FIREDOORS

The idea of a fire door is to retain a fire for a specified length of time i.e. ½ hour to allow evacuation of the building.

A fire door can not do its job if not working correctly or wedged open

An external door does not need to be fire rated (but they are still a cost effective solid strong door for the purpose)

A fire door used externally needs to be of an external grade which is more expensive, to prevent the plywood de-laminating. Remember a fire break is only as good as its weakest point i.e. a 1/2 hour door in a one hour firebreak wall is not acceptable.

INSPECTING YOUR FIREDOORS

Doors should be a minimum of 44mm thick

Sound solid not hollow core when tapped

Have an even clearance around the frame with a max of 4mm

Gap at base should be maximum of 8mm

The frame or doors should have brush smoke seals in corridor area

Door should close smoothly and latch on its own accord

Surrounding area should be clear of clutter and obstructions

Fire doors and exit doors should not be locked while building in use

Vision panels should have an engraved kite mark stamp on the glass

Frame and door should not be loose or damaged

Doors should have correct signage, i.e. push to open, keep shut etc

At least three CE marked hinges should used and not be loose

TIP

Number each door in your building and keep a list of their locations

This makes reporting any problems and logging repairs easier

The list can be added to your fire risk assessment folder as part of your fire door inspections procedures.

We do not charge for local factory visits to assist yourselves in a fire inspection report and can if needed provide you with a free estimate for any work required

Contact Gary on 07831 144849 or e-mail gary@hunterbuilders.co.uk

STANDARD PANIC BARS

SINGLE PANIC BAR
2 point fixing top and floor
Grade 4 security 3000 Newtons
Most likely to require repair or maintenance

SINGLE PANIC LATCH & BAR
1 Point fixing at side
Grade 3 security 2000 Newtons
Less likely to go wrong or require maintenance if security not an issue.
Suitable for public areas

PUSH PAD PANIC LATCH
Grade 3 security 2000 Newtons
Suitable for non public areas

CHECK YOUR INSURANCE SECURITY REQUIRMENTS

Identifying a fire door

½ hour fire doors are 44 – 46mm thick
1 hour fire doors are 54 - 58mm thick
36mm door are just STD internal doors

Hollow sounding doors are not fire doors

Plastic doors are not fire doors

Doors may have there original label on the unpainted top edge

Any problems give us a call and we will visit site free of charge

Calculating exit capacity

Width of escape routes and exits

<table>
<thead>
<tr>
<th>Max number</th>
<th>Minimum width</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 persons</td>
<td>750mm</td>
</tr>
<tr>
<td>110 persons</td>
<td>850mm</td>
</tr>
<tr>
<td>220 persons</td>
<td>1050mm</td>
</tr>
</tbody>
</table>

i.e. 3 exit doors at 750mm wide is

3 x 60 = 180 people working in area

Minimum number of exists

Table showing the minimum number of escape routes and exits from a work area

<table>
<thead>
<tr>
<th>Max number</th>
<th>Minimum exits</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 persons</td>
<td>1 exit</td>
</tr>
<tr>
<td>600</td>
<td>2 exits</td>
</tr>
<tr>
<td>600+</td>
<td>3 exits</td>
</tr>
</tbody>
</table>

Maximum travel distance to exist

<table>
<thead>
<tr>
<th>Use of area</th>
<th>1 exit</th>
<th>2+ exits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>18mtr</td>
<td>45mtr</td>
</tr>
<tr>
<td>Shop</td>
<td>18mtr</td>
<td>45mtr</td>
</tr>
<tr>
<td>Industrial low Hazard</td>
<td>25mtr</td>
<td>45mtr</td>
</tr>
<tr>
<td>Industrial higher Hazard</td>
<td>12mtr</td>
<td>25mtr</td>
</tr>
<tr>
<td>Commercial</td>
<td>18mtr</td>
<td>45mtr</td>
</tr>
<tr>
<td>Assembly areas 18mtr</td>
<td>45mtr</td>
<td></td>
</tr>
<tr>
<td>Recreational</td>
<td>18mtr</td>
<td>45mtr</td>
</tr>
<tr>
<td>Storage</td>
<td>As industrial</td>
<td></td>
</tr>
</tbody>
</table>
FREQUENTLY ASKED QUESTION and ANSWERS

