



FIRE-RATED GLASS CERAMIC

FireLite® is a 3/16" (5 mm) thick fire-rated glazing material. It is listed for use in **non-impact safety-rated locations** such as transoms and borrowed lites with fire rating requirements ranging from 20 to 90 minutes. Trusted for over 20 years, the FireLite family of products now feature ultraHD® Technology for superior color and surface quality.



FEATURES

- Now with ultraHD® Technology for improved surface quality, clarity and color
- As a Premium Grade product, both surfaces are polished to minimize distortion and provide superior surface quality
- Fire-rated for up to 90 minutes with required hose stream test
- Glass ceramic
- Clear and wireless
- Fits in Designer Series Fireframes® from TGP, or standard fire-rated frames
- Large sizes available
- May be lightly sandblasted or etched on one side without affecting fire rating
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- May be insulated (see FireLite IGU fact sheet)

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop®.

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. All above tests performed in accordance with UL 9, UL 10C, CSFM 43.7, NFPA 80, NFPA 257, UBC 43.2, UBC 43.4, UBC 7-2, UBC 7-4, CAN4 S-104. Approved for use in New York City: MEA 290-90-M-6. Approved for use in Los Angeles: LARR 25798.

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	OTHER THAN DOORS	3,325 in ² / 23.09 ft ² (2.15 m ²)	95" (2,413 mm)		95" (2,413 mm)
90 min.	OTHER THAN DOORS	2,627 in ² / 18.24 ft ² (1.69 m ²)	56-1/2" (1,435 mm)		56-1/2" (1,435 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Premium	Standard	Obscure
MAX. SHEET SIZE	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)	36" x 96" (.91 m x 2.43 m)

Note: FireLite is not an impact safety-rated product and should not be specified as such. However, TGP does offer FireLite Plus® and FireLite® NT which carry both fire and impact safety ratings. Please ask for more details.

SPECIFICATIONS

All glass designated on the drawings as fire-rated shall be 3/16" (5 mm) thick FireLite® supplied by Technical Glass Products. The surface condition shall be either: **Premium Grade**; **Standard Grade**; or **Obscure** (patterned surface).

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**.

GENERAL CHARACTERISTICS

THICKNESS:	3/16" (5 mm) overall
WEIGHT:	2.4 lb / ft² (11.72 kg / m²)
APPROX. VISIBLE TRANSMISSION:	88%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER'S SCALE):	700
FIRE RATING:	20 minutes to 90 minutes
IMPACT SAFETY RATING:	None
STC RATING:	35 dB

LABELING

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

INSTALLATION

FireLite shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in² (.8987 m²) FireLite shall be glazed with fire-rated glazing tape as supplied by TGP.

Inspect each piece of FireLite immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

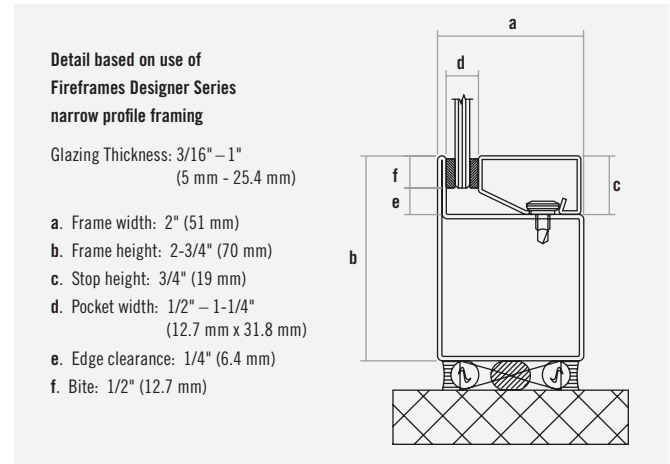
STORAGE & HANDLING

FireLite must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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.

Fireglass®20	Fire-rated, impact safety-rated toughened glass
FireLite®	Fire-rated glass ceramic
FireLite® NT	Fire-rated, impact safety-rated glass ceramic with surface-applied film
FireLite Plus®	Fire-rated, laminated, impact safety-rated glass ceramic
FireLite® IGU	Fire-rated or fire/impact safety-rated insulated glass units
Pilkington Pyrodur®	Fire-rated, impact safety-rated glass
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





FIRE-RATED GLASS CERAMIC

FireLite® is a 3/16" (5 mm) thick fire-rated glazing material. It is listed for use in **non-impact safety-rated locations** such as transoms and borrowed lites with fire rating requirements ranging from 20 to 90 minutes. Trusted for over 20 years, the FireLite family of products now feature ultraHD® Technology for superior color and surface quality.



FEATURES

- Now with ultraHD® Technology for improved surface quality, clarity and color
- FireLite Standard Grade is comparable to alternative fire-rated ceramics that are marketed as having a "Premium" finish
- Fire-rated for up to 90 minutes with required hose stream test
- Glass ceramic
- Clear and wireless
- Fits in Designer Series Fireframes® from TGP, or standard fire-rated frames
- Large sizes available
- May be lightly sandblasted or etched on one side without affecting fire rating
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- May be insulated (see FireLite IGU fact sheet)

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop®.

