



ESG **Pyrotech**™

Fire Resistant Safety Glass

With the requirements of Building Regulations and fire prevention legislation increasing the responsibilities of those in charge of buildings, the materials used in construction and refurbishment projects have become more important than ever. From the early design stage of a new building or a major refurbishment, it is wise to talk to ESG about your fire resistant glass requirements.

ESG **Pyrotech**™ can be used in doors, screens and as partitioning in a vast array of applications. Whether you are an architect, a Health & Safety officer, a contractor, a glazier or a partitioner, talking to ESG about the types of fire resistant safety glass products available makes practical and commercial sense.

While specifying the right fire resistant safety glass is paramount, it is also vital not to miss out on the opportunity to solve other conundrums and fulfil essential requirements for the building regulations. With advances made in glass processing by ESG, it is possible to produce not only a suitable fire resistant safety glass for nearly every application, but also one that will address other functions; such as sound attenuation, increased security or privacy; all in one specially created panel.

You may also need to consider using different types of frame. ESG has been at the forefront of developing fire safety glass products that can be used with a range of frames from timber fire doors to large steel frames. We have accumulated a wealth of knowledge and expertise on the subject, so a discussion with one of our Fire Resistant Glass Advisers may help you more than you might expect.

At ESG we have one of the largest ranges of fire resistant glass in the UK, manufactured inhouse and provide fast turn around times to help you keep your project on track.

If you have a proposal of a frame and panel that we haven't tested together so far, ESG is happy to consider joint testing in order to establish the viability of a new combination of products. Please call us on 01376 520061 to discuss your requirements.



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Versatility is fast becoming a desirable characteristic in construction materials, and few are more adaptable to the architect's needs than glass. ESG **Pyrotech™** is one of the most versatile CERTIFIRE accredited ranges of fire resistant safety glass products on the market. Products within the ESG **Pyrotech™** range can be safely used with appropriate steel and timber doors and screens.

There's nothing ordinary about the standard ESG **Pyrotech™** integrity only fire resistant safety glass range. Accredited by independent UKAS approved test laboratory Exova of Warrington CERTIFIRE scheme - CF628, products in this range are approved for use in approved steel and timber fire doors and steel screens. This versatile glass, in ESG **Pyrotech™ E30** or ESG **Pyrotech™ E60** versions, can also be used with a wide range of steel frames from leading manufacturers such as Wrightstyle, Schuco Jansen and Forster. These products provide either 30 or 60 minutes of containment of smoke and flames, depending on the requirements of the project, and also offer partial radiation control. Certified panels are available in sizes up to 4.9m² according to exact specification.

In addition to the standard ESG **Pyrotech™** products described above, ESG also manufactures a versatile laminated range developed to address specific Building Regulations and security requirements. Within each range the specialist ESG **Pyrotech™** products are supplied in four standard thicknesses.

The versatility of the ESG **Pyrotech™** range and its CERTIFIRE approval, also allows ESG to provide clients with bespoke thicknesses for specific project applications. For further information see the ESG **Pyrotech™** Technical Data Sheets.



Safety first with ESG **Pyrotech™ Safe**

ESG **Pyrotech™ Safe** is a laminated fire resistant safety glass using our tried and tested ESG **Pyrotech™** fire resistant glass. In the event of breakage, the panel will remain in place, with the broken pieces held together by the interlayer.

All ESG **Pyrotech™** glass is tested in accordance with EN12600: 2002 - achieving class 1 rating.

Certified Security with ESG **Pyrotech™ Secure** Glass EN356, LPS1270 and EN1063'

We are currently the only glass specialist in the UK to offer fire resistance combined with certified security glass as an option. ESG **Pyrotech™** can be combined with any of our security range of glass such as EN356 (Resistance to manual attack), LPS1270 (Intruder resistant glass) and EN1063 (Resistance against bullet attack) to provide a totally secure solution. By its nature of many interlayers, this glass range offers good sound attenuation.

For further information visit our designated security site www.esgsecurityglass.co.uk



ESG Pyrotech™ Acoustic

Architects frequently specify a given level of sound attenuation performance. Using a unique combination of ESG **Pyrotech™** and special interlayers, ESG has created ESG **Pyrotech™ Acoustic**, to provide a high dB performance with a thin panel. The resulting reduction in weight makes ESG **Pyrotech™ Acoustic** highly practical, cost effective and easier to handle for the client. This reduction in the passage of sound is achieved without any compromise to the panel's performance as a fire resistant safety glass.



