Working With Our Wooden Windows and Doors Successfully

Before Receiving Your Windows and Doors

Here is a checklist of important steps to take **before** your wooden windows and doors arrive on-site to ensure a smooth installation process:

1. Have a Plan in Place

- **Installation Plan:** Develop a clear, detailed plan for how you will install the windows and doors. Talk to us if you need help! Don't wait for installation day. If working with an architect, this detail should come from them. Consider wall design, window placement, accessibility, and aesthetic preferences.
- **Materials:** Gather all required installation supplies, including straps, screws, rod & caulk, vapor-permeable tape, shims, and glass suction cups.
- **Exterior Sill Setup:** Plan how you will attach the bottom exterior sill for water drainage, ensuring it is properly sloped. If you are screwing into the window frame, pre-drill holes and inject sealant or silicone before installing screws.

2. Prepare for Water Drainage

- **Drainage Holes:** Make sure not to block any drainage holes at the bottom of the window.
- **Sealing:** Seal between the windowsill and window face using a rubber gasket or silicone/caulk.

3. Prepare for Euro Door Sills and Frames

- **Trimming:** Remember that the Euro (78/106mm thick) entry door sills and frames may not match the depth of the wall and will require liners or returns to trim them out.

4. Safe Storage Area

- **Protection:** Store the windows and doors **upright** in a dry, protected area with climate control (temperature and humidity). Make sure the storage location is safe from accidental damage or scratches. Out of the way from people walking by who could accidently knock, scratch, or rub against them.
- **Avoid Direct Contact:** Never lean windows or doors directly on one another or against walls without cushioning. Use foam, towels, or other soft materials to protect them. Do not place them directly on the floor. We work very carefully to manufacture and ship our finished windows and doors to you – **be extremely careful** to minimize dents, dings, scratches, and bruising on the job site!
- **Wind Protection:** If necessary, use ropes or straps to prevent the windows from falling over due to wind or other factors.
- **Lifting Device:** Arrange for a lifting device if you need assistance moving large or heavy windows during delivery and installation.

5. Timing of Installation

- **Late Arrival:** Ideally, windows and doors should arrive as late as possible in the construction process to minimize the risk of damage. The less time they spend on the job site, the fewer people are working around them, and the less risk or damage there is. If possible, use plywood and plastic to fill window openings temporarily, allowing other work to continue.
- **Climate Control:** The installation environment should have consistent humidity and temperature levels. It is best to install windows and doors only when climate control can be established 24-48 hours after installation.
- **Avoid Early Installation:** Unlike vinyl, fiberglass, or aluminum windows, wood windows require more careful handling. Do not plan to install wood windows early in the build process as these can be affected by environmental changes (humidity, temperature, etc.). You don't need windows in to start on siding and waterproofing, work up to the window openings.

6. Climate Considerations for Wood

- **Wood Movement:** Wood naturally expands and contracts based on changes in temperature and humidity. To prevent any potential damage or warping, ensure that your wood windows and doors are stored and treated carefully throughout the construction process, similar to how millwork or kitchen cabinets would be treated.
- **Stable Environment:** The more stable the environment, the better the outcome for your windows and doors. Aim to control humidity and temperature around the windows from the time they arrive on-site until they are fully installed and protected.

While Receiving Your Windows and Doors

When the windows and doors arrive at your job site, follow these tips to ensure a smooth delivery and handling process:

1. Clear Path for Delivery

- **Clean Walkway:** Maintain a clean, clear pathway from the unloading zone to your storage area to prevent obstacles and ensure easy movement.
- **Delivery Area:** Note that delivery will be made to the tailgate only. You are responsible for unloading, although the truck driver can offer assistance.

2. Assistance for Handling

- **Get Help:** Have enough people available to help lift and carry the windows and doors. These are often heavy and may require multiple people to handle safely.
- **Suction Cups:** Use suction cups to lift windows and doors. The pump-style cups are preferred over the flip-lever style. Make sure the rubber side of the suction cups is clean and free from dust or dirt to avoid damaging the glass.

3. Proper Storage

- **Upright Position:** Always store windows in their upright position unless otherwise instructed. The glass is supported in specific areas when stored upright, and placing the windows upside down or sideways can cause the glass to shift or move, potentially damaging it.
- **Avoid Deep Piles:** Don't pile windows too deeply when leaning them against a surface. The weight from other windows may cause pressure on the one at the bottom of the stack, which could lead to bruising or damage to the wood.

4. Documentation

- **Delivery Note:** Keep a copy of the delivery note or order confirmation on hand. The item numbers are marked on each window frame, and the order may specify which window corresponds to which item number on your building plans. This will help you identify and track each window for installation.
- **Included Instructions:** Ensure you have the instructional page, which includes information on adjusting window hardware, a construction handle, and touch-up paint.

During Installation

Proper installation of your windows and doors is crucial to ensure their long-term performance and efficiency. Here are key guidelines to follow during the installation process:

1. Shimming and Blocking

- **Proper Shim Placement:** It is important to know where to place shims and blocks to ensure proper weight distribution from the glass to the frame.
    - **Picture Windows:** The glass in picture windows is supported approximately 12 inches from each corner. Block and shim under these areas to ensure weight is transferred correctly, even if the window is wide. For large picture windows (e.g., 10ft wide), support is provided at only 2 points.
    - **Shimming Tips:** Place shims snugly but not too tightly under the window. Avoid forcing them in, as this can distort the frame over time and cause sagging.
- **Operable or Combination Windows:**
    - Block beneath jamb legs, and beside/under mullions and transoms.
    - Block behind lock points and installation straps or screws through the frame.
    - Block under glass support areas of fixed glass sections.
- **Spacing for Shims:** We recommend strapping, screwing, anchoring, and blocking the window approximately every 20-28 inches for picture windows. For operable windows and doors, secure them at every lock point and hinge.

