# **Elevate Structural Bracket**

# **Field Applied Instruction**

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

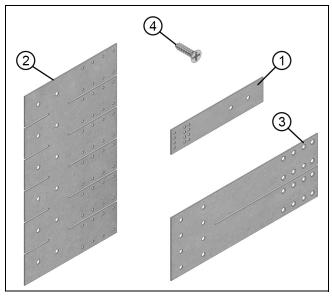
NOTE: Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number.



### WARNING!

Practice safety! Wear safety glasses or goggles when installing or performing adjustments to an Elevate 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 mulled 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 3/16"(56) from the nailing fin/drip cap kerf for proper placement of bracket.
- **2.** Carefully drill a 3/32"(2) pilot hole through the first layer of the Ultrex frame.
- **3.** Apply two 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.

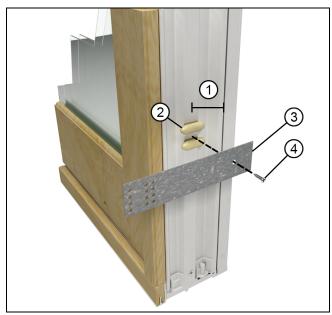


Figure 3

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

# **Outswing French Doors**

- **1.** Measure and mark 1 1/2"(38) from the nailing fin/drip cap kerf for proper placement of bracket.
- **2.** Carefully drill a 3/32"(2) pilot hole through the first layer of the Ultrex frame.
- **3.** Apply two 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 Elevate 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.

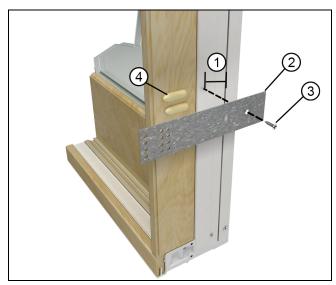


Figure 4

1	1 1/2"
2	Bracket
3	#7x5/8" screw
4	2 beads of construction adhesive

#### **ELALDGRT/ELALDGRT IZ3**

- 1. On ELALDGRT CA windows, attach a  $5/8" \times 3"$  (16 x 76) filler blocks (or  $5/8" \times 3$  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 ELALDGRT and ELALDGRT IZ3 units, attach structural brackets to the frame/filler boards with two #7x5/8" screws provided with the bracket.

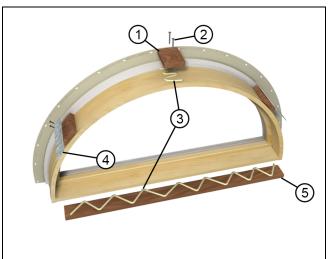


Figure 5

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).

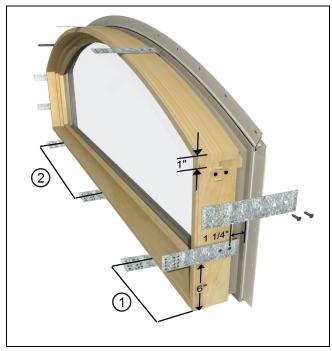


Figure 6

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.

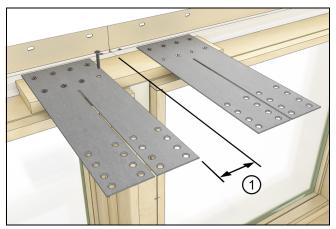


Figure 7

1	1 1/2" (38)

**2.** For ELALDGRT units mulled above casement or awning units, apply three standard structural brackets at each mull point of the round top unit.

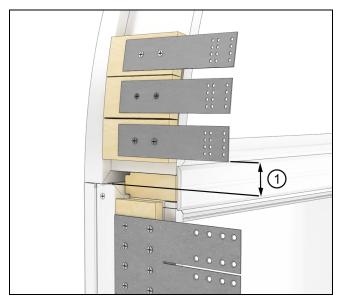


Figure 8

-	1	1 1/2" (38)

### 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-ELDH and ELOFD

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

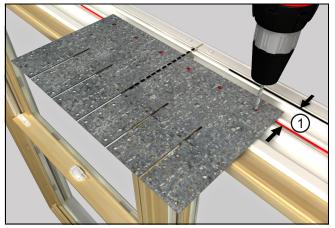


Figure 10

ſ	1	1 1/2" (38)

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

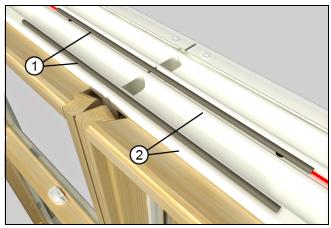


Figure 11 ELDH

1	Construction adhesive
2	Raised Ultrex ribs

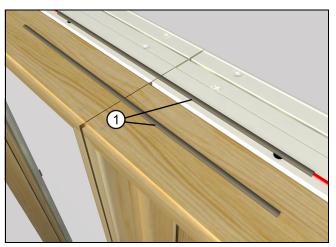


Figure 12 ELOFD

1	Construction adhesive
'	Constituction admicsive

**3.** Attach the mull brackets with the #7x5/8" screws provided.

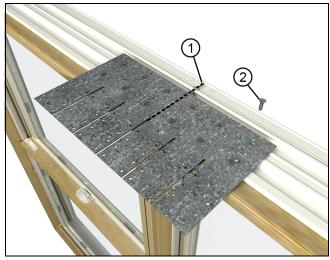


Figure 13

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

# Impact Brackets-ELCA, ELAWN, ELDG

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.

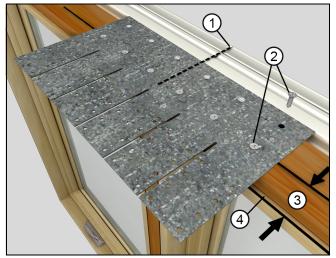


Figure 14