These instructions are for the following Wood-Ultrex Insert window units:

<table>
<thead>
<tr>
<th>Wood-Ultrex Insert Casement (IICA)</th>
<th>Wood-Ultrex Insert Awning (IIAWN)</th>
<th>Wood-Ultrex Insert Picture (IICAP)</th>
</tr>
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<tbody>
<tr>
<td>Wood-Ultrex Insert Transom (IICATR)</td>
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**NOTE:** Please read these instructions in their entirety before beginning to install your Integrity window product.

**ABSTRACT:** These installation instructions demonstrate the installation of new Wood-Ultrex Integrity windows in existing wood frame construction using an industry approved water management system. For other construction methods such as remodeling and recessed openings, refer to ASTM E2112-01. Standard Practice for Installation of Exterior Windows, Doors and Skylights for installation suggestions. Information on ASTM E2112-01 can be found on the ASTM website www.astm.org. For product specific issues, service instructions and other field service guides, refer to the Integrity Service Manual, visit our website at integritywindows.com, or contact your Integrity representative.

Regional standard practices, environmental conditions, and codes may vary and supersede the procedures contained within. The responsibility for compliance is yours: the installer, inspector, and owner(s).

**After Market Products**
Alterations to Integrity products including window films, insulating or reflective interior window treatments or additional glazings can cause excessive heat buildup and/or condensation. They may lead to premature failures not covered under warranty by Integrity Windows and Doors.

Before purchasing or applying any product that may affect the installation or performance of Integrity windows contact the manufacturer of after market product/glazings that are not supplied by Integrity and request written product use, associated warranties and damage coverage. Provide this information and warranties to the end user and/or building owner for future reference.
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Before You Begin
These instructions detail how to prep an existing frame for a new Integrity Wood-Ultrex window. Installation into other window frames may require adapting the window opening preparation process. Consult with your Integrity representative concerning installation into other window frame openings.

Installer and Builder Information

- It is the responsibility of the builder, installer and subcontractors to protect the interior and exterior of windows from contact with harsh chemical washes, construction material contamination and moisture. Damage to glazing, hardware, weather strip and cladding/wood can occur. Protect with painters tape and/or protective sheathing as required. Follow all guidelines regarding material use, preparation, personal safety and disposal.

- Contact your Integrity supplier if you have any questions regarding product and materials used in manufacturing or questions on replacement parts.

You Will Need to Supply

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety glasses</td>
<td>Hearing protection</td>
</tr>
<tr>
<td>Level</td>
<td>Square</td>
</tr>
<tr>
<td>Hammer</td>
<td>Shims</td>
</tr>
<tr>
<td>Fiberglass insulation</td>
<td>Tape measure</td>
</tr>
<tr>
<td>Perimeter sealant</td>
<td>Chisel</td>
</tr>
<tr>
<td>Utility knife</td>
<td>Foam backer rod</td>
</tr>
<tr>
<td>Pry bar</td>
<td>Adjustable pliers</td>
</tr>
<tr>
<td>Putty knife</td>
<td>Reciprocating saw</td>
</tr>
<tr>
<td>Power drill with bits</td>
<td>Frame expander</td>
</tr>
<tr>
<td>Foam type insulation</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Sealants used for installation must be Grade NS Class 25 per ASTM C920 and compatible with the building exterior, window exterior surface, and flashing/water management materials.

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

WARNING
Always practice safety! Wear the appropriate eye, ear and hand protection, especially when working with power tools.

WARNING
This product can expose you to chemicals including titanium oxide, which is known to the state of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

WARNING
This product can expose you to chemicals including methanol, which is known to the state of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

WARNING
Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.
Prepare the Unit

NOTE: Inspect unit for color, damage, and size prior to installation.

1. Remove and properly discard all shipping material.
2. Remove all screens and loose hardware, set aside for future use.

IMPORTANT

When preparing unit for installation, the covers and stops need to be removed before installing.

3. Insert a through jamb screw into one of the two head jamb mounting holes. Tap gently with a hammer to create a small opening to insert a putty knife. See figure 1.

4. Carefully pry the head jamb stop away from the frame with a putty knife. Follow the same procedure to remove the stationary jamb stop and lastly the operator jamb stop. See figure 2.

5. After the head jamb and stationary/operator jamb stops are removed, pull the hardware cover with both hands to remove.

6. After the unit is installed, replace both jamb stops first, followed by the head jamb stop and then the sill hardware cover.

7. Ensure operating units are in the closed and locked position until secured in the opening and ready for final adjustments. Once the unit has been shimmed and secured in the opening, open the unit and remove any shipping blocks placed between the frame and sash. Operate the sash and perform final adjustments to the frame to ensure smooth operation of the unit.
Exterior Installation-Prepare the Opening

All jamb hardware and/or jamb liners must be removed prior to installation of the Integrity unit.

Exterior Applications

Figure 3 Remove blind stop and parting stops on exterior applications.

1. On exterior applications, use a reciprocating saw or hammer and chisel to remove the blind stop. Cut it flush with the exterior casing and frame. See figure 7a.

2. If the existing window unit used a weight pocket and pulley system, lower the top sash and cut the balance cords to remove the sash. Disconnect and remove any balance mechanisms attached to existing window frame.

3. Remove the head jamb and side jamb parting stops with a pry bar or adjustable pliers. See figure 7b.

4. If applicable, cut the balance cords on the lower sash and remove them from frame. Remove any remaining balance mechanism hardware from the existing frame that may hinder installation. If your frame used weight pockets at the jambs, remove them (if possible) and fill cavity with insulation.

