

Fire Control

Glass is now firmly established as a fire protection material worldwide. Advances in glass products and manufacturing technology mean that today's range of fire resistant glasses offer the architect and specifier the ability to create a beautiful and safe environment for all of us. At first glance it would seem that glass is not the ideal material for forming a barrier to fire. It has a reputation for being fragile and unable to cope with localised stresses. So, although it is incombustible and makes no contribution to the fire itself, on exposure to heat it breaks at relatively low temperatures, falling from its framing and allowing the passage of fire.

By selecting one of our fire resistant glasses these natural tendencies can be fully overcome.

Please find below a guide to selecting fire resistant glass:

Step	Requirement	Option	Solution
0	Vertical Glazing	Go to 1	
	Sloping or horizontal glazing	Go to 13	
1	Integrity only required	Go to 2	
	Insulation and integrity required	Go to 10	
2	Period of fire resistance – 30 mins	Go to 3	
	Period of fire resistance – 60 mins	Go to 7	
	Period of fire resistance – 90 mins	Go to 8	
	Period of fire resistance – 120 mins	Go to 8	
3	Wires are acceptable	Go to 4	
	Unwired glass required		10mm Pyrodur
4	Safety glass is required for the location	Go to 5	
	Safety glass is not required	Go to 6	
5	Clear Vision is required		Pyroshield safety clear
	Obscuration is required		Pyroshield safety texture
6	Clear Vision is required		Pyroshield clear
	Obscuration is required		Pyroshield texture
7	Wires are acceptable	Go to 4	
	Unwired glass required		14mm Pyrodur
8	Timber frames		Not possible
	Steel frames	Go to 9	
9	Wires are acceptable	Go to 5	
	Unwired glass required	Go to 10	
10	Period of fire resistance – 30 mins		15mm Pyrostop **
	Period of fire resistance – 60 mins		21mm Pyrostop **
	Period of fire resistance – 90 mins	Go to 11	
	Period of fire resistance – 120 mins	Go to 12	
11	Timber frames		Not possible
	Steel frames		44mm Pyrostop insulating unit **
12	Timber frames		Not possible
	Steel frames		50mm Pyrostop insulating unit **
13	Period of fire resistance – 30 mins	Go to 14	
	Period of fire resistance – 60 mins		28mm Horizontal Pyrostop
	Period of fire resistance – 90 mins		Not possible
	Period of fire resistance – 120 mins		Not possible
14	Integrity only required		Pyroshield Insulating unit
	Insulation and integrity required		22mm Horizontal Pyrostop*

* Horizontal version is either 15 or 21mm Pilkington Pyrostop with 6mm Pilkington Toughened Safety Glass laminated to the upper surface.

For internal applications only

** External grade Pilkington Pyrostop must be used if daylight or sunlight can strike the glass.

