Installing A Weiland Bifold

In 9 Steps

Contents

PART 1: Overview

The Bifold is an advanced folding door system. Door panels can stack either to the right or left of the opening, or both. Some Bifolds include swinging doors.

Important To Know
Bifolds require a lot of care. Be considerate when handling the door components and treat them like fine furniture. The quality of the door's operation hinges on the precision of the installation and keeping the components in pristine condition. Tight tolerances also keep the system weatherproof.

Delivery & Arrival
Beefy Bifold systems are delivered on a Weiland truck or by common carrier. With a common carrier the system components are crated. Panels are crated separate from the head track, side jambs, and bottom track. All components are securely wrapped and protected during shipment.

NOTE: Unwrap and inspect all components for damage or for missing parts. If there is damage, take pictures write comments on the carrier's paperwork before they leave the jobsite and please let your dealer know immediately.

Contact Customer Service at 760.722.8828 with questions.

PART 2: Setting Up

Unpack & Organize
The components for a Bifold system are expensive and fragile. Show concern for their safety and wellbeing—it's not easy to replace them! Place the component bundles near the rough opening so they don't get moved unnecessarily.

The approved shop drawings and the tools listed in the pre-installation guide should be on site.

Make sure that:
- The dimensions of the rough opening are the same as in the approved shop drawings. In the event that the opening is larger than the approved drawings, fur the opening to the approved rough opening dimensions, making sure that the furring is firmly attached with screws or strapping.
- The mounting surface of the header has satisfactory support and that no sagging has occurred or will occur once the header is fully loaded.
- The side jamb mounting surfaces have satisfactory support for the supplied materials.
- All surfaces in the opening are level and square.
- The appropriate sill pans and window/door flashing are installed per local building codes, prior to installation.
- The slot dimensions match the approved drawings and the slot floor is completely flat.

NOTE: Due to varied installation techniques, Weiland Sliding Doors does not provide actual installation hardware. Please see the below list for a partial list of tools and supplies needed to complete the installation.

<u>Tools & Supplies</u>

Approved drawings
Lasers (360 degree, self-leveling 5 point)
6' or 8' level
Masons string
Rotary hammer and concrete bits
Screw gun
6mm and 2.5mm Allen wrenches
Socket set with extensions
Drill bit set for wood
Variety of horse shoe shims
Glass suction cups
Ladders
Caulking Gun
Polyurethane Caulking
1/2" inside diameter tubing for bottom track to site drainage
Blue Loctight

Bifold Components
Below are the system components. The number of components will vary depending on your configuration, so refer to your shop drawings.

1. Bottom Track
2. Head Track
3. Side Jambs
4. Panels

Orientation
Find the exact elevation of the top of the finished floor before installation begins. The elevation of the finished floor determines the location of the bottom track and the location of the bottom track determines all other door system measurements. Keep the approved shop drawings on hand for reference.

Bottom Track
The stainless steel bottom track usually comes assembled as a single unit, depending on the unit width and the shipping method. In some cases the bottom track is broken into two pieces, with a saddle to join them on site during track

installation. An example of the track system is shown below. The bottom track has at least two drains to be connected to a downstream drain location or weep.

Drain hoses are on the exterior side of the bottom track. These drains must be kept clear of debris during the completion of the finished floor. In some cases, such as interior applications, the system may be ordered without drains.

Head Track
The head track will be labeled on the interior side. It typically comes assembled as a single unit, depending on the width of the unit and the shipping method. In some cases the head track comes as equal length pieces with guide pins, so that it can be assembled on site prior to installation. The head track has an escapement opening that allows the panel trolleys to be inserted.

Side Jamb
Each side jamb comes assembled as a unit with built in jacking screws, and wood interior fascia if it's an aluminum wood system. The jambs will be labeled with the unit # and the top will be indicated.

Panels
Panels come assembled as a single unit with hardware and glass installed, unless they are requested without glass. Each panel comes protected with cardboard and plastic wrap. Panels are labeled with the unit number and panel number. Panels are numbered left to right as viewed from the exterior, and they are also labeled in the drawings. Note that the top of the panel has the trolley wheel assembly mounted to it. Take care to protect the trolley while handling the panels.

Part 3: Bottom Track

Preparing The Track
Determine the high spot on the slab, near the Bifold opening, and use it as the starting point for the entire installation. The flooring contractor will use this same location to start the flooring installation. Based on the high point, determine the finished floor location, taking into account the floating of the flooring material. Mark that elevation somewhere near the opening for future reference.

Positioning The Track
The Bifold system has a jamb on each end. Depth wise, determine where the jambs will finish out in the opening, in relation to wall finish material (drywall, stucco, casing, trim, etc.). For reference, the jambs have a vertical scribe line that indicates where the track and jamb should line up. The center of the stainless steel track should line up with the scribe line on the jamb.

After correctly positioning the track in the opening, draw a laser or pull a string across the opening along the flange of the track. Position the string at exactly the finished floor height. You will use this to aid in shimming the track to its final installed height. Using a torpedo level or laser, level the track along the width of the track. Shim beneath the track to bring the bottom flanges of the track level and 1/16" above the finished floor dimension.

