



Doncaster and Bassetlaw  
Teaching Hospitals  
NHS Foundation Trust

# FIRE SAFETY MANAGEMENT PROTOCOL

## FIRE STOPPING

This procedural document supersedes: CORP/HSFS 14 v.5 – Protocol 3



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The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. **If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.**

Executive Sponsor(s):	Kirsty Edmondson-Jones Director of Estates and Facilities
Author/reviewer: (this version)	Howard Timms - Deputy Director of Estates and Facilities
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**Amendment Form**

Please record brief details of the changes made alongside the next version number. If the procedural document has been reviewed **without change**, this information will still need to be recorded although the version number will remain the same.

<b>Version</b>	<b>Date Issued</b>	<b>Brief Summary of Changes</b>	<b>Author</b>
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## 1. INTRODUCTION

This protocol contributes to the fulfilment of developing fire safety protocols as stated in Health Technical Memorandum 05-01: Managing healthcare fire safety (second edition). This protocol addresses 'Fire Stopping'.

## 2. SCOPE

This protocol will be implemented throughout all premises, or parts of premises, that the Trust owns or those for which the Trust is responsible for maintaining the building fabric and/or services.

## 3. DEFINITIONS

### 3.1 Fire Stopping

A system of fire protection utilising various components to seal gaps, openings and other breaches in fire separating elements so as to maintain their fire performance.

### 3.2 Fire separating elements

Physical assemblies such as floors, walls and partitions that are intended to provide a specified fire performance such that they inhibit the spread of fire and smoke through the building.

### 3.3 Fire performance

The ability of a fire separating element to resist the passage of fire and smoke for a given period. Fire performance is determined through standardised fire test and is specified as a series of durations in minutes relating to:

- load bearing capacity;
- integrity; and
- insulation

### 3.4 Accreditation

Registration of a contractor to a third party scheme intended to verify the competence of the contractor and their operatives in the selection, and installation of fire stopping products.

### 3.5 Certification

Evidence that a fire stopping product has been independently tested to determine its fire performance when subjected to a standardised test, and the parameters for the product's application.

## **4. CONTEXT**

The safety of patients, visitors, staff and other building users from fire relies upon the fire precautions present within the building. A key element of these fire precautions is the physical structure which includes the building supporting elements, floors, and the internal walls and partitions (together with associated elements such as fire doors). Each of these elements are designed to restrict the spread of fire and the passage of smoke. Even small gaps or breaches in the fire resisting structures can allow the spread of fire and smoke through the building which may in turn impinge upon the safety of building occupants. Fire stopping forms a vital part of such fire resisting structures by sealing gaps between fire resisting elements, sealing around building services that may penetrate fire resisting elements, and re-instating the fire resistance of breaches through fire resisting elements.

It is vitally important that the appropriate fire stopping products are used and are applied correctly in order to maintain the fire performance of the elements to which they are installed.

## **5. ROLES AND RESPONSIBILITIES**

Whilst it is incumbent upon all staff involved in construction, maintenance, and services installation to ensure that appropriate fire stopping measures are undertaken, key personnel have particular responsibilities as follows:

### **5.1 Project Manager / Consultant**

- Identify any breaches or potential breaches in any of the fire separating elements associated with the project works
- Ensure that contractors are aware of the need for fire stopping
- Ensure that appropriate temporary fire stopping is used during works
- Select and appoint a competent fire stopping contractor
- Ensure certified products are used
- Review method statements and compliance with product certification
- Check operative accreditation
- Arrange for visual inspection of the fire stopping installation, during project works and prior to project completion
- Collate records of the fire stopping installation as set out in this fire stopping protocol

### **5.2 Maintenance Personnel**

- Identify any breaches or potential breaches in any of the fire separating elements associated with the maintenance works
- Ensure that appropriate temporary fire stopping is used during works
- Ensure that a competent fire stopping contractor installs permanent fire stopping when maintenance works concluded

- Reports instances of inadequate and/or inappropriate fire stopping to the maintenance manager

### **5.3 Fire Safety Manager/Advisor**

- Provide technical advice on:
  - The selection of fire stopping contractors and their accreditation
  - The selection of fire stopping materials and their certification
  - The methods of fire stopping and installation methodologies
- Provide visual inspection of fire stopping during the project works and prior to project completion/acceptance
- Report instances of inadequate and/or inappropriate fire stopping to the maintenance manager

### **5.4 Specialist Installer**

- Select appropriate materials and installation methods
- Provide copies of operative accreditations and product certification prior to the commencement of works
- Provide detailed method statements prior to commencement of works
- Install fire stopping in accordance with method statements and product certification
- Collate record of information as detailed in this protocol
- Provide certification of the fire stopping installation

## **6. SELECTION OF FIRE STOPPING CONTRACTORS**

It is important that any contractor providing fire stopping is competent to do so. All contractors appointed to provide fire stopping services must demonstrate their competence and the competence of their operatives in providing the services for which they have been commissioned prior to the commencement of their works.

