

Table of Contents

1 General Information

Entrances

- 2a .. Standard Narrow Stile Entrances** - Light to medium duty (1/8" wall) aluminum doors and frames for commercial use.
- 2b Standard Medium Stile Entrances** - Light to medium duty (1/8" wall) aluminum doors and frames for commercial use.
- 2c Standard Wide Stile Entrances** - Light to medium duty (1/8" wall) aluminum doors and frames for commercial use.
- 3 Monumental Doors** - Heavy duty (3/16" wall) doors and frames for educational/institutional use. Narrow, Medium & Wide Stiles.
- 4 Thermal=Block Doors** - Insulated doors and frames for superior thermal performance. Medium & Wide Stiles.
- 4a ... TerraPorte Terrace Doors** - Insulated doors and frames for multi-story Ribbon Window and Curtainwall

Impact Resistant Framing

ForceFront aluminum framing for heavy duty doors and window wall.

- 5 ForceFront - Blast**
- 6 ForceFront Storm Hurricane-Impact Series** (Windzones 3 & 4)
 - Sa.. E44000 Storefront** - 2 1/2" x 5" Flush Glaze for 5/16" Laminated Glass
 - Sb.. Medium & Wide Stile Door** - 1 3/4" x 4" Stile Entrance for 1 1/16" Laminated Glass
 - Sc.. Monumental Stile Door** - 1 3/4" x 5" Stile Entrance for 1 1/16" Laminated Glass
 - Sd-e E34000 Storefront** - 2 1/2" x 5" Flush Glaze for 1 1/16" Laminated Glass
 - Sf-g T34000 Storefront** - 2 1/2" x 5" Flush Glaze for 1 1/16" Laminated Glass
- 7 Hardware & Push/Pulls** - door hardware and accessories.

Operable Windows

- 10..... Commercial Windows** - 2" Project-out Vent, Concealed Vent & Casement Type.
- 11a .. Phantom Vent 5000** - Zero sightline vent operable window. AW rating.

Storefronts

Single story aluminum framing for commercial or retail applications.

- 12 4500 Series** - 1 3/4" x 4 1/2" Flush Glaze for center plane 1/4" glass.
- 12a .. INT45** - 1 3/4" x 4 1/2" Interior Framing for center plane 1/4" glass. (4500 Series)
- 12b . INT67** - 2" x 5 1/2" Interior Framing for center plane 1/2" glass.
- 14 14000 Series** - 2" x 4 1/2" Flush Glaze for center position 1" glass.
- 15 14000 I/O Plane** - 2" x 4 1/2" Flush Glaze for Inboard or Outboard position 1" glass.

TUBELITE[®]

DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

Table of Contents - cont'd

- 16 ... VersaTherm** - 1 $\frac{3}{4}$ " x variable depth thermal clip system for $\frac{1}{4}$ " or 1" glass.
- 17a... TU24650 ThermI=Block Storefront** - 2" x 6 $\frac{1}{2}$ " Flush Glaze for center 1" glass.
- 17b .. T24650 ThermI Storefront** - 2" x 6 $\frac{1}{2}$ " Flush Glaze for center 1" glass.
- 17c... E24650 Non-ThermI Storefront** - 2" x 6 $\frac{1}{2}$ " Flush Glaze for center 1" glass.
- 19..... TU24000 ThermI=Block Storefront** - 2" x 4 $\frac{1}{2}$ " Flush Glaze for center 1" glass.

Ribbon Window

High performance flush glaze for horizontal strip windows up to 6 stories.

- 18a... 900RW-T** - 2 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " & 6" Ribbon Window for 1" insulated glass.
- 18b .. 900RW-TU ThermI=Block** - 2 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " & 6" Ribbon Window for 1" glass.
- 18c... 300ES** - 2 $\frac{1}{4}$ " face Screw Spline Window Wall - 6" & 8" system depth.

Curtainwalls

High performance aluminum pressure-bar systems for buildings up to 6 stories.

