GUIDE TO THE RIBA FIRE SAFETY COMPLIANCE TRACKER

VERSION 1 - JULY 2021

RIBA
Architecture.com

Published by RIBA, 66 Portland Place, London, W1B 1AD.

Status

RIBA and its members uphold high standards of professional competence. This document sets out best practice guidance for members and for RIBA Chartered Practices. Adherence to this guidance is not compulsory but members and Chartered Practices should use their judgment to determine when to follow such guidance and to what extent. RIBA cannot accept liability for when and how members and Chartered Practices apply guidance published by RIBA.

Having an audit trail showing that the member took account of the practices contained in RIBA guidance may provide a partial defence to an allegation of negligence. When seeking an independent expert report to defend such a case, the expert is likely to reference relevant RIBA guidance as a measure of reasonable skill and care.

RIBA regularly reviews its RIBA guidance, to take into account changes in the legal and regulatory compliance environment. However, it is each member's responsibility to ensure they keep up to date with legal and regulatory compliance regimes, supported by RIBA CPD compliance requirements and RIBA standards material as this is published and reviewed from time to time.

Members are reminded that ARB Standards of Conduct (for all Registered Architects) and the RIBA Code of Conduct (for Chartered members) and RIBA Code of Practice (for Chartered Practices) impose requirements for holding suitable professional indemnity insurance to cover potential liabilities arising from negligence or breach of contract associated with professional activities.

Foreword

I don't believe that anyone will ever be able to forget the tragic fire that we all woke up to on 14 June 2017. In the intervening four years the construction industry has realised that apart from the horrific loss of 72 lives, the tragedy has exposed us all to the public gaze – and we have come up wanting. It is desperately sad to learn that this could have been prevented, and that it took a horror of such a shocking scale to prompt change from the Government and industry.

2021 marks the beginning of a long overdue comprehensive regulatory reform of our safety systems, where we expect to see the Government outline the biggest changes to safety law and enforcement in 40 years. The RIBA has been vociferous in its advocacy for clearer, stronger and enforceable regulations to ensure the safety of the public and protect their human right to sleep safely in their homes. In an ever increasingly complex design and construction industry, we also need to review the fire safety competence of our membership, and assure their readiness to face the challenges ahead. I am delighted that, in order to ensure that Chartered architects are at the forefront of the cultural and professional changes required, the RIBA plans to introduce mandatory competences for UK Chartered Members.

The RIBA Fire Safety Compliance Tracker will enable practices to track and record their projects' design development, and demonstrate compliance with Building Regulations Part B – Fire Safety. It will help to guide design decision making, and increase confidence in fire safety coordination. It's an excellent and critical tool, which I hope you will use and adapt going forwards.

Jane Duncan OBE
RIBA President 2017-19
Chair of the RIBA Expert Advisory Group on Fire Safety

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Introduction

The construction industry is facing significantly challenging times as a consequence of the Grenfell Tower fire in 2017 and the legal and commercial implications arising from the Grenfell Inquiry, the Hackitt Review and changes in Building Regulations. Professional indemnity insurers have reacted by reducing their exposure, resulting in rising premiums and limitations on fire safety related advice placed on the PII policies of the majority of architects and other built environment consultants. RIBA members are increasingly asked to demonstrate the fire safety risk profile of their projects to insurance brokers through a variety of different questionnaires.

The RIBA Fire Safety Compliance Tracker is intended as a template for RIBA members to use to track and record a project's design development and routes to compliance with Building Regulations Part B – Fire Safety. Following completion of the project, this tracker may be used to help answer questions from insurance brokers or others, providing them with a more detailed record of fire safety design decisions for compliance with building regulations, in a straightforward format.

The template is intended to be used by the practice in one of two ways:

A. When taking a leadership role in providing fire safety design coordination, this template may be used to provide compliance information to the design team.

B. When a fire engineer is leading fire safety design coordination, the template may be used internally within your practice to help your team track compliance and to confirm the architectural design aligns with the fire strategy.

The RIBA recognise there maybe value to members in sharing this information with their client to demonstrate how they have addressed fire safety in design decision making, or with the wider project team for design risk management purposes. RIBA members should exercise their judgement in deciding whether the template should be shared with the client or project team.

The International Fire Safety Standard: Common Principles

The RIBA Fire Safety Compliance Tracker draws on the International Fire Safety Standard: Common Principles (IFSS-CP) and its associated Framework.

