would most likely be 'The Trust'.

The 'RRO' or 'FSO' puts onus on the Responsible Person to take such general fire precautions as will ensure, so far as is reasonably practicable, the safety of employees and other 'Relevant Persons'. Relevant Persons in this context are anyone lawfully on, or in the vicinity of the premises, thus including patients.

HTM 05 'Firecode'

In short, the HTM 05 series is the Healthcare Technical Memoranda providing guidance as to how regulations can be complied with, but with specific reference to the Healthcare sector and with real technical insight surrounding how hospitals and such settings operate. For example, the rationale of protected corridors (a common fire safety principle in buildings) is flawed when it comes to hospital settings as the sheer number of doors along corridors means that for every door to be a fire door with closers etc would hinder an evacuation. Furthermore, it is not appropriate to evacuate wards of patients (of varying mobility and capacity) in a fire event.

HTM 05-02 is the key memorandum relating to the design and specification of the building elements. It is HTM 05-02 which should be referred to if the Fire Integrity project being approached involved building fabric upgrades, repairs and installations. The other elements of the HTM-05 series more relate to policies, procedures, and operational provisions. Depending on the scope of the Fire Integrity project in question, various sections of the Series will be applicable. Fully complying with the HTM guidelines would in turn prove compliance with the requirements of the Regulatory Reform Order.



3. SET THE BASELINE/STARTING POINT

- **With the requirements of the project known and the Project Brief written (and duly signed off by key stakeholders), the next step is to establish the starting point of the project or the 'current scenario'. This is required to determine the quantum of works, which will in turn dictate both the required budget and the programme.**

Before any advisory surveys are instructed, it is prudent to review existing information such as an existing fire strategy and fire risk assessments. These should be reviewed in conjunction with other key building documentation such as site and building plans, operation and maintenance manuals or previous maintenance and inspection records.

Special attention should be given to ensuring that Fire Protection Plans (otherwise referred to as compartmentation or fire line drawings) are **up to date** and correct. The AP Fire and AE Fire should assist in the review and any updating of these with consensus reached between all parties. Having a complete set of these up to date drawings will ensure that only areas requiring attention are incorporated into the project scope, saving time and money.

It is essential for any surveys carried out to be done so by suitably competent and qualified professionals. Working to the updated fire protection plans also ensures that all survey outputs are relevant.

Project Example

A UK hospital project is required to look at fire integrity measures they can introduce across their estate, this particular project concerns fire doors, firestopping and dampers as an example.

- **Fire Door Surveys:** Fire door surveys should ideally be **carried out** by FDIS (Fire Door Inspection Scheme) certified inspectors or BM Trada Maintainers. BM Trada Fire Door Maintainers are contractors competent to assess and repair fire doors. Their appointment can be a good option as not only will their doorset surveys give a true reflection of works required but it also gives the Maintainers an early opportunity to understand the condition of the existing stock, in preparation for the physical site works (repairs or any replacements).
- **Firestopping Surveys:** Firestopping surveys have until recently not been widely third-party accredited. FIRAS offer compartmentation and firestopping surveys to UKAS and British Standards. BM Trada also now operate a 'Q Mark Accredited Firestopping Installation Scheme' which includes for surveys **prior to any firestopping works being carried out**.
- **Dampers and Ventilation Ductwork:** Dampers and ventilation ductwork should also be inspected for fire integrity and function in a potential fire scenario. Again, FIRAS are able to offer an accredited inspection service. Many ventilation and ductwork installers are also able to offer inspection of installed plant for compliance with manufacturers details; it is recommended that this approach is sanctioned by the Client's Authorising Engineer prior to proceeding.

Although not a legal requirement, appointing such accredited independent third parties provides a good defensible position in terms of proving competence of all involved in the project.

Once all surveys are complete, they are best reviewed to establish the implications of their recommendations on the site environment, for reasons such as pre-empting potential decant requirements and/or understanding any special measures that may need to be put in place to allow the remedial works to proceed.



4. ESTABLISH THE RISK TOLERANCE

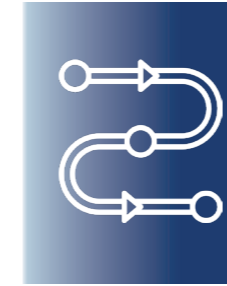
- **Risk tolerance (sometimes referred to as ‘risk appetite’) is in short, the level of risk which an organisation is acknowledging as acceptable and not requiring of any further mitigation.**

The utopia of course is for risk to be eliminated entirely but with the dynamic nature of the healthcare setting and factors such as the behaviour of building users taken into consideration, this is all but impossible. It is therefore critical to get an understanding of the priorities of the Client organisation in terms of which works must absolutely take place and which can follow when time and budget allow.

