INSTALLATION INSTRUCTIONS
- CONTENTS -

POSITIVE PRESSURE INSTALLATION INSTRUCTIONS

Retain these instructions. They will be required by the local code official or authority having jurisdiction (AHJ) to determine if the wood fire doors have been properly installed.

These instructions are required for the installation of fire doors that fall under the jurisdiction of building codes, including the International Building Code (IBC), which requires side hinged fire doors to meet positive pressure test methods.

These instructions cover the two parts of positive pressure testing, (1) fire resistance and (2) smoke control. All doors required to meet positive pressure must meet the specified fire resistance. The application and code determine if smoke control is also required. A brief description of each part, and the typical method of addressing it, are given below.

Part 1 – Fire Resistance:

Fire resistance requires the doors to pass the criteria of the positive pressure fire test method such as UL 10C or NFPA 252 (where the neutral plane is located at 40" above the sill). Doors that meet the fire resistance are designated as either Category A or Category B as described below. As seen in the descriptions, this designation indicates job-site actions required during the door installation.

CATEGORY "A": The door does not require any additional edge sealing system to meet fire resistance. This designation indicates the door has been specially manufactured to meet fire resistance, or has had the required edge sealing systems pre-installed in the door by the door labeler.

CATEGORY "B": The door requires additional edge sealing to meet fire resistance. This designation indicates the door will not meet fire resistance without the field application of an edge sealing material. This may involve an intumescent material, gasketing material, or combination of both.

Part 2 – Smoke Control:

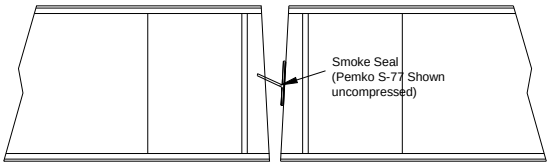
Smoke control requires the doors to meet the air leakage criteria of UL 1784 or NFPA 105. This requirement is typically met by field application of a listed Category H gasketing material, indicating it has been evaluated for positive pressure. In some applications specific gasketing material may provide both the fire resistant edge seal and smoke control.

The systems detailed in the following instructions are the systems provided with the doors if supplied by Eggers Industries.

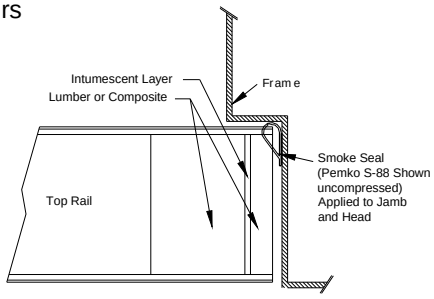
POSITIVE PRESSURE INSTALLATION INSTRUCTIONS
20 MINUTE APPLICATIONS

Category A

Meeting Edges of Pairs



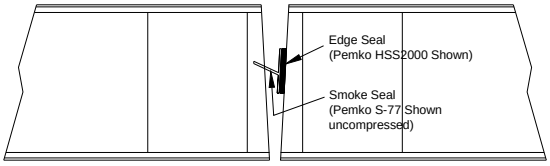
Singles and Hinge Edges of Pairs



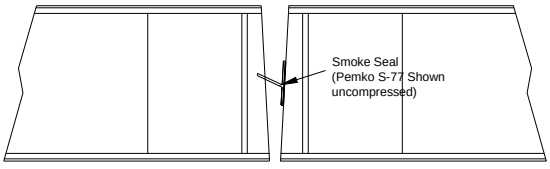
The smoke seal can be left out if smoke control ("S") is not required for Category A constructions.

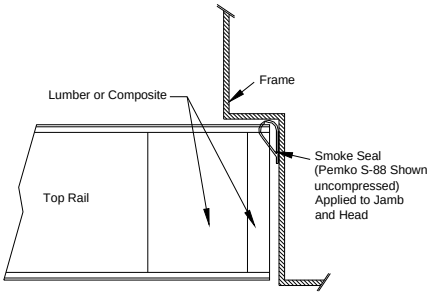
Category B

Meeting Edges of Pairs (Category B)



Meeting Edges of Pairs (Category A)





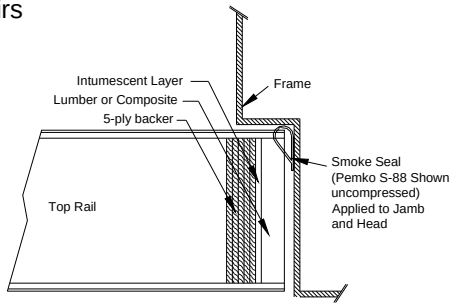
Singles and Hinge Edges of Pairs

The meeting edge gasketing can be left out if smoke control ("S") is not required. The frame gasketing is always required for Category B constructions.

