

# Integrity Structural Bracket

## Field Applied Instruction

Structural brackets are used for securing Integrity products into masonry openings, structural applications and specific mullion configurations.

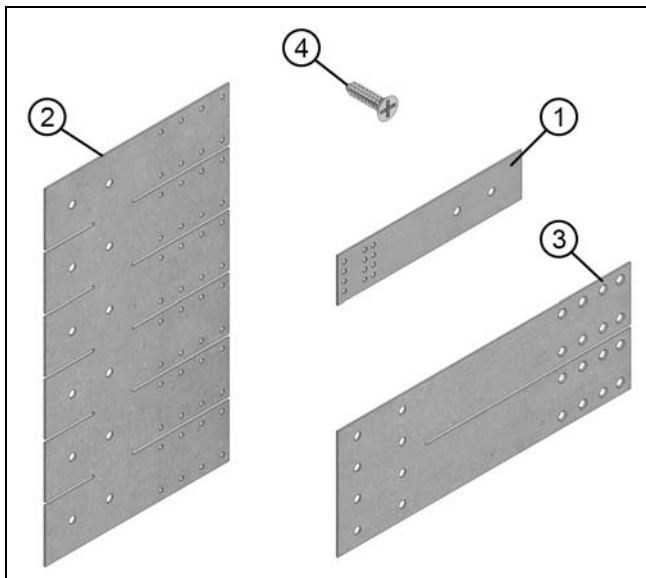
*NOTE: Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number.*



### WARNING!

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

### Parts Needed



1	Structural Bracket (6"-11860014) or (10"-11860009)
2	Impact Mull Bracket (6"-11862513) or (10"-11862514)
3	Structural Mull Bracket (6"- 11860002) or (10" 11860003)
4	#7x5/8" Phillips flat head screws (11800758)

### You Will Need to Supply

- Safety glasses
- Hearing Protection
- Phillips screwdriver or bit
- Power drill/driver
- Pencil
- Hammer
- 3/32" (2) Drill bit
- 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 for 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<sup>2</sup> zinc hot dipped galvanized or stainless steel type 304 or 316.*

### Bracket Spacing and Placement

Apply structural brackets 6" (152) from the head jamb and sill and 4" (102) on both sides of mullions on a standard mullied assembly (if applicable). On **certified mull assemblies**, place structural mull brackets 1 1/2" (38) on both sides of each mull joint.

## Casement, Awning and Polygon Windows

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 #8x 1 1/4" screws 7/8" from the interior edge. Space the screws 10" (254) from each end and 12" (305) on center. (On impact mullions, center the board across the mullion)

2. Place the brackets on the 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 #7x5/8" wood screws provided.



Figure 1

## Double Hung and Glider

1. Measure and mark 1 1/2" (38) from the nailing fin/drip cap kerf for proper placement of bracket. Carefully drill a 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 the frame where the brackets will be placed. Attach the bracket with one #7x5/8" Phillips flat head screw as shown.



Figure 2

## Sliding Patio Door/Sliding French Doors

1. Measure and mark  $2 \frac{3}{16}$ "(56) from the nailing fin/drip cap kerf for proper placement of bracket.
2. Carefully drill a  $\frac{3}{32}$ "(2) pilot hole through the first layer of the Ultrex frame.
3. Apply two  $\frac{1}{4}$ "(6) beads of construction adhesive on the frame where the brackets will be placed. Attach the bracket to the head jamb or side jambs with one #7x5/8" Phillips flat head screw.