Depending on the recommendations of the surveys undertaken, it may prove again all but impossible, to instruct all works with immediate effect. Budgets within the healthcare sector are generally already stretched with often several capital projects waiting in line to be fulfilled and competing for their share of allocated funds. The capital programme of works should also be reviewed to ensure that works aren't unnecessarily repeated, for example because of change of use across the Estate, thus altering the fire strategy of the area in question.

Establishing the risk tolerance of the organisation ensures that monies are spent wisely, only where required and not repeatedly.

It is good practice to record the approach to the project, including order of areas to be worked in etc, within the Project Execution Plan (written by the Project Manager). Sign-off of the ‘PEP’ from key stakeholders within the organisation ensures clarity and provides a reassuring ‘authority to proceed’.



5. MAINTAIN A SYSTEMATIC AND MEASURED APPROACH

- **As with any project, it is crucial to follow process, keep the Client informed throughout as the project progresses and seek approval as matters arise which may impact the parameters agreed at the outset.**

With specific regard to a fire-related project, key considerations should be:

Project Updates: To monitor the increasing level of compliance as works progress, it is important to report back to the project stakeholders and sponsors at suitable intervals. This reporting could be as straightforward as a ‘tracker’ document which is kept updated weekly or more of a formal monthly Project Manager’s Report shared with those at an executive level. This should be decided upon at Project Brief stage.

Managing ‘scope creep’ with Exception Reports: Due to the nature of the remedial works with fire doors for example, it is common for stakeholders to wish to take the opportunity for areas to be upgraded as opposed to purely made compliant and repaired. This should be discussed with the key stakeholders of the project and flagged as potential ‘scope creep’. It absolutely makes logical sense to make use of any access made available and upgrade the existing stock of doors etc where budget and programme allow but this should be sanctioned by key stakeholders.

Sectional Completion: With fire doors and dampers all requiring routine inspection, preference should be given to sectional completion of works by area/ward/building if at all possible. Any well managed Estate will have a planned preventative maintenance (PPM) schedule and statutory routine inspection timelines will be triggered upon completion of various works. Signing works off by area also provides clarity on responsibilities for ongoing maintenance and suchlike, with the onus for repairs within a 12 month liability period falling with the original contractors for example.

Monitor Workmanship Closely: Where the requirement for a project has come about due to lack of compliance, poor detailing or workmanship in the first instance, it is imperative to ensure that the remedial works are themselves to a suitable standard. Provided the supporting project team are suitably accredited and for example FIRAS-accredited installers are appointed for any replacement fire doors, then there is some level of comfort in this respect. That said, it is wise to monitor site works closely as they progress, both via the contractors’ own site supervisors and independently.

Stay up to date with Regulations, Legislation and Guidelines: As more research is carried out on the subject of fire safety, and materials and building methods evolve, the associated legislation will also inevitably change. To ensure that works are carried out to current standards, it is important to stay informed. Doing so will not only ensure compliance, but it will also drive best practice and inadvertently put onus on others within the project to keep up to date with developments and any new requirements.

Fire Integrity Up-keep: Fire integrity across an estate must be continuously reviewed and considered in the management of the wider estate. Operating a permit system (or similar) will ensure that any future works maintain the required stops and brakes.



ABOUT PROVELIO

- **Provelio is a strategic project management consultancy focused on delivering value-driven solutions that change organisations for the better.**

Since 2002 Provelio have provided project management and consultancy services across the UK to public and private sector clients to enhance project delivery, minimise risk and ensure successful outcomes.

Our promise is to provide our clients with certainty of delivery, through the combination of our expertly trained people, proven project management processes, and investment in the latest technology. This combination, utilised in conjunction with our experience of providing solutions to complex projects, makes us the experts in strategic project management consultancy services.

We provide professional management services to carry out such projects, ensuring that our clients can go through this transition phase as smoothly as possible, whilst being able to carry out 'business as usual'. These services include:

- Strategic Management
- Project Management
- Change Management
- Cost Reduction
- Procurement and Contract Management

We believe that management is not just about processes and best practice. It is about fostering good, motivational relationships between people. We therefore deliver management solutions with integrity, transparency, clarity and a constructive style.

For more information on Fire Strategies within the UK Healthcare Sector contact us at:



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