2. Lock Strikers

- **Removing Lock Strikers:** Lock strikers can be removed, and screws installed behind them, then reinstalled to conceal the fastener completely.
- **Avoid Stripping the Wood:** When reinstalling lock strikers, use a hand-held screwdriver. Do **not** use impact drivers, as they may strip the wood.

3. Plumb, Level, and Square Frames

- **Ensure Proper Alignment:** Make sure all frames are installed plumb, level, and square. If needed, adjust the window or door using the hardware.
- **For Euro Doors:** Euro doors are heavy, and sometimes it is necessary to install them slightly out of plumb on the hinge side. This accounts for the expected sagging over time, so that as it sags, the door and frame align plumb. Contact us for a Euro door installation manual if needed.

4. Air and Weather Barriers

- **Interior Air Barrier:** Apply an airtight tape (e.g., Siga Fentrim 20) or rod & caulk on the interior face of the window frame to create an air barrier.
- **Exterior Weather Barrier:** The exterior face of the window frame should be your weather barrier. Use a **vapor-permeable** tape (e.g., Siga Wigluv or Fentrim 2) on the exterior of the window frame to ensure moisture can escape from the cavity between the window and rough opening. Siga products are available through Small Planet Supply in Vancouver. Other tapes and suppliers exist but probably won't be found at your neighbourhood lumber yard. Think about this in advance!
    - **Avoid Cladding Seals:** For wood-aluminum clad windows, **always tape to the wood frame**, not the aluminum cladding, as the aluminum is not designed to be airtight or watertight.

5. Insulation

- **Cavity Insulation:** Fill the cavity between the window and rough opening (otherwise known as the cavity in between the interior air barrier, and exterior weather sealing tape) with insulation, such as loose pack batten insulation or Rockwool.
- **Avoid Expanding Foams:** Avoid using expanding foams in new wood-frame construction. These foams can prevent the cavity from breathing, and transfer stresses from settling or movements of the building onto the window frame.

After Installation

Once your windows and doors are installed, it is important to take steps to protect them during the construction process to maintain their finish and function. Here are some guidelines to follow:

1. Protect the Windows and Doors

- **Prevent Physical Damage and Contamination:** Protect your windows and doors from physical damage, dust, dirt, paint, and other contaminants, which can affect not only their finish but also critical components such as locking mechanisms, gaskets, and drainage channels. A common issue is the buildup of dust and dirt around the glass area. This can be prevented by covering the windows.
    - **Use Plastic Sheeting:** If using poly to cover windows, ensure you cut slits in the plastic so the windows can breathe. This prevents condensation buildup inside the window frame.
    - **Avoid Abrasive Covers:** Never cover windows or doors with cardboard, ram board, or similar materials, as these can be abrasive and damage the paint finish.

2. Manage Humidity During Construction

- **Ventilation and Dehumidification:** If the humidity in the house is high, for example, during painting or drywall work, take measures to prevent moisture from damaging your windows.
    - Crack open the windows to ventilate the area, only leaving them open for short periods of time.
    - Install dehumidifiers to help control moisture levels and protect the integrity of the windows and doors.

3. Keep Windows and Doors Closed and Locked

- **Prevent Warping or Movement:** During the construction phase, keep your windows and doors closed and fully locked. This helps maintain their position and prevents warping or twisting as the surrounding environment changes.
- **Warranty Disclaimer:** Fenstür is not responsible for any warping or twisting that occurs if the windows or doors are left open or unlocked during this phase.

4. Limit Use and Protect High-Traffic Areas

- **Minimize Use:** Limit the use of windows and doors during construction, especially in high-traffic areas. Consider installing temporary sashes or frames to protect the units from potential damage.
- **Avoid Welding or Grinding Nearby:** Do not weld or grind near the units as this can cause pitting or damage to the glass, wood, or hardware finishes.
- **Hoses and Cords:** Avoid running hoses or cords through frames.

5. Maintain Cleanliness

- **Remove Dust Immediately:** Dust from wood, stone, concrete, drywall, or other construction materials should not accumulate on the windows. If dust does settle, remove it immediately to prevent damage.
- **Avoid Taping or Drilling:** Do not apply tape, adhesives, or nails to any part of the finished units unless it will be covered by trim. Also, avoid drilling or compromising the wood surface. If any blemishes occur, use the provided touch-up to finish immediately to maintain the appearance of the units.

6. Post-Construction Inspections and Adjustments

- **Final Inspection:** Once construction is complete, inspect your windows and doors for cleanliness and adjust them for proper function. Ensure that seals, rubber gaskets, and drainage areas are free of debris or contamination.
- **Handle Installation:** Do not install hardware, such as handles or hinge covers, until just before move-in. Check that all lift-and-slide doors and swinging entry doors have had handles and locks ordered, as these are not included with the windows (only windows come with handles from the factory).

7. Blower Test for Air Leakage

- **Blower Test Setup:** If performing a blower test to check for air leaks, you can pressurize your home by taping off a door opening with plastic and using a leaf blower to blow air into the building. This is a simple and effective way to pressurize the space to check for air leaks before paying for an official test.
- **Leak Detection:** Once all doors and windows are closed and locked, use a smoke pen around the edges of each window or door to check for leaks. Adjust the windows or doors as needed and monitor the results of the smoke test immediately after adjustments to ensure a proper seal. Doing this in advance will reduce time and costs and improve the results of your blower test.