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. All above tests performed in accordance with UL 9, UL 10C, CSFM 43.7, NFPA 80, NFPA 257, UBC 43.2, UBC 43.4, UBC 7-2, UBC 7-4, CAN4 S-104. Approved for use in New York City: MEA 290-90-M-6. Approved for use in Los Angeles: LARR 25798.

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	OTHER THAN DOORS	3,325 in ² / 23.09 ft ² (2.15 m ²)	95" (2,413 mm)		95" (2,413 mm)
90 min.	OTHER THAN DOORS	2,627 in ² / 18.24 ft ² (1.69 m ²)	56-1/2" (1,435 mm)		56-1/2" (1,435 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Premium	Standard	Obscure
MAX. SHEET SIZE	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)	36" x 96" (.91 m x 2.43m)

Note: FireLite is not an impact safety-rated product and should not be specified as such. However, TGP does offer FireLite Plus® and FireLite® NT which carry both fire and impact safety ratings. Please ask for more details.

SPECIFICATIONS

All glass designated on the drawings as fire-rated shall be 3/16" (5 mm) thick FireLite® supplied by Technical Glass Products. The surface condition shall be either: **Premium Grade**; **Standard Grade**; or **Obscure** (patterned surface).

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**.

GENERAL CHARACTERISTICS

THICKNESS:	3/16" (5 mm) overall
WEIGHT:	2.4 lb / ft² (11.72 kg / m²)
APPROX. VISIBLE TRANSMISSION:	88%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER'S SCALE):	700
FIRE RATING:	20 minutes to 90 minutes
IMPACT SAFETY RATING:	None
STC RATING:	35 dB

LABELING

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

INSTALLATION

FireLite shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in² (.8987 m²) FireLite shall be glazed with fire-rated glazing tape as supplied by TGP.

Inspect each piece of FireLite immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

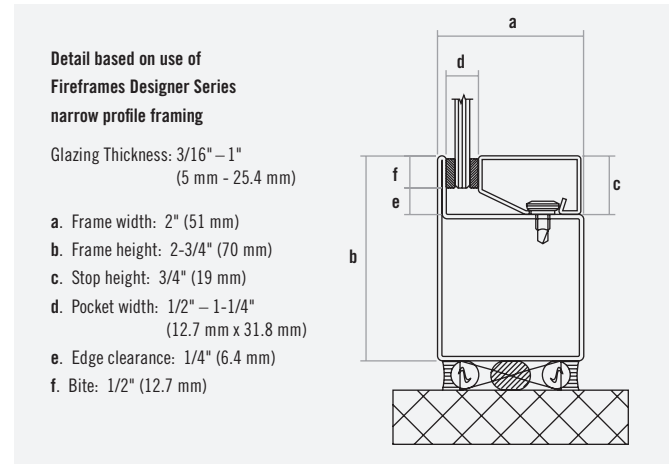
STORAGE & HANDLING

FireLite must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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.

Fireglass®20	Fire-rated, impact safety-rated toughened glass
FireLite®	Fire-rated glass ceramic
FireLite® NT	Fire-rated, impact safety-rated glass ceramic with surface-applied film
FireLite Plus®	Fire-rated, laminated, impact safety-rated glass ceramic
FireLite® IGU	Fire-rated or fire/impact safety-rated insulated glass units
Pilkington Pyrodur®	Fire-rated, impact safety-rated glass
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





FIRE-RATED, SAFETY-RATED GLASS CERAMIC MADE WITH SURFACE APPLIED FILM

FireLite[®] NT is a 3/16" (5 mm) thick fire-rated and impact safety-rated glazing material, composed of FireLite and surface-applied fire-rated film. It is listed for use in doors, sidelites, transoms and borrowed lites with fire rating requirements ranging from 20 minutes to 3 hours. Trusted for over 20 years, the FireLite family of products now feature ultraHD[®] Technology for superior color and surface quality.

ultraHD[®]
TECHNOLOGY

FEATURES

- Now with ultraHD[®] Technology for improved surface quality, clarity and color
- As a Premium Grade product, both surfaces are polished to minimize distortion and provide superior surface quality
- Fire-rated for up to 3 hours with required hose stream test
- Impact safety-rated—meets ANSI Z97.1 and CPSC 16 CFR1201 (Cat. I and II)
- Glass ceramic with high performance surface-applied approved fire-rated film
- Clear and wireless
- Fits in Fireframes[®] Designer Series from TGP, or standard fire-rated frames
- Withstands thermal shock
- Large sizes available
- Protects from fire and safety on both sides of glass
- FireLite side may be lightly sandblasted or etched without affecting the fire rating
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- 3-year limited warranty

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop[®].