POSITIVE PRESSURE INSTALLATION INSTRUCTIONS
45 -90 MINUTE APPLICATIONS

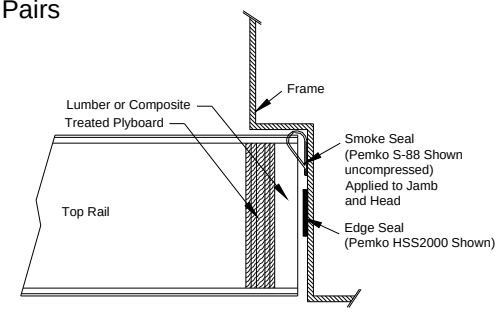
Category A

Singles and Hinge Edges of Pairs



Category B

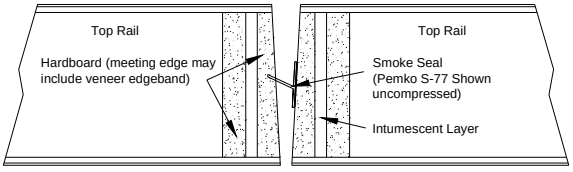
Singles and Hinge Edges of Pairs



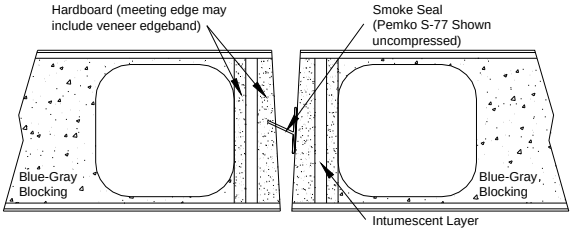
The smoke seal can be left out if smoke control ("S") is not required.

Category A

Meeting Edges of Pairs

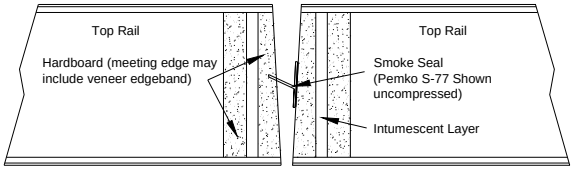


Full or partial height metal edges optional over the edges without additional intumescent

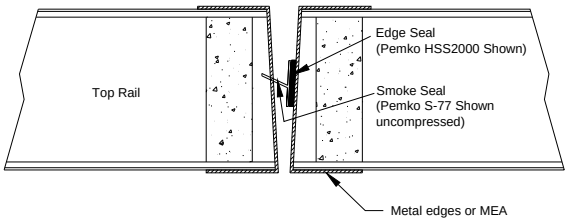


CVR applications (latch machining will vary)

Category B



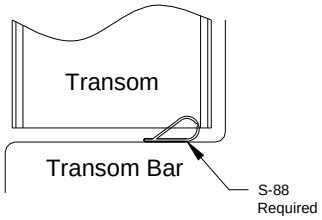
Full or partial height metal edges optional over the edges without additional intumescent



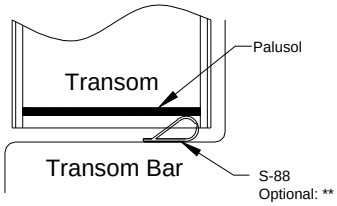
The meeting edge gasketing can be left out if smoke control ("S") is not required.

POSITIVE PRESSURE INSTALLATION INSTRUCTIONS DOOR/TRANSOM COMBINATIONS AND DUTCH DOORS

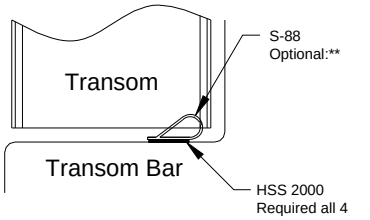
STRAIGHT CUT WITH HORIZONTAL TRANSOM BAR



20-Minute
Category "B"

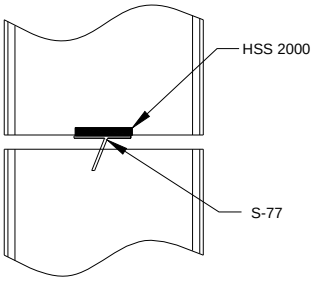


20 Thru 90-Minute
Category "A"

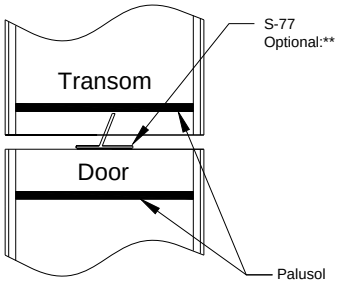


20 Thru 90-Minute
Category "B"

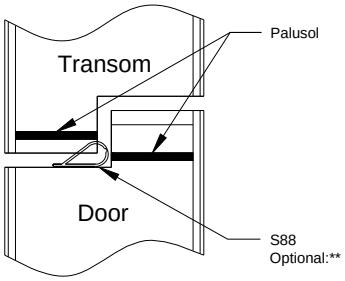
Category "A"



