

# FIRESTILE® Fully Glazed Joinery Doors 30 minute fire rating

CI/SfB	Ro	K4
2003		



The Boston Experience, Woking, UK

## Additional Features

FIRESTILE doors can be fitted with :-

- Side Panels, over panels and glazed screens
- Variety of stiles, top and bottom rails
- Various glazing bead profiles
- Applied decorative glazing beads
- Wide range of ironmongery

**MANN MCGOWAN**  
Advanced Intumescent Technology

## FIRESTILE Doors:

- Integrity and/or insulation
- Large panels of fire rated glass
- Softwood or hardwood
- Single or double leaf
- Full fabrication & installation service by Mann McGowan
- Fully fire tested
- Technical support
- CERTIFIRE approved CF 291



FIRESTILE doors under test at Warrington Fire Research Centre

**SCHOTT**  
glass made of ideas

## Flexible Door Designs



Fully Glazed



Mid Rail



Horizontal Bars

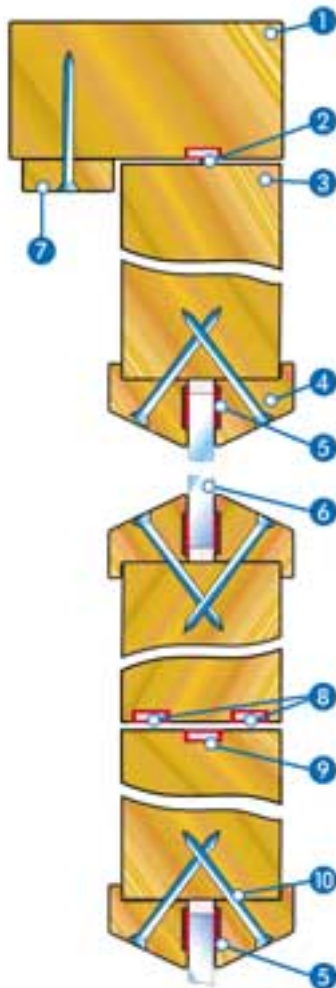


Georgian Style

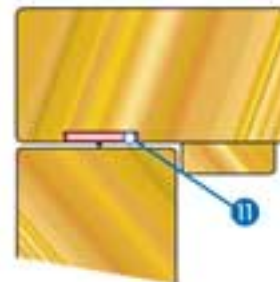
The door set designs above have been approved by assessment from the Warrington Fire Research Centre. Single acting door sets available in double and single leaf.

## Section Details

### Horizontal Cross Section



### Head Detail



#### Key

- ① Softwood Door Frame
- ② PYROSTRIP FLEXIFIN 15mm x 4mm
- ③ Softwood Door Leaf Perimeter Framework
- ④ Glazing Beads
- ⑤ PYROSTRIP 300 15mm x 2mm
- ⑥ Fire resistant glass: 6mm PYRAN S or 16.5mm PYRANOVA
- ⑦ Commercial Softwood Door Stop
- ⑧ PYROSTRIP 100P 10mm x 4mm
- ⑨ PYROSTRIP FLEXIFIN 10mm x 4mm
- ⑩ 40mm lost head pins
- ⑪ PYROSTRIP FLEXIFIN 25mm x 4mm

### Approved Dimensions

#### Dimensions of PYRAN® S - Integrity only

Maximum Leaf Size	920mm x 2550mm or 1150mm x 2040mm
Maximum area	2.35m <sup>2</sup>
Maximum Door Glass Size	800mm x 1750mm or 720mm x 1940mm
Maximum area	1.4m <sup>2</sup>

#### Dimensions of glazed side and/or over panels

Maximum Glass Size	1400mm x 2300mm
Maximum area	3.22m <sup>2</sup>

#### Dimensions of PYRANOVA® - Integrity & Insulation

Maximum Leaf Size	900mm x 2040mm
Maximum Door Glass Size	720mm x 1745mm

# Specification

## Integrity Only

Fire performance: FD30S  
Certification: Certifire No CF 291  
Product: Firestile Door  
Glass: 6mm Pyran S  
Manufacturer: SCHOTT UK Ltd  
Intumescent: Pyrostrip, Pyrohinge, Flexifin  
Manufacturer: MANN McGOWAN

### Timber (minimum specification)

- Species: Douglas Fir
- Density: 554kg/m<sup>3</sup>

### Door frame

- Frame: 95mm x 45mm
- Stops: 32mm x 15mm
- Intumescent Specification:
  - Pyrostrip Flexifin 15mm x 4mm (jamb)
  - Pyrostrip Flexifin 25mm x 4mm (head)

### Door leaf

- Stiles: minimum of 85mm x 45mm
- Top rail: minimum of 85mm x 45mm
- Bottom Rail: minimum of 200mm x 45mm
- Mid-rail: Any number of horizontal and vertical rails
- Intumescent:
  - 2 no Pyrostrip 10mm x 4mm (master leaf)
  - 1 no Pyrostrip Flexifin 10mm x 4mm (slave leaf)

### Glazing details

- Bead System: 20mm high x 24mm wide with 15° chamfer and 15mm x 2mm recess
- Glazing system: Pyrostrip 300 15mm x 2mm
- Manufacturer: MANN McGOWAN
- Species: Softwood Douglas Fir
- Density: 554kg/m<sup>3</sup>
- Fixings: 40mm long steel pins at 150mm centres

### Ironmongery

- Closer: Surface mounted to fire side
- Hinges: Steel lift off hinges or brass equal and approved
- Hinge seal: Pyrohinge strip 2mm thick
- Locks & Bolts: can be fitted if required but are unnecessary to achieve fire performance (specification on request).

