LISTING INFORMATION OF GGI Glass Distributors "Pyrobel" Fire Rated Glazing

SPEC ID: 39909

GGI Glass Distributors Corp.
101 Venture Way

Secaucus, NJ 07094

Note: The first number shows the fire-rating, in minutes, and the second number shows glazing thickness in millimeters.

“Pyrobel 45-16” (Door, Transom Light, Sidelight, and Borrowed Light)

Nominal 5/8" (16mm) thick "Pyrobel 45-16"* Glazing Panel for use in wood or steel fire doors in steel frames for sidelights/transom lights/borrowed lights, in up to 45 minute locations.

Limitations: When installed in door vision panels, listed fire rated steel door vision panel frame is required. In addition, 1/4" (6.4mm) high x 5/8" (16mm) wide x 3" (76.2mm) long calcium silicate setting blocks must be used at quarter points under the bottom edge; and 1/8" (3mm) thick x 1/2" (12.7mm) wide, closed cell foam glazing tape is required on all edges (on both faces). Exterior glazing compound of an additional laminated glazing layer with PVB is acceptable, including an additional insulating glazing panel.
Complies with ANSI Z97.1 (2009) Class A, Impact test requirements.

	Sidelight, Transom Light, and Borrowed Light	Doors
Maximum Allowable Clear View Area	4608 sq in. (2.97 sq m)	2747 sq in. (1.77 sq m)
Maximum Allowable Clear View Width	96" (244 cm)	58-3/4" (149 cm)
Maximum Allowable Clear View Height	96" (244 cm)	58-3/4" (149 cm)
Minimum Stop Depth	5/8" (15.87 mm)	5/8" (15.87 mm)

“Pyrobel 60-25” (Glazed Wall)

Nominal 1" (25.4mm) thick "Pyrobel 60-25"* Glazing Panel for use as non-load bearing fire rated wall system, in up to 60 minute locations.

Limitations: Exterior glazing wall compound or an additional laminated glazing layer with PVB is acceptable, including insulated glazing panel.
Complies with ANSI Z97.1 (2009) Class A, Impact test requirements.

Maximum Allowable Clear View Area	3855 sq in. (2.48 sq m)
Maximum Allowable Clear View Width	87-5/8" (223 cm)
Maximum Allowable Clear View Height	87-5/8" (223 cm)
Minimum Stop Depth	1" (25.4 cm)

“Pyrobel 60-25” (Door, Transom Light, Sidelight, and Glazed Wall)

Nominal 1" (25mm) thick "Pyrobel 60-25"* Glazing Panel for use in composite core wood or steel fire doors in steel frames for sidelights/transom light/borrowed lights, in up to 60 minute locations. This glazing maintains a temperature rise of no more than 250°F (121.11°C) above ambient and is acceptable for fire rated doors with temperature rise rating.

Limitations: In doors, this product must be installed in a listed, fire rated, steel door vision frame, made of cold rolled steel (minimum material thickness = 0.04" (1.01 mm) with through-bolt fasteners at maximum 12" (304.8 mm) o.c. In addition, 1/4" (6.4mm) high x 1" (25.4mm) wide x 3" (76.2mm) long calcium silicate setting blocks

must be used at quarter points under the bottom edge; and 1/8" (3mm) thick x 1/2" (12.7mm) wide, closed cell foam glazing tape is required on all edges (on both faces). Exterior glazing composed of an additional laminate glazing layer with PVB is acceptable, including an additional insulating glazing panel. Use of this glazing in sizes exceeding 100 sq in. (645 sq cm) in 60 minute fire rated doors may require prior approval by the Authority Having Jurisdiction.
Complies with ANSI Z97.1 (2009) Class A, Impact test requirements.

Maximum Allowable Clear View Area	3855 sq in. (2.48 sq m)
Maximum Allowable Clear View Width	87-5/8" (223 cm)
Maximum Allowable Clear View Height	87-5/8" (223 cm)
Minimum Stop Depth	5/8" (15.9 cm)

“Pyrobel 90-35” (Door, Transom Light, Sidelight, and Borrowed Light)

Nominal 1-3/8" (35mm) thick "Pyrobel 90-35"* Glazing Panel for use in composite core wood or steel fire doors, in steel frames for transom lights/sidelights/borrowed lights in up to 90 minute locations. This product maintains a temperature-rise of no more than 250°F (122°C) above ambient and is acceptable for fire-rated doors with temperature-rise ratings.

Limitations: 1) *Denotes manufacturer's designation. 2) When installed in door vision light panels, listed fire rated steel door vision panel frame is required. 3) In addition, 1/4" (6.4mm) high x 1-3/8" (35mm) wide x 3" (76.2mm) long calcium silicate setting blocks must be used at quarter points under bottom edge of glazing; 1/8" (3mm) thick x 1/2" (12.7mm) wide, closed-cell foam glazing tape is required on all edges (on both faces). 4) Exterior glazing composed of an additional laminated glazing layer with PVB is acceptable, including an additional insulating glazing panel. 5) Use of this glazing in sizes exceeding 100 sq in. (645 sq in.) in 90 minute fire-rated doors may require prior approval by the Authority Having Jurisdiction. 6) If width or height dimension for a vision light panel exceeds 35-1/4" to a maximum of 45", then maximum clear view area reduces to 1080 sq in.
Complies with ANSI Z97.1 (2009) Class A, Impact test requirements.