- 20 200 Series** - 2" face x variable depth back members.
- 21 400 Series** - 2 $\frac{1}{2}$ " face x variable depth back members. Thermally improved.
- 21a . 400T Series** - 2 $\frac{1}{2}$ " face x variable depth back members. Thermally broken.
- 21b . 400IG Series** - 2 $\frac{1}{2}$ " face x variable depth back members. Thermally broken.
- 22 400TU ThermI=Block Series** - 2 $\frac{1}{2}$ " face x variable depth back members.
- 23 400 4-Side SSG Cassette Series** - Adapter for 2 $\frac{1}{2}$ " face Curtainwall.
- 24 400SS** - 2 $\frac{1}{2}$ " face Screw Spline Curtainwall.

Day Lighting Controls

- 30..... Maxblock Sunshade System** - Airfoil, Tubular and Z-blade shading for Storefront and Curtainwall framing..
- 31 aLuminate Light Shelves** - Interior accessory for storefront or curtainwalls

TUBELITE®

DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

General Information

Corporate Office / Manufacturing

Tubelite Inc.

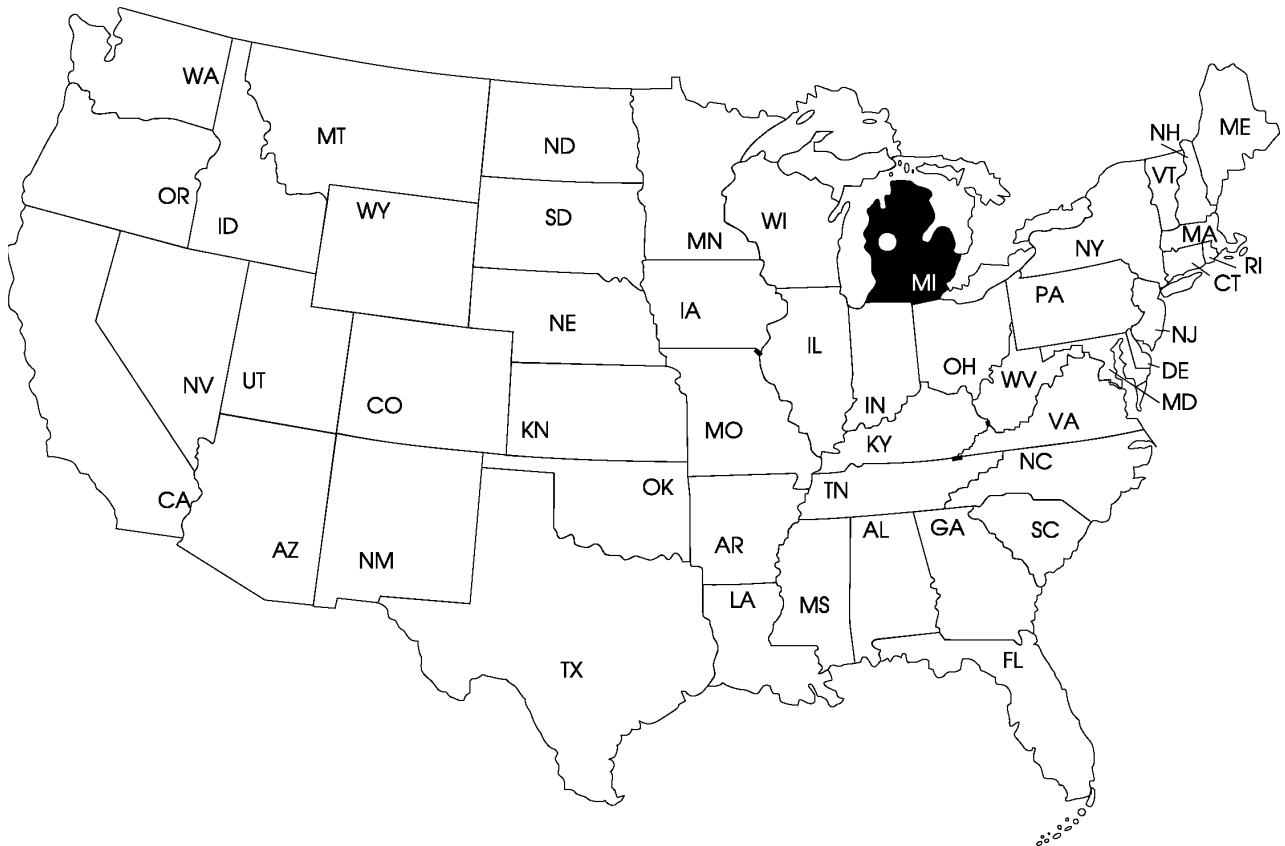
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1.02

