Before You Begin

IMPORTANT
Read these instructions thoroughly before beginning to install your Integrity Inswing French Door. Failure to install as recommended will void any warranty, written or implied. Regional applications and standards may vary, therefore Integrity Windows and Doors is not responsible for interpretations of local codes and/or ordinances. Installation of Integrity products is the sole responsibility of the installer, contractor, structural engineer, architect, building owner and/or consumer. After installation is completed, these instructions should be retained by the building owner. For additional information, consult your local Integrity Windows and Doors dealer.

IMPORTANT
All windows and doors must have properly installed flashing systems and sealant at unit perimeter in accordance with accepted and proven construction methods.

ATTENTION
Specifications and technical data are subject to change without notice.
NOTE: When specifying or considering the structural load requirements for windows and doors, it is important to consider the method of fastening the unit(s) together in addition to the method of fastening multiple assemblies into an opening. The methods contained herein may not be appropriate for all performance requirements. Selection of the appropriate fastening method(s) is the sole responsibility of the installer, contractor, structural engineer, architect, building owner and/or installer.

IMPORTANT
Do not allow strong detergents, solvents, chemicals or other harsh cleaning substances to come in contact with Ultrex surfaces as they can cause damage. Remove fresh paint splashes, grease or caulking with naphtha or isopropyl alcohol. If you wish to maintain the finish of the Ultrex, wash with soap and water.

WARNING
Practice safety! Wear safety glasses or goggles and appropriate hearing protection when installing Integrity window and door products.

You Will Need to Supply
| Safety glasses | Hearing protection |
| 4-6’ Level | Square |
| Hammer | Shims |
| 2” Roofing nails | Fiberglass insulation |
| Tape measure | Utility knife |
| Seam seal tape | 11/64” Drill bit |
| Drill | 5/32” Hex key |
| Interior trim or casing as desired |
| Drip cap flashing (for top of unit) |
| Backing material (foam backer rod) |
| Grade NS Class 25 sealant per ASTM C920. Sealant must be compatible with building exterior and window surface. |

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

IMPORTANT
Integrity windows and doors may be harmed by excess construction moisture. Ventilate building during high moisture phases or seal interior of the opening with plastic.

WARNING
Drilling, sawing, sanding, or machining wood products generates wood dust, a substrate known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

WARNING
These products contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

WARNING
Older homes may contain lead-based paint, which may be disturber when replacing windows or performing renovations. Consult state or local authorities for safe handling, disposal, or abatement requirements. For more information, go to www.epa.gov/lead.
### Standard Parts Shipped

<table>
<thead>
<tr>
<th>Illustration (Not to scale)</th>
<th>Part description</th>
<th>XX</th>
<th>XO/OX</th>
<th>X</th>
<th>O</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Primary handle set with escutcheon plates, machine screws, and keyed cylinder with keys.</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td></td>
<td>Secondary handle set with escutcheon plates and machine screws</td>
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<td></td>
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<tr>
<td></td>
<td>Nailing fin corner gasket</td>
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</tr>
<tr>
<td></td>
<td>Hole plugs</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<tr>
<td></td>
<td>Sliding screen sill dust block</td>
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<tr>
<td></td>
<td>#8 x 2 1/2” Flat head screws, color matched</td>
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<td>4</td>
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<tr>
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<tr>
<td></td>
<td>#8 x 3” Panhead screws, beige</td>
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</tr>
<tr>
<td></td>
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<td>1</td>
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</tr>
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<td></td>
<td>3/16 x 2 3/4” Masonry anchor</td>
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**NOTE:** Not all fasteners may be used during installation. Additional fasteners will be supplied with High Performance and Impact rated products.
Permanently Fastening the Door

NOTE: Prior to beginning this section ensure you have completed the general door installation instructions included with this unit.

WARNING

On X, XO/OX and XX units, the unit is locked. Please refer to the Handle Operation section for further details.

NOTE: For masonry installation and IZ3 rated products, refer to page 9 prior to beginning this installation.

1. Locate the through jamb installation holes on the jamb (three) and head jamb (two to four) Ultrex. Pre-drill each of these location to the rough opening with an 11/64” drill bit. Drive the #8 x 3” pan head screws into the framing members. Do not completely tighten screws as some adjustment may be necessary. From the interior, apply shims directly above installation screws. See figure 1.

Figure 1

NOTE: If you are installing a door with a transom or round top mulled above or a unit mulled to the side, do not drive long screws through frame towards mulling joint.

