Fire Door Inspection, Maintenance and Servicing

BWF-Certifire Fire Door and Doorset Scheme

John Fletcher – BWF-Certifire Scheme Marketing

Today's agenda

- The BWF-Certifire Fire Door and Doorset Scheme
- Fire safety – it's your responsibility
- Why Fire Doors work in a fire – How do I know they will?
- Regulations that you need to know about
- What to look for when checking Fire Doors
- What action to take if not fit for purpose
- Questions and answers

We take fire doors for granted

We expect them to have been installed correctly. . . .
. . . with correct components because

if a fire breaks out . . . . . .

. . . . they're expected to save lives

& protect property

Fire doors at sister block in Camberwell : *Source : London Standard*

July 3rd : Lakanal House Camberwell :
Source London :Standard

We just don't know . . .

- When a fire will break out
- A new building must comply with current building standards / regulations
- An existing building MUST continue to operate
  - Ventilation
  - Energy
  - Mobility requirements
  - Fire
- We need to check that all parts are functioning correctly

Kick the Wedge Survey

Fireco Ltd . Jan 2007

- Survey 100 Accredited Fire Risk Assessors / Fire Safety Officers

Issue	Result %
Inspection where flammable / explosive materials are used / stored hazardously	80
Inspections where Fire Exits were obstructed	80
Inspections where Fire Doors were wedged open	65
Inspections where door closer mechanisms have been removed or disengaged	80
Inspections where Escape Routes are not adequately indicated	70

The impact of the RRO

Regulatory Reform (Fire Safety) Order : 2005

- Replaced 118 pieces of previous Fire safety legislation
  - Fire Precautions Act 1972 + Fire Precautions (Workplace) Act 1997
- Brought about focus on the need for increased fire safety and reduction of fire hazards.

- 'Eliminate or reduce the risk from fire as far as is reasonably practical . . . and deal with any residual risk'.
  - Includes attention to escape routes
  - need for greater fire door inspection and maintenance
  - all buildings excluding domestic housing.

The outcome for BWF

- BWF DVD ‘Fire Doors- Your Responsibility’ has increased the awareness of the dangers of badly fitted and maintained fire doors and the what rectification is likely.

- BWF has received considerable response from facilities managers, inspectors and building owners for gap testers along with additional copies of the DVD.

- BWF also been contacted by companies who annually inspect fire extinguishers & who have also been asked to undertake inspections of fire doors by their clients.

HMO Network Workshop

THE BWF-CERTIFIRE FIRE DOOR SCHEME

What is the BWF-Certifire Fire Door and Doorset Scheme?

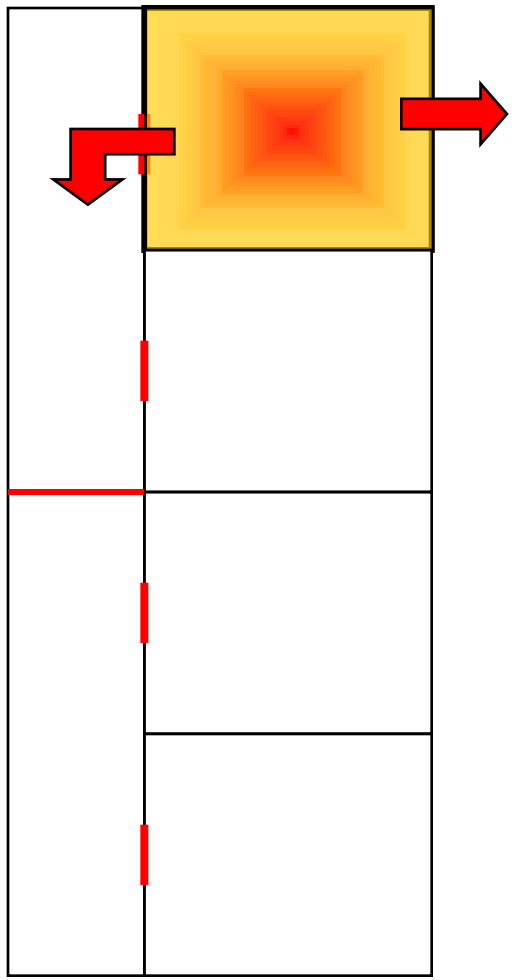
- What are fire doors and doorsets?
- What the BWF Scheme is about
- Why do they have to be certificated?

Fire doors

- Are part of a passive fire system
- A requirement in compartmenting a building
- Must be tested to show the design will work in a fire.
- Can only work correctly when
  - Fitted with the correct compatible components
    - Door + frame / linings
    - Closers
    - Hinges and other ESSENTIAL ironmongery

Compartmentation

- Means of Escape
- Internal Fire Spread *(doors)*
- Internal Fire Spread *(linings)*
- Internal fire spread *(structure)*
- External fire spread
- Access & facilities for the fire service



Compartmentation

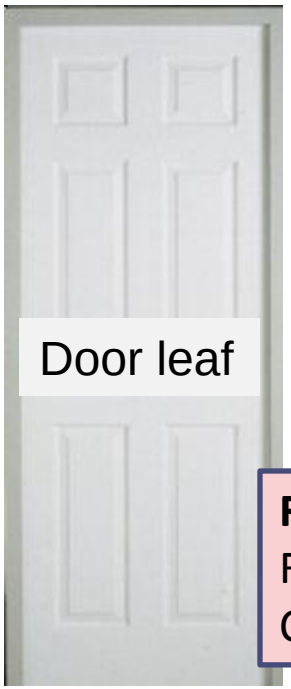
- Means of Escape
- Internal Fire Spread *(doors)*
- Internal Fire Spread *(linings)*
- Internal fire spread *(structure)*
- External fire spread
- Access & facilities for the fire service

Doorsets

Doors supplied complete with frame / seals / glazed apertures and all ironmongery in one single unit

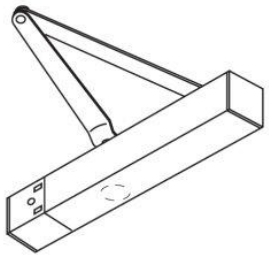
Fitted as a complete installation

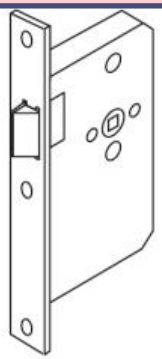
Door leafs



Fire door assembly
Fire door leaf / approved frame / casing
Compatible Approved Components

Door frame / casing / lining





CE marked Certifire Approved components – compatible with door test

Door test

Test furnace

Door test sample

Tested as a complete assembly

BWF-CERTIFIRE Fire Door & Doorset Scheme? What does it mean?

It is

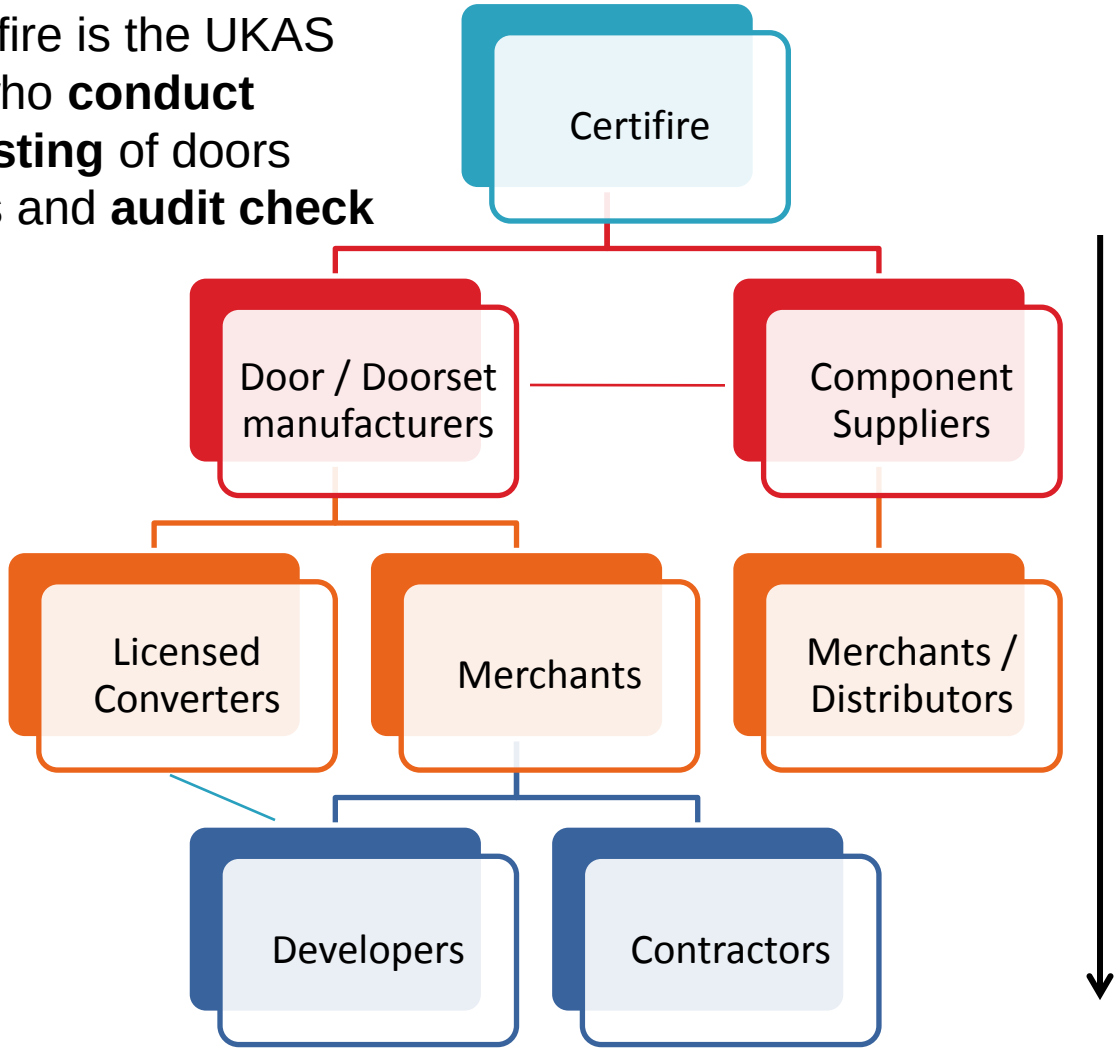
- A product guarantee scheme - through certification and audit
- An alliance across the supply chain

