

CITY OF NEW YORK  
DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of the Material and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, A.I.A., Commissioner

MEA 97-03-M

Report of Material and Equipment Acceptance Division

Manufacturer – Vetrotech Saint-Gobain, 1220 37<sup>th</sup> Street, NW #103 Auburn, Washington 98001.

Trade Name – Verotech.

Product – Glazing product for fire rated doors.

Pertinent Code Section(s) – 27-329, 27-342, 27-651.

Prescribed Tests – RS 5-6 (ASTM E152), RS 5-7 (ASTM E163), RS 5-2 (ASTM E119), RS 10-67 (ANSI Z97.1).

Laboratory – Intertek Testing Services.

Test Report- WHI-495 (16603, 1492, PSV-1548 SP-667.3, PSV-1520. 1667, SP-0672, PSV – 1546, 1621, PSV-1488, SP-1488, SP-0671, 1663, PSV-1558, 1668, PSV-1597, 1489, 14-15.

Description –

Pyroswiss Extra\* tempered, clear, alkaline silicate glass for use as door vision panels, transom lights, sidelights, and borrowed lights in positive pressure 20/30 minute without hose stream locations.

Standards:

UBC Std 7-2 (1997), UL 10C (1998), NFPA 252 (1999), ASTM E2074 (2000), CAN4-S104-M80 (1980), UBC Std 7-4 (1997), UL 9 (2000), NFPA 257 (2000), ASTM E2010 (2001), CAN4-S106-M80 (1980)

Limitations:

1. Listed for US market only
2. For installation in listed wood, aluminum or steel door vision panel frame kits in steel/wood doors or steel sidelight frames in drywall or masonry. For use in ordered sizes only.
3. Thickness: 0.197" ± 0.007" (5 mm ± 0.2 mm)
4. Dimensions (note: VPF = Vision Panel Frame)

Pyroswiss Extra\* (0.197"/ 5 mm) Positive Pressure 20/30 Minutes (Without Hose Stream)

CLEAR VIEW DIMENSIONS	STEEL VPF IN WOOD DOORS	STEEL/ALUMINUM VPF IN STEEL DOORS	WOOD VPF IN WOOD DOORS	SIDE LIGHTS/BORROWED LIGHTS/TRANSOM LIGHTS
MAX WIDTH	34" (863 mm)	35-13/16" (910 mm)	23" (584 mm)	60" (1524 mm)
MAX HEIGHT	69-3/4" (1771 mm)	81-1/4" (2064 mm)	28-3/4" (730 mm)	92-3/4" (2355 mm)
MAX AREA	2372 sq. in. (1.53 sq. m.)	2910 sq. in. (1.88 sq. m.)	662 sq. in. (0.43 sq. m.)	4638 sq. in. (2.99 sq. m.)
MIN STOP HEIGHT	1/2" (13 mm)	1/2" (13 mm)	1/2" (13 mm)	5/8" (16 mm)

Notes:

1. Can be lightly etched on one surface only
2. Can be made into insulating units
3. Decorative ceramic frit maybe added to units

Products:

Keralite® FR-R, Keralite® FR-F, Keralite® FR-L, clear ceramic glazing, monolithic/laminated, for use in door vision panels, transom lights, sidelights and fire window assemblies (borrowed lights) in up to 3-hour locations (positive pressure), with hose stream.

Standards:

UBC Std 7-2 (1997), UL 10C (1998), NFPA 252 (1999), ASTM E2074 (2001), UBC Std 7-4 (1997), UL 9 (2000), NFPA 257 (2000), ASTM E2010 (2001)

KERALITE FR-R

Limitations:

1. For use only with fire-rated steel door vision panel frames in fire-rated steel transom light/sidelight frames and fire window assemblies
2. Thickness:
  - a) Keralite® FR-R: 0.197" (5 mm) (monolithic glazing)
  - b) Keralite® FR-L: 0.315" (8.0 mm) (laminated glazing)
  - c) Keralite® FR-L: 0.390" (9.90 mm) (laminated glazing)
3. Dimensions