General Information

Glass Size Information (*Use Safety Glass)

Glass sizes are based on the use of a Tubelite standard threshold, top rail, and bottom rail. Special conditions, project requirements, local codes and/or special hardware may require a top or bottom rail with a face dimension greater than standard.

Contact a Tubelite manufacturing facility for assistance in determining glass sizes for non-standard doors.

Standard Narrow Stile 1 3/4" x 2 1/8" Doors - 1/4" Glass

| Door Size | | Glass Size for <u>Butt Hinges/Offset Pivots</u> | Glass Size for <u>Center Pivots</u> | Glass Size for <u>Continuous Hinges</u> |
|-------------|-------------------|----------------------------------------------------|----------------------------------------|--------------------------------------------|
| D 36 | 3'-0" x 7'-0" (1) | 31 1/16" x 76 9/16" | 31" x 76 9/16" | 30 25/32" x 76 9/16" |
| D 42 | 3'-6" x 7'-0" (1) | 37 1/16" x 76 9/16" | 37" x 76 9/16" | 36 25/32" x 76 9/16" |
| D 72 | 6'-0" x 7'-0" (2) | 31 1/16" x 76 9/16" | 31 1/16" x 76 9/16" | 30 25/32" x 76 9/16" |

Custom Size Doors - 1/4" Glass (D.O. = Door Opening)

| | | Glass Size for Offset Pivots <u>Butt / Continuous Hinges</u> | Glass Size for <u>Center Pivot</u> | Glass Size for Continuous <u>Hinges Non-Rabbit Stiles</u> |
|---------------------|----------------|-----------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------|
| Narrow Stile | | | | |
| <u>Height</u> | Single&Pairs = | D.O. - 7 7/16" | D.O. - 7 7/16" | D.O. - 7 7/16" |
| <u>Width</u> | Single = | D.O. - 4 15/16" | D.O. - 5" | D.O. - 5 7/32" |
| <u>Width</u> | Pairs = | [D.O. ÷ 2] - 4 15/16" | [D.O. ÷ 2] - 4 15/16" | [D.O. ÷ 2] - 5 7/32" |
| Medium Stile | | | | |
| <u>Height</u> | = | D.O. - 11 13/16" | D.O. - 11 13/16" | D.O. - 11 13/16" |
| <u>Width</u> | Single = | D.O. - 8 11/16" | D.O. - 8 3/4" | D.O. - 8 31/32" |
| <u>Width</u> | Pairs = | [D.O. ÷ 2] - 8 11/16" | [D.O. ÷ 2] - 8 11/16" | [D.O. ÷ 2] - 8 31/32" |
| Wide Stile | | | | |
| <u>Height</u> | = | D.O. - 12 13/16" | D.O. - 12 13/16" | D.O. - 12 13/16" |
| <u>Width</u> | Single = | D.O. - 10 11/16" | D.O. - 10 3/4" | D.O. - 10 31/32" |
| <u>Width</u> | Pairs = | [D.O. ÷ 2] - 10 11/16" | [D.O. ÷ 2] - 10 11/16" | [D.O. ÷ 2] - 10 31/32" |

Note: For 1" glass thickness subtract 1/2" from dimensions for 1/4" glass thicknesses.