It means

- Clear, simple traceability of doors
- Vigorous promotional campaign to encourage best practice methods

3rd party Accreditation

Warrington Certifire is the UKAS test laboratory who **conduct independent testing** of doors and components and **audit check** members



Doors + components can be traced up or down the supply chain

The importance of compatibility

A successful fire door test proves that a particular door configuration will work . . . .

. . . . but it doesn't prove that any variation can be relied upon in a fire.

We must ensure that the door and its frame / hinges / closers etc. are compatible

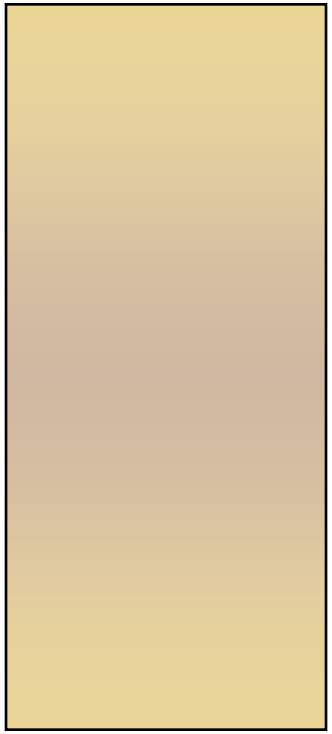
The importance of compatibility

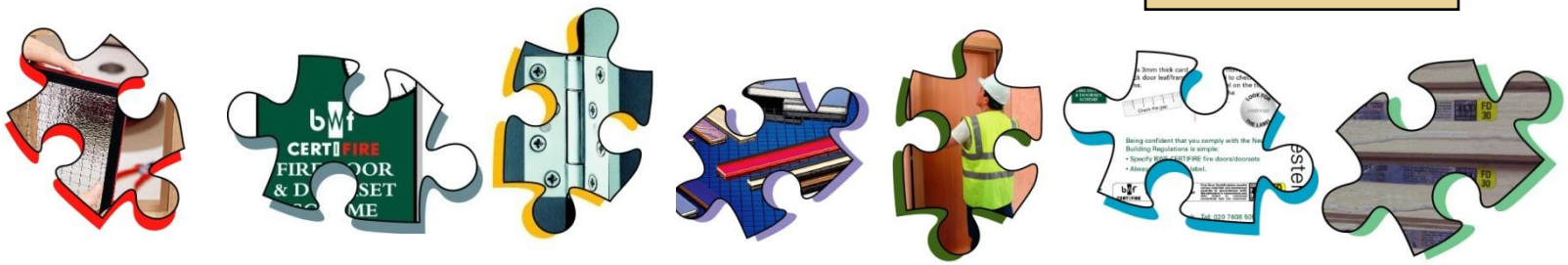
Think of it like a jigsaw…

all the pieces have to fit

together with the

door!

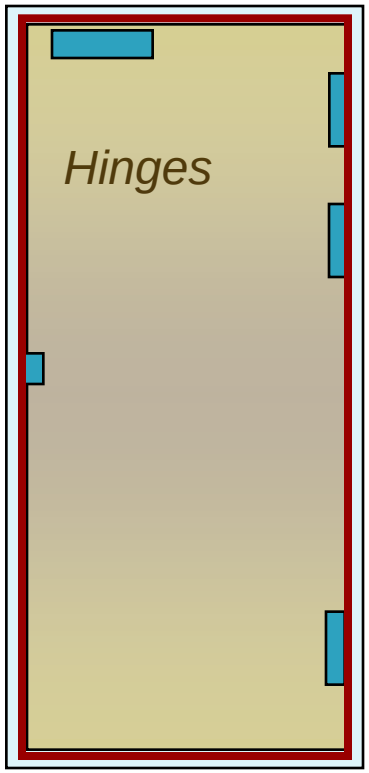




The importance of compatibility

Closers

Frames / linings



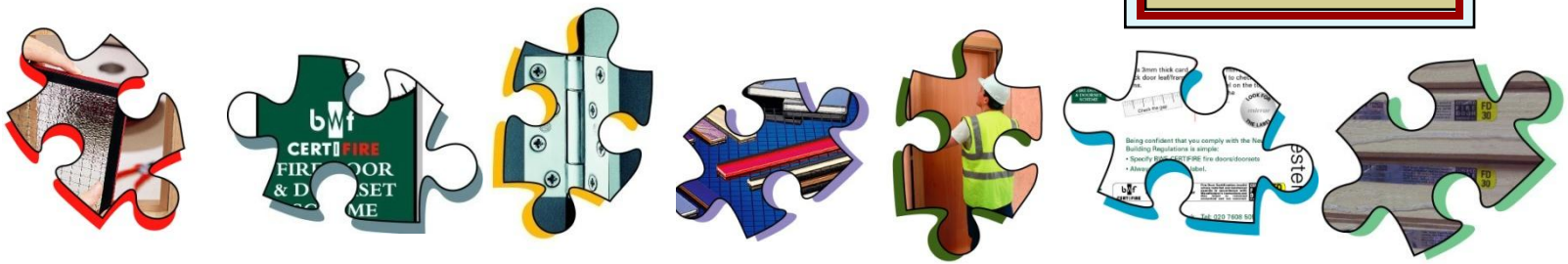
It's very important…

That ALL products

Latches

are compatible with the doors

Intumescent strips



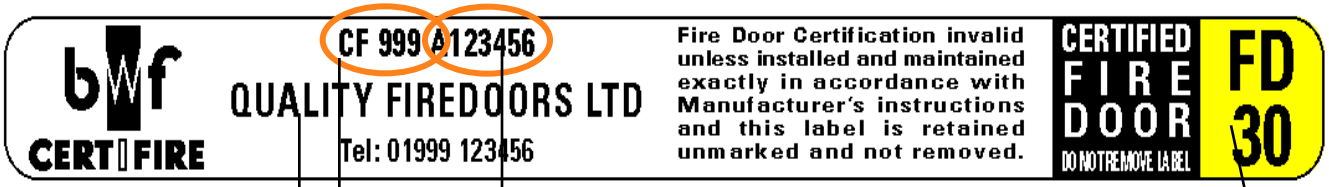
Identifying fire doors

- **Plugs**
- **Weight**
- **Thickness**
- **Catalogue**
- **Invoice**

- **Label**
  - Traceable information
  - Manufacturer
  - Contact details
  - Type of fire door
  - Proof of testing
  - Suitability for application