The use of third party accreditation is considered to be the most appropriate means by which a contractor's competency can be assured. To this end, any contractor providing fire stopping services must be accredited by at least one of the following schemes:

- Firas – administered by Warrington Certification Ltd.
- LPS 1531 – administered by the Loss Prevention Certification Board.
- IFC Installer Certification – administered by IFC Certification Ltd.

Prior to appointment of a fire stopping contractor, a copy of the contractor's accreditation certificate should be obtained and its validity verified by means of a check with the accreditation body. The details of the accreditation certificate should be reviewed to ensure that the contractor has been accredited for the nature of the works to be undertaken.

## 7. SELECTION OF FIRE STOPPING MATERIALS

The selection of the appropriate fire stopping materials is paramount to ensuring the continued fire performance of the element(s) to which they are installed. The selection for fire stopping materials should be made by the installing contractor. Care should be taken to ensure that the fire stopping materials selected are appropriate for the specific application for which they have been selected, and that the use of such materials is within the parameters of the product test certification.

Only materials listed within the current **Loss Prevention Certification Board Red Book** will be deemed to be acceptable. Details of the most up-to-date LPCB Red Book can be found at:

<http://www.redbooklive.com/index.jsp>

Prior to the commencement of fire stopping works, the contractor must provide details of the products to be used and copies of the test certificates and accompanying test reports for each product to the project manager. The project manager should check the validity of all submitted product certification and verify that the installer's method statements comply with the limitations of the product certification.

### 7.1 Performance

Fire stopping materials should be selected to provide the same or greater fire performance as that of the highest performance element to which they are to be installed. Where the fire performance of building elements are not clearly specified, advice should be sought from the fire safety manager/adviser.

The fire performance of fire stopping materials should meet the requirements for both integrity and insulation.

### 7.2 Compatibility

To ensure the performance of fire stopping materials, it is important to ensure that all elements of the fire stopping installation are compatible and will not adversely react either during exposure to fire conditions, or during the lifetime of the installation. To ensure compatibility, the following measures should be taken.

#### 7.2.1 New Installations

All new fire stopping installations should use products from a single product range as produced by a single manufacturer. This approach is more likely to ensure that complimentary fire stopping products have been tested in combination and their performance has been determined.

#### 7.2.2 Existing Installations

Where replacement or additional fire stopping is required in direct contact with existing fire stopping, materials from the same product range as the original fire stopping must be used.

In circumstances where the existing fire stopping materials cannot be identified, or the original products are no longer available, the existing fire stopping material should be removed and replaced with new fire stopping products as for a new installation.

## **8. INSTALLATION**

Prior to the commencement of fire stopping works, the contractor must submit detailed method statements to the project manager.

### **8.1 Method Statements**

The method statements provided by the contractor must detail:

- ◆ the products to be used for each fire stopping scenario;
- ◆ the construction arrangements including:
  - key dimensions;
  - any supporting elements;
  - fire performance;
- ◆ installation methods

The project manager/consultant, in conjunction with the fire safety manager/adviser, will assess the details of the method statements to ensure that the proposed installations are within the parameters of the product test certification and supporting test reports.

### **8.2 Operative competence**

Prior to commencement of fire stopping works, the contractor must submit evidence relating to the competence of the operatives that are to undertake the fire stopping installation. In the case of a contractor that is accredited by the Firas scheme, the operatives should appear on the Firas register of competent employees. Those contractors accredited under the LPS 1531 should provide copies of operative training records relevant to the type of installation. Contractors accredited under the IFC Certification scheme are required to provide details of the IFC competency assessments of their operatives.

### **8.3 Stability and support of penetrating services**

Unless specifically detailed in the test certification and supporting test reports, fire stopping materials must not be relied upon to provide support for penetrating services or associated fire elements such as fire dampers. Penetrating services must be independently supported in such a manner that their potential collapse due to exposure to fire will not affect the stability of the fire stopping installation.



#### **8.4 Visual inspection**

During the course of the fire stopping installation, and prior to completion and subsequent replacement of ceilings or other structures that may conceal the installation, the contractor must allow for the visual inspection of the fire stopping installation by the project manager and/or the fire safety manager/adviser or their appointed representative. The fire stopping installation will not be accepted without prior visual inspection.

