

Fire-Rated and Bullet-Resistant-Rated Transparent Wall Panel Fire-Rating: Up to 120 Minutes

Pilkington Pyrostop® BR is fire rated for up to 120 minutes and offers Level III bullet resistance ratings. It can be combined with Smartgard® products to achieve nearly any level of security.

FEATURES

- Fire-rated for up to 120 minutes with required hose stream test
- Bullet resistance ratings from Level I to Level VIII available in different make-ups
- Protection against radiant and conductive heat transfer
- Impact safety-rated-meets ANSI Z97.1 and CPSC 16 CFR1201 (Cat. I and II)
- May be lightly sandblasted or etched on one side without affecting fire rating
- Withstands thermal shock
- For use in interior and exterior applications
- 5-year limited warranty
- Large sizes available
- Available in insulated units with other glass products, including (but not limited to): Tinted; One-Way Mirror; Low-E; Reflective; Art Glass; Translucent Interlayer (for added obscurity and privacy)
- Fits in Fireframes® Heat Barrier Series windows. Contact TGP for allowable ballistic ratings
- Available for use in compliant frames by others (see frame manufacturer for details)
- Multi-laminate, not a sensitive polymer unit
- Comprised of Pilkington Optiwhite™ nearly colorless, wireless, low-iron float glass and clear intumescent interlayers

Pilkington Pyrostop sales are a cooperative effort between Technical Glass Products and Pilkington North America.

LISTINGS/STANDARDS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377 (45 minutes) and R38725 (60-120 minutes). Tests performed in accordance with:

UL 9	NFPA 80	CAN4 S-104	ASTM E119	MEA 241-00-M	NIJ 0108.01
UL 10B	NFPA 251	CAN4 S-106		LARR 25798	
UL 10C	NFPA 252	CAN/ULC-S101			
UL 263	NFPA 257				
UL 752					

LABELING

Each piece of Pilkington Pyrostop BR shall be permanently labeled with the Pilkington Pyrostop BR logo, UL logo and fire rating.

STORAGE & HANDLING

Pilkington Pyrostop must be handled with care during transportation, storage, inspection and installation. It should be stored in dry conditions, stocked vertically and fully supported in a manner which prevents the glass from sagging. During storage and transportation, the temperature of Pilkington Pyrostop should not exceed 122°F (50°C). Do not expose the “non-PVB” side of the glass to UV light. Do not remove the protective edge tape. See manufacturer’s installation and warranty information for further details.



BIM 3D Model Available



UL Classified & Labeled



Fire-Rated



Hose Stream Tested



Impact-Rated



Heat Barrier



Positive Pressure Tested



Bullet Resistant

UL-752 BULLET RESISTANCE RATING	FIRE RATING	MANUFACTURER'S DESIGNATION	SUPPLY FORM	NOMINAL THICKNESS	WEIGHT APPROX.	U-VALUE	DAYLIGHT TRANS. APPROX. (dB)	STC RATING APPROX. (dB)	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
Level I	60 min.	60-201 (with film*)	Single Glazing	1-1/16" (27 mm)	12.90 lbs/ft ² (63.00 kg/m ²)	.83	86	44	OTHER THAN DOORS DOOR	7,442 in ² (4.80 m ²) 3,724 in ² (2.40 m ²)	96" (2.44 m) 41-5/8" (1.06 m)		118-1/8" (3.00 m) 89-3/4" (2.28 m)
Level II	120 min.	120-201*	I.G. Units	2-7/16" (62 mm)	25.81 lbs/ft ² (126.00 kg/m ²)	.44	76	46	OTHER THAN DOORS	3,724 in ² (2.40 m ²)	111" (2.81 m)		111" (2.81 m)
Level III	120 min.	120-201 (with film*)	I.G. Units	2-7/16" (62 mm)	25.81 lbs/ft ² (126.00 kg/m ²)	.44	73	46	OTHER THAN DOORS	3,724 in ² (2.40 m ²)	111" (2.81 m)		111" (2.81 m)
Level II	120 min.	120-202 (with film*)	Single Glazing	1-9/16" (41 mm)	18.64 lbs/ft ² (91.00 kg/m ²)	.72	85	46	OTHER THAN DOORS DOOR	3,724 in ² (2.40 m ²) 3,724 in ² (2.40 m ²)	111" (2.81 m) 41-5/8" (1.06 m)		111" (2.81 m) 89-3/4" (2.28 m)

