

Protect Yourself

A fire door is a door that is built to protect the spread of fire and to withstand fire for a designated period of time, FD30 – 30 minutes, FD60 – 60 minutes. Where fire doors are not provided to individual flats either the doors should be replaced or upgraded to offer the minimum required fire resistance or an early warning system (fire alarm) installed.

Where should fire doors be fitted?

Good building design divides corridors, escape routes and the building generally into compartments to help stop the spread of fire and smoke. The front door to a residential flat forms part of the compartmentation, to protect fire escaping from a flat and onto escape routes such as corridors and staircases. The front doors to individual flats belong to the flat owner and a typical lease will provide covenants that require an owner to comply with current statute and bye laws. So each flat owner has a duty to participate in building upgrades to comply with statute and bye laws.

What fire resistant period is required?

- In domestic dwellings doors should offer 30 minutes fire resistance (FD30).
- Doors which separate buildings, and sometimes basement areas should offer 60 minutes fire resistance (FD60)

Fire door rating	Standard fire door /doorset	Fire door & smoke seals
30 minutes	FD30	FD30s
60 minutes	FD60	FD60s
90 minutes	FD90	FD90s
120 minutes	FD120	FD120s

Components of a fire door installation

The fire resistance period is not achieved by the fire door alone:

Hinges



Self closer



Intumescent strips



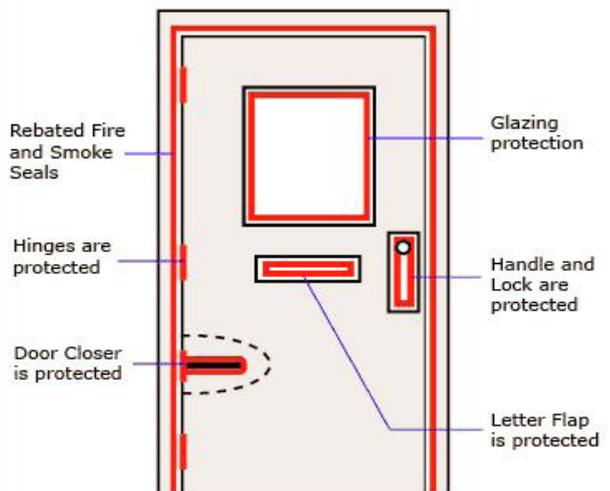
Intumescent paste



- Doors should be self-closing
- Intumescent strips should be fitted on doors and letterboxes to prevent smoke passing through compartment. These can be fitted with smoke seals combined - these smoke seals expand when a certain temperature is reached.
- Gaps at the Head, Hinge Side Lock/Latch Side and between meeting stiles shall be not more than 3 mm. Gaps at the bottom of the door should be no more than 10 mm.
- Hinges shall be 100 mm steel butt, 1½ pair (3 hinges) per leaf (brass hinges are permitted only when they have been tested and certified as part of a doorset). Rising butt hinges are not permitted. Hinges grades 07 and 09 can hold a maximum weight of 80kg, grade 07 hinges can hold door weights of up to 40kg.

The minimum thickness for a FD30 door is 44mm

Locations where intumescent strips are fitted



What might a timber fire doors costs?

£500 - £750 try <http://www.safeddoors.co.uk/fire-doors/>

- Locks
- Hinges
- Letterbox
- Intumescent strips
- Self-closer
- Installation



But what about my existing door? Can't I just upgrade that?

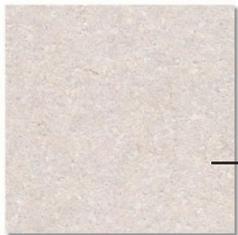
You can, but you need to consider these questions to weigh up whether to upgrade your existing door, or to get a complete new door. These include;

- What level of fire resistance is required?
- Will an upgrade satisfy the relevant authority
- Is ironmongery appropriate for use on a fire resisting doorset

Methods of upgrading include:

There is no 'one size fits all' method of upgrading, so each door should be taken on a case by case basis. The method of upgrading will depend on the construction, condition, and specific customer requirements. However, there are some options available and these include:

Facing the door leaf with a non-combustible board



This is one of the easiest and cheapest ways of upgrading, although the end result is not always desirable. However, with the increased weight on the door one should take care not to cause too much extra strain on the door frame and ironmongery.

Non-combustible boards are fixed to doors to give extra protection against fire.

Sandwiching glass panels

For panelled doors the weakest area is generally the panel itself. So one method of upgrading your door would be to remove the panels and insert a sandwich material. This could be either an intumescent sheet or a non-combustible board, thus keeping the original finish of the door. However, this can be more expensive than other methods of fireproofing doors.



Intumescent sheets can be sandwiched in between glass panels to give the extra strength and increase their durability against fire.

Intumescent paints and varnishes

Intumescent paints and varnishes are available for use on timber based door sets where 30 minutes integrity is required. These products require a specification and should only be applied by a specialist. It is also likely that other measures will be required in conjunction with such paints and varnishes.

Fire retardant paint is added to the timber finish of doors to give extra protection.

And, if I really don't want to update my fire door can I increase the fire resistance instead? Yes, where fire compartmentation is inadequate you might be able to install an inter-linked fire alarm in the flat and common parts to provide an early warning system instead. In the longer term this can be a costly as fire alarms require regular maintenance and testing.

