

Fire Performance Table for Steel Frames

Performance	Wired or Clear	Fire Resistance (mins)		Glass Type	Fire Tested Evidence and Recommended Maximum Sizes ^{a,b}	
		Integrity	Insulation		Steel Frame ^c	
					Doors	Screens ^d
Integrity and Insulation	Clear	30	30	15mm Pilkington Pyrostop [™] 30-10 Internal Grade	–	CF328 ^p Max area 5.25m ² Max w. 3000 or Max h. 3000 ^b
		60 ^e	30	15mm Pilkington Pyrostop [™] 30-10 Internal Grade	–	CF328 ^p Max area 3.43m ² Max w. 3000 or Max h. 3000
		60 ^f	30	18mm Pilkington Pyrostop [™] 30-20 External Grade	–	CF328 ^p Max area 3.43m ² Max w. 1862 or Max h. 2860
		60	30	29mm Pilkington Pyrostop [™] 30-15 Internal Grade IGU ^f 32mm Pilkington Pyrostop [™] 30-25 External Grade IGU ^f	–	CF328 ^p Max area 3.43m ² Max w. 1850 or Max h. 2820
		60	60	23mm Pilkington Pyrostop [™] 60-10I Internal Grade	CF328 ^p Max area 1.79m ² Max w. 1338 or Max h. 2280	Warres 113978 1495 x 2895
		60	60	51mm Pilkington Pyrostop [™] 60-16I S Internal Grade IGU ^g	–	Warres 110738 Max w. 1140 x Max h. 2390
		60	60	27mm Pilkington Pyrostop [™] 60-20I External Grade	CF328 ^p Max area 1.79m ² Max w. 1338 or Max h. 2280	CF328 ^p Max area 4.13m ² Max w. 2031 or Max h. 2500
		90	90	46mm Pilkington Pyrostop [™] 90-100 Internal Grade IGU ^h	–	CF328 ^p Max area 2.8m ² Max w. 1400 x Max h. 2000
		90	90	50mm Pilkington Pyrostop [™] 90-100 Internal Grade IGU ⁱ	–	Warres 57296 755 x 988
		90	90	53mm Pilkington Pyrostop [™] 90-200 External Grade IGU ^j	–	CF328 ^p Max area 2.8m ² Max w.1400 x Max h.2000
		120	120	52mm Pilkington Pyrostop [™] 120-104 Internal Grade IGU ^k	–	CF328 ^p Max area 3.57m ² Max w. 1889 or Max h. 2520
		120	120	58mm Pilkington Pyrostop [™] 120-104 Internal Grade IGU ^l	–	CF328 ^p Max area 3.57m ² Max w. 1889 or Max h. 2520
		120	120	62mm Pilkington Pyrostop [™] 120-20I External Grade IGU ^m	–	CF328 ^p Max area 3.57m ² Max w. 1889 or Max h. 2520
		Integrity with some Insulation	Clear	30	0 ⁿ	7mm Pilkington Pyrodur [™] Plus 30-104 Internal Grade
30	0 ⁿ			10mm Pilkington Pyrodur [™] 30-20I External Grade	CF328 ^p Max area 2.58m ² Max w. 1069 or Max h. 2415	CF328 ^p Max area 6.0m ² Max w. 3000 or Max h. 3000
30	0 ⁿ			24mm Pilkington Pyrodur [™] 30-25I External Grade IGU ^o	–	CF328 ^p Max area 3.75m ² Max w. 1500 or Max h. 2500
60	0 ⁿ			10mm Pilkington Pyrodur [™] 30-20I External Grade	–	Warres 112856 1430 x 2905
30	0 ⁿ			13mm Pilkington Pyrodur [™] 60-20 External Grade	–	CF328 ^p Max area 3.67m ² Max w. 3000 or Max h. 3000
60	0 ⁿ			13mm Pilkington Pyrodur [™] 60-20 External Grade	–	CF328 ^p Max area 2.85m ² Max w. 3000 or Max h. 3000
Integrity only	Wired	30	0	6mm Pilkington Pyroshield [™] Clear	C81232 - less than 0.5m ² small dim < 250mm	C81232 1760 x 3000
		30	0	7mm Pilkington Pyroshield [™] Texture	C81232 - less than 0.5m ² small dim < 250mm	C81232 1760 x 3000
		30	0	6mm Pilkington Pyroshield [™] Safety Clear	C81232 900 x 3000	C81232 1760 x 3000
		30	0	7mm Pilkington Pyroshield [™] Safety Texture	C81232 900 x 3000	C81232 1760 x 3000
		60	0	6mm Pilkington Pyroshield [™] Clear	–	C81232 1170 x 3000
		60	0	7mm Pilkington Pyroshield [™] Texture	–	C81232 1170 x 3000
	Clear	60	0	6mm Pilkington Pyroshield [™] Safety Clear	C81232 900 x 3000	C81232 1170 x 3000
		60	0	7mm Pilkington Pyroshield [™] Safety Texture	C81232 900 x 3000	C81232 1170 x 3000
		90	0	6mm Pilkington Pyroshield [™] Safety Clear	–	C81232 1000 x 3000
		90	0	7mm Pilkington Pyroshield [™] Safety Texture	–	C81232 1000 x 2400
		120	0	6mm Pilkington Pyroshield [™] Safety Clear	–	C81232 930 x 3000
		120	0	7mm Pilkington Pyroshield [™] Safety Texture	–	C81232 1000 x 2100

a Maximum tested size does not necessarily relate to maximum fire resistance

b Maximum recommended sizes are close to maximum available stock sizes so should only be specified following consultation with Pilkington Technical Helpline

c Refer to fire test summaries for frame details

d Use Pilkington **Pyroshield**[™] Safety for areas subject to Approved Document N requirements, i.e. low level glazing and Pilkington **Pyroshield**[™] information from WFRC C81232

e Only achieved in this specific test

f 15mm (30-15) or 18mm (30-25) Pilkington **Pyrostop**[™] / 8mm steel spacer / 6mm non-fire rated glass

g 23mm Pilkington **Pyrostop**[™] / 22mm spacer with integral blind / 6mm non-fire rated glass

h 15mm Pilkington **Pyrostop**[™] / 8mm steel spacer / 23mm Pilkington **Pyrostop**[™]

i 15mm Pilkington **Pyrostop**[™] / 12mm steel spacer / 23mm Pilkington **Pyrostop**[™]

j 18mm Pilkington **Pyrostop**[™] / 12mm steel spacer / 23mm Pilkington **Pyrostop**[™]

k 23mm Pilkington **Pyrostop**[™] / 6mm steel spacer / 23mm Pilkington **Pyrostop**[™]

l 23mm Pilkington **Pyrostop**[™] / 12mm steel spacer / 23mm Pilkington **Pyrostop**[™]

m 27mm Pilkington **Pyrostop**[™] / 12mm steel spacer / 23mm Pilkington **Pyrostop**[™]

n There is no requirement in UK standards or regulations for insulation of less than 30 minutes, however these products achieve full insulation for a short period of time and remain opaque throughout the test

o 10mm Pilkington **Pyrodur**[™] / 8mm steel spacer / 6mm non-fire rated glass

p Refer to Pilkington Technical Helpline when considering the use of evidence based on Certifire Approvals

NOTE: The Pilkington fire-resistant glass range holds more than 100 official test approvals, including single glazed and IGU applications. Details can be provided on request. Summary of Physical Data can be found on page 3. Please refer to our published fire test summaries for individual details.