Standard Doors with Top or Bottom Rail Substitutions

To determine glass sizes for doors with top or bottom rail substitutions, deduct the difference between the standard rail face dimension and the face dimension of the one substituted from the standard glass size. Listed below are the standard top and bottom rail dimensions (rail only, no glass stops):

| Door | Top Rail | Bottom Rail | Vertical Stile |
|---------------------|----------|-------------|----------------|
| Narrow Stile | 2 1/8" | 4" | 2 1/8" |
| Medium Stile | 4" | 6 1/2" | 4" |
| Wide Stile | 5" | 6 1/2" | 5" |

Clearances

| | | | |
|-------------------------|---------------------------|-----------------|----------------------|
| Single Door - | Butt Hinges/Offset Pivots | 1/16" @ Hinge | 1/8" @ Lock Jamb |
| | Continuous Gear Hinges | 1/16" @ Hinge** | 1/8" @ Lock Jamb |
| | Center Pivots | 1/8" @ Hinge | 1/8" @ Lock Jamb |
| Pairs of Doors - | Butt Hinges/Offset Pivots | 1/16" @ Hinge | 1/8" @ Meeting Stile |
| | Continuous Gear Hinges | 1/16" @ Hinge** | 1/4" @ Meeting Stile |
| | Center Pivots | 1/8" @ Hinge | 1/4" @ Meeting Stile |

**Using standard rabbit hinge stile. Use 11/32" if using beveled hinge stile with continuous hinges.

*Note: All entrance doors and/or adjacent sidelights should use tempered or laminated safety glass. Please check local or state codes governing the use of glass in entrances to determine the exact location and type of safety glass required.

General Information

Glass Size Information (*Use Safety Glass)

Glass sizes are based on the use of a Tubelite standard threshold, top rail, and bottom rail. Special conditions, project requirements, local codes and/or special hardware may require a top or bottom rail with a face dimension greater than standard.

Contact a Tubelite manufacturing facility for assistance in determining glass sizes for non-standard doors.

Narrow Stile 2" x 3" Monumental Doors - 1/4" Glass

| Door Size | | Glass Size for Butt Hinges/Offset Pivots | Glass Size for Center Pivots | Glass Size for Continuous Hinges |
|---------------|-----|---------------------------------------------|---------------------------------|-------------------------------------|
| 3'-0" x 7'-0" | (1) | 29 5/16" x 73 3/16" | 29 1/4" x 73 3/16" | 29 1/32" x 73 3/16" |
| 3'-6" x 7'-0" | (1) | 35 5/16" x 73 3/16" | 35 1/4" x 73 3/16" | 35 1/32" x 73 3/16" |
| 6'-0" x 7'-0" | (2) | 29 3/8" x 73 3/16" | 29 5/16" x 73 3/16" | 29 1/16" x 73 3/16" |

Custom Size Monumental Doors - 1/4" Glass (D.O. = Door Opening)

| | | Glass Size for Butt Hinge/Offset Pivot | Glass Size for Center Pivot | Glass Size for Continuous Hinges |
|----------------------------------------------------------|----------------|-------------------------------------------|--------------------------------|-------------------------------------|
| Narrow Stile (3") 3 1/2" Top Rail, 6" bottom rail | | | | |
| Height | Single&Pairs = | D.O. minus(-) 10 13/16" | D.O. - 10 13/16" | D.O. - 10 13/16" |
| Width | Single = | D.O. - 6 11/16" | D.O. - 6 3/4" | D.O. - 6 31/32" |
| | Pairs = | [D.O. ÷ 2] - 6 5/8" | [D.O. ÷ 2] - 6 11/16" | [D.O. ÷ 2] - 6 15/16" |
| Medium Stile (4 1/2") , 6" bottom rail | | | | |
| Height | = | D.O. - 11 13/16" | D.O. - 11 3/16" | D.O. - 11 13/16" |
| Width | Single = | D.O. - 9 11/16" | D.O. - 9 3/4" | D.O. - 9 31/32" |
| | Pairs = | [D.O. ÷ 2] - 9 5/8" | [D.O. ÷ 2] - 9 11/16" | [D.O. ÷ 2] - 9 15/16" |
| Wide Stile (6") 10" bottom rail | | | | |
| Height | = | D.O. - 17 5/16" | D.O. - 17 5/16" | D.O. - 17 5/16" |
| Width | Single = | D.O. - 12 11/16" | D.O. - 12 3/4" | D.O. - 12 31/32" |
| | Pairs = | [D.O. ÷ 2] - 12 5/8" | [D.O. ÷ 2] - 12 11/16" | [D.O. ÷ 2] - 12 15/16" |