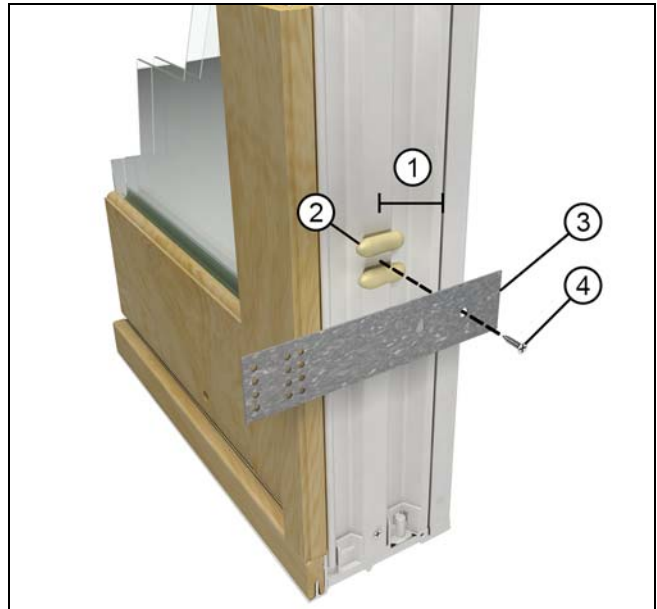


Figure 3

1	$2 \frac{3}{16}$ " (56)
2	2 beads of construction adhesive
3	Bracket
4	#7x5/8" screw

## Outswing French Doors

1. Measure and mark  $1 \frac{1}{2}$ "(38) from the nailing fin/drip cap kerf for proper placement of bracket.
2. Carefully drill a  $\frac{3}{32}$ "(2) pilot hole through the first layer of the Ultrex frame.
3. Apply two  $\frac{1}{4}$ "(6) beads of construction adhesive on the frame where the brackets will be placed.
4. Attach the bracket to the head jamb or side jambs with one #7x5/8" Phillips flat head wood screw.

*NOTE: For Inswing French Doors built after August 2016, refer to the [Integrity Inswing Installation Instructions](#) for structural bracket installation.*

*NOTE: For **Impact Mullions**, see additional steps for application of the mull bracket in the "Impact Mull Brackets" section.*

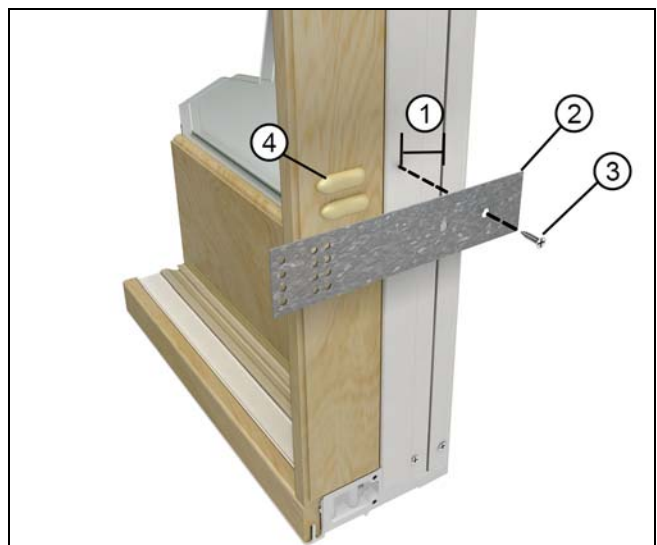


Figure 4

1	$1 \frac{1}{2}$ "
2	Bracket
3	#7x5/8" screw
4	2 beads of construction adhesive

## IRTM/IRT IZ3

1. On IRMT CA windows, attach a 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 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.

2. On all IRTM and IRT IZ3 units, attach structural brackets to the frame/filler boards with two #7x5/8" screws provided with the bracket.

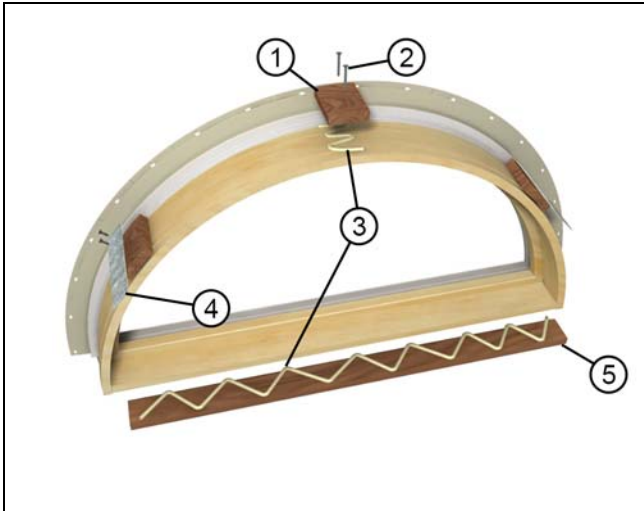


Figure 5

1	Filler blocks
2	#7x5/8" screws
3	Adhesive
4	Structural Bracket
5	Sill filler block runs continuously across sill

3. For all impact rated units, brackets are required 6" (152) from each corner and spaced no more than 12" (305) around the perimeter (including the sill).

