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Visit www.hopeswindows.com to learn more.
COMPONENTS AT FIXING HOLE LOCATIONS

- Filler shim to provide a full depth flat surface for the fixing shims
- Fixing shims to provide solid anchoring
- Fixing screw

COMPONENTS FOR GLAZING

- Cap bead of sealant
- Glazing tape
- Setting block
- Glazing wedge
- Glazing bead
JAMESTOWN175™ SERIES WITH OUT-SWING VENTILATOR

- 2-5/8” sightline
- Accepts up to 1-1/8” glass
- Triple integral groove weatherstrip

EMPIRE BRONZE™ JAMESTOWN175™ SERIES WITH OUT-SWING VENTILATOR

- 2-5/8” sightline
- Accepts up to 1” glass
- Integral groove weatherstrip

LANDMARK175™ SERIES WITH OUT-SWING VENTILATOR

- 2-3/16” sightline
- Accepts up to 1-1/8” glass
- Triple integral groove weatherstrip

UNIVERSITY SERIES™ WITH OUT-SWING VENTILATOR

- 2-3/16” sightline
- Accepts up to 3/4” glass
- Triple integral groove weatherstrip

*For many unique glazing options mastered for project-specific applications, consult your Hope’s Sales Representative.
GLAZING OPTIONS FOR VENTILATORS

JAMESTOWN175™ SERIES
- Out-swing ventilator
- Triple integral groove weatherstrip
- Exterior glazed with 3/4” glass with #305 glazing bead shown

JAMESTOWN175™ SERIES
- Out-swing ventilator
- Triple integral groove weatherstrip
- Interior glazed with 1” glass with #32 glazing bead shown

JAMESTOWN175™ SERIES
- In-swing ventilator
- Triple integral groove weatherstrip
- Exterior glazed with 7/8” glass with #231 glazing bead shown

JAMESTOWN175™ SERIES
- In-swing ventilator
- Triple integral groove weatherstrip
- Interior glazed with 1” glass with #32 glazing bead shown
**JAMESTOWN175™ SERIES**
- Interior glazed with 1-1/8" glass with #33 glazing bead shown

**LANDMARK175™ SERIES**
- Interior glazed with 1" glass with #32 glazing bead at fixed and #42 glazing bead at vent shown
UNIVERSITY SERIES™

- Interior glazed with 5/8” glass with #42 glazing bead shown
**MUNTINS, STACKS & MULLIONS**

**TDL (True Divided Lite) Muntin:**
A steel muntin bar that divides the glass into individual panes.

![TDL muntin diagram](image)

**SDL (Simulated Divided Lite) Muntin:**
A steel or aluminum shape that simulates true divided glass lites.

![SDL muntin diagram](image)

**Stack:**
A method of joining two or more windows together in a window opening without a mullion (see page 10).

![Stack diagram](image)

**Mullion:**
A steel shape that connects two or more windows together in a window opening (see pages 10-14).

![Mullion diagram](image)
**84H MUNTIN**
- Accepts 1/4" glass
- Interior glazed with 1/4" glass with #293 glazing bead shown

**84V MUNTIN**
- Accepts 1-1/8" glass
- Interior glazed with 1/4" glass with #240 glazing bead shown

**T875L MUNTIN**
- Accepts only 1/4" glass
- Interior glazed with 1/4" glass with #321 glazing bead shown

**T138L MUNTIN**
- Accepts 1-1/8" glass
- Interior glazed with 1/4" glass with #331 glazing bead shown

**T175L MUNTIN**
- Accepts up to 1-1/8" glass
- Interior glazed with 1/4" glass with #351 glazing bead shown

**175M MUNTIN**
- Accepts 1-1/8" glass
- Interior glazed with 1/4" glass with #307 glazing bead shown

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**TDL MUNTIN NOTES:**

All true divided lite muntins are manufactured from hot-rolled steel.
All true divided lite muntin intersections are full face welded and ground smooth.
**SDL MUNTIN NOTES:**

The #84H muntin is a hot-rolled stainless steel section back welded to the glazing leg of the window and at the intersections. The DS1, DS5, HW05, HW06, PS1 and HW08 muntin grids are aluminum extrusions, which are either cut square, mitered or coped and taped to the glass after glass installation. The spacer between the glass to simulate true muntins is optional.