2. Install handles on operator panels according to the instructions supplied with the handle sets.

3. On operator panels, after the jamb and head jamb installation screws are installed, open the door 90° to access the hinges and strike plate installation screws. Support the weight of the panel by adding blocking under the far edge (handle side) of panel to the floor.

4. On X and XX units remove the top screw from each hinge and replace with a #8 x 2 1/2” flat head color matched screw. See figure 2.

Figure 2

5. On X and XO/OX units, remove the center screw from the locking jamb strike plate and replace with either a #8 x 2 1/2” brass or stainless steel screw. See figure 3.

Figure 3

NOTE: On High Performance/IZ3 units, pre-drill all strike plate installation holes with an 11/64” bit prior to fastening. See figure 4.

Figure 4
6. On **X and XO/OX units**, remove the two interior head jamb strike plate screws and replace with #8 x 2 1/2" stainless steel screws. See figure 5.

7. On **XX and XO units**, remove two head jamb strike plate screws and replace with #8 x 2 1/2" stainless steel screws. **XX units** will be the two interior most screws, **XO/OX units** will be the two visible screws. See figure 6.

8. Place additional shims around the unit perimeter as necessary. Shims must be placed 4"-6" (102-152) from each corner and a maximum 15" (381) apart on center. *Do not over shim.*

9. Tighten each installation screw through Ultrex jamb and head jamb.

10. Check horizontal, vertical, and diagonal measurements to ensure the door is square in the opening. Adjust screws and shims as necessary.

11. When the unit is completely fastened to the opening and is square and plumb, cover the Ultrex jamb and head jamb screw holes with the colored plugs provided. Make sure the plug is seated tightly. See figure 7.

12. Permanently fasten nailing fin to exterior sheathing, space fasteners 6"- 8" (152- 203) apart (maximum) and a maximum of 6"(102) from each corner.
Final Installation Procedures

1. From interior side of unit, unlock operating panel. Open and remove shipping block from under each operator panel. Carefully bring panel into closed position, take care not to allow panel to contact sill if vertical adjustment is necessary. Follow hinge adjustment procedures on page 8 if necessary. Close and lock door panel. See figure 8.

2. Check the door to see if the panel swings easily. Follow hinge adjustment procedures if necessary.

Final Sealing Procedures

**IMPORTANT**
Using improper sealant could result in sealant failure causing air and water infiltration.

**CAUTION**
Expanding foam type insulation may be used to form an infiltration seal as required by some building codes. However, a low expansion type foam should be used in combination with fiberglass insulation.

1. After exterior finish or siding is installed, apply sealant around the exterior perimeter of the unit frame or casing. As needed, insert backing material between the frame or casing and the structure to provide a proper sealant joint. Sealant depth must be equal to width between unit and exterior finish material (brick and masonry apply). Always refer to the manufacturer's recommendations for proper surface preparation and application. See figure 9.

2. Fill gaps between the door frame and framing members on interior with insulation. Do not pack tightly.

3. Apply interior casing as desired. Finish the interior wood surfaces as soon as possible. Follow enclosed general paint/stain instructions and manufacturer’s recommendations to ensure proper adhesion and performance.

4. On XO/OX Units when installed with a sliding screen, install the sliding screen sill dust block at the center of the unit, flush to the bottom of the sill as shown in figure 10.
Handle Operation

NOTE: The door handle performs two separate functions. Rotating the handle upward engages the multi-point lock (at the top, bottom and side jamb). Rotating the handle in a downward motion releases the latch and also the multi-point lock if engaged. The thumb turn is used to lock the handle to prevent it from being rotated down. The thumb turn does not engage the multi-point lock.

Locking the Door

1. Close door so it latches. Rotate handle up to engage the shoot bolts and deadbolt on the multi-point lock.

2. Turn “thumb turn” 1/4 turn to lock the handle. Verify that the handle cannot be rotated down to ensure door is properly locked. See figure 11.

Unlocking the Door

1. Turn the thumb turn 1/4 turn.

2. Rotate the handle down to disengage the multi-point lock and latch mechanism. See figure 12.
Hinge Adjustment

NOTE: Should you find it necessary to make minor adjustments to your Integrity Inswing French door after it has been permanently installed, the adjustable hinge system will allow you to do this. During installation, adjustment of door frame shims should be done to correct any alignment or operation problems.

IMPORTANT

Ensure that the unit has been installed square in the opening.