The stainless steel bottom track is pre-drilled with mounting holes. The holes are large enough to accommodate ¼" flat head screws. (it is recommended that Tapcon S.S. ¼" x 3" concrete anchors are used in concrete and #10 x 3" S.S. wood screws are used in wood) Mark the location of the mounting holes and then remove the track to pre-drill. Before applying an approved sealant and installing appropriate anchor bolts, verify that the track is level and the height is accurate in respect to the finished floor.

Make sure that the final positioning of the bottom track is level and square before proceeding. Any errors in the bottom track position are transferred to the jambs and head track and will result in problems with the panel fit.

Connecting The Drains
Each of the drain tubes should be connected to a suitable drain that allows for gravity to drain the bottom track in the event of water entering the system. If the drain tubes are connected to a manifold, the manifold and any additional piping should be at least 1/2" in diameter. It is important to keep these drain tubes clear of debris during the installation of the door system and the finished floor. Compressed air can be used to clear the tubes if they become plugged.

Final Flooring Around The Bottom Track
It is recommended that the finished floor be completed around the bottom track before the panels are mounted and the system is operated to prevent any movement of the bottom track. Story Pole height and track position with respect to the head track and jambs should be confirmed before final floor installation. Be sure that whatever float material used is allowed to fully encase and secure the bottom of the track and its drains. If the floor cannot be finished at this time, take precautions to protect the bottom track from inadvertent movement or damage.

Part 4: Head Track and Side Jambs

Installing The Head Track
It is important to use the provided story pole when installing the head track. An accurate story pole for each unit is included with your order. The story pole height is located at the top of each page of your shop drawings and is the measurement between the top of the bottom track and the bottom of the head track.

Raise the head track into position allowing for a 1/2" shim space above and temporarily secure the head track with screws. Make sure the head track is level and plumb with the bottom track. Using shims, adjust the track height at each mounting hole to be exactly the story pole height. Horse shoe shims are preferred as they give the best support for the final mounting.

Next, use a laser to double check that the center of the bottom track and the center of the top track are level on both sides of the system at several points along tracks. Once you're satisfied with the story pole height and that the opening is plumb and level, secure the track at every mounting hole. Pre-drill the header at the mounting holes with a 3/16" drill bit to ensure proper lag penetration into header. For wood headers use ¼" lag screws at least 3" long or longer with ¼" washers. For steel headers or other materials consult with your architect or general contractor.

NOTE: The head track cannot rest on the jambs, as they are not designed to support the system weight. The head track must be supported by the header framing during panel installation.

NOTE: There are no jacking screws in the head track for further adjustment. It is important that the track is set at the exact elevation.

Installing The Side Jambs
Make sure the jambs are located on the correct side of the units. The side jambs need to be plumb and the scribe line of the jamb needs to line up with the center of the bottom track. The jacking screws are behind each mounting hole in the jambs and can be adjusted using a 6MM Allen wrench. Adjust each jacking screw to be snug with the framing. Verify that the jamb is plumb. If needed use the jacking screws to make final plumb adjustments. Install #10 x 3" flat head fasteners in each jamb mounting hole and carefully tighten them.

Final Adjustment Of The Side Jambs
Final side jamb adjustments are best made when the panels are installed. Now that the top track is installed in the correct position, the final side jamb installation can be completed. If your unit has a man door, adjustment of the side jamb allows control of the spacing at the astragals (meeting flaps) for proper latching. It also allows for adjusting the closing compression in an [even + even] or [even + odd] condition. The side jambs should butt up squarely against the panel when the system is completely closed. If there are minor gaps or a minor interference, the jamb jacking screws can be used as final adjustment.

The hinges on the panel side are set loose at the factory for installation. Slide the panel hinge onto the hinge post and tighten using a 2.5mm Allen wrench, leaving no gaps between the hinges. Blue tape is applied over the washer to keep hinges from moving.

NOTE: We recommend using J-Metal or Milcore around the perimeter of the system to finish drywall and stucco into the jambs and head. This will allow for future adjustment of the system.

Part 5: Panels

Panel Installation
Using your approved shop drawings locate each of the panels and confirm their location and labeling.

Bifold panels are heavy and must be handled by personnel trained in moving large glass panels. In most cases you will need at least three people to hang a panel. You will need two people to lift the panel and one person on a ladder to guide the trolley assembly into the head track. Before installing, double check panel locations, interior vs. exterior, left vs. right.

NOTE: Hinges have been set by the factory. Do not remove hinges from the hinge post or panels.

NOTE: It is recommended that you use a medium strength (blue) Loctight when tightening the set screws at the panels.

The panel furthest from the escapement area will be installed first. Note that the panels can swing freely and roll easily once they are hung. Be careful to keep the panel away from the escapement as it can fall and cause injury or damage.