SCALE: 1/2 Size; shown inside glazed
BAR STACK

Offers narrowest sightline at stack condition

INTERIOR

EXTERIOR

2 3/16

SECTION STACK

Steel channel welded to one window & screw attached to the other

Exterior & interior small joint sealer

INTERIOR

EXTERIOR

3 3/8

#1556A MULLION

- Hot-rolled steel section #1556A eliminates interior caulk joints

Interior small joint sealer

1556A

INTERIOR

EXTERIOR

1 2/16

3/4

1 7/16

3 5/8

Minimum

Exterior caulk joints
FLAT MULLION
- 1/4" x 2" (shown)
- Flat size varies to meet windload requirements

Windows can be located in various locations on the mullion flat.
PLATE MULLION

- Can accommodate interior wall partitions
- May be customized to meet design requirements
- Sightline may vary as required

1½" to 3"
7 gauge steel exterior flat

12 gauge steel interior flat

INTERIOR

EXTERIOR

Mullion clamp

TUBE MULLION

- 2" x 4" x 10 gauge steel tube
- Dimensions may vary to meet windload requirements

2" x 4" x 10 gauge steel tube

Continuous 7 gauge steel channel added to meet design requirements

Long leg section used for positioning windows to the exterior

Interior caulk joints

Exterior caulk joints

INTERIOR

EXTERIOR
WELDED CORNER

- 90 degree corner
- Directly glazed within a welded assembly

HAT SHAPED CORNER MULLION

- 90 degree corner
- Design eliminates exposed exterior caulk joints

[Diagram of welded corner and hat shaped corner mullion with dimensions and labels such as "12 GAUGE STEEL" and "1/4" minimum interior caulk joints"]
90 DEGREE TUBE MULLION
- 2" x 2" x 10 gauge steel tube
- Mullion size may vary to meet windload requirements

SPECIAL ANGLED TUBE MULLION
- 90-180 degree corners
- 2" diameter tube
- Mullion size may vary to meet windload requirements
DOUBLE CASEMENT & DOUBLE FOLDING CASEMENT

JAMESTOWN175™ SERIES
DOUBLE CASEMENT (with meeting rail)
- Ventilators operate independently from each other
- Interior glazed with 1" glass with #32 glazing bead shown

JAMESTOWN175™ SERIES
DOUBLE FOLDING CASEMENT (without meeting rail)
- Often referred to as "french style"
- Ventilators operate in sequence with one ventilator secured with top and bottom bolts
- Interior glazed with 1" glass with #32 glazing bead shown
LANDMARK175™ SERIES
DOUBLE CASEMENT (with meeting rail)
- Ventilators operate independently from each other
- Interior glazed with 5/8" glass with #40 glazing bead shown

LANDMARK175™ SERIES
DOUBLE FOLDING CASEMENT (without meeting rail)
- Often referred to as “french style”
- Ventilators operate in sequence with one ventilator secured with top and bottom bolts
- Interior glazed with 5/8" glass with #40 glazing bead shown
DOUBLE CASEMENT & DOUBLE FOLDING CASEMENT

UNIVERSITY SERIES™
DOUBLE CASEMENT (with meeting rail)
• Ventilators operate independently from each other
• Interior glazed with 3/4" glass with #24112-1 glazing bead shown

UNIVERSITY SERIES™
DOUBLE FOLDING CASEMENT (without meeting rail)
• Often referred to as “French style”
• Ventilators operate in sequence with one ventilator secured with top and bottom bolts
• Interior glazed with 3/4" glass with #24112-1 glazing bead shown
Hope’s has over 50 glazing beads: snap-in, hook-on and screw-on available. Consult Hope’s for additional options.
**INTERIOR GLAZED**

- Cap bead of sealant (compatible with tape)
- Position tape 1/8" down from edge of glazing leg
- 1/4" x 3/8" glazing tape (compressible to 3/16")
- Weep cover (required with weep hole)
- Weep hole (required only for insulating or laminated glass)
- Glazing wedge (3/16" face clearance)
- Setting block