Traceable label system

Permanent, Tamper Evident, Full Traceability

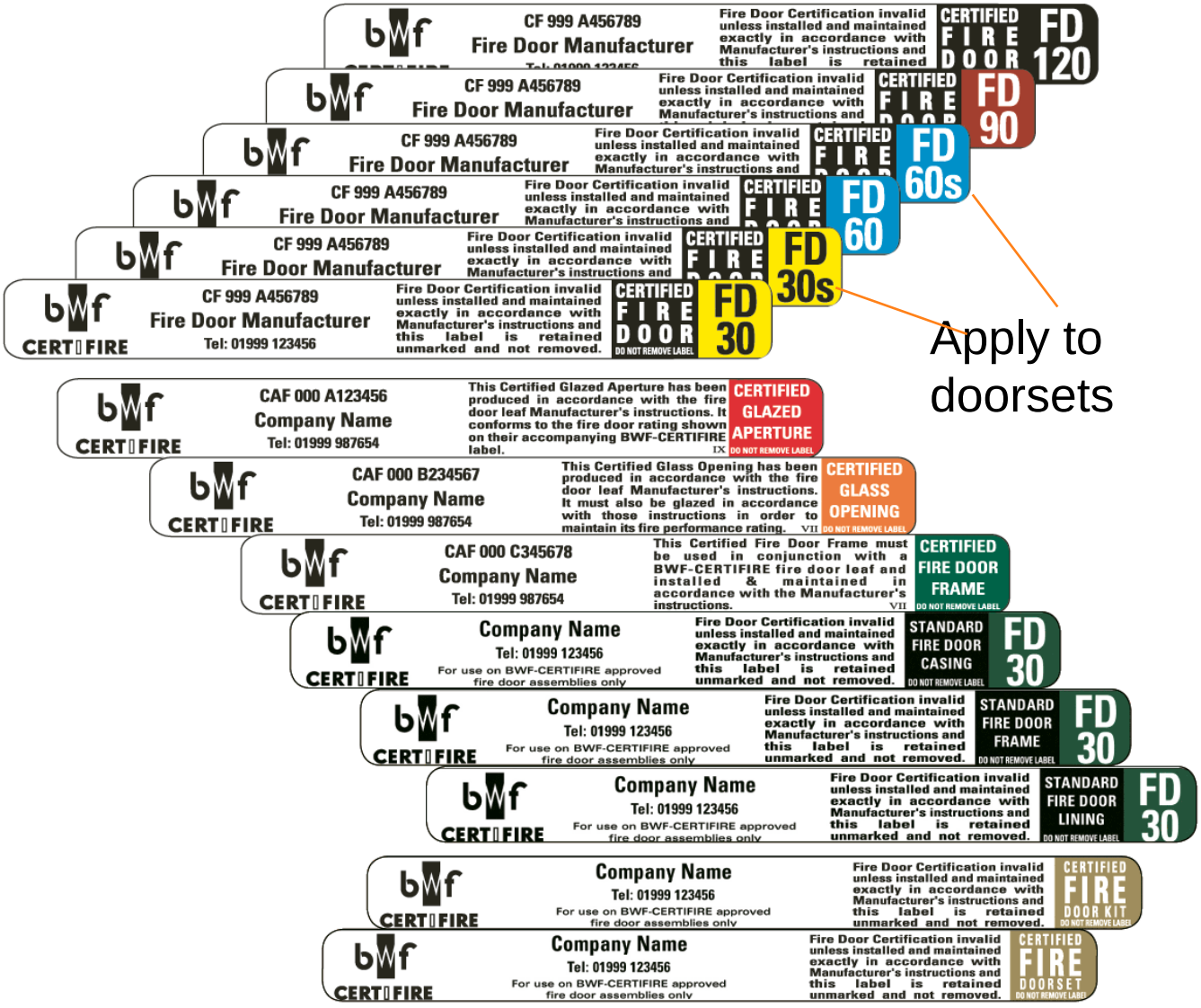


Manufacturer and contact details

Mfctrs Certifire No.

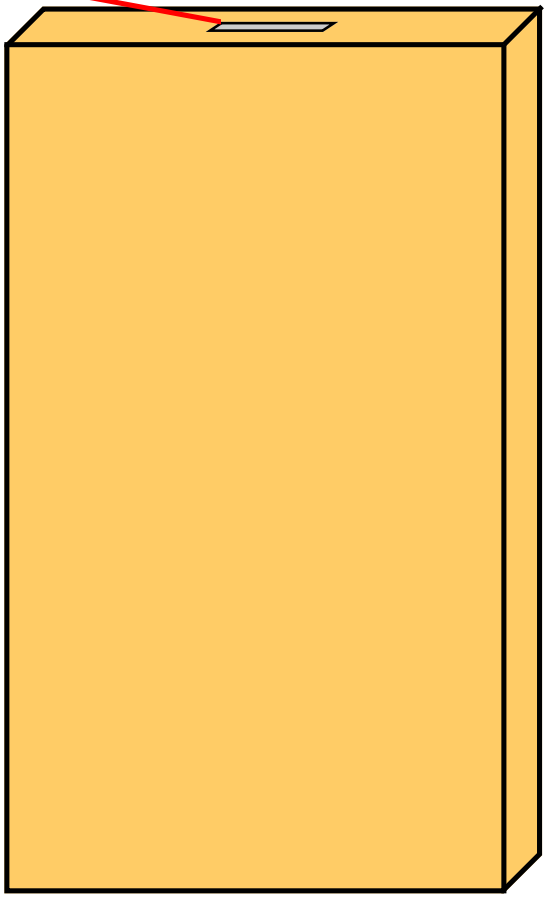
Unique door No.

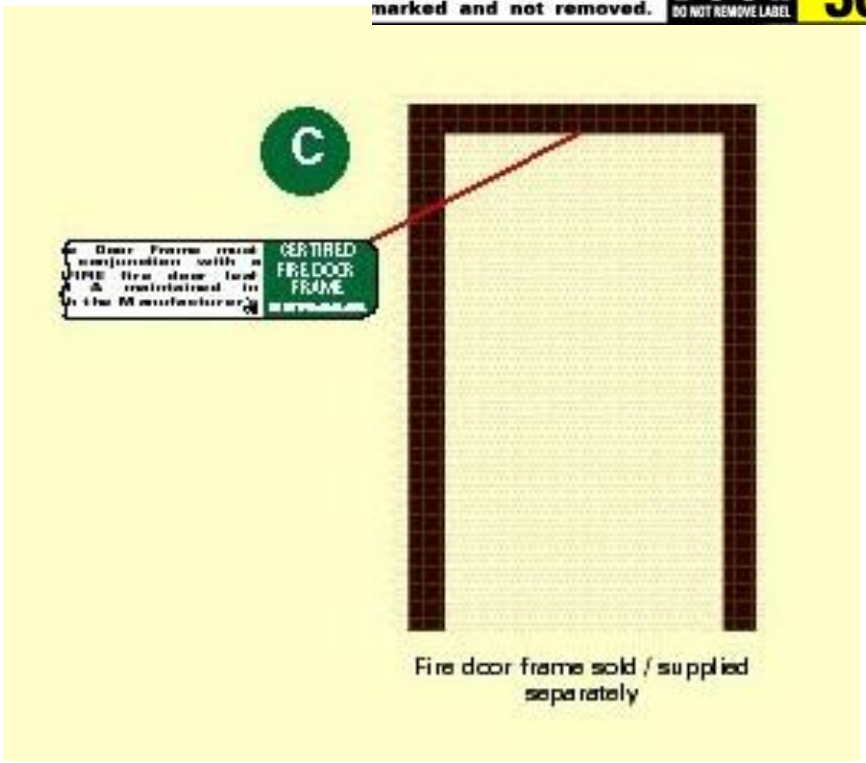
Fire door rating


CF 999 A456789
Fire Door Manufacturer
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained
CERTIFIED FIRE DOOR FD 120
CF 999 A456789
Fire Door Manufacturer
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and
CERTIFIED FIRE FD 90
CF 999 A456789
Fire Door Manufacturer
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and
CERTIFIED FIRE FD 60s
CF 999 A456789
Fire Door Manufacturer
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and
CERTIFIED FIRE FD 60
CF 999 A456789
Fire Door Manufacturer
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and
CERTIFIED FIRE FD 30s
CERTIFIRE
CF 999 A456789
Fire Door Manufacturer
Tel: 01999 123456
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained unmarked and not removed.
CERTIFIED FIRE DOOR FD 30
DO NOT REMOVE LABEL
Apply to doorsets
CERTIFIRE
CAF 000 A123456
Company Name
Tel: 01999 987654
This Certified Glazed Aperture has been produced in accordance with the fire door leaf Manufacturer's instructions. It conforms to the fire door rating shown on their accompanying BWF-CERTIFIRE label.
IX
CERTIFIED GLAZED APERTURE
DO NOT REMOVE LABEL
CERTIFIRE
CAF 000 B234567
Company Name
Tel: 01999 987654
This Certified Glass Opening has been produced in accordance with the fire door leaf Manufacturer's instructions. It must also be glazed in accordance with those instructions in order to maintain its fire performance rating.
VII
CERTIFIED GLASS OPENING
DO NOT REMOVE LABEL
CERTIFIRE
CAF 000 C345678
Company Name
Tel: 01999 987654
This Certified Fire Door Frame must be used in conjunction with a BWF-CERTIFIRE fire door leaf and installed & maintained in accordance with the Manufacturer's instructions.
VII
CERTIFIED FIRE DOOR FRAME
DO NOT REMOVE LABEL
CERTIFIRE
Company Name
Tel: 01999 123456
For use on BWF-CERTIFIRE approved fire door assemblies only
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained unmarked and not removed.
STANDARD FIRE DOOR CASING FD 30
DO NOT REMOVE LABEL
CERTIFIRE
Company Name
Tel: 01999 123456
For use on BWF-CERTIFIRE approved fire door assemblies only
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained unmarked and not removed.
STANDARD FIRE DOOR FRAME FD 30
DO NOT REMOVE LABEL
CERTIFIRE
Company Name
Tel: 01999 123456
For use on BWF-CERTIFIRE approved fire door assemblies only
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained unmarked and not removed.
STANDARD FIRE DOOR LINING FD 30
DO NOT REMOVE LABEL
CERTIFIRE
Company Name
Tel: 01999 123456
For use on BWF-CERTIFIRE approved fire door assemblies only
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained unmarked and not removed.
CERTIFIED FIRE DOOR KIT
DO NOT REMOVE LABEL
CERTIFIRE
Company Name
Tel: 01999 123456
For use on BWF-CERTIFIRE approved fire door assemblies only
Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained unmarked and not removed.
CERTIFIED FIRE DOORSET
DO NOT REMOVE LABEL