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.[®] and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Tested in accordance with UL 9, UL 10B, UL 10C, ASTM E2074, CSFM 43.7, NFPA 80, NFPA 252, NFPA 257, UBC 43.2, UBC 43.4, UBC 7-2, UBC 7-4, CAN4 S-104, CAN4 S-106. Approved for use in New York City: MEA 290-90-M-6. Approved for use in Los Angeles: LARR 25798.

GENERAL CHARACTERISTICS

THICKNESS:	3/16" (5 mm) overall
WEIGHT:	2.4 lb / ft ² (11.72 kg / m ²)
APPROX. VISIBLE TRANSMISSION:	88%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER'S SCALE):	700
FIRE RATING:	20 minutes to 3 hours
IMPACT SAFETY RATING:	Meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
STC RATING:	35dB

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	DOORS (non-temp rise)	3,204 in ² / 22.25 ft ² (2.07 m ²)	36" (914 mm)		89" (2,260 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	3,325 in ² / 23.09 ft ² (2.15 m ²)	95" (2,413 mm)		95" (2,413 mm)
90 min.	DOORS (non-temp rise)	2,034 in ² / 14.13 ft ² (1.31 m ²)	36" (914 mm)		56-1/2" (1,435 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	2,627 in ² / 18.24 ft ² (1.69 m ²)	56-1/2" (1,435 mm)		56-1/2" (1,435 mm)
3 hour	DOORS	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Premium	Standard	Obscure
MAX. SHEET SIZE	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)	36" x 96" (.91 m x 2.43 m)

SPECIFICATIONS

All glass designated on the drawings as fire-rated and impact safety-rated shall be 3/16" (5 mm) thick FireLite® NT supplied by Technical Glass Products. The surface condition shall be either: **Premium Grade**; **Standard Grade**; or **Obscure** (patterned surface).

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**. Please contact Technical Glass Products for more information.

LABELING

Each piece of FireLite NT shall be permanently labeled with the FireLite NT logo, UL logo and fire rating.

INSTALLATION

FireLite NT shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in² (.8987 m²), FireLite NT shall be glazed with fire-rated glazing tape as supplied by TGP.

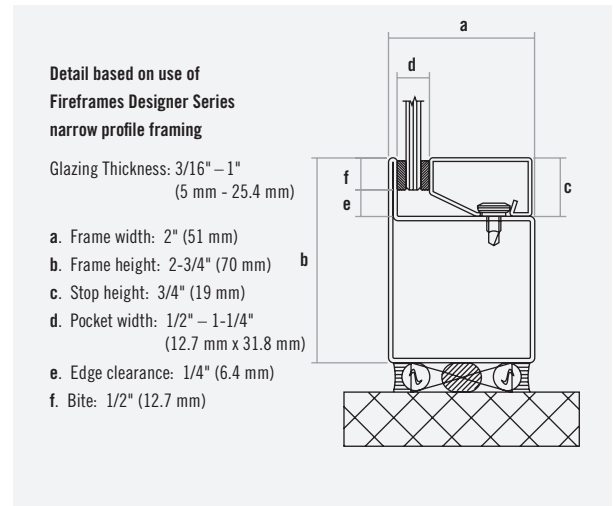
Inspect each piece of FireLite NT immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite NT may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

STORAGE & HANDLING

FireLite NT must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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**.





FIRE-RATED, SAFETY-RATED GLASS CERAMIC MADE WITH SURFACE APPLIED FILM

FireLite[®] NT is a 3/16" (5 mm) thick fire-rated and impact safety-rated glazing material, composed of FireLite and surface-applied fire-rated film. It is listed for use in doors, sidelites, transoms and borrowed lites with fire rating requirements ranging from 20 minutes to 3 hours. Trusted for over 20 years, the FireLite family of products now feature ultraHD[®] Technology for superior color and surface quality.



FEATURES

- Now with ultraHD[®] Technology for improved surface quality, clarity and color
- FireLite NT Standard Grade is comparable to alternative fire-rated ceramics that are marketed as having a "Premium" finish
- Fire-rated for up to 3 hours **with required hose stream test**
- Impact safety-rated—meets ANSI Z97.1 and CPSC 16 CFR1201 (Cat. I and II)
- Glass ceramic with high performance surface-applied approved fire-rated film
- Clear and wireless
- Fits in Fireframes[®] Designer Series from TGP, or standard fire-rated frames
- Withstands thermal shock
- Large sizes available
- Protects from fire and safety on both sides of glass
- FireLite side may be lightly sandblasted or etched without affecting the fire rating
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- 3-year limited warranty

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop[®].

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.[®] and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Tested in accordance with UL 9, UL 10B, UL 10C, ASTM E2074, CSFM 43.7, NFPA 80, NFPA 252, NFPA 257, UBC 43.2, UBC 43.4, UBC 7-2, UBC 7-4, CAN4 S-104, CAN4 S-106. Approved for use in New York City: MEA 290-90-M-6. Approved for use in Los Angeles: LARR 25798.