Keralite® FR-R, Keralite® FR-F (0.197"/ 5 mm) 90 Minutes (W/Hose Stream)

Clear View Dimensions	WOOD/STEEL DOORS	RAISED SIDE LIGHTS/BORROWED LIGHTS/WINDOWS	TRANSOM LIGHTS
MAX WIDTH	60-1/4" (1530 mm)	60-1/4" (1530 mm)	60-1/4" (1530 mm)
MAX HEIGHT	60-1/4" (1530 mm)	60-1/4" (1530 mm)	60-1/4" (1530 mm)
MAX AREA	1511 sq. in. (0.975 sq. m.)	1,763 sq. in. (1.14 sq. m.)	1,763 sq. in. (1.14 sq. m.)
MIN STOP HEIGHT	1/2" (12.7 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)



**Products:**

Swissflam-45 N2 clear, alkali silicate fire-rated glazing with an intumescent interlayer, for use with fire-rated, steel vision panel frames in steel/wood doors and in sidelights, transom lights and fire window assemblies (borrowed lights) in 45 minute locations (positive pressure) with hose stream.

**Standards:**

UBC Std 7-2 (1997), UL 10C (1998), NFPA 252 (1999), ASTM E2074 (2000), CAN4-S104-M80 (1980), UBC Std 7-4 (1997), UL 9 (2000), NFPA 257 (2000), ASTM E2010 (2001), CAN4-S106-M80 (1980)

**Limitations:**

1. For installation in labeled fire-rated steel door vision panel frames in fire-rated wood/steel doors, and fire-rated steel transom light/sidelight frames in drywall or masonry and fire window assemblies
2. Nominal Thickness: 5/8" (16 mm) or 3/4" (18 mm)
3. Dimensions

SWISSFLAM-45 N2 45 Minutes (w/Hose Stream)				
CLEAR VIEW DIMENSIONS	STEEL DOORS	WOOD DOORS	RAISED SIDE LIGHTS/BORROWED LIGHTS/WINDOWS	TRANSOM LIGHTS
MAX WIDTH	77-1/2" (1969 mm)	70-1/2" (1969 mm)	84" (2134 mm)	84" (2134 mm)
MAX HEIGHT	77-1/2" (1969 mm)	70-1/2" (1969 mm)	84" (2134 mm)	84" (2134 mm)
MAX AREA	2635 sq. in. (1.70 sq. m.)	2397 sq. in. (1.55 sq. m.)	3775 sq. in. (2.44 sq. m.)	1722 sq. in. (1.11 sq. m.)
MIN STOP HEIGHT	1/2" (12.7 mm)	1/2" (12.7 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)

**Notes:**

1. Can be lightly etched on one surface only
2. Can be made into insulating units

**Products:**

Swissflam-60 N2 clear, alkali silicate fire-rated glazing with intumescent interlayers, for use with fire-rated, steel vision panel frames in steel/wood doors and in sidelights, transom lights, transparent wall systems and fire window assemblies (borrowed lights) in 60 minute locations (positive pressure) with hose stream.

**Standards:**

UBC Std 7-2 (1997), UL 10C (1998), NFPA 252 (1999), ASTM E2074 (2000), CAN4-S104-M80 (1980), UBC Std 7-4 (1997), UL 9 (2000), NFPA 257 (2000), ASTM E2010 (2001), CAN4-S106-M80 (1980), UL 263 (1997), NFPA 251 (1999), ASTM E119 (1997), UBC Std. 7-1 (1997), CAN/ULC-S101-M89 (1989)

**Limitations:**

1. For installation in labeled fire-rated steel door vision panel frames in fire-rated wood/steel doors, and fire-rated steel transom light/sidelight frames in drywall or masonry and fire window assemblies
2. Nominal Thickness: 0.985" (25 mm), 1.024" (26 mm) or 1.102" (28 mm)
3. Dimensions