20-Minute
Dutch Door

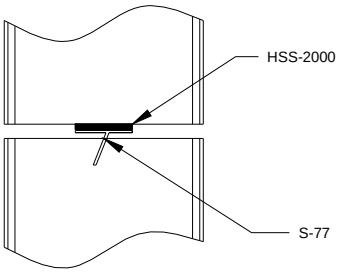


20 Thru 90-Minute
Straight Cut
Door & Transom

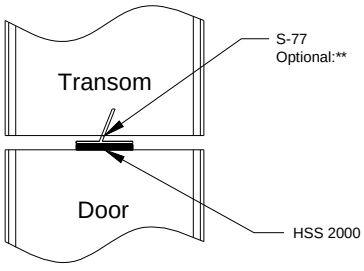


20 Thru 90-Minute
Rabbetted
Door & Transom

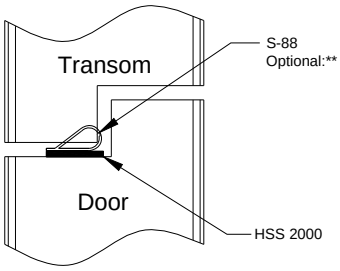
Category "B"



20-Minute
Dutch Door



20 Thru 90-Minute
Straight Cut
Door & Transom

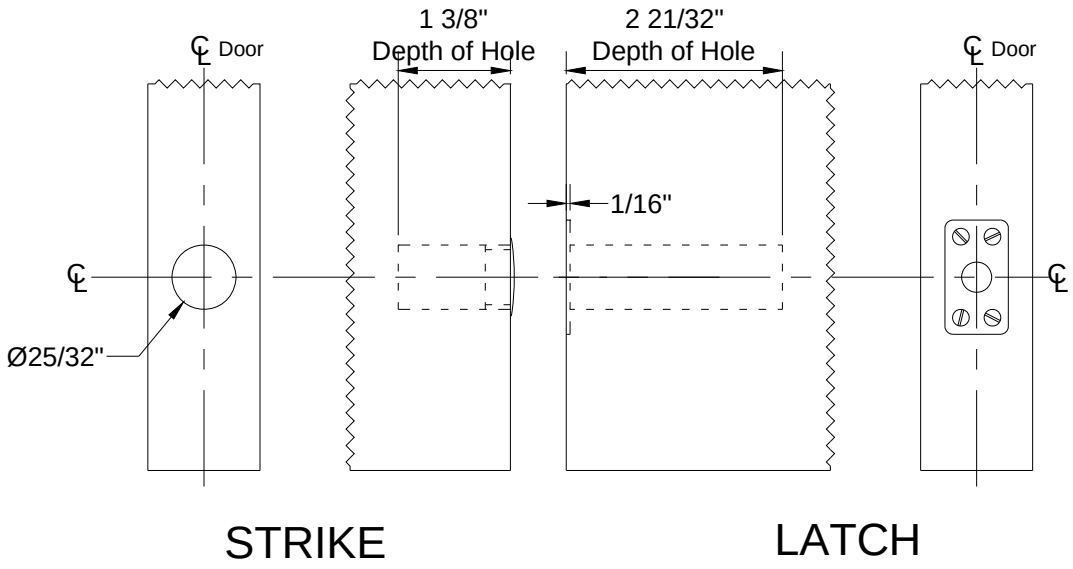


20 Thru 90-Minute
Rabbetted
Door & Transom

** Smoke seal is required by code for "S" label.

POSITIVE PRESSURE INSTALLATION INSTRUCTIONS

AUXILIARY FIRE LATCH



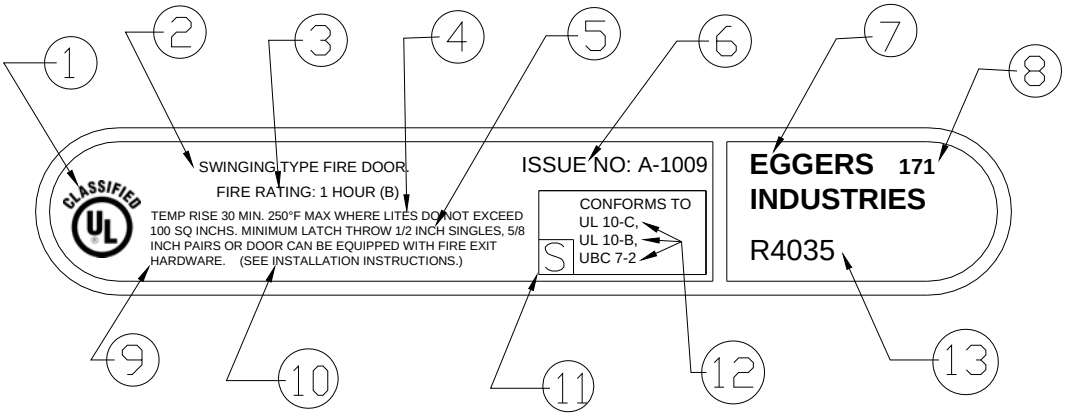
Several options are approved in our fire door procedures allowing auxiliary fire latches to be used in place of, or in addition to, bottom latching flush bolts, surface vertical rods, or concealed vertical rods. Where approved the fire door will be machined for the required fire latches.

The required latches are shipped in an accessory pack along with the doors, and must be installed to insure the fire protection rating. When the fire latches are required between the meeting stiles of pair doors the latch will be pre-machined in one door and the strike in the other door. Where the latch is required between the rail and floor, rail and frame header, or stile and frame jamb a corresponding strike must be machined in that surface opposite the fire latch. The strike hole should be covered with the plastic cap provided. Alternately, a dust proof strike of equal diameter may be used.

