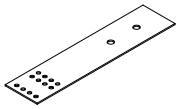
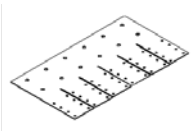
Integrity Windows and Doors
Structural Bracket Installation

Structural brackets are used for securing Integrity products into a masonry opening. Structural brackets are also used for structural applications and specific mullion configurations.

Illustrations (not to scale)	Description	Part/Profile Number
	Structural Bracket 6" (152) 10" (254)	 11860014 11860009
	Impact Mull Bracket 6" 10"	 11862513 11862514
	#7 x 5/8″ Phillips flat head screw	11800758

NOTE: Numbers listed in parentheses ( ) are metric equivalents in millmeters rounded to the nearest whole number.

WARNING

Practice safety! Wear safety glasses or goggles when installing or performing adjustments to an Integrity product.

You Will Need to Supply

Safety glasses	Hearing protections
Phillips screwdriver	Hammer
Power drill/driver	3/32" (2) Drill bit
Pencil	Tape measure

#8 x 1 5/8" screws
#8 x 1 1/4" screws (casement and IRTM casement)
5/8" x 3 1/2" Filler board (IRT IZ3)
5/8" x 2 1/2" Filler board (casement and IRTM casement)
APA, AFG-01 spec. (or equivalent) construction sealant/adhesive with gun

NOTE: Fasteners penetrating chemically treated lumber must be a minimum of 0.90 oz/ft^2 zinc hot dipped galvanized or stainless steel type 304 or 316.

Bracket Spacing and Placement

Structural brackets should be applied 6″(152) from head jamb and sill and 4″(102) on both sides of mullion on a standard mulled assembly (if applicable). Depending on the size of the unit install remaining brackets around frame perimeter. Spacing between brackets should not exceed 12″(305). Round top units should have a bracket placed 1″(26) from the springline (if applicable). Apply additional brackets at quarter points and at the midsection of the radius. Impact rated Round Top units require brackets spaced every 12″(305) around the perimeter. **See below for product specific instructions and illustrations on placement of brackets.**

Casement, Awning, and Polygon Units

1. Attach a 5/8″(16) thick x 2 1/2″ (64) filler board to the wood frame prior to attachment of structural brackets. Attach filler blocks by first placing a 5/16″ (8) bead of adhesive as shown. Fasten the blocks to the frame using #8 x 1 1/4″ screws 7/8″(22) from interior edges. Space the screws 10″(254) from each end and 12″(305) on center. (On impact mullions, center the board across the mullion).

2. Place brackets on filler board so the interior most screw hole is no more than 1 9/16″(40) from the interior edge of the frame. Attach with two #7 x 5/8″ wood screws provided.

Figure 1 Casement, Awning, Polygon.

Double Hung and Glider

NOTE: Measure and mark 1 1/2″(38) from nailing fin/ drip cap kerf for proper placement of bracket.

1. Carefully drill on 3/32″(2) pilot hole through the first layer of the Ultrex frame.

2. Apply two 1/4″(6) x 1 1/4″(32) beads of construction adhesive on frame where the brackets will be placed. Attach the bracket with one #7 x 5/8″ Phillips flat head screw as shown.

Figure 2 Double Hung and Glider.

Sliding Patio Door/Sliding French Door Units

NOTE: Measure and mark 2 3/16″(56) from nailing fin/ drip cap kerf for proper placement of bracket.

1. Carefully drill a 3/32″(2) pilot hole through the first layer of the Ultrex frame.

2. Apply two 1/4″(6) beads of construction adhesive on frame where brackets will be placed. See figure 3. Attach bracket to head jamb or side jambs with one #7 x 5/8″ Phillips flat head screw as shown in figure 3.

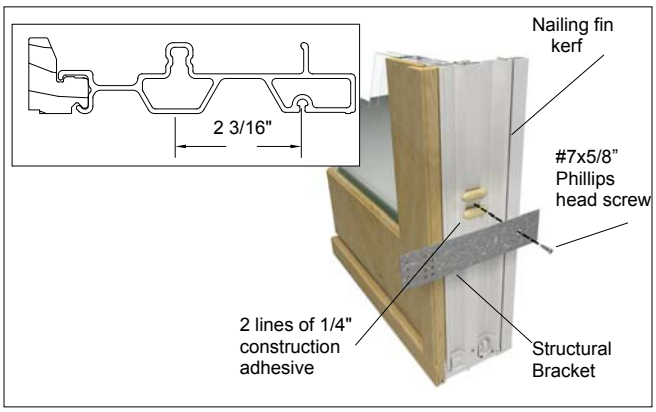


Figure 3 Sliding Patio Door, Sliding French Door.