Over time the construction industry has learned fundamental fire safety principles for preventing fire events and managing their impact (i.e. the Common Principles: Prevention, Detection and Communication, Occupant Protection, Containment and Extinguishment) that can be consistently applied internationally.

The IFSS-CP primarily focuses on the information required for life safety from fire and aims to minimise the social and economic impact of fire on communities. IFSS-CP establishes overarching, performance-based Common Principles for fire safety engineering design, construction, occupation, and ongoing management. IFSS-CP is intended to be flexible and non-prescriptive so that it can be adopted incrementally and will also advance good practice.

The Common Principles become actionable through the IFSS-CP Framework, which enables evidence-based assessment to achieve fire safety engineering design, construction, occupation, and ongoing management on a Building level. The IFSS-CP Framework is the collective application of the Common Principles, which apply to different stages in the Building Life Cycle.

The RIBA recommends that RIBA members consider using the full IFSS-CP for sharing fire safety information with their project teams. The objectives of the IFSS Common Principles are listed below.

- **Prevention Principle**
  Safeguarding against the outbreak of fire and/or limiting its effects.
- **Detection and Communication Principle**
  Investigating and discovering of fire followed by informing occupants and the fire service.
- **Occupant Protection Principle**
  Facilitating occupant avoidance of and escape from the effects of fire.
- **Containment Principle**
  Limiting of fire and all of its consequences to as small an area as possible.
- **Extinguishment Principle**
  Suppressing of fire and protecting of the surrounding environment.

The RIBA Fire Safety Compliance Tracker applies the structure set out in the IFSS-CP Framework, but is only compliant with the design decision section of the IFSS rather than the full lifecycle as this is the area relevant to architects' design liability. The full list of fire safety measures included in the template are also listed in this guide, aligned to the overarching requirements of Part B and set out according to each IFSS Common Principle.

Principles of Fire Safety Measures

Principle: Prevention

- Occupant behaviour
- Natural and man-made disasters
- Process safety in use
- Distance to external hazards

Requirement B1
Means of warning and escape

Principle: Detection and Communication

- Detection systems
- Warning systems
- Fire service communications
- Building configuration

Principle: Occupant Protection

- Evacuation procedures
- Evacuation plans
- Protected areas
- Smoke control
- Smoke lobbies
- Locations of fire doorsets
- Travel distances
- Means of escape and alternative means of escape
- Potential restrictions en route
- Exit and stair capacities
- Merging population flows
- Corridor widths
- Evacuation lifts
- Emergency power supply
- Emergency lighting
- Emergency exit signage
- Assembly points
- Evacuation equipment
- Occupant characteristics

Requirement B2
Internal fire spread (linings)

Principle: Containment

- Selection of internal lining materials to adequately resist the spread of fire
- Thermoplastic materials

Requirement B3
Internal fire spread (structure)

Principle: Containment

- Fire door and shutter sets
- Fire-rated glazing
- Fire resilient ductwork and dampers
- Fire-stopping
- Cavity barriers
- Protected shafts
- Firestopping systems
- Sprinklers / automatic fire suppression systems
- Structural fire protection
- Fire resilient structure and compatibility with compartmentation design
- Ventilation

Requirement B4
External fire spread

Principle: Containment

- Resisting fire spread over external walls
- Resisting fire spread over the roof
- Resisting fire spread from one building to another

Requirement B5
Access and facilities for the fire service

Principle: Extinguishment

- Proximity to the nearest fire department and fire service arrival time
- Parking conditions and external access routes for the fire and rescue services
- Protection to the internal firefighting access routes
- Fire control room
- Dry risers
- Wet risers
- Impact of water run off
- Firefighting lifts
- Firefighting lobbies
- Manual firefighting equipment
- Wayfinding signage for fire and rescue services
- Structural resilience for firefighter safety
- Availability of building information

How to use the Fire Safety Compliance Tracker

The template has been developed to enable RIBA members to track and record compliance with fire safety requirements using the following headings:

Project Details

This table allows RIBA members to identify the roles being provided on the project, as well as setting out the details of the project and any defining characteristics (such as the project height, storeys, M^2, use etc). There is also provision to input the documents date and version control, which can be kept updated alongside the project's development.

Where a project is being developed over several phases, it is expected that a new template will be developed for each phase.