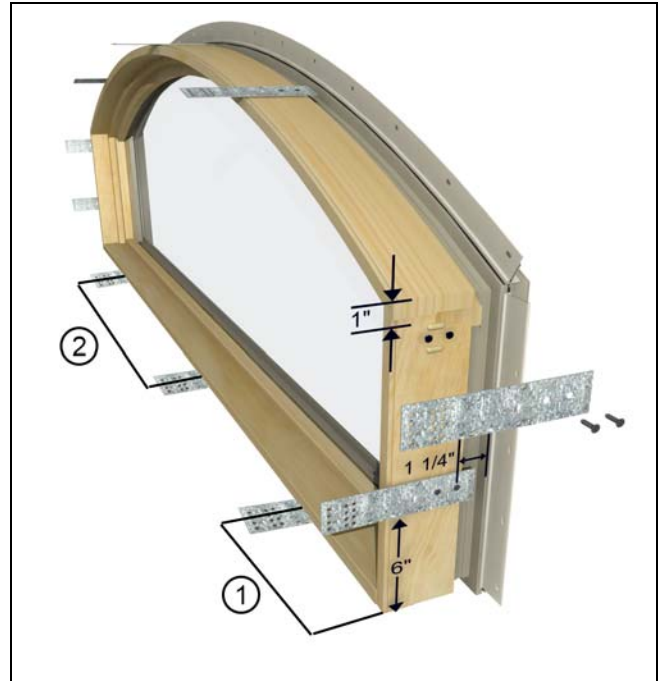


Figure 6

1	6" (152)
2	12" (305)

## Certified Mull Brackets

**Additional mull brackets are necessary on Certified Mull products. Follow window installation instructions and supplemental instructions included with the units for installation.**

1. Place mull brackets 1 1/2" on both sides of each mull joint. Follow bracket installation instructions for each specific product type. Attach the mull brackets to the frames with eight #7x5/8" Phillips flat head screws. Place the remaining structural brackets as instructed in the bracket spacing and placement section.

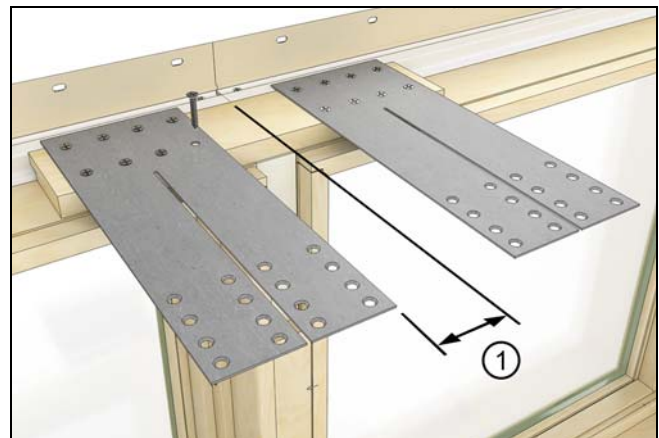


Figure 7

1	1 1/2" (38)
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2. For IRTM units mulled above casement or awning units, apply three standard structural brackets at each mull point of the round top unit.