## Integrity & Insulation

Fire performance: FD30S and 30 minutes insulation  
Certification: WFRC No C117339  
Product: Firestile Door  
Glass: 16.5mm Pyranova  
Manufacturer: SCHOTT UK Ltd  
Intumescent: Pyrostrip, Pyrohinge, Flexifin  
Manufacturer: MANN McGOWAN

### Timber (minimum specification)

- Species: Douglas Fir
- Density: 554kg/m<sup>3</sup>

### Door frame

- Frame: 95mm x 45mm
- Stops: 32mm x 15mm
- Intumescent Specification:
  - Pyrostrip Flexifin 15mm x 4mm (jamb)
  - Pyrostrip Flexifin 25mm x 4mm (head)

### Door leaf

- Stiles: minimum of 85mm x 45mm
- Top rail: minimum of 85mm x 45mm
- Bottom Rail: minimum of 200mm x 45mm
- Mid-rail: Any number of horizontal and vertical rails
- Intumescent:
  - 2 no Pyrostrip 10mm x 4mm (master leaf)
  - 1 no Pyrostrip Flexifin 10mm x 4mm (slave leaf)

### Glazing details

- Bead System: 20mm high x 19mm wide square bead with 15mm x 2mm recess
- Glazing system: Pyrostrip 300 15mm x 2mm
- Manufacturer: MANN McGOWAN
- Species: hard wood
- Density: 650kg/m<sup>3</sup>
- Fixings: 40mm long steel pins at 150mm centres

### Ironmongery

- Closer: Surface mounted to fire side
- Hinges: Steel lift off hinges or brass equal and approved
- Hinge seal: Pyrohinge strip 2mm thick
- Locks & Bolts: can be fitted if required but are unnecessary to achieve fire performance (specification on request).



# Company Profiles

## SCHOTT UK Ltd

SCHOTT, Europe's leading manufacturer of special glass products, was founded over 100 years ago. SCHOTT manufactures some 50,000 different products with representation in over 70 countries worldwide.

SCHOTT'S PYRAN® S fire resistant glass is a Class A safety glass which combines outstanding resistance to heat and thermal shock with large panel sizes. PYRAN® S optical float quality fire resistant glass offers up to two hours integrity rating in fire doors, partition walls, external windows & sloped glazings.

PYRAN® has been the market leader in clear integrity glass for 25 years, and its use in FIRESTILE® joinery doors is another example of the product's capability to provide a long sought practical solution for fully glazed fire rated softwood joinery doors.

## MANN McGOWAN

MANN McGOWAN has consistently been at the forefront of intumescent and fire resistant technology ever since its inception in 1975. The company was the first in the world to fully encapsulate intumescent in UPVC, a technology which has now become an industry norm. In 1983 PYROGLAZE 60® was developed, which tackled the problem of using fire resistant glass in timber frames. Up until this time, the method of glazing 60 minute timber doors was by using bulky channel sections.

Constant product development has ensured the company has retained its position as a market leader in the specialist field of passive fire protection. MANN McGOWAN products are sold throughout the world. Successful fire resistance tests have been conducted in the UK, Australia, New Zealand, France, Holland, Germany, Singapore, Malaysia, Taiwan and China.

### Reference projects for FIRESTILE® doors include:

Boston Experience Restaurant (Woking, Surrey), Kingsway Hall Hotel (London), South of England Health and Racquet Club (Brighton), Gateway Tower (Hong Kong), Lucas Building (Birmingham), Shropshire Homes (private residence, Telford), Nestle (York), St Andrew's University (Scotland).

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This test and field of application are only valid with the use of all the materials detailed herein.

ANY SUBSTITUTION OF MATERIALS WILL INVALIDATE THE USE OF THIS DOORSET CONSTRUCTION.



### MANN McGOWAN Installations Ltd.

Unit 4, Brook Trading Estate  
Deadbrook Lane, Aldershot  
Hampshire GU12 4XP  
Phone: 01252 333601  
Fax: 01252 322724  
Email: [technical@mannmcgowan.co.uk](mailto:technical@mannmcgowan.co.uk)  
Web: [www.mannmcgowan.co.uk](http://www.mannmcgowan.co.uk)

### SCHOTT UK Ltd

**Sales Office**  
Drummond Road  
Stafford ST16 3EL  
Phone: 01785 223166  
Fax: 01785 223522  
Email: [info.uk@schott.com](mailto:info.uk@schott.com)  
Web: [www.schott.com/uk](http://www.schott.com/uk)

**MANN McGOWAN**

Advanced Intumescent Technology

**SCHOTT**  
glass made of ideas