Note: Some hardware is furnished with its own auxiliary fire latches, and recommended fire latch locations. Where those locations or latch sizes vary from the door machining, the door machining takes precedence, and the hardware supplied with the door is to be used.

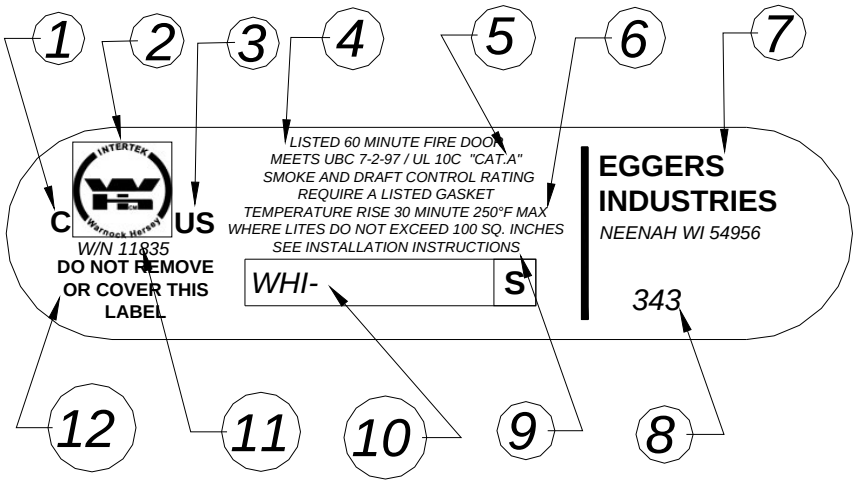
POSITIVE PRESSURE INSTALLATION INSTRUCTIONS

INFORMATION FOUND ON AN UNDERWRITERS LABORATORY LABEL



1. UL CLASSIFIED MARKING - Authorized mark verifying approval of label content
2. UL CATEGORY - Indicates product type
3. UL FIRE RATING - Hourly approval
4. TEMPERATURE RISE RATING - indicates the maximum temperature of the door face
5. MINIMUM LATCH THROW REQUIRED ON LOCK/LATCH.
6. MANUFACTURERS PERMANENT ISSUE NUMBER - This UL issued number indicates the label category. It replaces the earlier design using sequencial numbering.
7. MANUFACTURES NAME.
8. MANUFACTURES PART NUMBER.
9. STATES IF THE DOOR IS ELIGIBLE FOR FIRE EXIT HARDWARE.
10. REFERENCE TO INSTALLATION INSTRUCTIONS - Per code requirement, a packet of instructions are shipped with each fire door order. these are to aid the installer and are to be retained for the Authority Having Jurisdiction (AHJ) to use in determining code compliamce.
11. "S" MARK - Indicates the opening will meet smoke control requirements when gasketed per the installation instructions.
12. CONFORMANCE - Identifies the standard test methods the door has been evaluated to.
13. UL FILE NUMBER - The UL file established to document manufacturing approvals.