e Door Certification invalid
ess installed and maintained
actly in accordance with
nufacturer's instructions and
s label is retained
marked and not removed.
CERTIFIED
FIRE
DOOR
DO NOT REMOVE LABEL
FD
30


Always look for the BWF label...
A
FD 30
FIRE DOOR MANUFACTURER
Factory assembled fire door set

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d in accordance with the fire
f Manufacturer's instructions. It
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accompanying BWF-CERTIFIRE
IX
CERTIFIED
GLAZED
APERTURE
DO NOT REMOVE LABEL
e Door Certification invalid
ess installed and maintained
actly in accordance with
nufacturer's instructions and
s label is retained
marked and not removed.
CERTIFIED
FIRE
DOOR
DO NOT REMOVE LABEL
FD
30
C
CERTIFIED
FIRE DOOR
FRAME
Fire door frame sold / supplied
separately

Why doors have to be certificated

- **YOU** need proof of fitness for purpose
  - Compliance with building regs.
- A test certificate indicates that the door configuration will work in a fire
- What many fail to realise - that the COMPLETE ASSEMBLY must be installed as it was tested
  - Components as well as door

certifire

CERTIFICATE OF APPROVAL
No CF 380

PREMDOR CROSBY LIMITED

Huddersfield Road, Darton, Barnsley, S75 5JS
Tel: 01226 383434 Fax: 01226 388808

CERTIFIED PRODUCT

Premdor Crosby Limited
FD30 Tube Core LITE

TECHNICAL SCHEDULE

TS10 Fire Resisting Door Assemblies with Non Metallic Leaves

Sir Ken Knight
Chairman - Management Council
Page 1 of 3

Issued: 26th October 2004
Revised: 20th November2006
Valid to: 25th October 2009

Certificates for companies in the scheme can be downloaded at http://www.warringtonfire.net/certifire/Products.asp?c=2

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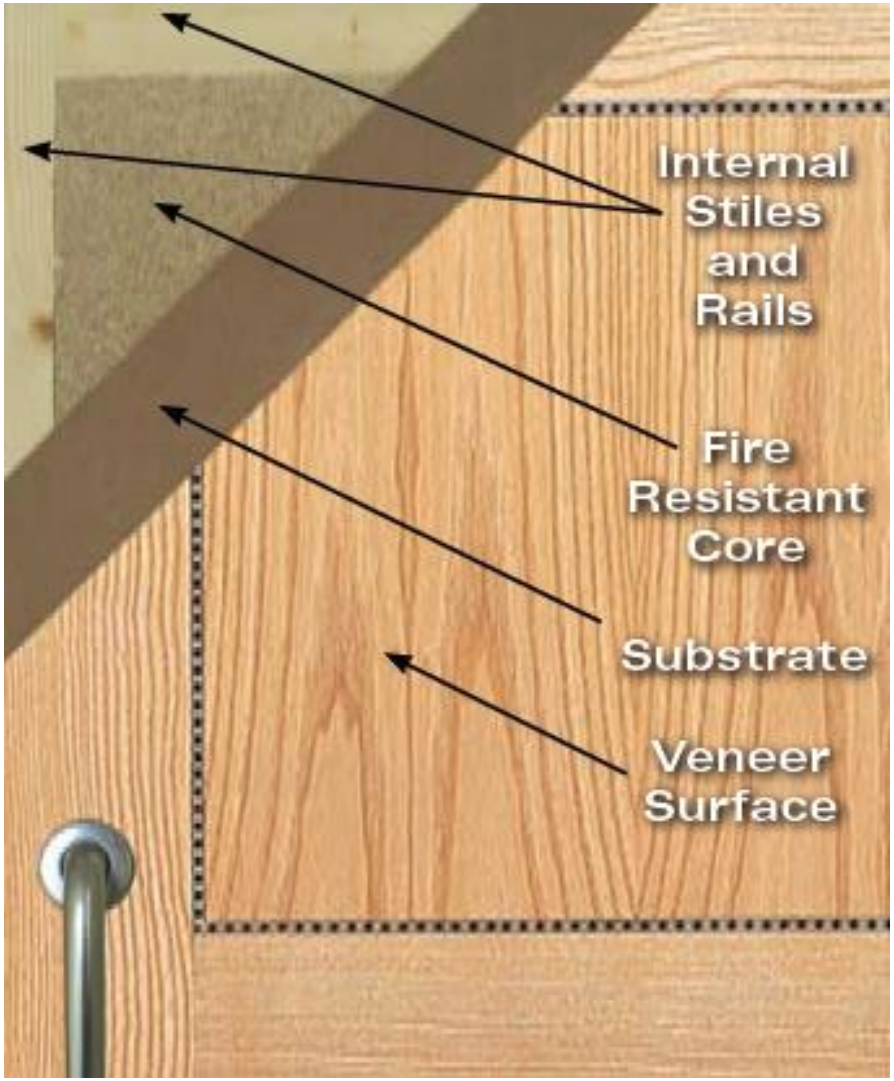
WHY FIRE DOORS WORK IN A FIRE

Why Fire Doors work - How do I know they will?

- The difference between a standard door and a Fire Door.
- Why they work in a fire - and an ordinary door will not.
- What the test evidence will tell you.