GENERAL CHARACTERISTICS

THICKNESS:	3/16" (5 mm) overall
WEIGHT:	2.4 lb / ft ² (11.72 kg / m ²)
APPROX. VISIBLE TRANSMISSION:	88%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER'S SCALE):	700
FIRE RATING:	20 minutes to 3 hours
IMPACT SAFETY RATING:	Meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
STC RATING:	35 dB

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	DOORS (non-temp rise)	3,204 in ² / 22.25 ft ² (2.07 m ²)	36" (914 mm)		89" (2,260 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	3,325 in ² / 23.09 ft ² (2.15 m ²)	95" (2,413 mm)		95" (2,413 mm)
90 min.	DOORS (non-temp rise)	2,034 in ² / 14.13 ft ² (1.31 m ²)	36" (914 mm)		56-1/2" (1,435 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	2,627 in ² / 18.24 ft ² (1.69 m ²)	56-1/2" (1,435 mm)		56-1/2" (1,435 mm)
3 hour	DOORS	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Premium	Standard	Obscure
MAX. SHEET SIZE	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)	36" x 96" (.91 m x 2.43 m)

SPECIFICATIONS

All glass designated on the drawings as fire-rated and impact safety-rated shall be 3/16" (5 mm) thick FireLite® NT supplied by Technical Glass Products. The surface condition shall be either: **Premium Grade**; **Standard Grade**; or **Obscure** (patterned surface).

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**. Please contact Technical Glass Products for more information.

LABELING

Each piece of FireLite NT shall be permanently labeled with the FireLite NT logo, UL logo and fire rating.

INSTALLATION

FireLite NT shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in² (.8987 m²), FireLite NT shall be glazed with fire-rated glazing tape as supplied by TGP.

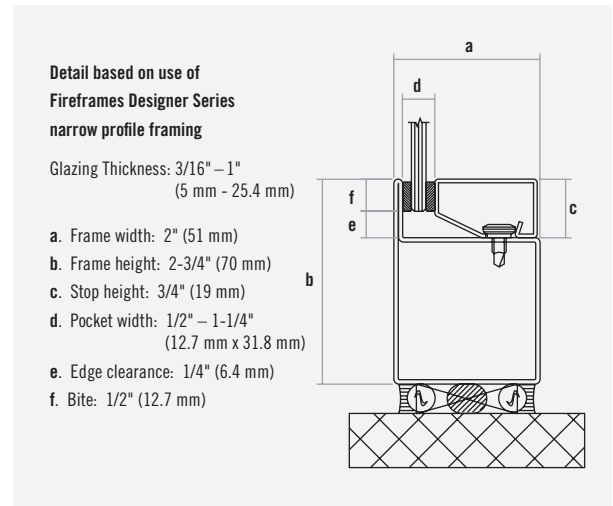
Inspect each piece of FireLite NT immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite NT may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

STORAGE & HANDLING

FireLite NT must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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**.





BIM 3D MODEL AVAILABLE



FIRE-RATED



HOSE STREAM TESTED



IMPACT-RATED



POSITIVE PRESSURE TESTED



FIRE-RATED, SAFETY-RATED GLASS CERAMIC

FireLite Plus[®] is a nominal 5/16" (8 mm) thick laminated fire-rated polished and impact safety-rated glazing material. It is listed for use in doors, sidelites, transoms and borrowed lites with fire rating requirements ranging from 20 minutes to 3 hours. Trusted for over 20 years, the FireLite family of products now feature ultraHD[®] Technology for superior color and surface quality.

ultraHD[®]
TECHNOLOGY

FEATURES

- Now with ultraHD[®] Technology for improved surface quality, clarity and color
- As a Premium Grade product, both surfaces are polished to minimize distortion and provide superior surface quality
- Fire-rated for up to 3 hours with required hose stream test
- Impact safety-rated—meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
- Glass ceramic
- Clear and wireless
- Fits in Fireframes[®] Designer Series from TGP, or standard fire-rated frames
- Withstands thermal shock
- Protects from fire and impact on both sides of the glass
- Large sizes available
- May be lightly sandblasted/etched on one side without affecting fire rating
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- 5-year limited warranty

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop[®].

LISTINGS

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GENERAL CHARACTERISTICS

THICKNESS:	Nominal 5/16" (8 mm) overall
WEIGHT:	4 lb / ft ² (19.53 kg / m ²)
APPROX. VISIBLE TRANSMISSION:	85%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER'S SCALE):	700
FIRE RATING:	20 minutes to 3 hours
IMPACT SAFETY RATING:	Meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
STC RATING:	38 dB

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	DOORS (non-temp rise)	3,204 in ² / 22.25 ft ² (2.07 m ²)	36" (914 mm)		89" (2,260 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	3,325 in ² / 23.09 ft ² (2.15 m ²)	95" (2,413 mm)		95" (2,413 mm)
90 min.	DOORS (non-temp rise)	2,034 in ² / 14.13 ft ² (1.31 m ²)	36" (914 mm)		56-1/2" (1,435 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	2,627 in ² / 18.24 ft ² (1.69 m ²)	56-1/2" (1,435 mm)		56-1/2" (1,435 mm)
3 hour	DOORS	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Premium	Standard
MAX. SHEET SIZE	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)

SPECIFICATIONS

All glass designated on the drawings as fire-rated and impact safety-rated shall be nominal 5/16" (8 mm) thick supplied by Technical Glass Products. The surface condition shall be either **Premium Grade** or **Standard Grade**.