INFORMATION FOUND ON A WARNOCK HERSEY LABEL



1. *Country identifier "C" for Canada and Hose Stream.*
2. *Warnock Hersey Certification Mark.*
3. *Country identifier "US" for United States.*
4. *LISTED, Fire Rating & Category "FIRE DOOR".*
5. *Positive Pressure & Smoke and Draft Control.*
6. *Limitation if a Temperature Rise door is required.*
7. *Listee's name and location.*
8. *Manufactures part number.*
9. *Due to changes in fire codes a set of Installation Instructions are sent with each order of fire doors. These instructions are to aid the authority having jurisdicion (AHJ) in determining if the opening is in code compliance.*
10. *Serial Number.*
11. *Intertek part number.*
12. *DO NOT REMOVE OR COVER THIS LABEL.*

Glazing Instructions

Eggers has developed the attached set of instructions for glazing the four most commonly ordered wood bead installations. These include:

- 20-minute lites with 3/16” to 5/16” glazing in wood beads (also applicable for non-fire-rated installations). This includes 20-minute rated doors glazed with Firelite NT, Firelite Plus, FireGlass 20, and wired glass*.
- 20-minute lites with Pyroswiss 20 glazing and wood beads, including ful-lites
- 20-minute lites with Pyroedge glazing and wood beads, including full-lites.
- 45-minute through 90-minute lites with wired glass or ceramic glazing in veneer wrapped lite beads. Additional instructions may be added to this set as warranted by the market.
- 45-minute lites with Firelite plus glazing in wood beads, including full-lites.

It is the responsibility of the glazier to insure the installation instructions used are correct for the specific application. For metal vision panel applications, refer to the manufacturer’s instructions provided with their frame. Technical assistance and guidance for these and other glazing applications are available at 920-722-6444.

*NOTE: The IBC does not allow an exception for the impact resistance for wired glass. All glazing used in fire doors must comply with CPSC 16 CFR1201, Category I or II, based on the application.

Glazing Instructions: 20 Minute Lites with 3/16” to 5/16” Glazing and Wood Beads

1. These doors are supplied with the lite cutout pre-machined by Eggers Industries. The wood beads will normally be provided loose tacked into the lite cutout. (Glazing clips are not required for doors that do not require hose stream testing.)

2. Lay the door flat, taking care to protect the surface from marring.

3. Remove the beads from the cutout. Determine the thickness of glazing tape required between the wood beads and glazing based on the thickness of the door, glazing, wood beads, and desired bead down-set.

4. Apply glazing tape, such as Norton V990 *****, to one set of wood beads and install it into the opening at the proper downset. The beads should be secured into the opening using nails, supplied by the glazer, at least 1-3/16” in length and 18 gauge in diameter. Nails shall be located within 3” of the corners and no more than 5” between adjacent nails. (Fig 1). Pre-drill nail holes in the bead as required to prevent splitting.

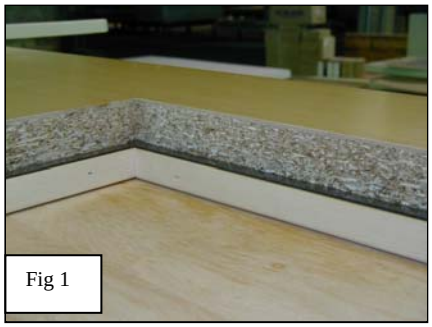


Fig 1

5. Position the glazing in the opening.

6. Apply glazing tape***** to the second set of wood beads and install it in the cutout as described in step 4. (Fig 2)

7. Putty the nail holes. Sand and finish as required.

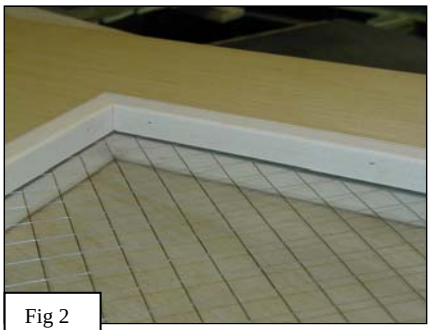


Fig 2

***** Caulking may be used in lieu of glazing tape.

Glazing Instructions: 20-Minute Full-Lite with Pyroswiss-20 Glazing and Wood Beads

1. 20-Minute doors are supplied with the lite cutout pre-machined by Eggers Industries. The wood glazing bead will be supplied mitered, and tacked into the opening. Full-lite particle core applications require the use of a bead of 100% silicone caulk to secure the bead to the glazing and cutout.

2. Carefully remove the wood bead from the lite opening.

3. Lay the door flat, taking care to protect the surface from marring.


Fig 1

4. Secure the bead in one face of the lite opening using nails, supplied by the glazer, at least 1-3/16" in length and 18 gauge in diameter. Nails shall be located within 3" of the corners and no more than 6" between adjacent nails. (Fig 1). Pre-drill nail holes in the bead as required to prevent splitting.