Note: For 1" glass thickness subtract 1/2" from dimensions for 1/4" glass thicknesses.

Monumental Doors with Top or Bottom Rail Substitutions

To determine glass sizes for doors with top or bottom rail substitutions, deduct the difference between the standard rail face dimension and the face dimension of the one substituted from the standard glass size. Listed below are the standard top and bottom rail dimensions (rail only, no glass stops):

| Door | Top Rail | Bottom Rail | Vertical Stile |
|--------------|----------|-------------|----------------|
| Narrow Stile | 3 1/2" | 6" or 10" | 3" |
| Medium Stile | 4 1/2" | 6" or 10" | 4 1/2" |
| Wide Stile | 6" | 10" | 6" |

Clearances

| | | | |
|-------------------------|---------------------------|-----------------|----------------------|
| Single Door - | Butt Hinges/Offset Pivots | 1/16" @ Hinge | 1/8" @ Lock Jamb |
| | Continuous Gear Hinges | 1/16" @ Hinge** | 1/8" @ Lock Jamb |
| | Center Pivots | 1/8" @ Hinge | 1/8" @ Lock Jamb |
| Pairs of Doors - | Butt Hinges/Offset Pivots | 1/16" @ Hinge | 1/8" @ Meeting Stile |
| | Continuous Gear Hinges | 1/16" @ Hinge** | 1/4" @ Meeting Stile |
| | Center Pivots | 1/8" @ Hinge | 1/4" @ Meeting Stile |

**standard rabbet hinge stile. Use 11/32" if using beveled hinge stile with continuous hinge.

*Note: All entrance doors and/or adjacent sidelights should use tempered or laminated safety glass. Please check local or state codes governing the use of glass in entrances to determine the exact location and type of safety glass required.

Tubelite Inc. provides glass size information as a courtesy only. Tubelite shall not be responsible for any discrepancies between these details and project requirements.

1.04

General Information

Custom Thermal Doors & Frames (*Use Safety Glass)

Glass sizes are based on the use of a Tubelite standard threshold, top rail, and bottom rail. Contact a Tubelite manufacturing facility for assistance in determining glass sizes for non-standard doors.

Standard Size Doors 1" Glass Size

| Medium Stile | | | | Wide Stile | | | |
|--------------|-------------------|----------------------------------------------------------|--|------------|-------------------|----------------------------------------------------------|--|
| Door Size | | Glass Size for Offset Pivots Butt / Continuous Hinges | | Door Size | | Glass Size for Offset Pivots Butt / Continuous Hinges | |
| D36 | 3'-0" x 7'-0" (1) | 26 13/16" x 68 1/16" | | D36 | 3'-0" x 7'-0" (1) | 24 13/16" x 67 1/16" | |
| D42 | 3'-6" x 7'-0" (1) | 32 13/16" x 68 1/16" | | D42 | 3'-6" x 7'-0" (1) | 30 13/16" x 67 1/16" | |
| D72 | 6'-0" x 7'-0" (2) | 26 13/16" x 68 1/16" | | D72 | 6'-0" x 7'-0" (2) | 24 13/16" x 67 1/16" | |