Inswing/Outswing French Door Units

NOTE: Measure and mark 1 1/2″(38) from nailing fin/ drip cap kerf for proper placement of bracket.

1. Carefully drill a 3/32″(2) pilot hole through the first layer of the Ultrex frame.

2. Apply two 1/4″(6) beads of construction adhesive on frame where brackets will be placed. See figure 4.

3. Attach bracket to head jamb or side jambs with one #7 x 5/8″ Phillips flat head wood screw as shown in figure 4. (For Impact mullions, see additional steps for application of the mull bracket in “Impact Mull Brackets” on page 4.)

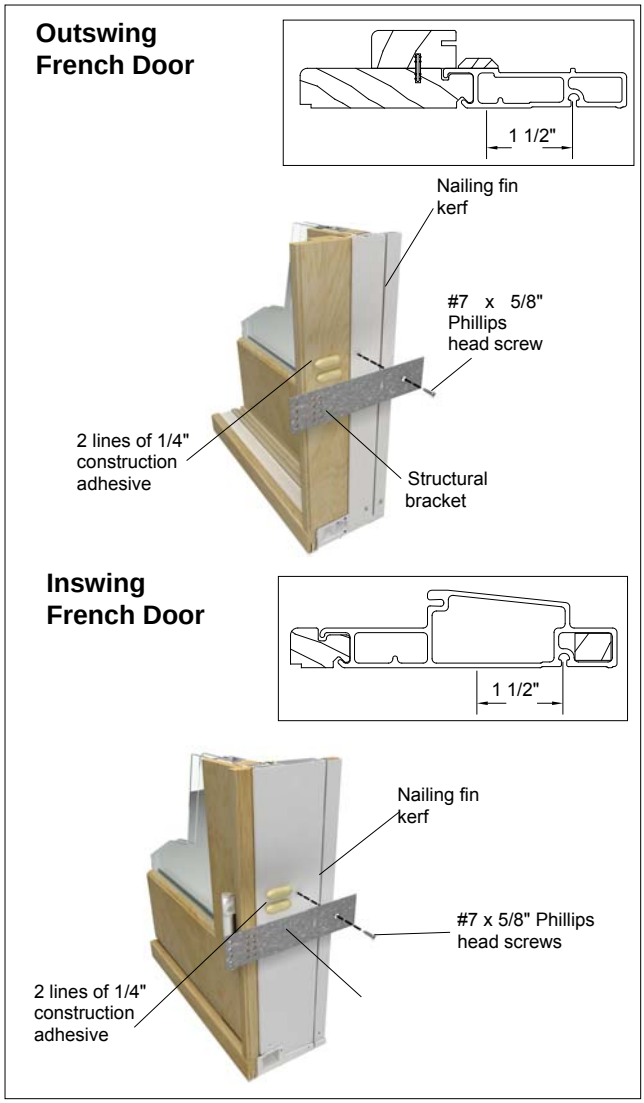


Figure 4 Inswing and Outswing French Door.

IRTM/IRT IZ3

1. On IRTM CA units, attach 5/8″ x 3″(16 x 76) filler blocks (or 5/8″ x 3 1/2″ filler board for IRT IZ3) to the frame prior to attachment of structural brackets. Attach blocks by first placing a 5/16″ (8) bead of adhesive as shown. Fasten the blocks to the frame using #8 x 1 1/4″ screws. See figure 5.

2. On all IRTM and IRT IZ3 units, attach structural brackets to the frame/filler boards with two #7 x 5/8″ screws provided with the bracket. See figure 5a.