CAUTION

Failure to follow adjustment procedures as outlined may damage hinge.

1. Adjustments should only be made when panel misalignment is visible or it causes poor operation of the door/lock. Make any adjustments in small increments (one rotation per hinge), starting with the bottom hinge and working up to the top hinge. Repeat the process as necessary adjusting one rotation at a time. Check results, readjust or proceed as required. Each hinge has a vertical and horizontal adjustment screw. See figure 13.

2. Check panel clearance at the sill. The panel should have a minimum of 3/16” (5) clearance at the bottom. The vertical adjustment screw should be adjusted equal amounts starting with the bottom hinge. Check index mark on hinge leaf to determine amount and direction of panel movement. See figure 14.

3. Check panel alignment with locking jamb, the panel should have 3/16” (5) clearance along the jamb on one panel configurations and 1/8” clearance on two panel configurations. Rotate the horizontal adjustment screw clockwise to decrease, counterclockwise to increase jamb to panel clearance.

NOTE: If increasing clearance at the top, the bottom hinge may have to be adjusted to decrease clearance at the hinge jamb and avoid hinge binding.

4. After panel alignment is corrected, recheck latch and deadbolt operation.

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<tbody>
<tr>
<td>1</td>
<td>3/16” (5)</td>
</tr>
<tr>
<td>2</td>
<td>3/16” (5)- 1/4” (6)</td>
</tr>
<tr>
<td>3</td>
<td>3/16” (5)</td>
</tr>
<tr>
<td>4</td>
<td>1/8” (3)</td>
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</tbody>
</table>
Masonry and High Performance/IZ3 Unit Installation

**IMPORTANT**
Fasten IZ3 rated products to the rough opening using either nailing fin with installation clips or structural brackets.

Nailing fin with installation clips must be used on IZ3 units using a nail fin installation. Alternatively, structural brackets may be used instead of nailing fin and installation clips. Both installation types will be fastened to the frame following these instructions. **High performance units do not require IZ3 installation clips on the nailing fin.**

1. Align each installation clip or structural bracket on the frame with the nailing fin (if used) extended to 90°. Align center hole on installation clip or structural bracket with through jamb hole location for placement guide. Fasten installation clip or structural bracket using three #7 x 5/8" wood screws, as shown in figure 15.

**NOTE:** On XO/OX units, the center installation clip or structural bracket on the head jamb will align with two outer holes of installation clip or structural bracket, and fasten as shown in figure 16.

2. On X and XO/OX Units, install nailing fin installation clip or structural brackets at the rhino hook strike plate locations as shown in figure 17. Ensure the bracket does not interfere with the hardware operation.

**NOTE:** Top rhino hook plate will be tangent to top of route, bottom rhino hook location will be tangent to bottom of route.
3. On nailing fin with installation clips, prior to installing the unit, pre-drill each of the holes from the installation clip through the nailing fin to make installation easier. See figure 18.

4. To install the unit using nailing fin with installation clips, install the unit as defined in the general door installation instructions, then complete the installation by placing five #8 x 1 1/4" drywall screws through each installation clip into framing member. See figure 19.

5. To install the unit using structural brackets, install the unit as defined in the general door installation instructions, then complete the installation by bending structural bracket tabs to the interior of the frame. Attach structural bracket to wood framing with two 1 5/8"(41) sheet rock screws per tab, making sure screws are no more than 1/4" (6) from the bend in bracket. Angle the screws approximately 15° towards the thicker part of the framing member. See figure 20.

6. On X & XX Units, install 2 installation screws through each hinge, top and bottom hole locations. Pre-Drill location with 11/64" drill bit through installation bracket. See figure 21.

7. On X and XO/OX units, remove the two interior strike plate screws and replace with #8 x 2 1/2" stainless steel screws. See figure 22.
8. On XX Units, remove four head jamb strike plate screws and replace with #8 x 2 1/2” stainless steel screws (on XO/OX units these will be the two visible screws). Pre-drill locations with 11/64” drill bit through installation bracket. See figure 24.

9. On X & XO/OX Units, install two installation screws through each of the Rhino hook strike plates. Pre-drill location with 11/64” drill bit through installation bracket. See figure 24.

10. On all High Performance/IZ3 Units, install 2 3/4” masonry anchor screw through the sill installation bracket. Locate bracket at the center of the unit. Pre-drill center hole location with 11/64” drill bit through the Ultrex sill foot at 25° angle from vertical. See figure 25.