CHILT-RF

How a fire door works

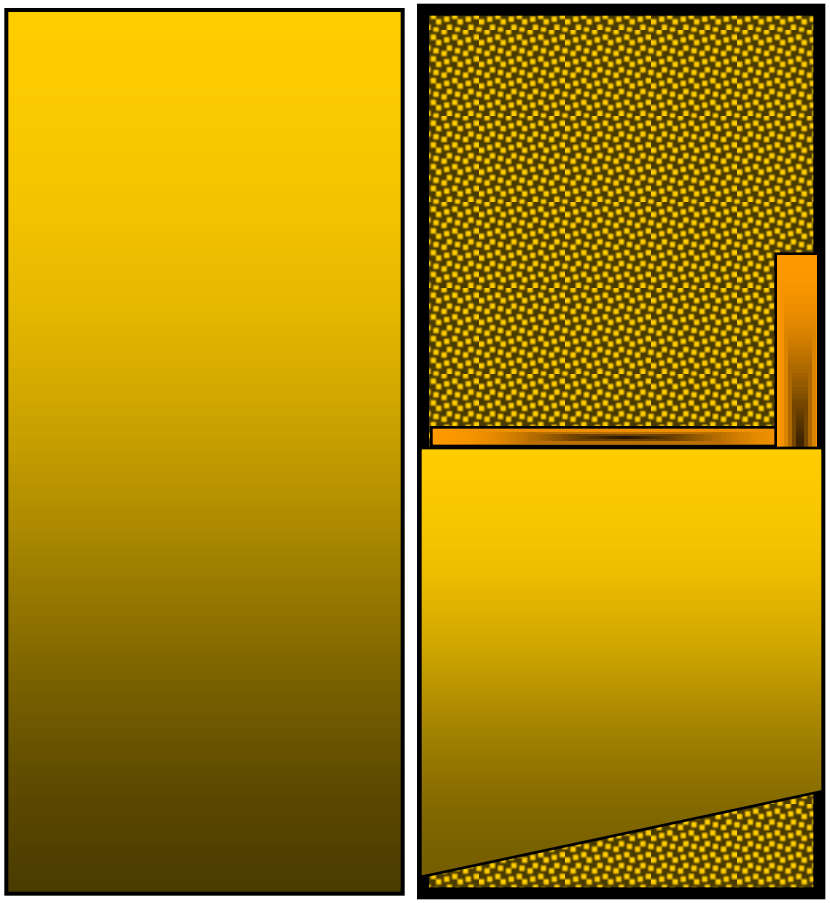


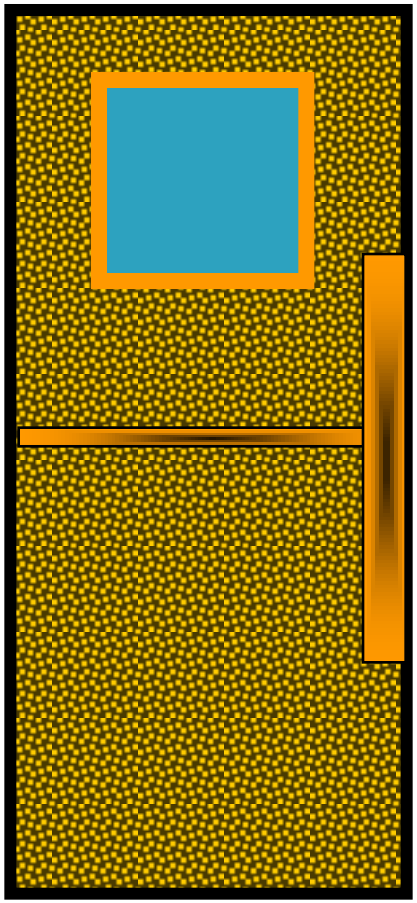
Fire door composition

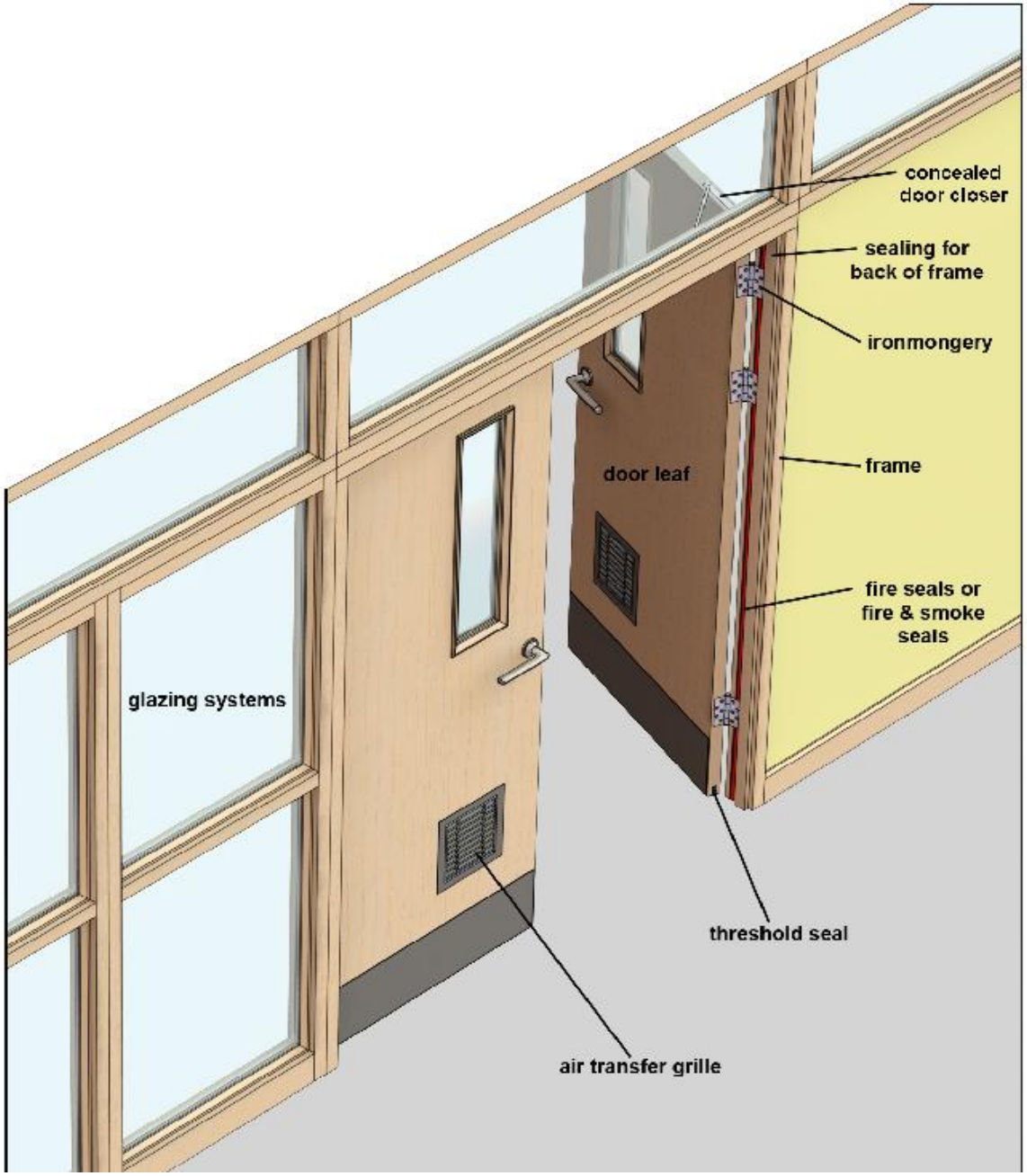
Door skin

Door core + blocking

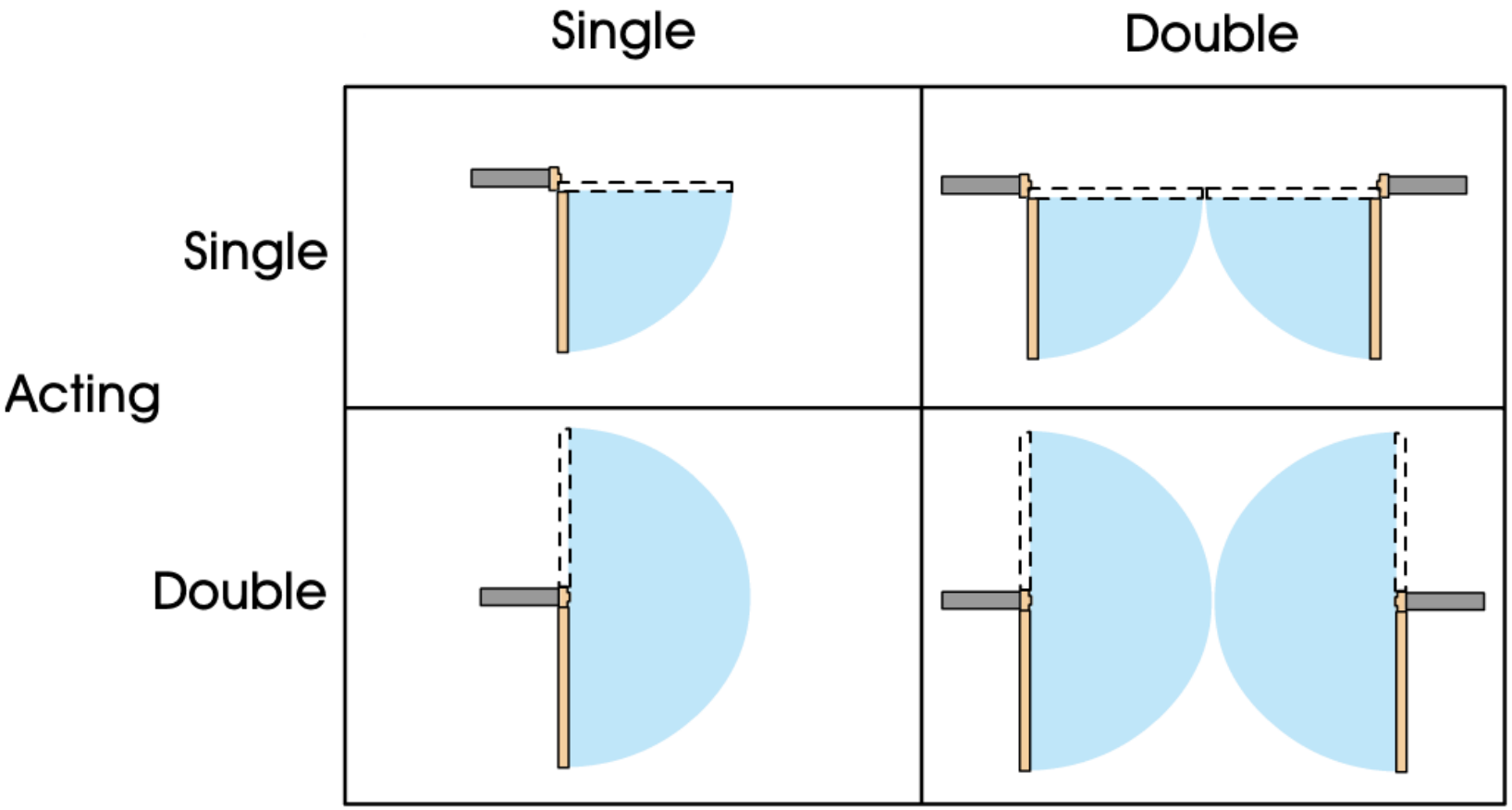
Removal of the core will weaken the door.