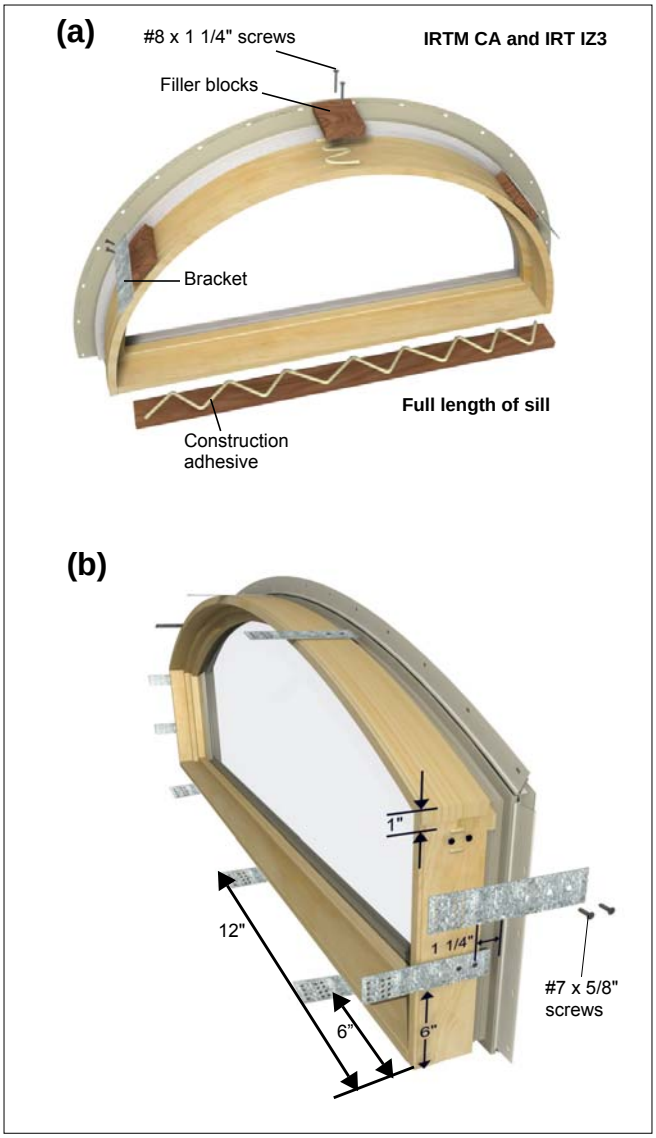


Figure 5 IRTM and IRT IZ3.

3. For all Impact rated units, brackets are required 6″ from each corner, and spaced no more than 12″ around the perimeter (including the sill). See figure 5b.

Installation of Unit with Brackets

1. Follow installation instructions for installing unit into opening.

2. Bend brackets against wood framing as shown in figure 6. Attach structural brackets to wood framing with two 1 5/8″ (41) sheet rock screws, making sure that the screws are no more than 1/4″ (6) from the bend in the bracket (edge of the wood buck). Angle the screws approximately 15 degrees toward the thicker part of the framing member.

NOTE: It may be necessary to drill two 5/32″ (4) holes in bracket.

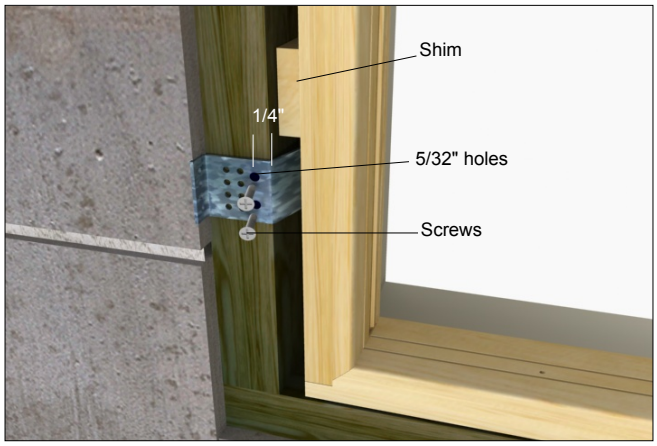


Figure 6 Unit Installation.

Impact Products

See “Impact Mull Brackets” on page 4 for additional mull bracket placement for impact mulls.

Impact Mull Brackets

Impact Products

Additional mull brackets are necessary on Impact Mull products. Follow window installation instruction and supplemental instructions included with unit for installation.

ITDH and IOFD

1. Measure and mark a line 1 1/2" (38) from the nailing fin kerf. Center the bracket over the mull and align the exteror hole on the mull bracket with the 1 1/2" line. Using the bracket as a guide, carefully drill 3/32" (2) pilot holes through the first layer of the Ultrex frame. See figure 7.

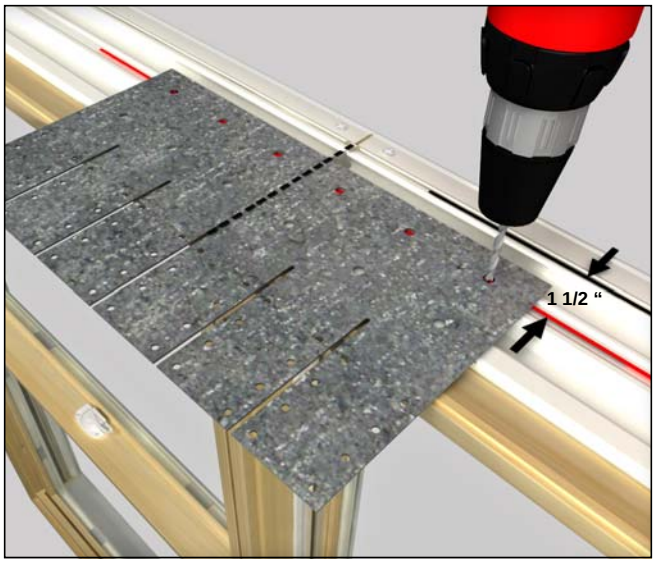


Figure 7 Predrill through bracket (ITDH shown, similar for IOFD).