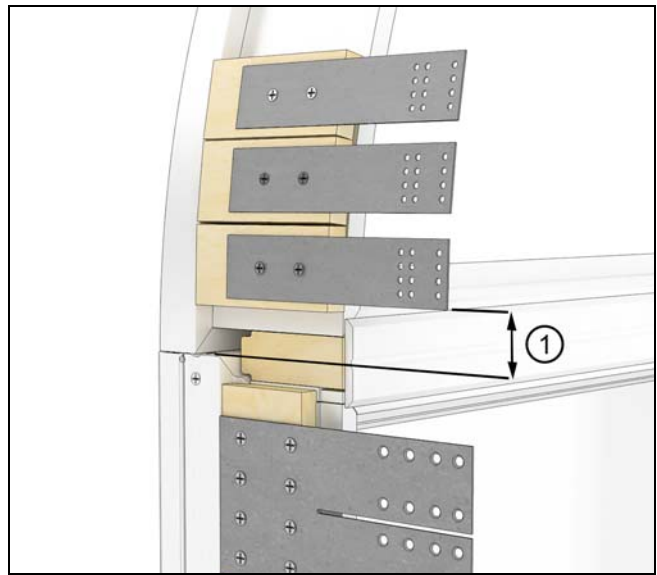


Figure 8

1	1 1/2" (38)
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## Unit Installation with Brackets

1. Follow installation instructions for installing the unit into the opening.
2. Bend brackets against wood framing as shown in. Attach the brackets with two #8x1 5/8" (41) screws. Make sure that the screws are no more than 1/4" (6) from the bend in the bracket (edge of 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 the bracket.*

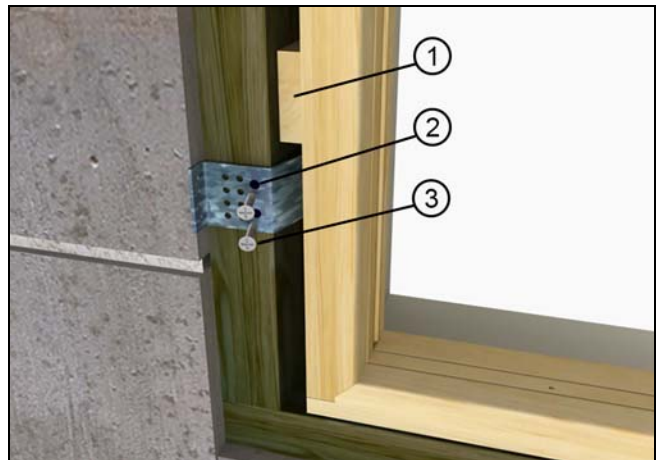


Figure 9

1	Shim
2	5/32" (4) holes
3	#8x1 5/8" screws.

### IMPORTANT

**Impact Products:** See "Impact Mull Brackets" section in this instruction for additional placement for impact mulls.

## Impact Mull Brackets-All Products

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

## Impact Mull Brackets-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 exterior hole on the mull bracket with your mark. Using the bracket as a guide, carefully drill 3/32" (2) pilot holes through the first layer of the Ultrex frame. See Figure 10

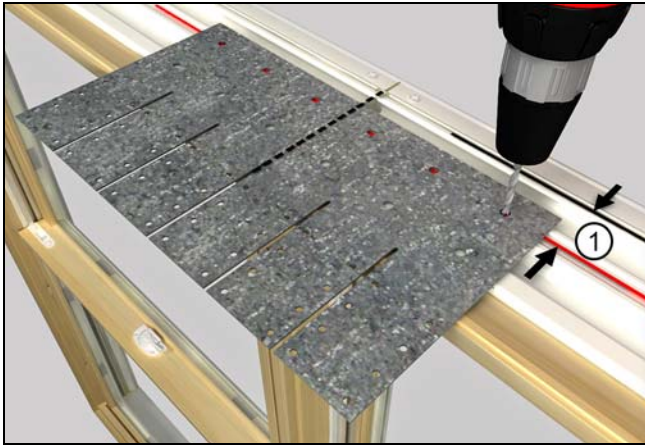


Figure 10

1	1 1/2" (38)
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2. Apply two 1/4" (6) x12" (32) beads of construction adhesive on the frame beneath where the mull brackets will be applied. See Figure 11 and Figure 12.