5. Position the door so that the bead is at the bottom of the cut-out.

6. Position two 1/8" x 1/4" x 3" setting blocks (supplied with the glazing) at quarter points on the bottom of the lite opening (Fig 1)

7. Lay the glazing into the opening. It should be located against the setting blocks, leaving a gap between the glazing and cut-out of 1/8" at all four edges.

8. Position the remaining wood bead in the cut-out. The down-set of the beads will vary from door to door due to "tolerance stacking" of the door, wood bead and glazing dimensions. The wood beads have been profiled to allow a nominal 1/32" recess (down-set) at flush doors. If the recess is greater than this, a layer of appropriate thickness PVC glazing tape or a bead of 100% silicone caulk should be used between the back of the bead, and the glazing.

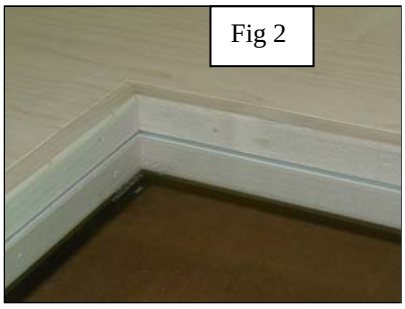


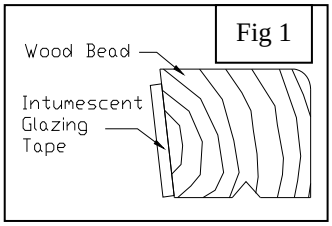
Fig 2

9. Secure the bead as described in step 4 above. (Fig 2).

10. Complete the installation by filling the nail holes with putty and sanding smooth.

Glazing Instructions: 20-Minute Full-Lite with Pyroedge Glazing and Wood Beads

1. 20-Minute doors are supplied with the lite cutout pre-machined by Eggers Industries. The wood glazing bead will be supplied mitered, and tacked into the opening with the required glazing tape applied (Fig 1).



2. Carefully remove the wood bead from the lite opening.

3. Lay the door flat, taking care to protect the surface from marring.

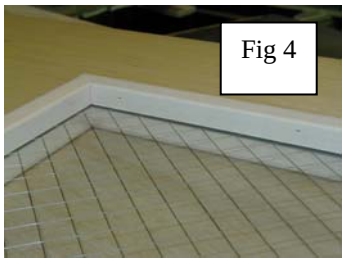
4. Secure the bead in one face of the lite opening using nails, supplied by the glazer, at least 1-3/16" in length and 18 gauge in diameter. Nails shall be located within 3" of the corners and no more than 6" between adjacent nails. (Fig 2). Pre-drill nail holes in the bead as required to prevent splitting.

5. Position the door so that the bead is at the bottom of the cut-out.

6. Position two 1/4" x 1/4" x 3" setting blocks (supplied with the glazing) at quarter points on the bottom of the lite opening (Fig 2)

7. Lay the glazing into the opening. It should be located against the setting blocks, leaving a gap between the glazing and cut-out of 1/4" at both sides and 5/16" at the top.

8. Place a small dab of 100% silicone in the gap on both sides within the top half of the lite to prevent the glazing from shifting (Fig 3)



9. Position the remaining wood bead in the cut-out. The down-set of the beads will vary from door to door due to "tolerance stacking" of the door, wood bead and glazing dimensions. The wood beads have been profiled to allow a nominal 1/32" recess (down-set) at flush doors. If the recess is greater than this, a layer of appropriate thickness PVC glazing tape or a bead of 100% silicone caulk should be used between the back of the bead, and the glazing.
10. Secure the bead as described in step 4 above. (Fig 4).
11. Complete the installation by filling the nail holes with putty and sanding smooth.

Glazing Instructions: 45-90 Minute Lites with Wired Glass or Ceramic Glazing and Veneer-Wrapped Beads

1. These doors are supplied with the lite cutout pre-machined by Eggers Industries. The perimeter of the cutout is machined with recessed pockets for 2-part metal glazing clips. The glazing clips and their nails (Fig 1), together with the bead nails, will be sent loose as an accessory kit. The veneer-wrapped glazing bead (Fig 2) will be supplied mitered, and tacked into the opening.