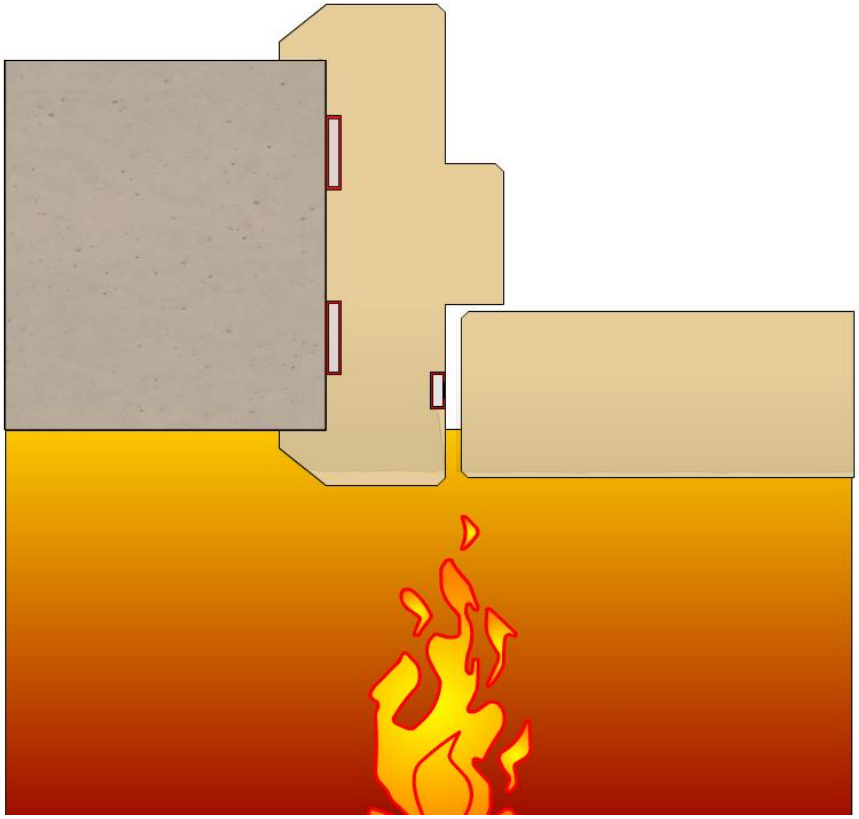


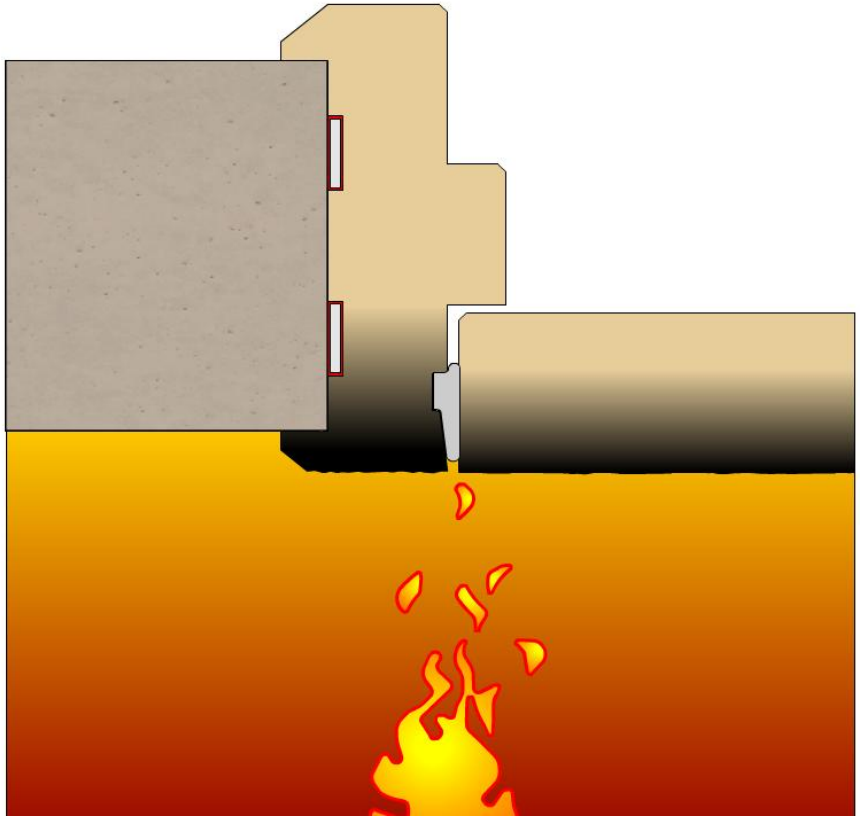



concealed door closer
sealing for back of frame
ironmongery
frame
door leaf
fire seals or fire & smoke seals
glazing systems
threshold seal
air transfer grille

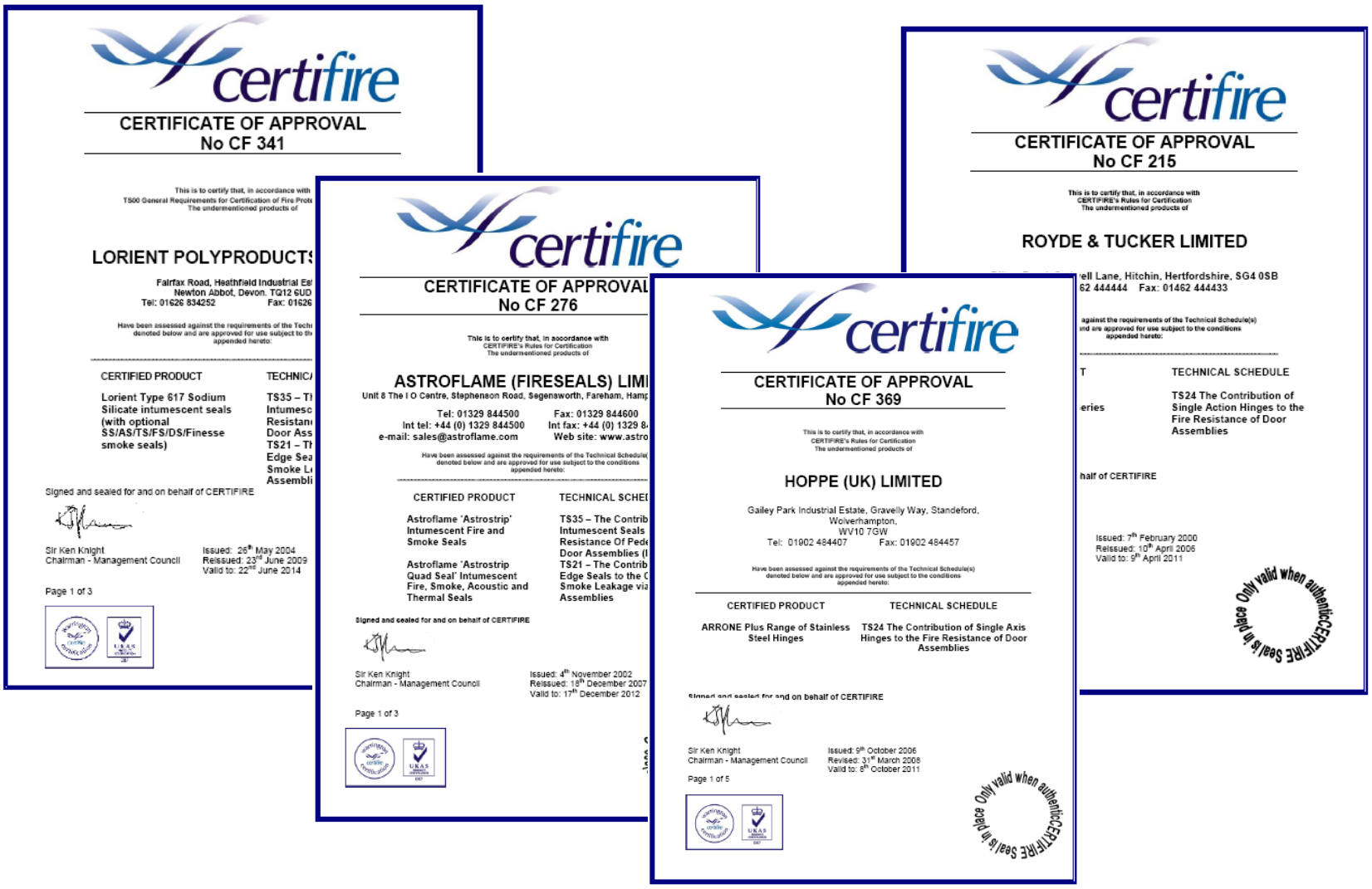
Each configuration requires a test to prove it will work







