

SEE WHAT
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Pyrobel 45

Features & Benefits

- Manufactured by AGC for 45 minute fire rating with hose stream
- Multi-laminated glass with intumescent interlayers
- Designated on drawings and in specifications as Pyrobel 45
- Tested for use as door lites and 48" x 96" fixed lites in accordance with ASTM E119, NFPA 80, NFPA 257, NFPA 252, UL 9, UL 10B, and UL 10C
- Tested to ANSI Z97.1 and CPSC 16CFR 1201 to meet maximum safety ratings
- Available for standard steel door and frame assemblies with 5/8" stops
- Available with additional lite for decorative, patterned, or painted appearance
- For use in interior and exterior applications
- U.S. fabrication for fast delivery



Maximum Glazing Sizes (ClearView)

	Width	Height	Max. Sq. In.	Stop Height	Listing
Doors	58 3/4"	58 3/4"	2747"	5/8"	Intertek/WHI
Windows and Borrowed Lites	96"	96"	4608"	5/8"	Intertek/WHI
Sidelites	96"	96"	4608"	5/8"	Intertek/WHI

For more information, please contact marketing@generalglass.com.

General Characteristics

	Interior	Exterior	Insulated Exterior
Usage	Interior	Ext. below 120°F, above -20°F	Ext. above 120°F, below -20°F
Thickness	5/8" (16mm) -0/+1.5mm	3/4" (20mm) +/-1mm	1 1/4" (34mm) +/-2mm
Weight/sq.ft.	8.2 lbs (40kg/sq.m)	9.8 lbs (48kg/sq.m)	13.12 lbs (64kg/sq.m)
Light transmission	85%	83%	74%
Sound reduction	Rw=39 dB	Rw=40 dB	Rw=42 dB
Safety rating	CPSC 16CFR1201 Cat. II 400 ft. lbs. ANSI Z97.1		
Fire rating	45 minutes		
R-value	1.09	1.14	1.89
U-value	0.915	0.881	0.528

Product Guidelines

LISTINGS

Testing completed by Intertek/Warnock-Hersey and UL

LABELING

All products are labeled bearing the manufacturers name, testing laboratory, rating and safety standards.

INSTALLATION

All systems require 1/4" x thickness of glass x 3" calcium silicate setting blocks placed at sill quarter points. Each lite of Pyrobel must be inspected prior to installation for damage including review of edge protecting tape. (DO NOT INSTALL GLASS THAT HAS BEEN DAMAGED.) Pyrobel must be glazed with 1/8" x 1/2" closed cell foam glazing tape. Exterior glazing must have PVB side facing to exterior side. Refer to shop drawings for final assembly requirements.

STORAGE AND HANDLING

Store in a dry, ventilated location, not exposed to solar radiation at temperatures not to exceed -20°F or 120°F. Always maintain glass in a vertical position with back slightly inclined at 6-10°.

QUALITY STANDARD

Pyrobel products are specially prepared products designed to prevent the expansion of fire. Thus, the specific optical quality should not be compared to single float or laminated PVB glazing. Consult GGI for specific acceptable quality standards.

GUARANTEE

The manufacturer, **AGC Flat Glass Europe**, guarantees the characteristics of Pyrobel for a period of 5 years from date of delivery. Due to the nature of its interlayers, Pyrobel may develop some minor imperfections such as small bubbles or a slight distortion which will not affect the free vision through the glazing or fire performance. A variation of up to 5% of light transmission or haze shall not be considered a defect. This guarantee is for replacement of glass only. Any other costs associated with the removal or replacement of defective units is not the responsibility of the manufacturer. The guarantee shall apply only to glass handled, transported, stored and installed in accordance with normal procedures.

For more information, please contact marketing@generalglass.com.