**EXTERIOR GLAZED**

- Glazing wedge (3/16" face clearance)
- Cap bead of sealant (compatible with tape)
- Position tape 1/8" down from edge of glazing leg
- 1/4" x 3/8" glazing tape (compressible to 3/16")
- Setting block
- Weep cover
- Weep hole (always required)
Dovetail groove cut into section to retain triple weatherstrip

All ventilators are triple weatherstripped unless otherwise noted on approved shop drawings.
JAMESTOWN175™ SERIES
SINGLE HUNG WINDOW

- Accepts up to 1-1/8" glass
- Interior glazed with 1" glass shown with #32 glazing bead
  at ventilator and #47 glazing bead at fixed

SCALE: 1/2 Size
OPERABLE WINDOW

- Accepts up to 1-1/4" blast-resistant glass

FIXED WINDOW

- Accepts up to 1-1/4" blast-resistant glass

All projects requiring blast-resistant windows must be engineered to determine the structural compliance of the window system including the proper glass thickness, anchoring, mullion size, etc.
**SINGLE CASEMENT**
- Out-swing or in-swing
- Hand operated double casements available

**SINGLE AND DOUBLE DOORS**
- Out-swing or in-swing
- Jamestown175™ Series and 5000 Series™

**45 MINUTE FIRE RATED PRODUCTS INCLUDE:**
- Jamestown175™ Series windows
- Jamestown175™ Series doors
- 5000 Series™ doors

**PRODUCTS TESTED TO THE FOLLOWING STANDARDS:**
- NFPA 252 / NFPA 257
- UL10C / UBC 7-2
- CAN 4 S104 / ASTM E2010 / ASTM E2074
- 3/4 hour fire test
- Hose stream
- Positive pressure
- Underwritten by Warnock Hersey

All fire rated products must comply with listed size criteria.
60 & 90 MINUTE FIRE RATED DOORS

7000 SERIES™ SINGLE AND DOUBLE DOORS

- Out-swing or in-swing
- Accepts up to 90 minute fire rated glass
- Shown glazed with 90 minute fire rated glass

All fire rated products must comply with listed size criteria.

SCALE: 1/2 Size
7000 SERIES™ FIRE RATED WALL SYSTEM

- Fire ratings up to 120 minute
- 60 minute wall system can accept 45 minute rated products (shown)
- 120 minute wall system can accept 90 minute fire rated doors

All fire rated products must comply with listed size criteria.
GLAZING BEADS FOR VARIOUS GLASS THICKNESS
All glazing beads are manufactured from either 12 or 14 gauge steel.
STAINLESS STEEL INSECT SCREENS

TYPICAL FLAT SCREEN ELEVATION
(7/16" frame depth)

PROJECT-OUT
Dual Arm Roto Operator

SIDE HUNG-OUT
Roto Operator

Springbolts pull inward to release and remove the screen

TYPICAL SPRINGBOLT SCREEN ELEVATION
(3/4" frame depth)

PROJECT-IN

SIDE HUNG-IN

Hinged wicket opens to gain access to the fastener to open/close the window

TYPICAL WICKET SCREEN ELEVATION
(1" frame depth)

PROJECT-OUT
Hand Operated

SIDE HUNG-OUT
Hand Operated

7/16" FRAME DEPTH

Screen mesh available in painted aluminum, stainless steel, bronze and fiberglass

Stainless steel screen frame 7/16" (shown)

Screen spline

3/4" FRAME DEPTH

1" FRAME DEPTH

7/16"
INSTALLATION DETAILS
STONE WALL

HEAD
- Long leg application

HEAD
- Equal leg application

SILL
- Long leg application

SILL
- Equal leg application

See page 36 for anchoring components.

SCALE: 1/2 Size
**Brick/Block Masonry**

**Head**
- Long leg application
- Exterior glazed

**Sill**
- Long leg application
- Exterior glazed

See page 36 for anchoring components.

SCALE: 1/2 Size
INSTALLATION DETAILS
STUCCO WALL

HEAD
- Long leg application
- Exterior glazed

HEAD
- Equal leg application
- Interior glazed

SILL
- Long leg application
- Exterior glazed

SILL
- Equal leg application
- Interior glazed

See page 36 for anchoring components.

SCALE: 1/2 Size
INSTALLATION DETAILS
WOOD FRAME WALL

HEAD
- Long leg application
- Exterior glazed

HEAD
- Equal leg application
- Interior glazed

SILL
- Long leg application
- Exterior glazed

SILL
- Equal leg application
- Interior glazed

See page 36 for anchoring components.

