

## **Worldwide Specialists in Fire Protection Glass**



World Largest Frameless Fire Resistance glass Design

5m height butt joint testing ( Efectis holland





# INNOVATION IN FIRE PROTECTION GLASS TECHNOLOGY FOR SAFETY AND TRANSPARENCY

#### G GLASS AGAINST FIRE

Building professionals well appreciate the essential nature of glass in today's architecture. It's ability to allow natural illumination, define space, give visual transparency and satisfy aesthetics while combining multi-funtional qualities and comforts such as safety, security, energy efficiency and solar control. Indeed the notion that glass is capable of providing fire protection can seem incongruent. Although, many are familiar with the traditional use and inherent limitations of polished wired glass, innovative new clear glass technologies incorporated into fire rated doors, screens, windows and facades now provide high performance protection of vulnerable openings within a fire resistive construction. In this way, fire protection glass helps to protect people, limit property loss and stop the spread of fire.











#### W WORLDWIDE SPECIALIST

Pyro nano stands in the industry forefront, exclusively dedicated to fire protection glass. While the dynamics of fire behave quite the same around the world, we uniquely recognise and respect that individual countries and regions may consider and protect against fire risk in essentially different ways. This global view leads to the development of the broadest and most diverse product range available. Guiding our partners and clients through often complex application considerations and product selection criteria, Interver is equipped to provide commercial, technical and testing certification support. This clearly establishes Interver as the world-wide specialist in fire protection glass.





# PYRO NANO GLASS AGAINST FIRE

















# Fire protection and safety glass product range Nanoflam El and Nanofire EW

#### **BASIC STANDARDS**

Fire tests in accordance with national norms and BS EN Standard (BS EN 1634-3/BS EN1364-1/BS 476 Part 22) as certificates according EN13501-2. Detailed Information about tested sizes and frames systems in each country are available on our actual element overview.

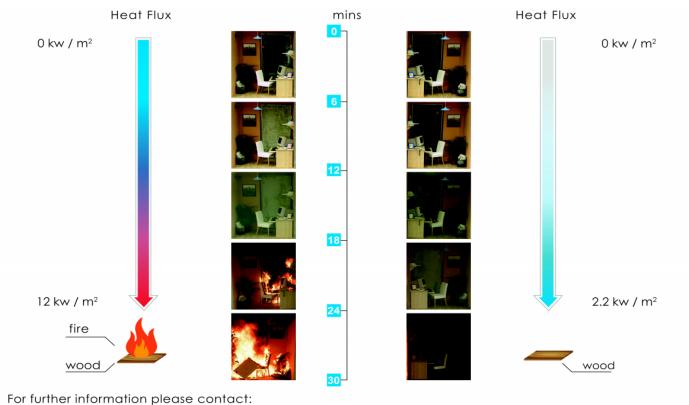
Item	(Product Name)	(Model)	(Certification Type)	(Product Struture)
1	Double-leaf Glazed Doorset with Transom and Side Panels	EI60	BS EN 1634-1: 2008	5G+5F+5G+5F+5G (25mm)
2	Fire Rated Glazed Wall	EI60	BS EN 1364-1:1999	6G+10F+6G (22mm)
3	Insulated Glazin Wall system (external exposure)	EI60	ASTM E119-15	5G+5F+5G+7F+5G+16A+5G+1.52PVB+ 5G (54.52mm)
4	Loadbearing Insulated Glazed Flooring System	El120	BS476: Part 21: 1987	4 x 10 G + 6 x 5 mm F + 6 x 5 mm G + 9 mm spaur + 2 x 1.52 PVB (112mm)
5	Curved Glazed Wall with Butt joints	EI60	EN 1364-1: 1999	8G+7F+10G+7F+8G (40mm)
6	Double-leaf Glazed Doorset with Fixed Screens	EI120	BS EN 1634-1: 2008	5G+8F+6G+8F+6G+ 8F+5G ( 46mm )
7	Double-acting Glazed Doorset with Fixed Screens	El30/EW60	BS 476: Part 22: 1987	5G+5F+5G (15mm)
8	Loadbearing Insulated Glazed Flooring System	EI60	BS476: Part 21: 1987	
1	Double-leaf Glazed Doorset with Transom and Side Panels	EI60	BS476: Part 22: 1987	5G+5F+5G+5F+5G (25mm)



### PYRO NANO - TECHNICAL GUIDES

Comparision model Flat for classification E & EW /EI





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# DEDICATED TECHNICAL SUPPORT

- PROJECT TESTING
- TYPE APPROVALS & CERTIFICATIONS
- SYSTEM DESIGN SPECIALIST
- R RECOGNIZED IN-HOUSE FIRE TEST FURNACE
- G GLASS SELECTION ADVICE
- P PRE-TESTING CUSTOMER SYSTEMS
- LOCAL TESTING SUPPORT
- INTERNATIONAL EXPERIENCE











### CLASSIFICATION FOR FIRE PROTECTION PERFORMANCE

The fire resistance classification is related to the complete glazed assembly.

Classes are expressed by the letter(s) representing the considered functional requirement(s), followed by the performance time in minutes.

Example: E130 = 30 minutes fire resistance plus 30 minutes insulation



**E** INTEGRITY

Provides a physical barrier against flame, hot gases and smoke.

"The ability of the element of construction with a separating function to withstand fire exposure on one side only, without the transmission of fire to the non-fire side as a result of the passage of significant qyantities of flames or hot gases from the fire to the non-fire side, thereby causing ignition of the non-fire exposed surface or any materials adjacent to that surface."- Reference: EN 1363 / 1364

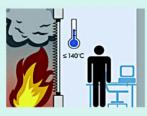




#### W RADIATION

Safer escape routes for people and separation distances for combustible materials

"The ability of the element of construction with a separating function to withstand fire exposure on one side only for a period of time, while the measured radiated heat in font of he glazing is below a specified level." - Reference: EN 1363 / 1364





highest perfor-mance limitation of surface temperature on the unexposed side.

"The ability of the element of construction with a separating function to withstand fire exposure on one side only, without the transmission of fire exposure on one side only, without the transmission of fire to the ono-fire side as a result of significant conduction of heat from the fire side to the non-fire side, thereby causing ignition of the non-fire exposed surface of any material in contact with that surface and the ability to provide a barrier to heat sufficient to protect people near the element of construction for the relevant classification period." - Reference: EN 1363 / 1364