SWISSFLAM-60 N2 (1.102" / 28 mm thick) 60 Minutes (w/Hose Stream)					
CLEAR VIEW DIMENSIONS	STEEL DOORS	WOOD DOORS	RAISED SIDE LIGHTS/BORROWED LIGHTS/WINDOWS	TRANSOM LIGHTS	WALL SYSTEMS
MAX WIDTH	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)
MAX HEIGHT	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)
MAX AREA	4465 sq. in. (2.88 sq. m.)	4465 sq. in. (2.88 sq. m.)	4465 sq. in. (2.88 sq. m.)	4465 sq. in. (2.88 sq. m.)	4465 sq. in. (2.88 sq. m.)
MIN STOP HEIGHT	1/2" (12.7 mm)	1/2" (12.7 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)

SWISSFLAM-60 N2 (1.024" / 26 mm thick) 60 Minutes (w/Hose Stream)					
CLEAR VIEW DIMENSIONS	STEEL DOORS	WOOD DOORS	RAISED SIDE LIGHTS/BORROWED LIGHTS/WINDOWS	TRANSOM LIGHTS	WALL SYSTEMS
MAX WIDTH	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)
MAX HEIGHT	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)
MAX AREA	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)
MIN STOP HEIGHT	1/2" (12.7 mm)	1/2" (12.7 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)

SWISSFLAM-60 N2 (0.985" / 25 mm thick) 60 Minutes (w/Hose Stream)					
CLEAR VIEW DIMENSIONS	STEEL DOORS	WOOD DOORS	RAISED SIDE LIGHTS/BORROWED LIGHTS/WINDOWS	TRANSOM LIGHTS	WALL SYSTEMS
MAX WIDTH	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)
MAX HEIGHT	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)	95" (2413 mm)
MAX AREA	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)	3325 sq. in. (2.15 sq. m.)
MIN STOP HEIGHT	1/2" (12.7 mm)	1/2" (12.7 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)	5/8" (15.87 mm)

Notes:

1. Can be lightly etched on one surface only
2. Can be made into insulating units



Swissflam-90 N2 clear, alkali silicate fire-rated glazing with intumescent interlayers, for use with fire-rated, steel vision panel frames in steel doors assemblies (borrowed lights) in 90 minute locations (positive pressure) with hose stream.

**Standards:**

UBC Std 7-2 (1997), UBC Std 7-4 (1997), UL 10C (1998), UL 9 (2000), NFPA 252 (1999), NFPA 257 (2000), ASTM E2074 (2000), ASTM 2010 (2001), CAN4-S104-M80 (1980), CAN4-S106-M80 (1980)

**Limitations:**

1. For installation in labeled fire-rated steel door vision panel frames in fire-rated steel door assemblies.
2. Nominal Thickness: 1.339" (34 mm)
3. Dimensions

SWISSFLAM-90 N2 (1.339" / 34 mm thick) 90 Minutes (w/Hose Stream)					
CLEAR VIEW DIMENSIONS	STEEL DOORS	WOOD DOORS	RAISED SIDE LIGHTS	TRANSOM LIGHTS	BORROWED LIGHTS/WINDOWS
MAX WIDTH	31-7/8" (810 mm)	NA	NA	NA	31-7/8" (810 mm)
MAX HEIGHT	34" (864 mm)	NA	NA	NA	34" (864 mm)
MAX AREA	1084 sq. in. (0.70 sq. m.)	NA	NA	NA	1084 sq. in. (0.70 sq. m.)
MIN STOP HEIGHT	5/8" (16 mm)	NA	NA	NA	5/8" (16 mm)

**Recommendation –** That the above described glazing material installed in fire rated doors assemblies be accepted a providing fire protection rating as described above when installed in accordance with manufacturer's installation instructions and Reference Standard RS 5-8 (NFPA 80) for Class B or C openings, in which opening occurs on condition that the certificates or labels accompanying all shipments shall be provided by the testing services which shall be regularly engaged by the manufacturer to make periodic inspections and/or tests of the fire protection rated glazing materials in the course of their manufacturer.

All shipments and deliveries of such materials, shall in addition, be accompanied by a metal tag certifying that the materials shipped or delivered are equivalent to those tested and acceptable for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance July/25/03

Examined by S Derfludam