*For filmed products, one dimension of the glass cannot exceed 60" (1.52 m)

+ Available with a translucent interlayer

FOR APPROVED FRAMING SYSTEMS FOR USE WITH PILKINGTON PYROSTOP, VISIT FIREGLASS.COM OR CALL 800.426.0279

SMARTGARD BULLET RESISTANT (LEVEL I-III)

		SMARTGARD BR1 LEVEL I**		SMARTGARD BR2 LEVEL II**		SMARTGARD BR3 LEVEL III*		SMARTGARD BR3TH LEVEL III*	
FIRE RATING	PILKINGTON PYROSTOP DESIGNATION	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.
45 min.	45-200	1.60" (41 mm)	16.82 lbs/ft ² (82.11 kg/m ²)	1.72" (44 mm)	19.42 lbs/ft ² (94.80 kg/m ²)	2.07" (52 mm)	23.39 lbs/ft ² (114.8 kg/m ²)	1.73" (44 mm)	19.42 lbs/ft ² (94.80 kg/m ²)
60 min.	60-101	1.75" (45 mm)	18.46 lbs/ft ² (90.11 kg/m ²)	1.88" (48 mm)	21.06 lbs/ft ² (102.80 kg/m ²)	2.22" (56 mm)	25.03 lbs/ft ² (122.18 kg/m ²)	1.89" (48 mm)	21.06 lbs/ft ² (102.80 kg/m ²)
60 min.	60-201	1.91" (49 mm)	20.50 lbs/ft ² (100.11 kg/m ²)	2.04" (52 mm)	23.10 lbs/ft ² (112.80 kg/m ²)	2.38" (60 mm)	27.07 lbs/ft ² (132.18 kg/m ²)	2.04" (52 mm)	23.10 lbs/ft ² (112.80 kg/m ²)
90 min.	90-102	2.30" (59 mm)	25.21 lbs/ft ² (123.11 kg/m ²)	2.43" (62 mm)	27.81 lbs/ft ² (135.80 kg/m ²)	2.77" (70 mm)	31.78 lbs/ft ² (155.18 kg/m ²)	2.44" (62 mm)	27.81 lbs/ft ² (135.80 kg/m ²)
120 min.	120-104	2.97" (76 mm)	29.31 lbs/ft ² (143.11 kg/m ²)	3.10" (79 mm)	31.91 lbs/ft ² (155.80 kg/m ²)	3.44" (87 mm)	35.88 lbs/ft ² (175.18 kg/m ²)	3.11" (79 mm)	31.91 lbs/ft ² (155.80 kg/m ²)
90 - 120 min.	120-202	2.42" (62 mm)	26.24 lbs/ft ² (128.11 kg/m ²)	2.55" (65 mm)	28.84 lbs/ft ² (140.80 kg/m ²)	2.89" (73 mm)	32.18 lbs/ft ² (160.18 kg/m ²)	2.55" (65 mm)	28.84 lbs/ft ² (140.80 kg/m ²)
90 - 120 min.	120-262	3.21" (82 mm)	29.31 lbs/ft ² (143.11 kg/m ²)	3.34" (85 mm)	31.91 lbs/ft ² (155.80 kg/m ²)	3.68" (93 mm)	35.88 lbs/ft ² (175.18 kg/m ²)	3.34" (85 mm)	31.91 lbs/ft ² (155.80 kg/m ²)

*Tested according to UL 752 standards, registered with UL

**Tested according to UL 752 standard

SMARTGARD BULLET RESISTANT (LEVEL IV-VIII)