#### **8.5 Certification**

Upon completion of the fire stopping installation, the contractor is required to submit the appropriate certification for the installation as detailed in the requirements of their accreditation.

The fire stopping installation will not be accepted until the appropriate certification for the installation has been received and verified by the project manager.

### **9. RECORDING**

The collation of detailed fire stopping records is fundamental to the ongoing management of fire performance and the integrity of fire separating elements.

#### **9.1 Labelling**

All fire stopping installations must be clearly labelled adjacent to each sealed gap, sealed service penetration and/or repaired breach in a fire separating element. The label should be permanently affixed to the fire separating element and should provide the following details:

- The identity of the installer
- The product(s) used
- The fire performance achieved (integrity and insulation)
- The date of installation.

The fire stopping installation will not be accepted without appropriate labelling.

#### **9.2 Recorded Information**

Upon completion of the fire stopping installation the contractor must submit record information to the project manager/consultant in both hard copy and electronic copy format which includes:

- Details of the installer
- Details of the products used for each gap sealed, service penetration sealed and each breach repaired including:
  - A unique identification number;
  - Location;
  - Details of the fire separating element to which the fire stopping is installed;
  - Product name;

- Manufacturer;
- Quantity used;
- Manufactured date;
- Product batch numbers;
- The fire performance achieved (integrity and insulation);
- The date of installation.

In addition, before and after photographic evidence (both hard copy and in electronic jpg file format), referenced by the location unique identification number, should be provided for each gap sealed, service penetration sealed and each breach repaired.

The above to be uploaded onto the DBH EF MICAD Database.

## **10. MONITORING**

The ongoing performance of Fire Stopping provision will be monitored and reported via the Fire Safety management system through reports and records generated by the Fire Safety Manager, Fire Safety Advisor, Maintenance Team Leader and Maintenance staff. Monitoring will be reported to the Estates and Facilities Fire Safety Committee, the Trust Health and Safety Committee and the Trust Board.

In addition to the above independent third party audits will be undertaken yearly or as required by the Trust Fire Authorised Engineer.

## **11. RELATED DOCUMENTS**

Relevant building manual and fire strategy report.

Relevant fire risk assessment reports.

Compartmentation survey reports.

Fire stopping records

DOH (2015) Health Technical Memorandum 05-02: Guidance in support of functional provision for healthcare premises. [ONLINE] Available at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/473012/HTM\\_05-02\\_2015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/473012/HTM_05-02_2015.pdf)

## APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/Strategy	Care Group/Executive Directorate and Department	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Fire Safety Management Protocol 3 Fire Stopping	Estates and Facilities	Howard Timms	Existing	26.04.19
<b>1) Who is responsible for this policy?</b> - Name of Care Group/Directorate: Estates and Facilities				
<b>2) Describe the purpose of the service / function / policy / project/ strategy?</b> Who is it intended to benefit? What are the intended outcomes? - All Trust Staff. The Trust must continually monitor Fire Safety Precautions and Fire Stopping throughout all Trust Premises to ensure compliance with the Regulatory Reform (Fire Safety) Order and the DOH Firecode HTM 05 Series to minimise the incidence of Fire				
<b>3) Are there any associated objectives?</b> Legislation, targets national expectation, standards. - Regulatory Reform (Fire Safety) Order 2005, the DOH Firecode HTM 05 Series and Fire Stopping Certification Schemes				
<b>4) What factors contribute or detract from achieving intended outcomes?</b> Trust Staff awareness				
<b>5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief?</b> - No				
<ul style="list-style-type: none"> <li>If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation] - N/A</li> </ul>				
<b>6) Is there any scope for new measures which would promote equality?</b> [any actions to be taken - N/A				
<b>7) Are any of the following groups adversely affected by the policy?</b> - No				
<b>Protected Characteristics</b>	<b>Affected?</b>	<b>Impact</b>		
a) Age	No			
b) Disability	No			
c) Gender	No			
d) Gender Reassignment	No			
e) Marriage/Civil Partnership	No			
f) Maternity/Pregnancy	No			
g) Race	No			
h) Religion/Belief	No			
i) Sexual Orientation	No			
<b>8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box</b>				
Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4	
*If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a Detailed Equality Analysis form in Appendix 4				
<b>Date for next review:</b> April 2022				
<b>Checked by:</b> Sean Tyler, Head of Compliance/ Neil Colton, Fire Safety Adviser				<b>Date:</b> 26.04.19