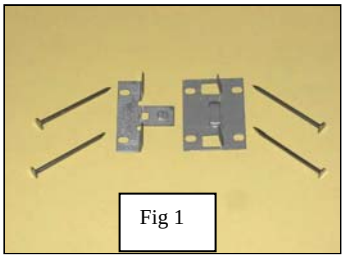


Fig 1

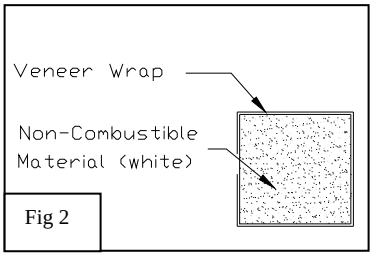


Fig 2

2. Carefully remove the wood bead from the lite opening. The glazing clip pockets are roughly centered within the door thickness.

3. Lay the door flat, taking care to protect the surface from marring.

4. Position the rectangular half of the glazing clip, with the tabs down, being sure it is centered within the door thickness. Secure it using two of the 1-9/16” long 4d nails inserted through the holes below the tabs (Fig 3). Where nails are hand driven into blocking, pre-drilling with a 5/64” bit is required. **Caution**: These clips are directional; insure correct positioning of the clips before beginning to nail them into place. **Note**: Clips are required in all of the machined pockets.

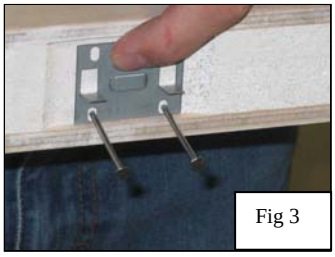


Fig 3

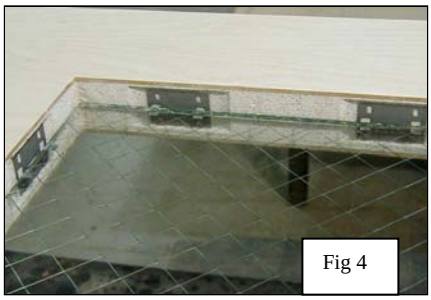


Fig 4

5. After installing the rectangular half of all of the clips in all of the pockets, position the glazing in the opening, resting it against the clip tabs (Fig 4).

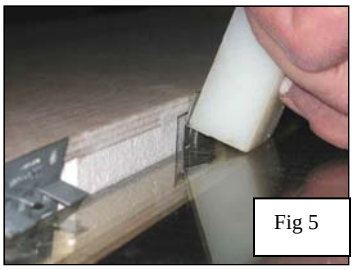


Fig 5

6. Install the second part of the clips by inserting the "tongue" into the raised slot until the locking tab engages (Fig 5).

7. Secure the second part of the clip to the cutout using two additional 1-9/16" nails. These nails should extend through the overlapping holes in both halves of the clips (Fig 6).

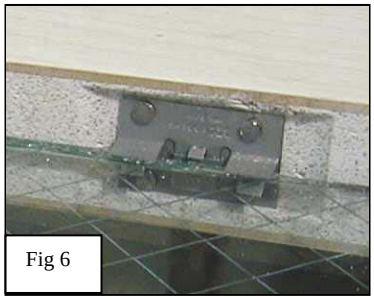


Fig 6

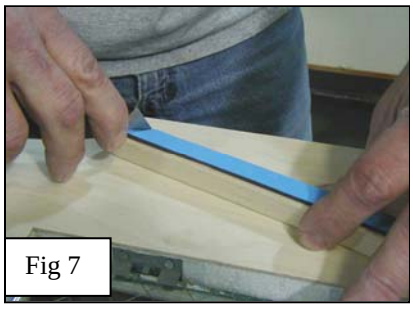


Fig 7

8. Attach double sided glazing tape to the back of the veneer wrapped bead, trimming it to match the mitered corners (Fig 7).

9. Position the wood bead in the cutout. The recess (down-set) of the beads will vary from door to door due to "tolerance stacking" of the door, wood bead and glazing dimensions. Because of this, the wood beads have been profiled to allow a nominal 1/32" recess after the glazing tape has been applied. If the recess is greater than this, thicker glazing tape may be used.

10. After satisfactorily positioning the glazing bead in the opening, secure it using one two-inch nail (6d finish supplied or 16-gauge trim) centered between adjacent clips and at each end of the bead (Fig 8). **Note**: For hand nailing, pre-drilling the bead and any blocking material the nails will engage using a 5/64" bit is required.


Fig 8

11. Flip the door over and repeat steps 8, 9 and 10.

12. Putty and sand all nail holes before finishing.

Glazing Instructions: 45-Minute, including Full-Lite, with Firelite Plus Glazing and Wood Beads

1. 45-Minute full-lite doors are supplied with the lite cutout pre-machined by Eggers Industries. The perimeter of the cutout is machined with recessed pockets for 2-part metal glazing clips. The glazing clips and their nails (Fig 1), together with the bead nails, will be sent loose as an accessory kit. The wood glazing bead will be supplied mitered, and tacked into the opening with the required glazing tape applied (Fig 2).