Which way should fire doors open?
Generally in the direction of traffic flow to the emergency exit
Office doors open into room to avoid obstructing the corridor

Can a fire exist door open inwards?
In certain circumstances where not practicable to open outwards it may providing less than 60 people in the area and work is low hazard

Can you bolt or lock an external fire escape door?
Yes, but must not be left locked while people are in the building

Do all fire doors require a self closing device or door spring?
Yes, except external doors and normally locked cupboards

Which doors require which size vision panels generally?
Full height — Entrance, lobby, reception, corridors, stairs
Top pane — Offices, workshops
None — external doors, toilets, cupboards, low use areas

Can you use a normal lock and handle set on a fire door?
Not on main corridors but OK on office doors etc.
Can be used on external doors if less than 60 people working in the area and no general public. Doors must unlock with one operation i.e. a thumb turn lock instead of having to locate a key as there may be no or poor lighting at time of the emergency

Do all doors require smoke seals and intumescent strips fitted?
Generally this would be standard for all new work
All main escape corridors and stair wells would require brush strips
Office doors not leading on to escape route would not require them
Rules other than escape corridors are more relaxed if two escape routes are available

How many steps are allowed immediately out side a fire exist?
One only allowed with a max height of 165mm high

If a vision panel has clear glass with kite mark is it fire proof?
Toughened or laminated safety glass have a kite mark but are unsuitable for fire protection check the BS number or the wording on the internet

Any way to hold open a fire door with out expensive electrical systems?
No, a fire door should be closed to allow it to work. We can supply and fit a delayed action door closer which will stay open at 90 deg for a short while to allow for example a trolley to be taken through without knocking the door

Can you put vents in fire doors for air flow?
Yes, but it requires a special intumescent insert that expands in the event of fire and seals the opening. This is not practable where both smoke protection and fire protection are required.

RISK ASSESSMENTS

It is now you job to prepare and regularly update a Fire Risk Assessment for your building as the Fire Brigade no longer do regular inspection visits. The assessment should include a log of all fire door inspections made and remedial actions taken.

For business not wishing to contract out this work, the Fire Department have a number of useful templates on their web site and you can select the one nearest to your style of operation and us it as a template free of charge. There is a lot of other useful information on this site www.twfire.gov.uk

BUILDING REGULATIONS

The Main documents relating to fire doors are listed below
Access and use of building amended April 2013 Document M
Fire Safety amended April 2013 Document B2
These are available in full on our web site www.hunterbuilders.co.uk

Also available to view and down load free of charge or purchase from www.planningportal.gov.uk/buildingregulations

VISION PANELS TO FIRE DOORS

Are normally clear wired glass
This glass should have an engraved kite mark in the bottom corner to indicate the glass is fire rated. Glass without this mark is no longer acceptable as some of the older glass panels had thinner wire in them and although still suitable for security can not be used for fire protection and will need replacing.
Pyro Clear glass without the wire in it is available but is very expensive and only used for expensive high end projects.
Some clear glass may have a kite mark engraved but must not be confused with safety glass.
The BS numbers can be easily checked on the internet some examples are below
BS EN 572-9 is fire rated
The examples below are not suitable for fire protection
BS EN 14449 is laminated safety glass
BS 3193 is toughened safety glass
BS EN 12150 is toughened safety

SMOKE SEALS AND INTUMESCENT STRIPS

Without brush strip — only fire protection
With brush strip - Fire & Smoke protection
Escape routes and corridors should have the strips upgraded if they do not include a brush strip to comply with the current regulations.
Normally the strips are in the door fames but we can router the door and fit strips if none exist and they are required.
Contact us for a quote as most types and colours of strips are held on stock at our workshops.

VISION PANELS TO FIRE DOORS

In corridors and circulation routes
The fire regulations require less visibility than the Access to use and disability acts one way to comply with all regulations in a corridor is below

Doors across circulation routes should have vision panels
Vision Panels

Vision panels in a corridor should cover low vision level but offices only need to cover higher vision level.

Normal clear glass is not acceptable in fire doors.

Special fire rated clear glass is now available but rarely used due to its incredible expense.

Normally wired clear glass is used for a ½ hour door (with special intumescent beading this can be upgraded to 1 hour).

Wired glass should be engraved with a sign in the corner which says Fire rated safety glass (a thicker grade of wire mesh is used).