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**.

LABELING

Each piece of FireLite Plus shall be permanently labeled with the FireLite Plus logo, UL logo and fire rating.

INSTALLATION

FireLite Plus shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in² (.8987 m²), FireLite Plus shall be glazed with fire-rated glazing tape as supplied by TGP.

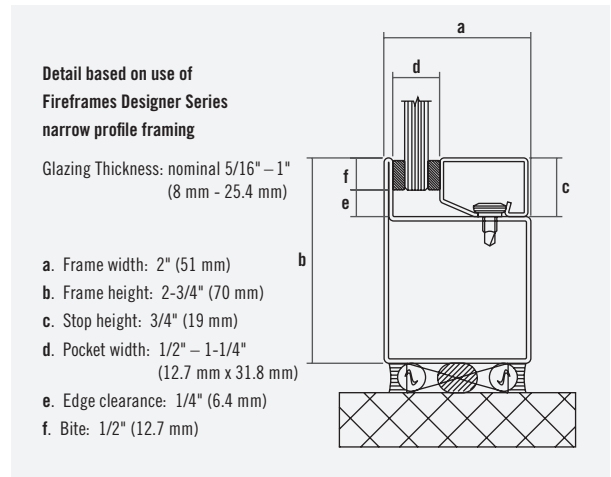
Inspect each piece of FireLite Plus immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite Plus may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

STORAGE & HANDLING

FireLite Plus must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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**.





FIRE-RATED, SAFETY-RATED GLASS CERAMIC

FireLite Plus® is a nominal 5/16" (8 mm) thick laminated fire-rated and impact safety-rated glazing material. It is listed for use in doors, sidelites, transoms and borrowed lites with fire rating requirements ranging from 20 minutes to 3 hours. Trusted for over 20 years, the FireLite family of products now feature ultraHD® Technology for superior color and surface quality.



FEATURES

- Now with ultraHD® Technology for improved surface quality, clarity and color
- FireLite Plus Standard Grade is comparable to alternative fire-rated ceramics that are marketed as having a "Premium" finish
- Fire-rated for up to 3 hours with required hose stream test
- Impact safety-rated—meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
- Glass ceramic
- Clear and wireless
- Fits in Fireframes® Designer Series from TGP, or standard fire-rated frames
- Withstands thermal shock
- Protects from fire and safety on both sides of the glass
- Large sizes available
- May be lightly sandblasted/etched on one side without affecting fire rating
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- 5-year limited warranty

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop®.

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. All above tests performed in accordance with UL 9, UL 10B, UL 10C, ASTM E2074, CSFM 43.7, NFPA 80, NFPA 252, NFPA 257, UBC 43.2, UBC 43.4, UBC 7-2, UBC 7-4, CAN4 S-104, CAN4 S-106. Approved for use in New York City: MEA 290-90-M-6. Approved for use in Los Angeles: LARR 25798.

GENERAL CHARACTERISTICS

THICKNESS:	Nominal 5/16" (8 mm) overall
WEIGHT:	4 lb / ft ² (19.53 kg / m ²)
APPROX. VISIBLE TRANSMISSION:	85%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER'S SCALE):	700
FIRE RATING:	20 minutes to 3 hours
IMPACT SAFETY RATING:	Meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
STC RATING:	38 dB

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	DOORS (non-temp rise)	3,204 in ² / 22.25 ft ² (2.07 m ²)	36" (914 mm)		89" (2,260 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	3,325 in ² / 23.09 ft ² (2.15 m ²)	95" (2,413 mm)		95" (2,413 mm)
90 min.	DOORS (non-temp rise)	2,034 in ² / 14.13 ft ² (1.31 m ²)	36" (914 mm)		56-1/2" (1,435 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	2,627 in ² / 18.24 ft ² (1.69 m ²)	56-1/2" (1,435 mm)		56-1/2" (1,435 mm)
3 hour	DOORS	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Premium	Standard
MAX. SHEET SIZE	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)

SPECIFICATIONS

All glass designated on the drawings as fire-rated and impact safety-rated shall be nominal 5/16" (8 mm) thick supplied by Technical Glass Products. The surface condition shall be either **Premium Grade** or **Standard Grade**.

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**.

LABELING

Each piece of FireLite Plus shall be permanently labeled with the FireLite Plus logo, UL logo and fire rating.