CE Marked & Certifire Approved



certifire

CERTIFICATE OF APPROVAL
No CF 341

LORIENT POLYPRODUCTS

Fairfax Road, Heathfield Industrial Est
Newton Abbot, Devon. TQ12 6UD
Tel: 01626 834252 Fax: 01626

CERTIFIED PRODUCT

Lorient Type 617 Sodium Silicate intumescent seals (with optional SS/AS/TS/FS/DS/Finesse smoke seals)

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight
Chairman - Management Council

Issued: 25th May 2004
Reissued: 23rd June 2009
Valid to: 22nd June 2014

Page 1 of 3

certifire

CERTIFICATE OF APPROVAL
No CF 276

ASTROFLAME (FIRESEALS) LIMI
Unit 8 The I O Centre, Stephenson Road, Segensworth, Fareham, Hamp

Tel: 01329 844500 Fax: 01329 844600
Int tel: +44 (0) 1329 844500 Int fax: +44 (0) 1329 8
e-mail: sales@astroflame.com Web site: www.astro

CERTIFIED PRODUCT

Astroflame 'Astrostrip' Intumescent Fire and Smoke Seals

Astroflame 'Astrostrip Quad Seal' Intumescent Fire, Smoke, Acoustic and Thermal Seals

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight
Chairman - Management Council

Issued: 4th November 2002
Reissued: 18th December 2007
Valid to: 17th December 2012

Page 1 of 3

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CERTIFICATE OF APPROVAL
No CF 369

HOPPE (UK) LIMITED

Gailey Park Industrial Estate, Gravelly Way, Standeford,
Wolverhampton,
WV10 7GW
Tel: 01902 484407 Fax: 01902 484457

CERTIFIED PRODUCT

ARRONE Plus Range of Stainless Steel Hinges

TECHNICAL SCHEDULE

TS24 The Contribution of Single Axis Hinges to the Fire Resistance of Door Assemblies

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight
Chairman - Management Council

Issued: 9th October 2006
Revised: 31st March 2008
Valid to: 8th October 2011

Page 1 of 5

Only valid when authentic CERTIFIRE Seal is in place

certifire

CERTIFICATE OF APPROVAL
No CF 215

ROYDE & TUCKER LIMITED

ell Lane, Hitchin, Hertfordshire, SG4 0SB
62 444444 Fax: 01462 444433

TECHNICAL SCHEDULE

TS24 The Contribution of Single Action Hinges to the Fire Resistance of Door Assemblies

eries

half of CERTIFIRE

Issued: 7th February 2000
Reissued: 10th April 2006
Valid to: 9th April 2011

Only valid when authentic CERTIFIRE Seal is in place

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REGULATIONS THAT YOU NEED TO BE AWARE OF

Regulations affecting Fire Doors

- Building Regulations
- Other regulations;
  - Health and Safety
  - The RRO
- Impact on insurance policies

		Regulatory Parts		
Performance	Notes	England & Wales - Approved Documents	Scotland - Secions	Northern Ireland - Technical booklets
Fire Safety	- Where a Fire Door is required - The fire resistance period expected - Specific requirements eg smoke seals & signage	B	2	E
Sound	- Minimum sound resistance performance of the door	E	5	G
Ventilation	- Minimum air trasfer gap required under the door	F	3	K
Thermal	- Minimum thermal performance of the door if required	L	6	F
Accessibility	- Access to buildings for disabled people, including door width, hardware locations,opening forces, provision of vision panels and light reflectance values required	M	3	R
Safety Glazing	- Where safety glass is required	N	4	V

The RRO and Fire Doors

- Applies to ‘any person who exercises some level of control in all premises to take reasonable steps to reduce the risk from fire and ensure occupants can safely escape if a fire does occur’.

- Called the ‘Responsible Person’

- Although introduced Oct 2005, effective from October 1st 2006.

The Effect

- ‘Responsible Person’ required to carry out Fire Risk Assessment
- Created need for training and certification of Fire Risk Assessors
  - Warrington Certification 3rd party certification scheme for Fire Risk Assessors in conjunction with RICS
- Register of Competent Fire Risk Assessors
  - Looking to develop Approved Fire Door Inspectors along similar lines
- Other companies (service engineers / inspectors) being asked to carry out fire door inspections)
- Many organisations still trying to get to grips with ‘Competent Persons’
  - NHS / Prisons / Retail Outlets / Hotels / HMO’s / Landlords/ FM companies

RRO and Fire Doors

- A maintenance log should be kept, with all Fire Doors given a unique number
- Maintenance period should be appropriate for the type of building; high life risk, such as hospitals, schools and care homes should be monthly, but other buildings maybe bi-annual.
- Only products of equal or better standard should ever be fitted as replacements; as anything less could invalidate the doors Fire Certificate.
- Building Controllers can then use the inspections from the Maintenance log in their regular fire drills and routine fire precaution inspections.

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WHAT TO LOOK FOR WHEN CHECKING FIRE DOORS

What to look for when checking Fire Doors

- Doors & Frames
- Intumescent Seals
- Ironmongery
- Glazing Detail
- Fire Rated ATG’s
- Gaps

Label

- Has the Fire Door got a BWF – Certifire Scheme label on the head (top) of the door?

- If not, can you confirm that the door is a Fire Door and has been certificated as such?
  - Do you have handover documents?
  - Invoices or other information to help you find out

Door Leaf

- Does the door leaf sit in the door frame, free from distortion?
- Is the door leaf free from damage?
- If the door leaf is veneered or lipped, is the glue still holding these products firmly in place?

Door Frame

- Is the door frame firmly attached to the wall?
- Is the planted stop firmly attached to the frame?
- Is the frame to door leaf gap consistently 3mm (with a tolerance of +/- 1mm)?

Fire & Smoke Seals

- Is the Fire Door an **FD30(S)** or an **FD60(S)**?
- Are there any seals present in the door leaf or frame?
- Are the seals free from damage?
- Are the seals continuous around the door leaf's perimeter?
- Are the intumescent seals, graphite or sodium silicate?
- If combined fire and smoke seals, are the fins or brushes free from damage?
- Is the door leaf to frame gap still 3mm (+/- 1mm)?

Hinges

- Is there a CE mark?
- Are there a minimum of 3no x 100mm hinge leaves present, complete with screws?
- Are the screws tight and are they all effectively holding the door leaf or frame?
- Are the hinges free from oil leakage or metal fragments, which is a sign of excessive wear + tear?
- Check for wear on hinge knuckles and the pivot pin
- Light lubrication may be required

Door Closers

- Is there a CE mark?
- Is the closer correctly attached to the door leaf and frame?
- Is the closer free of damage and not leaking any oil?
- If you open the door 5° or 75mm, will it close the door and engage the latch?
- If the arms are disengaged, is the Fire Door (when closed) in line with the frame and the intumescent seal?
- Pivoting arms and terminal fixings need to be checked for tightness and lubricated as appropriated.
- Opening, closing and latching speeds should be regularly checked and adjusted.

Electro-Mag Hold Open Devices

- Is there a CE mark?
- Periodic checks must be conducted with the fire/smoke alarm tests weekly (as required in RRO).
- Does the hold-open device release the door when the power to the door is cut?
- If you open the door 5° or 75mm, will it close the door and engage the latch?
- Is the magnet (if separate) fixed on the same plane as the door closer?
- Check the door is not warped – sometimes caused by using the device over a long period

Floor Springs

- Is there a CE mark?
- Careful inspection of the lower pivot area should be taken to remove any debris which may prevent closing.
- The upper pivot should not show any signs of wear and any indicated wear must be rectified to prevent the door jamming at critical times.
- If you open the door **5°** or 75mm, will it close the door and engage the latch?
- If double action does the door centre everytime and without ‘play’.

Lock or Latch

- Is there a CE mark?
- Bolts for locks or latches should be regularly checked to ensure that they fit centrally into their respective keeps, and hold the Fire Door into the frame.

Panic + Emergency Exit Devices

- Is there a CE mark?
- Moving parts should be checked for wear and tear and replaced as required.
- Lubrication should be used where indicated.
- Screws and all fixings should be tested to ensure that they are secure.
- Electro-Mag devices should be tested with power off to ensure their continued use is available following power cuts.
- Floor sockets should be checked and cleaned regularly.
- Use of cable ties to prevent unauthorised use is illegal.
- Does the door lock when closed?

