

# Fire Door Installation

**Stick to the Spec was a key message in Fire Door Safety Week, which took place this year from 26th September to 2nd October, for every builder, contractor and installer: stay safe, save lives and stick to the specification. With pressure on contractors to bring projects in under budget, saving costs by specifying sub-standard, low-quality fire doors have been occurring.**

However, there are major risks to contractors and their clients if a specification is ignored. These include lack of adequate insurance protection, non-compliance with the Fire Safety Order, non-compliance with Building Regulations, in particular Regulation 38, and of course insufficient protection

for life or property. FDIS Certificated Inspectors are qualified to undertake fire door inspections.

## Installation

Installing a fire door is not as obvious as an ordinary one. The fire doors should be fitted in accordance with manuals and regulations to make sure their fire resistance will be kept.

- *Check seals*
- *Check hinges*
- *Check gaps (Gaps around and between the door leaves should be no more than 3mm.)*
- *Checking for certification*
- *Check if door close properly*

According to the national fire safety regulations, fire doors are required in almost every building built in the UK. The requirements specified here are based on the England and Wales Building Regulations.

## Regulation 38

Regulation 38 of the Building Regulations for England and Wales requires to provide the fire safety information to the occupants at the completion of a project, or when the building or extension is first occupied.

Contractor has to pass the following details to either HSE inspector, architect, project manager or client:

- The location and rating of every fire door in the building.
- The fire door certificate.
- The type of seal (intumescent / smoke seal / acoustic) fitted to the door or frame.
- Details of the door frame (hardwood, softwood, MDF etc.) and how that relates to the fire door test.
- Details of hinges, closers and other essential building hardware (CE marked) and how that relates to the fire door test.
- Maintenance information for each component, including the door leaf.
- Frequency of inspection and maintenance, depending on expected usage of the door.


**CHECK SEALS**

**CHECK HINGES**

**CHECK GAPS**

**CHECK SIGNAGE**

**CHECK IF DOOR CLOSE PROPERLY**

## Approved Document B – Fire Safety

### *Installation of fire doors*

Fire doors are required in domestic dwellings above two levels. Doors at all levels leading to the staircase must be a fire door if leads to a room. Moreover, fire doors are compulsory in loft conversions, between the house and integral garage, between the residential and commercial parts of the building. Please refer to regulations for rules in non-domestic premises (escape routes etc.).

### *Fire resistance period of fire doors*

Fire doors FD60 are required in buildings connected by the compartment wall. Such doors must be fire resistant for 60 minutes. In other situations, a 30 minutes fire door FD30 is acceptable. There are also fire doors FD20 with 20 minutes resistance, but such are not recommended by the BWF-CERTIFIRE Scheme.

### *Fire doors signage*

Adequate signs such as 'keep closed' etc. are required in non-domestic buildings.

### *Smoke seals requirement*

Smoke seals are required on doors in staircases and corridors or a front door. The 3mm gap should be left.

## Approved Document E – Resistance to Sound

The sound resistance of doors is necessary if doors separate the occupants of the building. Acoustic seals might be required on a fire door, including at the threshold.

## Approved Document F – Ventilation

For residential buildings, a ventilation gap to allow air movement of total 7600 mm<sup>2</sup> is recommended at the threshold of the door. It is recommended to measure from the highest finished floor covering to the bottom edge of the door, so for instance for a 762 mm wide door the 10mm gap will be required, (8 mm for a 926 mm wide door). This can be achieved by making an undercut of 10 mm above the fitted floor finish. Refer to architect's specification for ventilation requirements, in non-domestic buildings.

## Approved Document L – Conservation of fuel and power

Fire doors which lead to common corridors, garages or external doors will have to provide for

energy efficiency to ensure they keep heat loss to a minimum.

### Approved Document M – Access to and Use of Buildings

This document recommends usage of doors in buildings for disabled persons. Please refer to the document for details such as door widths, visual contrast of doors, opening force, vision panels, etc.

### Approved Document N – Glazing safety

When doors are located under 1500mm from floor level or if the smaller dimension of the glazing area is greater than 250mm.

Please note this information is for guidance only. Refer to relevant authority before implementation.

(Source: BWF-CERTIFIRE Fact Card, Building Regulations, November 2012)

## 5 things to check for fire door safety



### 1. CERTIFICATION

Look for a label, a plug or similar marking to show that it's certificated & follow the instructions. **IMPORTANT:** All ironmongery such as locks, latches, closers & hinges, **MUST** be CE marked & compatible with the door leaf's certification.



### 2. APERTURES

Altering the door for glazing apertures and air transfer grilles will make certification **VOID**.



### 3. GAPS & SEALS

Check the gap around the door frame is constant and around 3 to 4 mm & CE Marked hinges are firmly fixed with no missing screws. Ensure seals are fitted at the top and sides of the door.



### 4. CLOSERS

Check that the closer shuts the door onto the latch from any position – check from 75mm from the closed position.



### 5. OPERATION

Ensure the door closes correctly around all parts of the frame.