INSTALLATION

FireLite Plus shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in² (.8987 m²), FireLite Plus shall be glazed with fire-rated glazing tape as supplied by TGP.

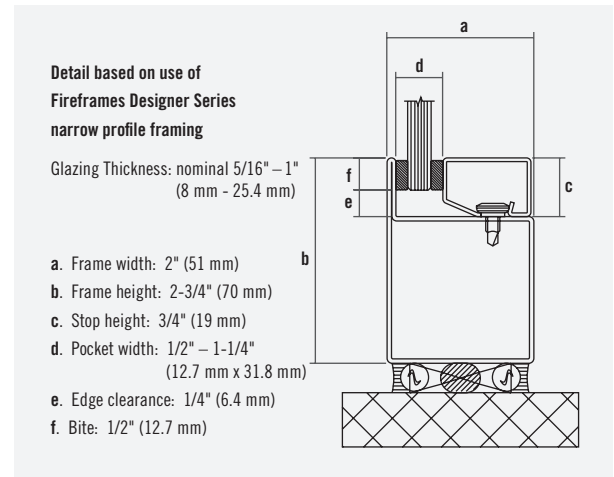
Inspect each piece of FireLite Plus immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite Plus may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

STORAGE & HANDLING

FireLite Plus must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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**.





FIRE-RATED



HOSE STREAM TESTED



IMPACT-RATED



ENERGY EFFICIENT



POSITIVE PRESSURE TESTED



FIRE-RATED OR FIRE/IMPACT SAFETY-RATED INSULATED GLASS UNITS (IGU)

FireLite® IGU is composed of FireLite products and tempered or annealed float glass. It is listed for use in fire-rated applications with ratings from 20 minutes to 3 hours (must be specified with either FireLite NT or FireLite Plus® for 3 hour rating). Trusted for over 20 years, the FireLite family of products now feature ultraHD® Technology for superior color and surface quality.



FEATURES

- **Now with ultraHD® Technology for improved surface quality, clarity and color**
- Available in two surface finishes for clear viewing, Standard Grade and Premium Grade
- Clear and wireless
- Fire-rated for up to 3 hours **with required hose stream test**
- Impact safety-rated version meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
- Large sizes available
- Typical 1" thickness fits in Designer Series or Hardwood Series Fireframes® from TGP, or standard fire-rated frames (variable thicknesses available)
- Available incorporating a variety of glass products, including (but not limited to):
 - Tinted
 - Low-E
 - Art Glass
 - Reflective
 - One-Way Mirror
 - Lead Glass (X-Ray)
- May be lightly sandblasted or etched on one side without affecting fire rating
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- 10-year limited warranty
- Stainless steel spacers
- Decorative films approved by TGP

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop®.

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Tests performed in accordance with UL 9, UL 10B, UL 10C, ASTM E2074, CSFM 43.7, NFPA 80, NFPA 252, NFPA 257, UBC 43.2, UBC 43.4, UBC 7-2, UBC 7-4, CAN4 S-104, and CAN4 S-106. Approved for use in Los Angeles: LARR 25798.

GENERAL CHARACTERISTICS

SEAL	Dual-seal polysulfide units with breather tubes				
U-VALUE	Similar to standard insulating units with a make-up of: 1/4" float glass - 1/2" air space - 1/4" float glass (6.4 mm float glass - 12.7 mm air space - 6.4 mm float glass)				
	Summer U-Value:	Approximately .55*			
	Winter U-Value:	Approximately .49*			
	*U-values increase with use of high performance float glass products.				
STC RATING	3/16" (5 mm) FireLite	-	9/16" (14.23 mm) air space	-	1/4" (6.4 mm) float glass = 35 dB**
	3/16" (5 mm) FireLite NT	-	9/16" (14.23 mm) air space	-	1/4" (6.4 mm) float glass = 35 dB**
	5/16" (8 mm) FireLite Plus	-	9/16" (14.23 mm) air space	-	1/4" (6.4 mm) float glass = 38 dB**

** Values were achieved with these specific make ups.

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	DOORS (non-temp rise)	3,204 in ² / 22.25 ft ² (2.07 m ²)	36" (914 mm)		89" (2,260 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	3,325 in ² / 23.09 ft ² (2.15 m ²)	95" (2,413 mm)		95" (2,413 mm)
90 min.	DOORS (non-temp rise)	2,034 in ² / 14.13 ft ² (1.31 m ²)	36" (914 mm)		56-1/2" (1,435 mm)
	DOORS (temp rise)	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)
	OTHER THAN DOORS	2,627 in ² / 18.24 ft ² (1.69 m ²)	56-1/2" (1,435 mm)		56-1/2" (1,435 mm)
3 hour	DOORS	100 in ² / 0.69 ft ² (.06 m ²)	12" (304 mm)		33" (838 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Premium	Standard	Obscure
MAX. SHEET SIZE	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)	36" x 96" (.91 m x 2.43 m)

SPECIFICATIONS

Due to the great variety of possible make-ups with FireLite IGU, please call Technical Glass Products at **800.426.0279** for assistance when preparing specifications. Additional specification information is available at fireglass.com

LABELING

Each unit of FireLite IGU shall be permanently labeled with the FireLite IGU logo, UL logo and fire rating.