Custom Size Doors - 1" Glass (D.O. = Door Opening)

| Medium Stile | | | | Wide Stile | | | |
|---------------|---------------|----------------------------------------------------------|--|---------------|---------------|----------------------------------------------------------|--|
| Door Size | | Glass Size for Offset Pivots Butt / Continuous Hinges | | Door Size | | Glass Size for Offset Pivots Butt / Continuous Hinges | |
| <u>Height</u> | Single/Pairs= | D.O. - 15 15/16" | | <u>Height</u> | Single/Pairs= | D.O. - 16 15/16" | |
| <u>Width</u> | Single | = D.O. - 9 3/16" | | <u>Width</u> | Single | = D.O. - 11 3/16" | |
| <u>Width</u> | Pairs | = [D.O. ÷ 2] - 9 3/16" | | <u>Width</u> | Pairs | = [D.O. ÷ 2] - 11 3/16" | |

Standard Doors with Top or Bottom Rail Substitutions

To determine glass sizes for doors with top or bottom rail substitutions, deduct the difference between the standard rail face dimension and the face dimension of the one substituted from the standard glass size. Listed below are the standard top and bottom rail dimensions (rail only, no glass stops):

| Door | Top Rail | Bottom Rail | Vertical Stile |
|--------------|----------|-------------|----------------|
| Medium Stile | 4" | 10" | 4" |
| Wide Stile | 5" | 10" | 5" |

Clearances

| | | |
|----------------------------------------------------------------------------|---------------------|----------------------|
| Single Door - Butt Hinges/Offset Pivots & Continuous Gear Hinges | 1/16" @ Hinge Stile | 1/8" @ Lock Jamb |
| Pairs of Doors - Butt Hinges/Offset Pivots & Continuous Gear Hinges | 1/16" @ Hinge Stile | 1/8" @ Meeting Stile |

Transom Glass - 1" Glass (D.L.O. = Day Light Opening)

Height Single/Pairs= D.L.O. + 3/4" MAX.
Width Single/Pairs= D.L.O. + 3/4" MAX.

Glass Size = Day Light Opening plus 3/4" maximum. Critical dimension.

Note: Transom areas use snap-in stops at the jambs, and a removable stop at the head. Always measure from the gasket reglet, not necessarily from the edge of main members.

*Note: All entrance doors and/or adjacent sidelights should use tempered or laminated safety glass. Please check local or state codes governing the use of glass in entrances to determine the exact location and type of safety glass required.

Glass Size Information (*Use Safety Glass)

Glass sizes are based on the use of a Tubelite standard threshold, top rail, and bottom rail. Special conditions, project requirements, local codes and/or special hardware may require a top or bottom rail with a face dimension greater than standard.

Contact a Tubelite manufacturing facility for assistance in determining glass sizes for non-standard doors.

4500 Flush Glaze Framing

Glass size = Day Light Opening + 5/8" (9/16" when using E4540)

Note: Transom areas use snap-in glass stops at the base and recessed pockets at the head and jambs. Always measure from the gasket reglet, not necessarily from the main member.

14000 Flush Glaze Framing**14000 I/O Flush Glaze Framing****TU24000 Flush Glaze Framing****TU24650 Flush Glaze Framing**

Glass size = Day Light Opening + 5/8"

Note: Transom areas use snap-in glass stops at the base and recessed pockets at the head and jambs. Always measure from the gasket reglet, not necessarily from the main member.

300ES Curtainwall Framing

Glass size = Day Light Opening + 7/8"

VersaTherm Framing**900 Ribbon Window****200 Curtainwall****400 Curtainwall - CW, SS, IG, TU**

Glass size = Day Light Opening + 1"

ForceFront Blast 34000**ForceFront Blast Curtainwall****ForceFront Storm 44000****ForceFront Storm 34000****ForceFront Storm Curtainwall**

Glass size = Day Light Opening + 1 1/4"