Glazing Detail

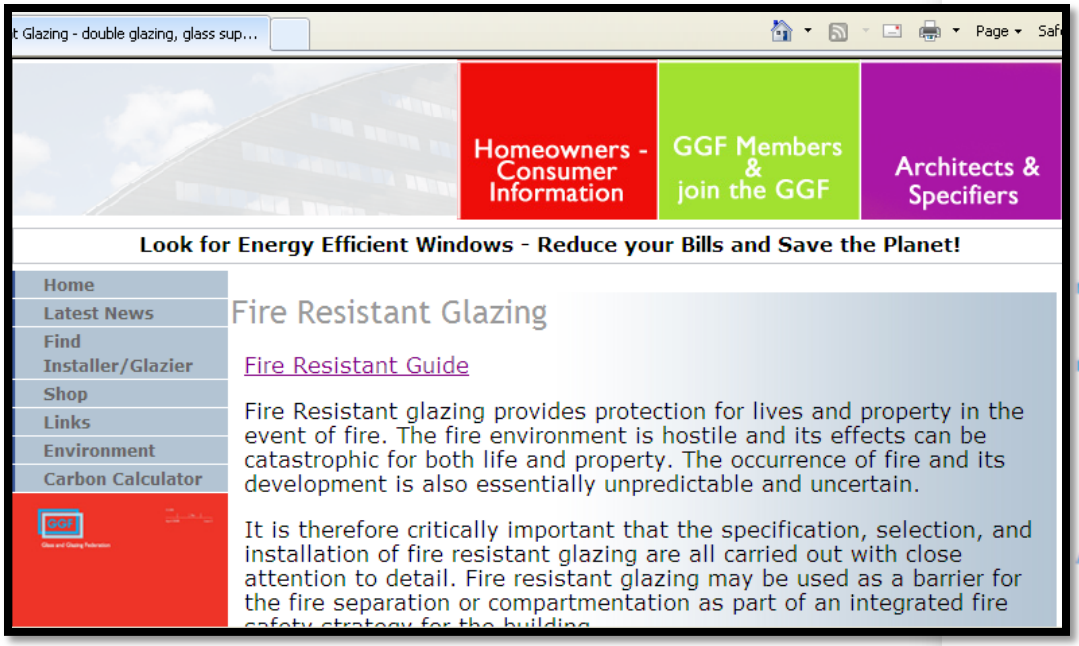
- Are the glazing beads well attached to the door leaf and free from damage?
- Is the glass free from damage and cracking?
- Is the intumescent glazing seal continuous and attached to both the glass and bead?
- If the glass is below 1500mm from the bottom of the door is the glass a fire rated safety glass?

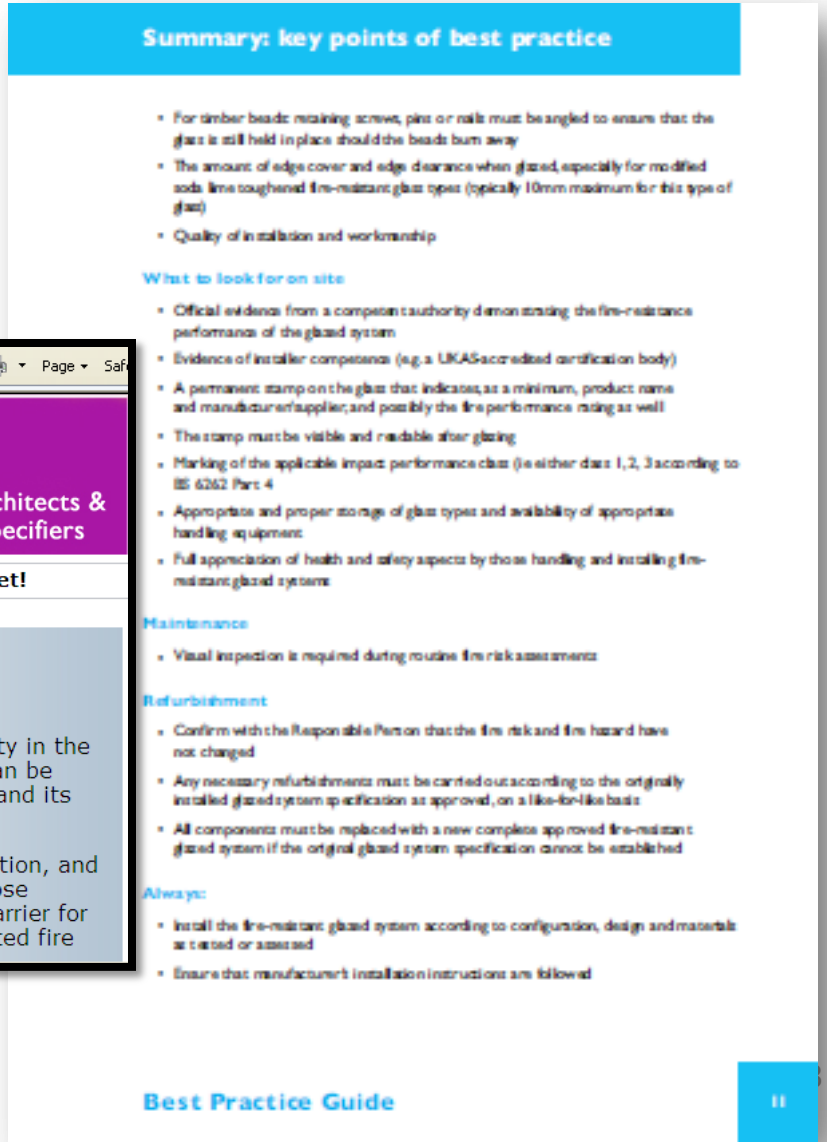
Glass – what to look for

- Official evidence from a competent authority demonstrating the fire-resistance performance of the glazed system
- Evidence of installer competence (e.g. a UKAS-accredited certification body)
- A permanent stamp on the glass that indicates, as a minimum, product name and manufacturer/supplier, and possibly the fire performance rating as well
- The stamp must be visible and readable after glazing
- Marking of the applicable impact performance class (ie either class 1, 2, 3 according to BS 6262 Part 4)

Fire resistant glass - guidelines

Glass and Glazing Federation
Best Practice Guide
http://www.ggf.org.uk/frrg.aspx





Threshold Gap

- If a Fire Door – the permissible threshold gap is **10mm**.
- If a Fire and Smoke Door – the permissible threshold gap should be **3mm** – the same as the perimeter gap.
- Does the door freely swing, without binding?

HMO Network Workshop

WHAT IF THE FIRE DOOR IS NOT FIT FOR PURPOSE?

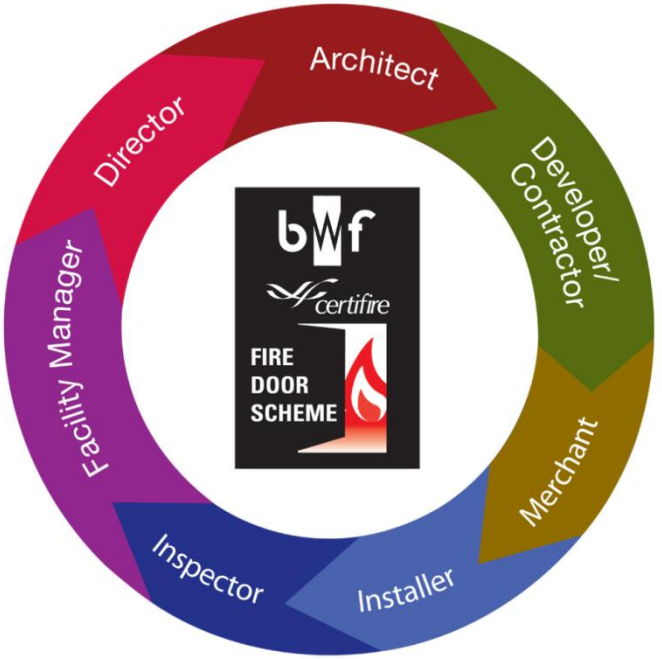
What you can do

- Depends on many circumstances and **assessment of risk**
- Tighten screws – but why have they become loose?
- Adjust closers, locks latches etc. – lubricate
- Check glass – replace – like for like
- Check gap between door and frame
- Replace seals – like for like
- Use the labels for traceability
- **If in ANY doubt – consult experts**
  - Use BWF Directory
  - Use website
- **Do NOT cut corners**

Circle of Responsibility

They're **YOUR** responsibility

- It doesn't matter where you are in the circle
- Applies to new installations
- Applies to existing doors



Any Views / Comments / Questions

ANY QUESTIONS?

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