INSTALLATION

FireLite IGU shall be glazed into the appropriate fire-rated framing with an approved glazing compound (polysulfide sealant or closed cell PVC tape) as supplied by the installer. For 90 minute ratings that exceed 1,393 in² (.8987 m²) FireLite IGU shall be glazed with fire-rated glazing tape as supplied by TGP.

Note: Do not use pure silicone.

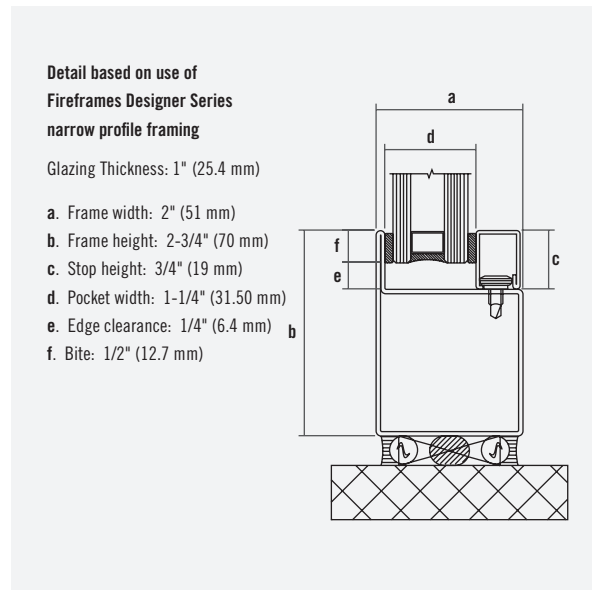
Inspect each piece of FireLite IGU immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite IGU may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

STORAGE & HANDLING

FireLite IGU must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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**.





FIRE-RATED WIRED GLASS

WireLite® is a nominal 1/4" (6 mm) thick fire-rated glazing material composed of wired glass. It is listed for use in openings that do not require an impact safety rating.

FEATURES

- Fire-rated for 45 minutes **with required hose stream test**
- Available in **Diamond Clear, 3/4" pattern (19 mm)** and **Georgian Clear, 1/2" pattern (12.7 mm)**
- Available as an insulated glass unit (IGU)
- Withstands thermal shock
- Passes positive pressure test standards **UL 10C, UBC 7-2 and UBC 7-4**
- Fits in **Designer Series Fireframes®** from TGP, or standard fire-rated frames

Note: This product is not a barrier to radiant heat. This product does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop®.

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Testing performed in accordance with UL 9, ASTM E2074, UBC 7-2 and UBC 7-4.

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
STANDARD SIZES					
45 min.	OTHER THAN DOORS	1,296 in ² / 9 ft ² (.84 m ²)	54" (1,372 mm)		54" (1,372 mm)
SIZES WHEN GLAZED WITH PEMKO FG3000™					
45 min.	OTHER THAN DOORS	4,608 in ² / 32 ft ² (2.97 m ²)	100" (2,540 mm)		100" (2,540 mm)

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Diamond	Georgian
MAX. SHEET SIZE	58" x 100" (1.47 m x 2.54 m)	58" x 100" (1.47 m x 2.54 m)

GENERAL CHARACTERISTICS

THICKNESS:	Nominal 1/4" (6 mm) overall
WEIGHT:	3.79 lb / ft ² (18.50 kg / m ²)
APPROX. VISIBLE TRANSMISSION:	77%
FIRE RATING:	45 minutes

SPECIFICATIONS

All glass designated on the drawings as fire-rated shall be nominal 1/4" (6 mm) thick WireLite supplied by Technical Glass Products.

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**.

LABELING

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

INSTALLATION

WireLite shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape, or DAP 33 putty) as supplied by the installer.

For sizes larger than 1,296 in² (.84 m²) or 54" (1.37 m) in one dimension (noted in the size schedule for standard sizes), WireLite shall be glazed with Pemko FG3000™ as supplied by the installer.

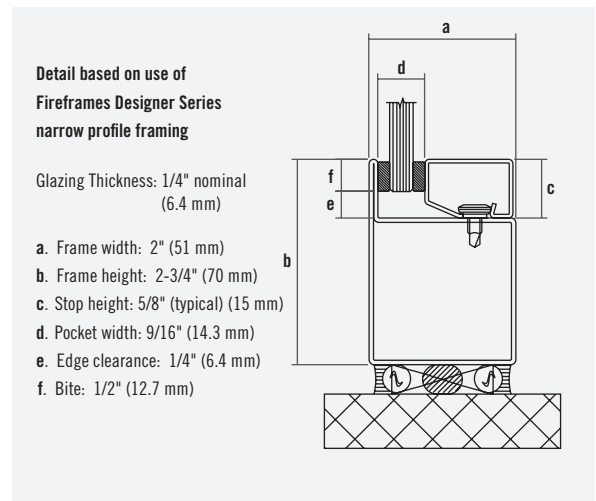
STORAGE & HANDLING

Inspect each piece of WireLite immediately before installation and eliminate any with observable edge damage or face imperfections. WireLite must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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.