		SMARTGARD BR4 LEVEL IV*		SMARTGARD BR5 LEVEL V*		SMARTGARD BR7 LEVEL VII**		SMARTGARD BR8 LEVEL VIII*	
FIRE RATING	PILKINGTON PYROSTOP DESIGNATION	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.
45 min.	45-200	2.09" (53 mm)	23.69 lbs/ft ² (115.7 kg/m ²)	2.31" (59 mm)	25.07 lbs/ft ² (122.39 kg/m ²)	2.31" (59 mm)	25.19 lbs/ft ² (122.97 kg/m ²)	3.13" (79 mm)	35.27 lbs/ft ² (172.19 kg/m ²)
60 min.	60-101	2.25" (57 mm)	25.33 lbs/ft ² (123.65 kg/m ²)	2.47" (63 mm)	26.71 lbs/ft ² (130.89 kg/m ²)	2.47" (63 mm)	26.83 lbs/ft ² (130.97 kg/m ²)	3.28" (83 mm)	36.91 lbs/ft ² (180.19 kg/m ²)
60 min.	60-201	2.41" (61 mm)	27.37 lbs/ft ² (133.65 kg/m ²)	2.62" (67 mm)	28.75 lbs/ft ² (140.39 kg/m ²)	2.62" (67 mm)	28.87 lbs/ft ² (140.97 kg/m ²)	3.44" (87 mm)	38.95 lbs/ft ² (190.19 kg/m ²)
90 min.	90-102	2.80" (71 mm)	32.08 lbs/ft ² (156.65 kg/m ²)	3.02" (77 mm)	33.46 lbs/ft ² (163.39 kg/m ²)	3.02" (77 mm)	33.58 lbs/ft ² (163.97 kg/m ²)	3.84" (97 mm)	43.66 lbs/ft ² (213.19 kg/m ²)
120 min.	120-104	3.47" (88 mm)	36.18 lbs/ft ² (176.65 kg/m ²)	3.69" (94 mm)	37.56 lbs/ft ² (183.39 kg/m ²)	3.69" (94 mm)	37.68 lbs/ft ² (183.97 kg/m ²)	4.50" (114 mm)	47.76 lbs/ft ² (233.19 kg/m ²)
90 - 120 min.	120-202	2.92" (74 mm)	33.11 lbs/ft ² (161.65 kg/m ²)	3.14" (80 mm)	34.49 lbs/ft ² (168.39 kg/m ²)	3.14" (80 mm)	34.61 lbs/ft ² (168.97 kg/m ²)	3.95" (100 mm)	44.69 lbs/ft ² (218.19 kg/m ²)
90 - 120 min.	120-262	3.71" (94 mm)	36.18 lbs/ft ² (176.65 kg/m ²)	3.92" (100 mm)	37.56 lbs/ft ² (183.39 kg/m ²)	3.92" (100 mm)	37.68 lbs/ft ² (183.97 kg/m ²)	4.74" (120 mm)	47.76 lbs/ft ² (233.19 kg/m ²)

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**Tested according to UL 752 standard

SMARTGARD BULLET RESISTANT (MILITARY-RATED)

