Avoid Call Backs with these Installation Tips

This sheet is a supplement to Sun Window and Door Installation Instructions. It is intended to help you prevent call backs. It can also help you identify the causes of potential operating issues. Please note that ALL STEPS in the Sun Window and Door Installation Instructions are important and must be followed to insure proper product function and a valid warranty.

The Wall Must Be True

Why?
Failure to have a True Framing Plane will create a twist in the product frame which will make it difficult to close properly and latch.

Check by running two strings diagonally across the opening with the corners flush against the exterior wall surface. One string will overlap the other in the center. If the strings don’t touch in the center, or if one pulls the other down, the wall is not framed in a true plane. Double check by reversing the overlapping strings.

The Sill Must Be Level

Verify that the sill is level. If not, shim with additional waterproof shims to level.

Why?
Leveling is the first step in making sure the product is installed square. A level sill insures that water will drain properly and is the foundation for window sash-to-frame or door panel-to-frame alignment.

The Product Frame Must Be Installed Square

The Diagonal Measurements Must Be Equal To Each Other within 1/16th of an Inch.

Why?
Casement: If the casement window frame is not installed square, the alignment of the sash in relationship to the product frame will be off. This will cause misalignment between the latches and keepers, preventing proper closure. Out-of-square will also cause the top hinge pin to interfere with sash closure. It is also possible that the adjustable hinges will not have enough adjustment to allow the square sash to fit in the out of square frame.

Double Hung: If the double hung window frame is not installed square, the alignment of the sashes in relationship to each other and the jamb liners will be off. This will create gaps between the sashes and the jamb liners, as well as the head and sill. This will cause air leakage, possible water leakage and sash drift.

Door: If the inswing or outswing door frame is not installed square, the alignment of the door panel(s) in relationship to the product frame will be off. This will likely cause the top, bottom and side of the panel to rub against the frame head, sill and/or side jamb. It can also keep the panel from opening or closing correctly, as well as hinder the operation of locks and latches. Air and water leakage is also likely, due to improper contact with the weather seals.
The Product Frame Sides Must Be Properly
Plumbed & Shimmed

Why?

**Casement:** Failure to shim the jambs may allow them to bow out slightly. This can cause the frame height to shrink slightly. This height shrinkage can cause the top rail of the sash to rub on the head rail hinge pin, making it hard to open or close the sash.

**Double Hung:** Failure to shim the jambs at the meeting rails and making the jambs plumb will cause operational issues with the balance system (sash drift) which may not be correctable with the adjustable balance shoes. It will also reduce the weathering effectiveness of the window by allowing the sash to not have a uniform seal with the jamb liners.

**Sill Pan Required For Doors**

Why?
Installing a Sill Pan, prior to installing a door, can help prevent damage caused by water infiltration from a variety of potential sources.

**Long Screw Required Through Hinge Into Structural Framing**

Why?
Anchoring the hinge to the wall structural framing will provide support to the door frame and panel and help prevent sagging of the panel. This will help keep the panel properly aligned and will insure that it will operate and close correctly and properly contact the weather seals, minimizing weathering issues.

**Masonry Gap Required - Tell Your Mason!**

- **1/2” Clearance Between Sill Bottom and Masonry Wall**
- **1/4” Clearance Between Frame Sides and Masonry Wall**

Finish With Backer Rod and Window & Door Sealant.

Why?
As wood framing dries out, the main wall structure will expand, contract and move at a different rate than the independent masonry wall, often resulting in some shifting and settling of the main wall. This causes the bottom of exterior frame of the window to contact the masonry wall which in turn exerts upward pressure against the window sill, deforming it and forcing it to contact and bind against the bottom of the sash. This damages the casement window and prevents it from operating correctly. It prevents the double hung window from properly contacting the weather seals.