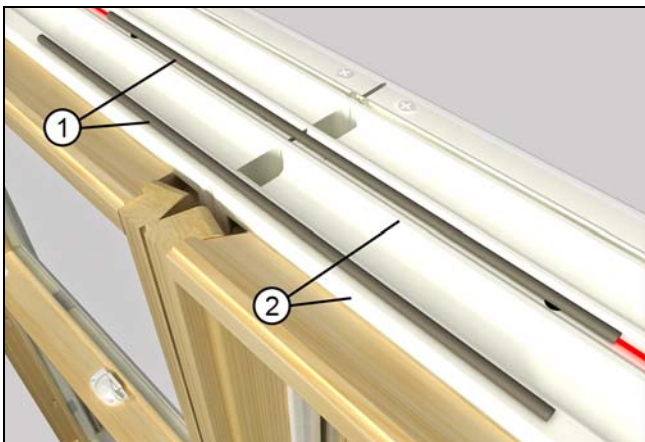


Figure 11 ITDH

1	Construction adhesive
2	Raised Ultrex ribs

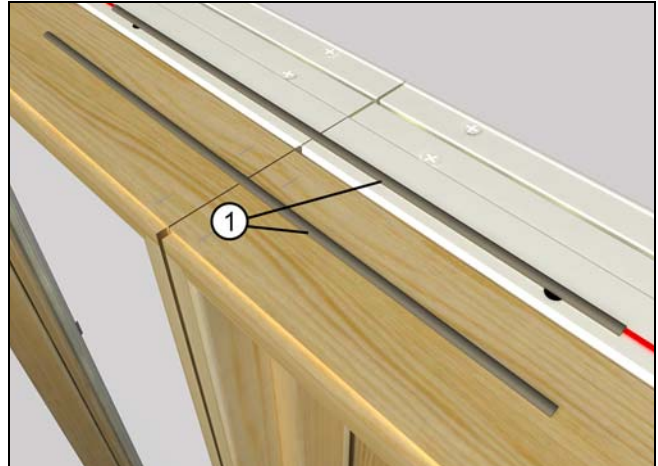


Figure 12 IOFD

1	Construction adhesive
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3. Attach the mull brackets with the #7x5/8" screws provided.

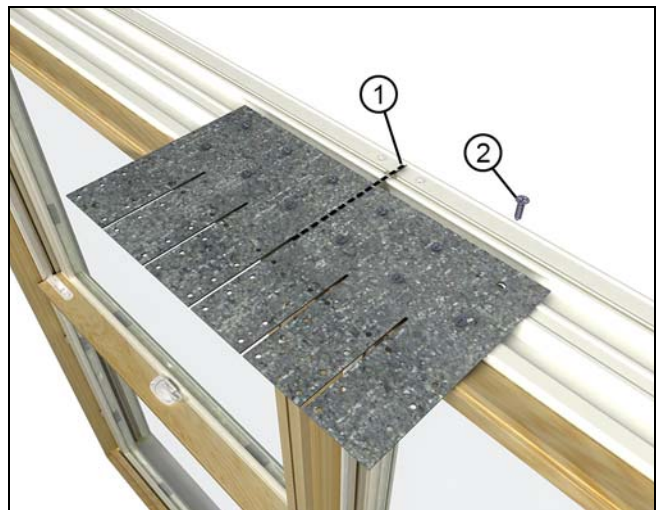


Figure 13

1	Bracket centered on mull
2	#7x5/8" screw

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## ***Impact Brackets-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 #7x5/8" screws provided. See Figure 14.

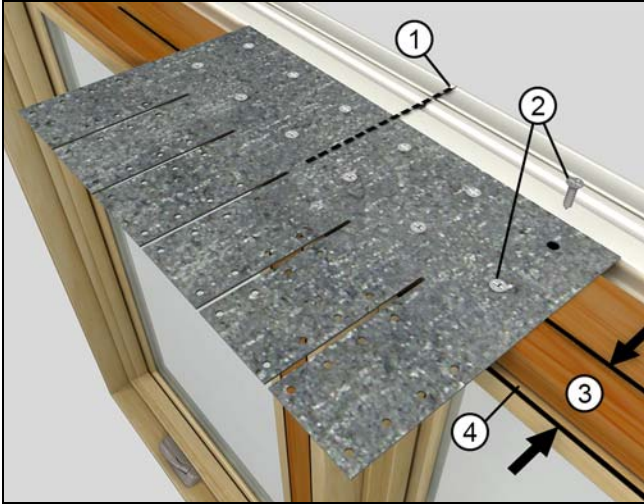


Figure 14