		SMARTGARD NIJ3A		SMARTGARD NIJ3		SMARTGARD NIJ4	
FIRE RATING	PILKINGTON PYROSTOP DESIGNATION	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.	NOMINAL THICKNESS	WEIGHT APPROX.
45 min.	45-200	1.90" (48 mm)	35.62 lbs/ft ² (173.90 kg/m ²)	2.53" (64 mm)	22.01 lbs/ft ² (107.45 kg/m ²)	2.99" (76 mm)	30.23 lbs/ft ² (147.58 kg/m ²)
60 min.	60-101	2.05" (52 mm)	37.26 lbs/ft ² (181.90 kg/m ²)	2.69" (68 mm)	23.65 lbs/ft ² (115.45 kg/m ²)	3.15" (80 mm)	31.87 lbs/ft ² (155.58 kg/m ²)
60 min.	60-201	2.21" (56 mm)	39.30 lbs/ft ² (191.90 kg/m ²)	2.84" (72 mm)	25.69 lbs/ft ² (125.45 kg/m ²)	3.31" (84 mm)	33.91 lbs/ft ² (165.58 kg/m ²)
90 min.	90-102	2.60" (66 mm)	44.01 lbs/ft ² (214.90 kg/m ²)	3.24" (82 mm)	30.40 lbs/ft ² (148.45 kg/m ²)	3.70" (94 mm)	38.62 lbs/ft ² (188.58 kg/m ²)
120 min.	120-104	3.27" (83 mm)	48.11 lbs/ft ² (234.90 kg/m ²)	3.91" (99 mm)	34.50 lbs/ft ² (168.45 kg/m ²)	4.37" (111 mm)	42.72 lbs/ft ² (208.58 kg/m ²)
90 - 120 min.	120-202	2.72" (69 mm)	45.04 lbs/ft ² (219.90 kg/m ²)	3.35" (85 mm)	31.43 lbs/ft ² (153.45 kg/m ²)	3.82" (97 mm)	39.65 lbs/ft ² (193.58 kg/m ²)
90 - 120 min.	120-262	3.51" (89 mm)	48.11 lbs/ft ² (234.90 kg/m ²)	4.14" (105 mm)	34.50 lbs/ft ² (168.45 kg/m ²)	4.61" (117 mm)	42.72 lbs/ft ² (208.58 kg/m ²)

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MAXIMUM ALLOWABLE SIZES

FIRE RATING	PILKINGTON PYROSTOP DESIGNATION	SUPPLY FORM	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
45 min.	45-200	Single Glazing	OTHER THAN DOORS DOOR	4,500 in ² (2.90 m ²) 3,724 in ² (2.40 m ²)	95-1/4" (2.42 m) 41-5/8" (1.06 m)		95-1/4" (2.42 m) 89-3/4" (2.28 m)
60 min.	60-101*	Single Glazing	OTHER THAN DOORS DOOR	5,616 in ² (3.62 m ²) 3,724 in ² (2.40 m ²)	96" (2.44 m) 41-5/8" (1.06 m)		96" (2.44 m) 89-3/4" (2.28 m)
60 min.	60-201*	Single Glazing	OTHER THAN DOORS DOOR	7,442 in ² (4.80 m ²) 3,724 in ² (2.40 m ²)	96" (2.44 m) 41-5/8" (1.06 m)		118-1/8" (3.00 m) 89-3/4" (2.28 m)
90 min.	90-102*	Single Glazing	OTHER THAN DOORS DOOR	3,724 in ² (2.40 m ²) 3,724 in ² (2.40 m ²)	96" (2.44 m) 41-5/8" (1.06 m)		96" (2.44 m) 89-3/4" (2.28 m)
120 min.	120-104*	I.G. Units	OTHER THAN DOORS	3,730 in ² (2.41 m ²)	111" (2.81 m)		111" (2.81 m)
90 - 120 min.	120-202	Single Glazing	OTHER THAN DOORS DOOR	3,730 in ² (2.41 m ²) 3,724 in ² (2.40 m ²)	111" (2.81 m) 41-5/8" (1.06 m)		111" (2.81 m) 89-3/4" (2.28 m)
90 - 120 min.	120-262	I.G. Units	OTHER THAN DOORS	3,730 in ² (2.41 m ²)	111" (2.81 m)		111" (2.81 m)

+ Available with a translucent interlayer

*Interior use only

FAMILY OF PRODUCTS

TGP offers a complete family of products for all your fire-rated glazing needs, ranging from 20 minute to 3 hour applications. More information is available online at fireglass.com, or by calling 800.426.0279.

Fireglass®20

Fire-rated, impact safety-rated glass

FireLite®

Fire-rated glass ceramic

FireLite® NT

Fire-rated, impact safety-rated glass ceramic with surface-applied film

FireLite Plus®

Fire-rated, impact safety-rated glass ceramic

FireLite® IGU

Fire-rated or fire/impact safety-rated insulated glass units

Pilkington Pyrostop®

Fire-rated, impact safety-rated transparent wall panels

WireLite®

Fire-rated, wired glass

WireLite® NT

Fire-rated, impact safety-rated wired glass with surface-applied film

Fireframes®

Fire-rated framing & doors for use with all TGP glass products