SEE WHAT
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Pyrobel 60

Features & Benefits

- Manufactured by AGC for 60 minute fire rating with hose stream
- Multi-laminated glass with intumescent interlayers
- Available in butt-glazed assembly*
- Designated on drawings and in specifications as Pyrobel 60
- Tested in accordance with ASTM E119, NFPA 80, NFPA 252, NFPA 257, UL 9, UL 10B, UL 10C and UL 263 as a transparent wall assembly using *StileLite™* or *GGI-KwicKap™* or *GGI PyroFrames™*
- Tested to ANSI Z97.1 and CPSC 16CFR 1201 to meet maximum safety ratings
- Available for use in door vision lite assemblies with 5/8" stop height
- Available with additional lite for decorative, patterned, or painted appearance
- For use in interior and exterior applications
- U.S. fabrication for fast delivery



Maximum Glazing Sizes (ClearView)

	Width	Height	Max. Sq. In.	Stop Height	Listing
Doors	87 5/8"	87 5/8"	3855	5/8"	Intertek/WHI
<i>PyroFrames™</i>	86 5/8"	86 5/8"	3833	5/8"	Intertek/WHI
<i>KwicKap™</i>	*87 5/8"	*87 5/8"	*3855	1 1/4"	Intertek/WHI & UL
<i>Vision 60™</i>	*48"	*96"	*4608	5/8"	Intertek/WHI
<i>StileLite 60™</i>	93"	93"	4487	5/8"	Intertek/WHI

For more information, please contact marketing@generalglass.com.

General Characteristics

	Interior	Exterior	Insulated Exterior
Usage	Interior	Ext. below 120°F, above -20°F	Ext. above 120°F, below -20°F
Thickness	1" (25mm) +/-2mm	1 1/4" (29mm) +/-2mm	1 3/4" (45mm) +/-2mm
Weight/sq.ft.	12.3 lbs (60kg/sq.m)	13.94 lbs (68kg/sq.m)	17 lbs (83kg/sq.m)
Light transmission	81%	80%	71%
Sound reduction	Rw=42 dB	Rw=43 dB	Rw=44 dB
Safety rating	CPSC 16CFR1201 Cat. II 400 ft. lbs. ANSI Z97.1		
Fire rating	60 minutes		
R-value	1.14	1.16	2.18
U-value	0.881	0.862	0.458

Maximum structural load performance (wind load-ASTM E330) of Pyrobel-60-25 is 1119.1 lbs./sq. ft.

Product Guidelines

LISTINGS

Testing completed by Intertek/Warnock-Hersey and UL

LABELING

All products are labeled bearing the manufacturers name, testing laboratory, rating and safety standards.

INSTALLATION

All systems require 1/4" x thickness of glass x 3" calcium silicate setting blocks placed at sill quarter points. Each lite of Pyrobel must be inspected prior to installation for damage including review of edge protecting tape. (DO NOT INSTALL GLASS THAT HAS BEEN DAMAGED.) Pyrobel must be glazed with 1/8" x 1/2" closed cell foam glazing tape. Exterior glazing must have PVB side facing to exterior side. Refer to shop drawings for final assembly requirements.

STORAGE AND HANDLING

Store in a dry, ventilated location, not exposed to solar radiation at temperatures not to exceed -20°F or 120°F. Always maintain glass in a vertical position with back slightly inclined at 6-10°.

QUALITY STANDARD

Pyrobel products are specially prepared products designed to prevent the expansion of fire. Thus, the specific optical quality should not be compared to single float or laminated PVB glazing. Consult GGI for specific acceptable quality standards.

GUARANTEE

The manufacturer, **AGC Flat Glass Europe**, guarantees the characteristics of Pyrobel for a period of 5 years from date of delivery. Due to the nature of its interlayers, Pyrobel may develop some minor imperfections such as small bubbles or a slight distortion which will not affect the free vision through the glazing or fire performance. A variation of up to 5% of light transmission or haze shall not be considered a defect. This guarantee is for replacement of glass only. Any other costs associated with the removal or replacement of defective units is not the responsibility of the manufacturer. The guarantee shall apply only to glass handled, transported, store and installed in accordance with normal procedures.

For more information, please contact marketing@generalglass.com.