Fireglass®20	Fire-rated, impact safety-rated toughened 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 Pyrodur®	Fire-rated, impact safety-rated glass
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





FIRE-RATED, SAFETY-RATED WIRED GLASS

WireLite[®] NT is a nominal 1/4" (6 mm) thick fire-rated and impact safety-rated glazing material composed of wired glass and surface-applied fire-rated film. It is listed for use in doors, sidelites, transoms and borrowed lites with fire rating requirements for 20, 45, 60 and 90 minutes.

FEATURES

- Fire-rated for 20, 45, 60 and 90 minutes **with required hose stream test**
- Impact safety-rated—meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)
- Wired glass with high performance surface-applied fire-rated film
- Available in Diamond Clear, 3/4" pattern (19 mm) and Georgian Clear, 1/2" pattern (12.7 mm)
- Available as an insulated glass unit (IGU)
- Withstands thermal shock
- Passes positive pressure test standards UL 10C, UBC 7-2 and UBC 7-4
- Fits in Designer Series Fireframes[®] from TGP, or standard fire-rated frames
- 3-year limited warranty*

Note: This product is not a barrier to radiant heat. This product does not meet test standards ASTM E-119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact Technical Glass Products regarding Pilkington Pyrostop[®].

LISTINGS

Classified and labeled by Underwriters Laboratories, Inc.[®] and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Testing performed in accordance with UL 9, UL 10C, ASTM E2074, NFPA 252, NFPA 257, UBC 7-2 and UBC 7-4.

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
STANDARD SIZES					
20 min.	DOORS (non-temp rise) OTHER THAN DOORS	3,289 in ² (2.12 m ²) / 22.84 ft ² 1,296 in ² (.84 m ²) / 9 ft ²	34–3/4" (883 mm) 54" (1,372 mm)		92" (2,337 mm) 54" (1,372 mm)
45 min.	DOORS (non-temp rise) / OTHER THAN DOORS	1,296 in ² (.84 m ²) / 9 ft ²	54" (1,372 mm)		54" (1,372 mm)
60 min. - 90 min.	DOORS	100 in ² (.06 m ²) / .69 ft ²	10" (254 mm)		33" (838 mm)
SIZES WHEN GLAZED WITH PEMKO FG3000™					
45 min.	DOORS (non-temp rise) OTHER THAN DOORS	2,856 in ² (1.84 m ²) / 19.83 ft ² 4,608 in ² (2.97 m ²) / 32 ft ²	34" (839 mm) 100" (2,540 mm)		84" (2,134 mm) 100" (2,540 mm)
60 min.	WOOD DOOR (non-temp rise)	960 in ² (.62 m ²) / 6.66 ft ²	12" (305 mm)		80" (2,032 mm)
90 min.	DOORS (non-temp rise)	552 in ² (.36 m ²) / 3.83 ft ²	12" (305 mm)		46" (1,168 mm)

Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

SURFACE FINISH	Diamond	Georgian
MAX. SHEET SIZE	58" x 100" (1.47 m x 2.54 m)	58" x 100" (1.47 m x 2.54 m)

GENERAL CHARACTERISTICS

THICKNESS:	Nominal 1/4" (6 mm) overall
WEIGHT:	3.79 lb / ft ² (18.50 kg / m ²)
APPROX. VISIBLE TRANSMISSION:	77%
FIRE RATING:	20, 45, 60 and 90 minutes
IMPACT SAFETY RATING:	Meets ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II)

SPECIFICATIONS

All glass designated on the drawings as fire-rated and impact safety-rated shall be nominal 1/4" (6 mm) thick WireLite NT supplied by Technical Glass Products.

Complete 3-part CSI format specifications are available online at fireglass.com, or by calling **800.426.0279**.

LABELING

Each piece of WireLite NT shall be permanently labeled with the WireLite NT logo, UL logo and fire rating.

INSTALLATION

WireLite NT shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape, or DAP 33 putty) as supplied by the installer.

For sizes larger than 1,296 in² (.84 m²) or 54" (1.34 m) in one dimension (noted in the size schedule for standard sizes), WireLite NT shall be glazed with Pemko FG3000™ as supplied by the installer.

STORAGE & HANDLING

Inspect each piece of WireLite NT immediately before installation and eliminate any with observable edge damage or face imperfections. WireLite NT must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

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.

Fireglass®20	Fire-rated, impact safety-rated toughened 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 Pyrodur®	Fire-rated, impact safety-rated glass
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

