



In the event of a fire every minute counts.

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## Fire-Resistant Glass Range

Pilkington **Pyrostop**<sup>®</sup> Pilkington **Pyrostop**<sup>®</sup> Line Pilkington **Pyrodur**<sup>®</sup> Pilkington **Pyroclear**<sup>®</sup>



- Pilkington Pyrostop<sup>®</sup>
- Pilkington Pyrostop® Line
- Pilkington Pyrodur®
- Pilkington Pyroclear®



Elizabeth Line, London. Based on Pilkington **Pyroclear®** technology

Whitechapel Station, London.

# The UK's most versatile and reliable suite of fire-resistant glass solutions

## Application

- Doors and door sets, with side and over glazed panels, internal and external
- Glazed partitions and screen assemblies
- Units with integral blinds available
- Stairwells, lobbies and escape routes
- Protected fire fighter shafts
- Overhead glazing and façades
- Load-bearing glass floors (for safety, must be insulation rated)
- A wide range of practical framing options, glazing configurations and glass sizes. Available in a comprehensive size range and can be used in various combinations with other glass types in Insulating Glass Units (IGUs)

## Key Guidance

- Test evidence must be available, appropriate to the application
- Customers, installers and users should make sure that the test evidence is available and applicable
- The glazed system must be installed according to the evidence
- Edge protection tape must not be removed
- Please observe guidelines on product handling and storage

Specifire our on-line specification tool – to help find the right glazing solution. www.pilkington.co.uk/specifire

## **Taking Responsibility**

The Regulatory Reform (Fire Safety) Order 2005 emphasizes responsibility in law for the provision of fire safety measures in buildings, starting with those in control of the premises. That includes suppliers and installers, who have a duty of care to ensure that the product is fit for purpose and appropriate.

## Benefits

- Comprehensive range of approvals for a wide range of applications
- Reliable and robust proprietary technologies backed by the renowned Pilkington brand
- Consistent and reproducible fire resistance performance, tested internally to our quality requirements
- Personal guidance on the key elements governing applications: regulations, legislation, fire safety principles, custom and design practice
- All products in the range UKCA Marked, CE Marked, and have their own DoP (Declaration of Performance)
- Certifire certification available, reference: CF5140, CF328
- Detailed guidance on glazing, handling, quality and product performance data, readily available as downloads



## Fire resistance

#### Integrity

A physical barrier against flames, smoke and fumes.

#### Insulation

A heat and physical barrier against fire, based on measured surface temperature limits under test in standard conditions. For protection against all heat, i.e. by conduction, radiation and convection.

## Insulation

#### Pilkington Pyrostop®

- Highly successful intumescent technology
- Forms opaque and robust insulating barrier against heat, flames and fumes
- A sodium silicate interlayer (therefore not liable to flame or smoke on non-fire side)
- Classes 30, 60, 90, 120 and 180 minutes insulation & integrity (EI)<sup>[1]</sup>
- Impact safety up to class 1(B)1<sup>[2]</sup>
- Extensively specified worldwide in timber and metal framing systems
- Good visual and optical quality

#### Pilkington Pyrostop® Line

- Flush glazing without vertical framing sections between the glass units
- Up to 120 minutes for internal application only
- Monolithic glass composition (≥18 mm) ideally suited for open space design with a maximum area of unobstructed panoramic view
- Slim vertical butt joint (3-5 mm)
- All-glass view with uncompromising safety performance
- Tested in large dimensions (w×h: up to 1400 mm × 3000 mm); bigger dimensions on request
- Glazing unrestricted in width

### www.pilkington.co.uk/fire



Collège Simone Veil, Lamballe, France. Pilkington Pyrostop® Line

- Polished edges for a high quality finish
- Wide range of colour and design combinations available (decorative foil, opaque interlayer, sand blasting for design or privacy and more)
- · For maximum light transmittance and natural colour clarity Pilkington Pyrostop® Line comprises Pilkington **Optiwhite**<sup>™</sup> depending on glass type
- Approved for use in timber and insulated steel / aluminium frames
- Tested corner solutions for 30 and 60 minutes
- · Additional product compositions available to comply with specific statical load requirements



Alte Mälzerei, Düsseldorf, Germany. Pilkington Pyrodur®

#### [1] BS EN 13501-2, Classification from fire resistance tests. I = Insulation; E = Integrity; W = radiation (not in UK regulations).

[2] BS EN 12600, Impact test and classification. Class C indicates mode of breakage as toughened safety glass. Class B indicates mode of breakage as laminated glass.

Baverischer Rundfunk, München, Germany. Pilkington Pyrostop®





Aylesbury Street, London. Pilkington **Pyroclear®** Plus Images courtesy of S G Photography Ltd

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- BS EN 12600, Impact test and classification. Class C indicates mode of breakage as toughened safety glass. Class B indicates mode of breakage as laminated glass.

## Integrity

#### Pilkington Pyrodur®

- Based on intumescent technology
- Class 30 and 60 mins integrity (E)<sup>[1]</sup>
- Protection from radiant heat (EW30) and added insurance of insulation for 15 minutes
- Impact safety class up to 1(B)1<sup>[2]</sup>

#### Pilkington Pyroclear®

- A unique, special modified toughened glass, 30 and 60 minutes integrity (E)<sup>[2]</sup>
- Designed for consistency: proprietary NSG processing technology, a special toughening specification and specific control criteria
- Product design and use backed by a new validated computer model
- Achieved 50 successive tests in timber frames before launch
- Less sensitive to edge cover relative to standard modified toughened glasses
- Impact safety 1(C)1, i.e. at highest drop height in the impact test<sup>[1]</sup>
- Large sizes and flexible use in timber, metal and screens
- Ideal for safe escape before fire conditions become untenable

## **Protection from noise**

Pilkington **Pyrostop**<sup>®</sup> and Pilkington **Pyrodur**<sup>®</sup> provide good acoustic performance, which can be further enhanced in IGUs and by combination with acoustic laminated glass. Acoustic design is now important for many situations, e.g. in schools, hospitals and offices. Options from R<sub>w</sub> 34 to 48 dB available.

This publication provides only a general description of the products. Further, more detailed, information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, codes of practice and other requirements. To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it. Pilkington, "Pyrostop", "Pyroclear" and "Pyroshield" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.

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UK CA UK CA Marking confirms that a product meets the requirements of its relevant UK-designated standard and can be placed on the market in Great Britain. The UK CA Marking Declaration of Performance for each product can be found at www.pilkington.com/ukca



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