RIBA Plan of Work Stages

At each stage of the project, design submissions and approvals by the client can be tracked, alongside any specific project notes. Following a stage approval, this template can be saved and filed alongside each of the projects stage approvals, to be maintained as an independent record copy.

Statutory Compliance

Completing and updating the template during the project's design development stages will provide a high-level snapshot of the project's statutory compliance against Planning / Gateway 1, Building Control / Gateway 2 and Completion / Gateway 3, alongside any approval conditions.

Fire Safety Measures to be Included

The template is structured using Part B of the Building Regulations and uses the five Common Principles from the IFSS. Each section of the template is populated with a list of the key fire safety measures that may be required in a project to comply with Part B of the Building Regulations.

Although an extensive list of key fire safety measures has been provided, this is not exhaustive and additional fire safety measures can be added to ensure that all the appropriate measures for the project are tracked.

Dependent upon the project type and scale, not all the key fire safety measures may be required in a project. A checkbox against each measure for the principles of Detection and Communication, Occupant Protection, Containment and Extinguishment, can be used to identify if the measure is to be included in the project.

The initial template ('Safeguard against the outbreak of fire') outlines the IFSS Principal of Prevention, which provides the means to broadly identify and document the risks that may give rise to the potential for a fire to occur. This provides a set of overarching considerations that may influence the development of fire safety measures.

Responsibility

The template provides space to identify who is taking lead responsibility for designing each fire safety measure, with a secondary role identifier that may be contributing to the development of the measure. This may be more than one entity including the RIBA member and should be used to record if they have provided design advice in relation to the measure. This dropdown list can be duplicated to enable you to add further roles as appropriate.

Where a measure is assigned to a role that is not available in the dropdown list, you can edit the list to add or amend the roles displayed.

> *To enable this functionality, you will need to add the 'Developer' Tab to the ribbon in Microsoft Word (File > Options > Customize Ribbon, and under Main Tabs, select the Developer check box). Once this functionality is added, you can select the dropdown list you plan to amend, click the 'Developer' Tab, and then 'Properties' (under 'Controls'), which will bring up a dialogue box with the appropriate editing functionality so you can make changes.*

Route to Compliance and Design Considerations

The template allows the RIBA member to record the route to compliance used, signposting to where guidance or the processes followed (ADB, British Standards, CFD, QDR, Fire and Rescue Service etc) in relation to the respective fire safety measure design decision can be found, as well as any accompanying notes on the decisions taken. Completion of this section can also include an extract or snapshot from the document where guidance was taken and inserted into the table. Any documents referenced within the route to compliance should be captured with their date and any identifying numbering or version control.

Design Status

The design status for each fire safety measure that is included within the project can be tracked against 4 stages:

- Design in Progress (DP)
- Design Complete (DC)
- Design Approved (Building Control) (DA)
- Constructed and Signed Off (CS)

At any one time, only one box within the design status for each measure may be checked. A design should not be considered complete until all necessary measures are approved, however if your appointment ceases or the client hands over responsibility to another member of the project team, it may not be possible for you to complete this process. Dependent upon your scope of services, you may not be able to complete the design status for all 4 stages.

Following any statutory submission, where fire safety measures are not approved, or where an approved design solution is impacted by subsequent design decisions, these measures should be reassessed and unchecked as 'Design Complete' or 'Design Approved', and rechecked as 'Design in Progress', until any necessary amendments to the design are completed.

Fire Safety Compliance Tracker – Completed Sample

The table below shows an extract of the 'Occupant Protection' compliance table, which has been based on a 7 storey multi occupancy residential building, to show how the compliance tracker can be completed.