Pyrobel 90

Features & Benefits

- Manufactured by AGC for 90 minute fire rating with hose stream
- Multi-laminated glass with intumescent interlayers
- Designated on drawings and in specifications as Pyrobel 90
- Tested in accordance with ASTM E119, NFPA 80, NFPA 252, NFPA 257, UL 9, UL 10B, UL 10C and UL 263 as a transparent wall assembly using *GGI-PyroFrames™* or *GGI-KwicKap™* and in *GGI-PyroDoors™*
- Tested to ANSI Z97.1 and CPSC 16CFR 1201 to meet maximum safety ratings
- Available for standard steel door vision lite assemblies with 5/8" stop height
- Available with additional lite for decorative, patterned, or painted appearance
- For use in interior and exterior applications
- U.S. fabrication for fast delivery



Maximum Glazing Sizes (ClearView)

	Width	Height	Max. Sq. In.	Stop Height	Listing
<i>PyroDoors™</i>	39 3/4"	87 5/8"	3492	5/8"	Intertek/WHI
<i>PyroFrames™</i>	87 5/8"	87 5/8"	3833	5/8"	Intertek/WHI
<i>KwicKap™</i>	87 5/8"	87 5/8"	3528	5/8"	Intertek/WHI
Vision Lites	36"	61"	2196	5/8"	Intertek/WHI

General Characteristics

	Interior	Exterior	Insulated Exterior
Usage	Interior	Ext. below 120°F, above -20°F	Ext. above 120°F, below -20°F
Thickness	1 3/8" (35mm) +/-2mm	1 1/2" (37mm) +/-2mm	2" (50mm) +/-2mm
Weight/sq.ft.	16.4 lbs (80kg/sq.m)	18 lbs (88kg/sq.m)	21 lbs (103kg/sq.m)
Light transmission	82%	81%	72%
Sound reduction	Rw=43 dB	Rw=44 dB	Rw=46 dB
Safety rating	CPSC 16CFR1201 Cat. II 400 ft. lbs. ANSI Z97.1		
Fire rating	90 minutes		
R-value	1.16	1.21	2.22
U-value	0.862	0.828	0.460

Maximum structural load performance (wind load-ASTM E330) of Pyrobel-90-37 is 512.4 lbs/sq.

Product Guidelines

LISTINGS

Testing completed by Intertek/Warnock-Hersey and UL

LABELING

All products are labeled bearing the manufacturers name, testing laboratory, rating and safety standards.

INSTALLATION

All systems require 1/4" x thickness of glass x 3" calcium silicate setting blocks placed at sill quarter points. Each lite of Pyrobel must be inspected prior to installation for damage including review of edge protecting tape. (DO NOT INSTALL GLASS THAT HAS BEEN DAMAGED.) Pyrobel must be glazed with 1/8" x 1/2" closed cell foam glazing tape. Exterior glazing must have PVB side facing to exterior side. Refer to shop drawings for final assembly requirements.

STORAGE AND HANDLING

Store in a dry, ventilated location, not exposed to solar radiation at temperatures not to exceed -20°F or 120°F. Always maintain glass in a vertical position with back slightly inclined at 6-10°.

QUALITY STANDARD

Pyrobel products are specially prepared products designed to prevent the expansion of fire. Thus, the specific optical quality should not be compared to single float or laminated PVB glazing. Consult GGI for specific acceptable quality standards.

GUARANTEE

The manufacturer, **AGC Flat Glass Europe**, guarantees the characteristics of Pyrobel for a period of 5 years from date of delivery. Due to the nature of its interlayers, Pyrobel may develop some minor imperfections such as small bubbles or a slight distortion which will not affect the free vision through the glazing or fire performance. A variation of up to 5% of light transmission or haze shall not be considered a defect. This guarantee is for replacement of glass only. Any other costs associated with the removal or replacement of defective units is not the responsibility of the manufacturer. The guarantee shall apply only to glass handled, transported, store and installed in accordance with normal procedures.