Move the panel into position, making sure to place the panels in the right order (see drawings). With the panel perpendicular to the track lean the panel to the side until the bottom guide can slip into the bottom track. At the same time insert the top trolley into the top guide escape-

ment and stand the door up. Slide the panel to the jamb and attach the panel to the jamb with supplied screws.

Now insert the next panel. Meet the hinged side of the panels to the post at 180 degrees. Carefully fold the panels to expose the hinges. Loosen the set screws on female hinges and connect them to male hinges. Tighten the set screws using a 2.5 mm Allen wrench, noting that the top hinge is inverted.

Repeat this process until all of the panels are hung and connected together. Confirm that the tops of all panels are level with the tops of the posts.

Now you can begin to carefully close the system. Pulling the panels towards the jamb should cause a smooth unfolding of the system. If there is binding, stop and double-check the hinge installation. On systems with man doors, the man door is closed last and opened first.

Part 6: Fine Tuning The System

Double-check the track and jamb adjustments. Be sure that the end doors meet the jamb straight and parallel; adjust the jambs until they do. The doors should operate freely and very easily. If your particular system has the weep system, recheck it to make sure everything will drain properly.

Install Complete
Your Bifold system is now completely installed. The exterior and interior finish is all that remains to be completed.

Part 7: Notes On Flooring

Over the years most customers have found that it is best to have their flooring contractor backfill the track slot. This serves two purposes:

1. The flooring contractor knows what spacing he will need to install the finished flooring and what he is going to use to get that flooring to the correct height.
2. He can gain some insight into what's required to complete the installation of the system. Most customers use a grout or high strength concrete to fill the track slot. Care must be taken when filling the trough in order to avoid damaging the track surface.

Once the trough is filled to a level that will accept the finish flooring material, the finish floor material can be installed. Be sure that the exterior surfaces are sloped properly so that water can't build up at the base of the doors. We recommend at a minimum 1/4" per foot slope from the edge of each door away from the opening. Make sure not to damage the tracks when installing the grout, high strength concrete or finished floor.

Part 8: Sealing & Caulking

Once the floor is in, there should be a gap between the finished floor and the side jambs. This area should be caulked, since it is a potential area for leaks. Address weatherproofing the jambs and interlocks to the building with the weatherproofing contractor. We have made accommodations for installation of waterproofing material at all surfaces that meet the jambs and these should be used as is necessary.

Part 9: System Care

Protect The System
At this point you have a large amount of time and money invested in your new door system. Please protect it as you would all other high priced items on the site. We have over the years seen several beautiful sets of doors ruined even before the homeowner moves in. Several sources of damage to the door are listed below.

Stucco – etches the finish on the aluminum, stains the wood, clogs the track and damages the rollers.

Drywall – stains the wood.

Wheelbarrows – they can bend the bottom track and scratch the jambs and doors. A very effective way to protect the track is to build a wood bridge over the track.

Duct Tape – the adhesives in some tapes can chemically release many finishes. Use 3M blue painters tape to protect your painted surfaces. Note that even #3M blue painter's tape should not remain on the surface for more than 7 days as noted on the package. Tape of any kind is not recommended for use on hardware, please protect surface with appropriate material before adding tape.

Wood – if left unsealed, could cause swelling, shrinking and finish distortions that could prevent proper operation of the door. All wood parts must be sealed and finished within 48 (forty-eight) hours of arrival to jobsite. Until they are sealed, the panels should be properly stored and protected. See *Buyer's Preparation and Care Obligations*.

Protect The Glass
Do not cover glass with plastic tarps or anything that can blow in the wind. Plastic blowing in the wind can sand glass surfaces. Protect glass with brush-on glass protectant or panels of some type that will not touch the surface.

Fasteners
Weiland supplies jacking screws (installed at the factory) for adjusting the jambs, but no fastener pack. The side jambs are pre-drilled and countersunk for #10 flat-head screws. The head jamb is drilled to accommodate ¼" lag bolts that should be at least 3" long. Screw type is based on application; normally sheet metal screws are used. It is highly recommended that only stainless steel screws are used in exposed locations. Pilot holes need to be drilled for stainless steel screws because stainless steel is a very soft metal.

Cleaning
Kynar finishes - How often the exterior of the door is cleaned is based on your location's exposure to the elements. It will need to be cleaned more often in severe environments such as homes near the coast. Surfaces should be kept clean. Rinse any contaminants off the surface with fresh water. After the doors have dried, a high quality car wax should be used on all non-wood surfaces. This will help maintain the appearance of the door system.

Anodized finishes should not be waxed and should only be cleaned with mild soap and water.

Gaskets and contact surfaces should be cleaned as needed. Use a damp cloth to remove dirt and dust. After gaskets and gasket sealing areas have dried, a coat of UV protectant spray such as Armor-All will help the gasket maintain flexibility and reduce drag.

Hardware should be cleaned with a damp cloth. A light coating of a mineral oil on all metal surfaces will lubricate and protect from corrosion.

Wood should be maintained as directed by the finisher.

For additional information please refer to the *"Buyer's Care and Maintenance Guide"* provided at delivery or located at www.weilandslidingdoors.com.

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