IFSS	Fire safety measures to be included		Responsibility	Route to compliance & Design Considerations *Guidance or processes followed (ADB, British Standards, CFD, QDR, Fire and Rescue Service etc)* *Document version / extract / accompanying notes*	Design status			
					DP	DC	DA	CS
Occupant Protection	**Evacuation procedures** *(such as delayed (including stay put), phased, progressive and simultaneous)*	✓	**Lead:** fire engineer **Contributor:** architect	***BS 9991: 2015*** ***BS 9999: 2017*** ***London Plan Policy D12*** ***Flats*** *A 'stay put' evacuation strategy is followed initially (except the flat of origin). An Evacuation Alert System with live voice communication controlled by the Fire and Rescue Service on site can instigate phased evacuation.* *In the event of a fire, the occupants of the flat of the fire origin (and all flats if instructed) will evacuate into the common corridor which leads to two protected stairs. These stairs discharge either at lower ground or upper ground.* ***Basement Plant Rooms*** *The basement plant rooms will operate an independent simultaneous evacuation strategy.*	☐	✓	☐	☐
	Evacuation plans *(such as GEEPs and PEEPs)*	☐	**Lead:** Select Role **Contributor:** Select Role		☐	☐	☐	☐
	Protected areas *(such as stairs, corridors and lobbies, refuge areas)*	✓	**Lead:** architect **Contributor:** fire engineer	***BS 9991: 2015*** *Each level is provided with two protected stairs, a firefighting stair accessed via the fire-fighting lift lobby and a secondary escape stair with a protected lobby accessed from the common corridor offering alternative means of escape. Disabled refuges are provided within the fire-fighting lobby and secondary stair lobby at each level. Protected corridors are provided which link directly to the final exits at upper and lower ground floor.*	☐	✓	☐	☐
	Smoke control *(such as passive or mechanical, ventilation shafts)*	✓	**Lead: building services engineer** **Contributor: fire engineer** **Contributor: architect**	***BS 9991: 2015*** *Three mechanical smoke shafts will be provided. The shafts within the common corridors will be reversible to ensure smoke is always pulled away from the stair that opens into the corridor. The shaft within the fire-fighting lift lobby will be an extract shaft.* *CFD analysis to be carried out.*	✓	☐	☐	☐
	Smoke lobbies	✓	**Lead:** architect **Contributor:** Select Role	***BS 9991: 2015*** ***BS 9999: 2017*** *Smoke lobbies will be provided adjacent to firefighting and secondary escape stairs.*	☐	✓	☐	☐
	Locations of fire doorsets	✓	**Lead:** architect **Contributor:** fire engineer	***BS 9991: 2015*** ***BS 9999: 2017*** *Fire doorsets are to achieve a minimum FD 30s.*	✓	☐	☐	☐
	Travel distances	✓	**Lead:** architect **Contributor:** fire engineer	***BS 9991: 2015*** *Travel distances from flats to either protected stair lobby are within 30m.*	☐	✓	☐	☐
	Means of escape and alternative means of escape	✓	**Lead:** architect **Contributor:** fire engineer	***BS 9991: 2015*** *Two stairs are provided, one at each end of the building.*	☐	✓	☐	☐

Building and Fire Safety Reforms

The draft Building Safety Bill takes forward reforms of the building safety system in response to the Building a safer future consultation, providing the Health and Safety Executive with powers to improve Building Standards and to oversee a new and more stringent regime for higher-risk buildings. It also outlines improvements in building safety and performance standards for all buildings, extending the dutyholder roles set out in the Construction (Design and Management) Regulations 2015 (CDM 2015).

RIBA members need to keep abreast of these changes, as the duties for fire safety measures may only be allocated to specific roles identified in future legislation. The RIBA will update this guide and its associated template following any related changes to legislation.

The RIBA has long been campaigning for thorough reforms of the building safety regulatory system to create a safer built environment. You can access our consultation responses to Government and other published fire safety material on www.architecture.com/firesafety

| Acknowledgements

The RIBA Fire Safety Compliance Tracker was authored by Rahim Rahemtulla and Alex Tait from the RIBA Practice Department.

The RIBA would like to thank the following RIBA Expert Advisory Groups for their advice and input into the development of the tracker:

- RIBA Expert Advisory Group on Fire Safety
- RIBA Housing Group
- RIBA Large Practice Group
- RIBA Practice and Profession Committee
- RIBA Regulations and Standards Group

The RIBA would also like to take the opportunity to individually acknowledge the following members for their contributions:

- Alan Beveridge | RCKa
- Anthony Staples | RCKa
- Constance Ridout | ARUP
- David Phillips | EPR Architects
- Dieter Bentley-Gockmann | EPR Architects
- George Sambrook | EPR Architects
- Mark Taylor | Allies and Morrison
- Nigel Ostime | Hawkins\Brown
- Richard Irving | EPR Architects
- Roland Reinardy | Hawkins\Brown
- Tahera Rouf | RCKa
- Wendy Charlton | RCKa

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