Clear View Dimensions	Steel Doors	Wood Doors	Raised Side Lights	Transom Lights	Borrowed Lights/Windows
Maximum Width	36" (914 mm)	36" (914 mm)	84" (2134 mm)	84" (2134 mm)	84" (2134 mm)
Maximum Height	61" (1549 mm)	61" (1549 mm)	84" (2134 mm)	35-1/4" (869 mm)	84" (2134 mm)
Maximum Area	2196 sq in. (1.42 sq m)	2196 sq in. (1.42 sq m)	3528 sq in. (2.28 sq m)	1243 sq in. (0.76 sq m)	3528 sq in. (2.28 sq m)
Minimum Stop Height	5/8" (16mm)	5/8" (16mm)	5/8" (16 mm)	5/8" (16 mm)	5/8" (16 mm)

“Pyrobel 90-35” (Glazed Wall)

Nominal 1-3/8" (35mm) thick "Pyrobel 90-35"* Glazing Panel for use as non-load bearing fire rated wall system, in up to 90 minute locations or proprietary frame systems.

Limitations: Exterior glazing wall compound or an additional laminated glazing layer with PVB is acceptable, including insulated glazing panel.
Complies with ANSI Z97.1 (2009) Class A, Impact test requirements.

Maximum Allowable Clear View Area	3828 sq in.
Maximum Allowable Clear View Width	88"
Maximum Allowable Clear View Height	88"
Minimum Stop Depth	1"

“Pyrobel 120-53” (Glazed Wall)

Nominal 2-1/8" ± 1/8" (53mm ± 3mm) thick "Pyrobel 120-53"* Glazing Panel for use as non-load bearing fire rated wall system, in up to 120 minute locations or proprietary frame systems.

Limitations: Exterior glazing wall compound used for exterior applications is composed of an additional laminated glazing layer with PVB including an additional insulated glazing panel.
Complies with ANSI Z97.1 (2009) Class A, Impact test requirements.

Maximum Allowable Clear View Area	3828 sq in.
Maximum Allowable Clear View Width	88"
Maximum Allowable Clear View Height	88"
Minimum Stop Depth	1"

* Denotes Manufacturer's Designation

Companies that Manufacture or Assembly Glazing/Glass Under Warnock Hersey Label Service
Intertedge Technologies
27 Central Avenue
Sausalito, CA 94965

Evaluated to the following...
Unless otherwise noted, the glazing in this section have been evaluated for conformance to the following standards listed below:
When listed for use in a Door Vision Panel, Transom or Side Light:
ASTM-E152, Methods of Fire Tests of Door Assemblies
CAN/ULC-S104, Standard Method for Fire Tests of Door Assemblies
CSFM-43.7, Standard Methods of Fire Tests of Door Assemblies
NFPA-252, Standard Methods of Fire Tests of Door Assemblies
UBC-7-2-94, Uniform Building Code Standard
UL-10(b), Fire Tests of Door Assemblies

When listed for use in a Fire Window Assembly:
ASTM-E163, Methods of Fire Tests of Fire Window Assemblies
CAN/ULC-S106, Standard Method for Fire Tests of Window & Glass Block Assemblies
NFPA-257, Standard Method for Fire Tests of Fire Window Assemblies
UBC-7-4-94, Uniform Building Code Standard
UL-9, Fire Tests of Fire Window Assemblies

When listed for use as wall system:
ASTM E-119 (2016) Test Methiod for Fire Test of Building Construction and Materials
UL 263 (2015) Standards for Fire Test of Building Construction and Materials
ULC/CAN-S101 (2014) Standard Method of Fire Endurance Tests of Building Construction and Materials

Listed products are intended to be installed, unless otherwise noted, in accordance with the following:
NFPA-80, Fire Doors & Windows
Manufacturer's Instructions.
Listed maximum sizes of glazing are based on sizes tested and may exceed those allowed by local codes.
Dependent on the end use installation, local codes may require that additional criteria be met to address considerations such as radiant heat hazards and impact safety. Under such circumstances, the prior approval of the Authority Having Jurisdiction must be obtained unless conformance to relevant additional requirements is indicated within the individual listing.
Clearance between the edges if the glazing and the inside edge of the frame shall not exceed 1/8" unless otherwise noted in the individual listing or the manufacturer's installation instructions.
All glazing is identified by an etched mark or label bearing the WHI Certification Mark or ETL Mark.

Attribute	Value
Criteria	ASTM E119 (Engulfment)
Criteria	UBC 7-2 (1997)
Criteria	UL 10(b) (1997)
Criteria	ASTM E2074 (2000)
Criteria	UBC 7-4 (1997)
Criteria	NFPA 252 (2003)
Criteria	ASTM E152-81AE02
Criteria	CAN / ULC S104 1980 (R1985)
Criteria	UL 10(c) (R2001)
Criteria	UL 10(b) Revision 1 (2009)
Criteria	UL 10(c) (2009)
Criteria	CAN / ULC S104 (2010)
Criteria	UL 263 (2011)
Criteria	ANSI Z97.1 (2009)
Criteria	NFPA 252 (2012)
Criteria	CAN / ULC S101 (2014)
CSI Code	08 80 00 Glazing
Glazing	Fire Rated Glass
Intertek Services	Certification
Listed or Inspected	LISTED

Listing Section	GLAZING/GLASS
Report Number	3071996
Spec ID	39909
Verification Testing	No