5. Remove any debris or dirt in the opening. Apply a 1/4" (6) bead of sealant at both sill to jamb joints and on the back of the interior sash stops or moulding. See figure 7c.

6. Apply a secondary continuous bead of sealant on sill as shown in figure 7d.

NOTE: The placement of the secondary continuous bead of sealant is the same on interior and exterior installation.
**Interior Installation - Prepare the Opening**

1. Remove all interior stops with a pry bar or stiff putty knife. It may be necessary to break the paint seal with a utility knife.

2. Remove the lower sash from the frame. If the existing window unit used a weight pocket and pulley system, raised the lower sash, cut the balance cords, and then remove the sash.

3. Remove the parting stop from head jamb with a stiff putty knife or pry bar. See figure 4a.

4. Remove parting stops from both side jambs. See figure 4b. Lower the top sash and cut the balance cords. Remove the top sash, disconnect and remove any balance mechanisms attached.

5. Remove any remaining balance mechanism hardware from the existing frame such as balance cords, balance cord pulleys, etc. If your frame used weight pockets at the jambs, remove the weights (if possible) and fill cavity with fiberglass insulation.

6. Remove any debris or dirt in the opening. Apply a 1/4" (6) bead of sealant at sill to jamb joints, sill to sill liner/stool joints, and on the back of the blind stop of existing window frame. See figure 4c.

7. Apply a secondary continuous bead of sealant as shown in figure 4d.

**IMPORTANT**

Before beginning installation be sure to inspect the existing opening for any signs of rot, decay or other deterioration. It is essential that all substrates and sheathing be solid and free from defects to ensure proper installation. If the above conditions are not met please take corrective action and repair and/or replace components as necessary.

**IMPORTANT**

Do not break or damage interior stops if they are to be reused.

NOTE: *The placement of the secondary continuous bead of sealant is the same on interior and exterior installation.*
Installing the Insert Window

**Exterior Installation**

1. Center the unit in the opening. Depending on interior or exterior installation, press unit against interior sash stop or blind stop. See figure 5a.

**IMPORTANT**
Take care not to over or under shim the jambs.

2. If necessary, place shims under corners of unit to level. Level the unit horizontally from jamb to jamb at the sill of the unit. See figure 5b.

3. Place shims at the bottom corners at the pre-drilled screw holes in the jamb. See figure 5c. (Horseshoe type stackable shims recommended.)

**NOTE:** IICA mulled units have a shipping bracket applied across the Mull. If the brackets impede installation into the opening, remove bracket(s) and reinstall unit.

**Interior Installation**

- (a)
- (b)
- (c)

**Seek Assistance**
Installation of the insert will be easier if another person is helping to hold the unit in place, especially on larger and heavier units.

1. Center the unit in the opening. Depending on interior or exterior installation, press unit against interior sash stop or blind stop. See figure 5a.
Installing the Unit (continued)

Figure 6

4. Drive the #8 x 3” (76) screws into pre-drilled screw holes at the bottom corners. Only tighten until snug. See figure 6a.

5. On installations with a sloped existing sill, install a wedge shaped block underneath sill at both corners, in the center of the unit, at all meeting stiles and mull locations to provide adequate support. Blocking material to be held back 3/4” (19) from exterior of unit to allow for proper installation of frame expander. See figure 6b.

6. Square frame by taking diagonal measurements. Measurements should be equal. Adjust frame by applying shims at pre-drilled screw holes in jambs. Adjust upper shims as necessary. See figure 6c.

7. When the window is square and plumb, hold the unit firmly (depending on installation method), drive the installation screws provided through pre-drilled holes in jambs at the top corners. Do not over tighten screws. See figure 6d.

8. Recheck diagonals for squareness. See figure 6c. Adjust screws as necessary to obtain frame squareness. If square apply additional shims between the side jambs and existing window opening at additional pre-drilled holes.

9. Fasten unit in the opening through additional installation holes. Be sure to shim these additional through jamb holes.

10. Once the unit is flush, square, and plumb in the opening and sash operate properly, cut shims flush with the interior jamb or exterior of frame.
Sealing the Opening

1. Fill gaps between the new window frame and existing window frame with fiberglass insulation. Do not pack tightly.

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

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**CAUTION**

When using expanding foam insulation it is important **not** to bow the head jamb or side jambs of the replacement unit.

2. For **interior installation**, run a bead of sealant between the new frame and existing frame around the entire interior perimeter. If necessary install backer rod prior to sealant application. See figure 7a. Replace interior sash stops or new trim as desired.

3. For **exterior installation**, apply a backer rod between the new frame and existing window frame. Place a bead of sealant over the backer rod, so that it contacts both the new frame and existing window frame. See figure 7b.

4. For both installation types, trim out the sill with frame expander.

5. At the exterior, run a bead of sealant between the new window and the existing window frame (blind stop on interior applications). See figure 7b.
**IMPORTANT**
Finish the cut edge of the blind stop on exterior installations with paint, stain, or other type of sealer.

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**Final Installation Procedure**
Integrity Insert Casement units are supplied with two shipping blocks on each non-hinged corner that must be removed after installation has been completed. Unlock sash and open to remove shipping blocks. See figure 8. Install hardware cover, jamb stops, and head jamb stop.

![Figure 8](image-url)

Figure 8