2. Apply two 1/4" (6) x 12" (32) beads of construction adhesive on the frame beneath where the mull brackets will be applied as shown in figure 8.

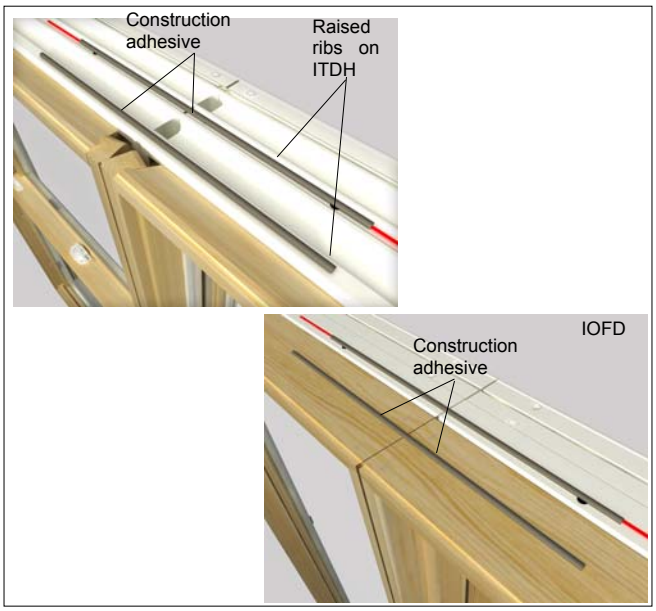


Figure 8 Apply construction adhesive.

3. Attach the mull brackets with the #7 x 5/8" screws provided. See figure 9.

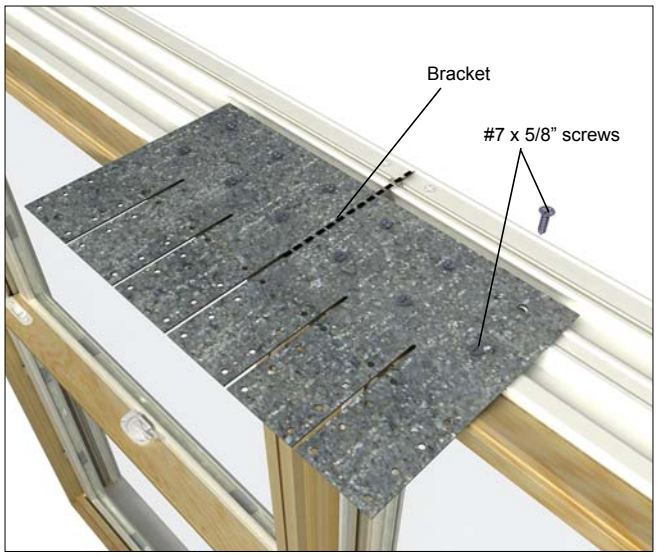


Figure 9 Center bracket and attach with screws.

ICA, IAWN, IPOLY

1. Center mull brackets on top of filler board at mullion joints with the interior most screw hole no more than 1 1/8" (29) from the interior edge of the frame. Attach the mull bracket with the #7 x 5/8" screws provided. See figure 10.

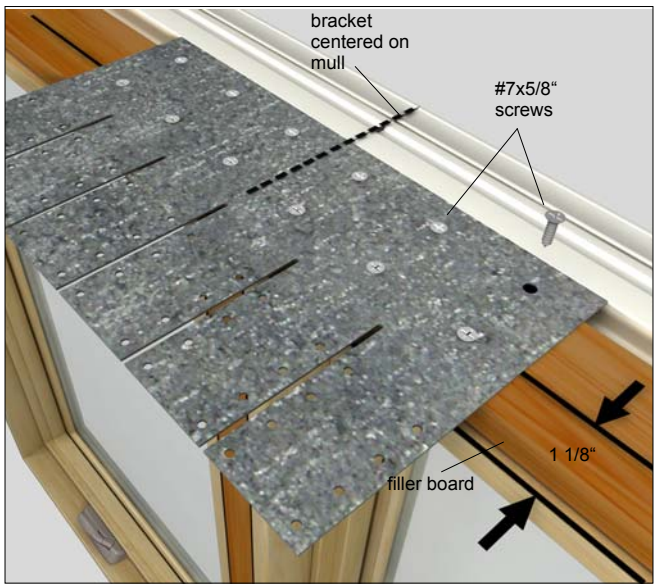


Figure 10 Attach bracket to filler board on ICA, IAWN, and Polygons.