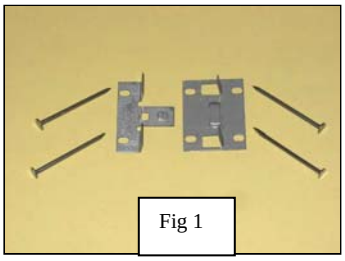


Fig 1

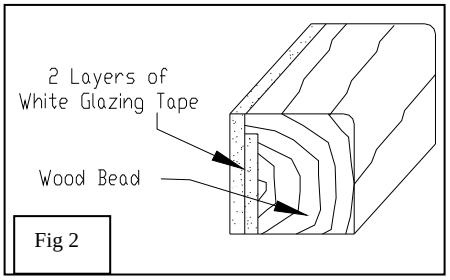


Fig 2

2. Carefully remove the wood bead from the lite opening. The glazing clip pockets are roughly centered within the door thickness.

3. Lay the door flat, taking care to protect the surface from marring.

4. Position the rectangular half of the glazing clip with the tabs down, being sure it is centered within the door thickness. Secure it using two of the 1-9/16” long 4d nails inserted through the holes below the tabs (Fig 3) Where nails are hand driven into blocking, pre-drilling with a 5/64” bit is required. **Caution**: These clips are directional; insure correct positioning of the clips before nailing them into place. **Note**: Clips are required in all of the machined pockets.

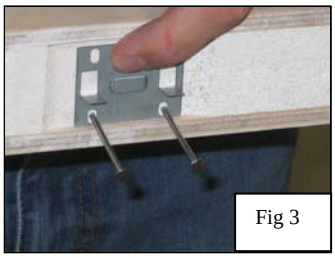


Fig 3

Fig 4

5. After installing the rectangular half of all of the clips in all of the pockets, position the glazing in the opening, resting it against the clip tabs (Fig 4).

6. Install the second part of the clips by inserting the "tongue" into the raised slot until the locking tab engages (Fig 5).

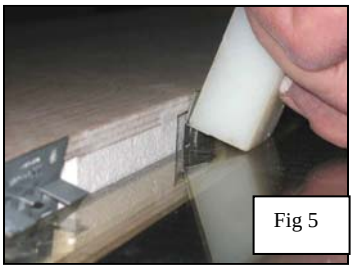


Fig 5

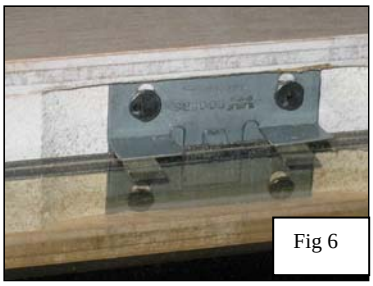


Fig 6

7. Secure the second part of the clip to the cutout using two additional 1-9/16" nails. These nails should extend through the overlapping holes in both halves of the clips (Fig 6).

8. Apply a bead of 100% silicone caulk around the perimeter of the glazing (Fig 7).

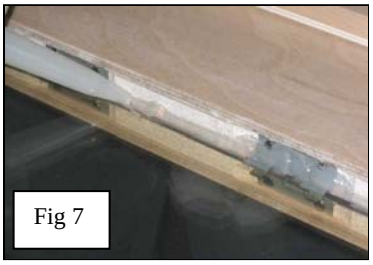


Fig 7

9. Position the wood bead in the cutout. The recess (down-set) of the beads will vary from door to door due to "tolerance stacking" of the door, wood bead and glazing dimensions. Because of this, the wood beads have been profiled to allow a nominal 1/32" recess. If the recess is greater than this, an additional bead of silicon can be added between the bead and glazing.

10. After satisfactorily positioning the glazing bead in the opening, secure it using one two-inch nail (6d finish supplied or 16-gauge trim) centered between adjacent clips and at each end of the bead (Fig 8). Where nails are hand driven into blocking, pre-drilling with a 5/64" bit is required. **Note**: For hand nailing, pre-drilling the bead and any blocking material the nails will engage using a 5/64" bit is required.

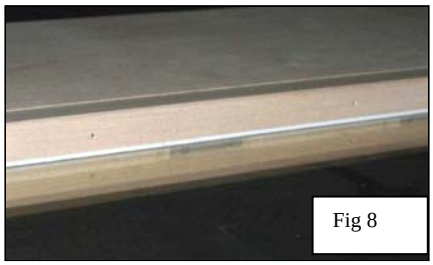


Fig 8

11. Flip the door over and repeat steps 8, 9 and 10.

12. Putty and sand all nail holes before finishing.

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