SCALE: 1/2 Size
INSTALLATION DETAILS
STEEL FRAME WALL

HEAD
- Equal leg application
- Exterior glazed

HEAD
- Equal leg application
- Interior glazed

SILL
- Equal leg application
- Exterior glazed

SILL
- Equal leg application
- Interior glazed

See page 36 for anchoring components.

SCALE: 1/2 Size
HEAD
- Offset leg application
- Interior glazed

SILL
- Offset leg application
- Interior glazed

See page 36 for anchoring components.
**ANCHORING COMPONENTS**

**TYPICAL EQUAL LEG APPLICATION**

- Fixing screw
- Plastic filler shim
- Poly filler runs in between fixing shims
- Plastic fixing shims used as required to assure proper fit of window to opening
- Perimeter caulking

**TYPICAL LONG LEG APPLICATION**

- Window-to-anchor fixing screw
- Steel anchor custom formed to suit job condition
- Perimeter caulking
- Poly filler
- Plastic fixing shims used as required to assure proper fit of window to opening
- Fixing screw
JAMESTOWN175™ SERIES, LANDMARK175™ SERIES AND UNIVERSITY SERIES™

TYPICAL APPLICATIONS:
• Historic
• Residential
• Light commercial
• Institutional
• Interior/exterior

HARDWARE:
Typically all doors are furnished with Hope’s standard mortise lock, cremone hardware or concealed multi-point hardware. Consult Hope’s for other available hardware.

5000 SERIES™

TYPICAL APPLICATIONS:
• High traffic, heavy duty
• Residential
• Commercial
• Institutional
• Interior/exterior

HARDWARE:
All hardware can be accommodated including exit panic devices and automatic openers.

ALTERNATE LOCKBOX CONFIGURATIONS:

Wide stile Achieves minimal sightline; requires glass notching
JAMESTOWN175™ SERIES
- Out-swing door
- Accepts up to 1-1/8" glass
- Shown glazed with 1" glass with #32 glazing bead

5000 SERIES™
- Out-swing door
- Accepts up to 1-1/8" glass
- Shown glazed with 1" glass with #47 glazing bead
- Interior and exterior skin can be of different materials (steel, stainless or bronze)

Door leaf face dimension (3-1/2" minimum) may vary depending on hardware. 5000 Series doors will accept all hardware.
HOPKINS SERIES™ SLIDE AND FOLD DOORS

- Multiple configurations available
- Accepts up to 1-1/8" glass
- Interior glazed with 1" glass with #47 glazing bead shown

SCALE: 1/2 Size
5000 SERIES™ LIFT AND SLIDE DOORS

- Multiple configurations available
- Accepts up to 1-1/8” glass
- Interior glazed with 1” glass with #47 glazing bead shown
- Weatherstrip on all four sides of door

SCALE: 1/2 Size
Commercial application of out-swing door meeting ADA requirements

Residential application of out-swing door with non-ADA requirements shown with flat floor condition

Hope’s #204 threshold

SCALE: Full Size

SCALE: 1/2 Size
7000 SERIES™

- Pressure glazed system
- Optional cap profiles
- Available as a structurally glazed capless system
- Accepts Jamestown175™ Series and 5000 Series™ window and door inserts

Steel profile (depth varies dependent on loading)

Glass support

Filler block

SCALE: 1/2 Size
CUSTOM FORMED

- Available in steel or bronze material

7000 SERIES™

- Pressure glazed system
- Available as a structurally glazed capless system
Hope’s® Windows, Inc. is the world’s preeminent manufacturer of custom steel and bronze windows and doors. Each window and door Hope’s creates is proudly handcrafted to meet an owner’s, architect’s and builder’s most exacting and demanding requirements. In addition to architectural products, Hope’s offers a full line of windows and doors for detention and blast resistant applications, including 60, 90 and 120 minute fire rated wall systems.

Throughout its long history, Hope’s windows and doors have been synonymous with longevity and quality. From the development of truly visionary design concepts through an unparalleled finishing process, Hope’s is the first choice in premium quality steel and bronze windows and doors. To learn more, visit www.hopeswindows.com.