Total Discretion with ESG Pyrotech™ LCD Privacy Glass

When discretion is vital, ESG **Switchable™** gives you the choice of privacy or visibility at the flick of a switch and it can be combined with ESG **Pyrotech™** and our other security products to give you a total fire resistant and secure solution.



ESG **Switchable™** is an intelligent glass which under the effect of an electric current switches from opaque to an optically clear state. It offers users the choice between privacy and the public gaze - and is the leading instant switchable privacy glass on the market today.

ESG **Switchable™** is easily installed and can be used in a variety of applications, making it the perfect choice for architects and designers. With high durability and exceptional optical qualities, it is the perfect addition when creating conference rooms, office space, nurseries and medical consulting rooms. It can also be used in residential areas, hotels, security windows and beauty salons – just about anywhere you might need privacy.

In its white state, ESG **Switchable™** is the perfect background on which to project presentations, without the need for a separate screen. This provides efficient use of space in the built environment, while creating an eco-friendly setting by blocking damaging UV rays. Please be aware that it is only rear projection systems that are compatible.

ESG Pyrotech™ PRODUCT SPECIFICATION OVERVIEW

	Security Attributes							Fire Resistant Capabilities																					
	EN 12600 IMPACT RESISTANCE				EN356 (Levels P1A - P8B)			LPS 1270 (Levels 1-5)		EN1063 (Levels BR1-BR7 & SG1-SG2)		FIRE RESISTANCE E30/Ew15		FIRE RESISTANCE E60/Ew15		FIRE RESISTANT IGU		TIMBER DOORS		TIMBER SCREENS		TIMBER SCREENS IN PLASTERBOARD		STEEL SINGLE DOORS		STEEL DOUBLE DOORS		STEEL SCREENS	
ESG PYROTECH™ 630	1C1																												
ESG PYROTECH™ 660	1C1																												
ESG PYROTECH™ SAFE RANGE	1C1	✓																											
ESG PYROTECH™ SECURE RANGE	1C1	✓	✓	✓																									
ESG PYROTECH™ ACOUSTIC RANGE	1C1	✓	✓	✓																									
ESG PYROTECH™ LCD PRIVACY RANGE	1C1	✓	✓	✓																									

✓ Attributes can be incorporated into a panel on request.



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Making the right choice

Integrity Only

ESG **Pyrotech**™ is one of the leading 'Integrity only' fire resistant glasses on the market and will contain flames for a specified time. It also has a radiation rating of EW15 minutes.

Within our range we offer either 30 or 60 minutes integrity only fire resistant glass in various thicknesses.

Full Insulation

If a more physically robust fire protection shield is required, you may wish to consider our multi-layered fire resistant glass, offering both integrity and full insulation up to 120 minutes.

Specify with ease

With a vast number of fire resistant glass products to choose from, it is all too easy for the wrong type of glass to be installed. To simplify the specification process, ESG have introduced a product selection tool on their Fire Resistant Glass website – www.esgfireresistantglass.co.uk

The product selector simply asks a set of key questions and takes the user through to a selection of fire glass products to consider. Completing fields including duration, classification (integrity/insulation), and desired frame type, all available products are immediately identified, together with the associated test certificate number.



Quality Standards

Our products are tested in house and by Europe's leading Independent and Certified test laboratories such as Exova, TNO, Technalia, Wiltshire Ballistics and the British Standards Institute which distinguish our products and services from our competitors, and gives you, our customers, total confidence about their performance.

In addition to this stringent testing, our products are independently certificated which undergo continuous auditing to maintain high quality performance products. This endorsement includes approval by Exova Warrington through their Certifire scheme (CF628) for our fire resistant glass and Loss Prevention Certification Board (LPCB) - Cert. 997a for our LPS1270 intruder resistant glass.

ESG **Pyrotech**™ fire resistant safety glass products are covered under the scope of the prestigious Quality Management System BS EN ISO 9001 : 2008 - FM611206 by the British Standards Institute who also audit our Kitemark Licence - KM511207.

ESG **Pyrotech**™ has been tested to numerous standards including BS 476-22 : 1987, BS EN 1634-1 : 2000, BS EN 1364-1: 1999, and BS EN 1363-1 : 1999. ESG Pyrotech™ has been tested in systems including timber doors and screens, steel single and double door sets and screens.



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