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SEE WHAT
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Pyrobel 120

Features & Benefits

- Manufactured by AGC for 120 minute fire rating with hose stream
- Multi-laminated glass with intumescent interlayers
- Available in butt-glazed assembly*
- Designated on drawings and in specifications as Pyrobel 120
- Tested in accordance with ASTM E119, NFPA 80, NFPA 252, NFPA 257, UL 9, UL 10B, UL 10C and UL 263 as a transparent wall assembly using *GGI-PyroFrames™* or *StileLite 300™* or *GGI-KwickKap™*
- Tested to ANSI Z97.1 and CPSC 16CFR 1201 to meet maximum safety ratings
- Available for standard steel door vision lite assemblies with 5/8" stop height
- Available with additional lite for decorative, patterned, or painted appearance
- Meets maximum performance requirements of ASTM C1629 Hard Body Impact testing
- ASTM C1629 Hard Body impact Classification Level 3 for materials; soft Body Impact Classification Level 2 for the Assembly as required by NYBC



Maximum Glazing Sizes (ClearView)

	Width	Height	Max. Sq. In.	Stop Height	Listing
<i>PyroFrames™</i>	86 5/8"	86 5/8"	3833	5/8"	Intertek/WHI
<i>StileLite300</i>	94"	94"	4434	5/8"	Intertek/WHI & UL
<i>KwickKap™</i>	*100 7/8"	*100 7/8"	*4434	11/4"	UL
Butt-Glazed Panel	40"	114"	4560	11/4"	UL

For more information, please contact marketing@generalglass.com.

General Characteristics

	Interior	Exterior	Insulated Exterior
Usage	Interior	Ext. below 120°F, above -20°F	Ext. above 120°F, below -20°F
Thickness	2 1/8" (53mm) +3/-1mm	2 5/16" (57mm) +3/-1mm	2 3/4" (70mm) +3/-1mm
Weight/sq.ft.	24.6 lbs (120kg/sq.m)	26.2 lbs (128kg/sq.m)	30 lbs (146kg/sq.m)
Light transmission	71%	70%	Varies
Sound reduction	Rw=46 dB	Rw=47 dB	Varies
Safety rating	CPSC 16CFR1201 Cat. II 400 ft. lbs. ANSI Z97.1		
Fire rating	120 minutes		
R-value	1.18	1.21	Varies
U-value	0.845	0.828	Varies

Maximum structural load performance (wind load-ASTM E330) of Pyrobel 120 is 512.4 lbs/sq. ft.

Product Guidelines

LISTINGS

Testing completed by Intertek/Warnock-Hersey and UL

LABELING

All products are labeled bearing the manufacturers name, testing laboratory, rating and safety standards.

INSTALLATION

All systems require 1/4" x thickness of glass x 3" calcium silicate setting blocks placed at sill quarter points. Each lite of Pyrobel must be inspected prior to installation for damage including review of edge protecting tape. (DO NOT INSTALL GLASS THAT HAS BEEN DAMAGED.) Pyrobel must be glazed with 1/8" x 1/2" closed cell foam glazing tape. Exterior glazing must have PVB side facing to exterior side. Refer to shop drawings for final assembly requirements.

STORAGE AND HANDLING

Store in a dry, ventilated location, not exposed to solar radiation at temperatures not to exceed -20°F or 120°F. Always maintain glass in a vertical position with back slightly inclined at 6-10°.

QUALITY STANDARD

Pyrobel products are specially prepared products designed to prevent the expansion of fire. Thus, the specific optical quality should not be compared to single float or laminated PVB glazing. Consult GGI for specific acceptable quality standards.

GUARANTEE

The manufacturer, **AGC Flat Glass Europe**, guarantees the characteristics of Pyrobel for a period of 5 years from date of delivery. Due to the nature of its interlayers, Pyrobel may develop some minor imperfections such as small bubbles or a slight distortion which will not affect the free vision through the glazing or fire performance. A variation of up to 5% of light transmission or haze shall not be considered a defect. This guarantee is for replacement of glass only. Any other costs associated with the removal or replacement of defective units is not the responsibility of the manufacturer. The guarantee shall apply only to glass handled, transported, stored and installed in accordance with normal procedures.

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