

Steel L-Frame Double Door Installation

Steel L-Frame Double Door Installation

15.1 Steel L-Frame Double Door

Before installing a Steel L-frame double door be sure you understand how to install a steel l-frame single door.

With the exception of some assembly that needs done before the door is installed, the method of installing a double door is the same as a single door. A double door also takes at least two people to install. Do not attempt to install a double door by yourself.

Before a double door can be installed the opening needs to be properly prepared. We are assuming that this has been done at this time in accordance with the chapter titled "Preparing the opening Steel L-frame Door."

The old wood frame has been verified that it will accept the new steel l-frames and it is plumb and square.

The threshold area has been checked and is level, and if a threshold extension is needed with the new steel l-frame door it has been ordered and is on hand.

15.2 Assembling the Steel L-Frame Double Door.

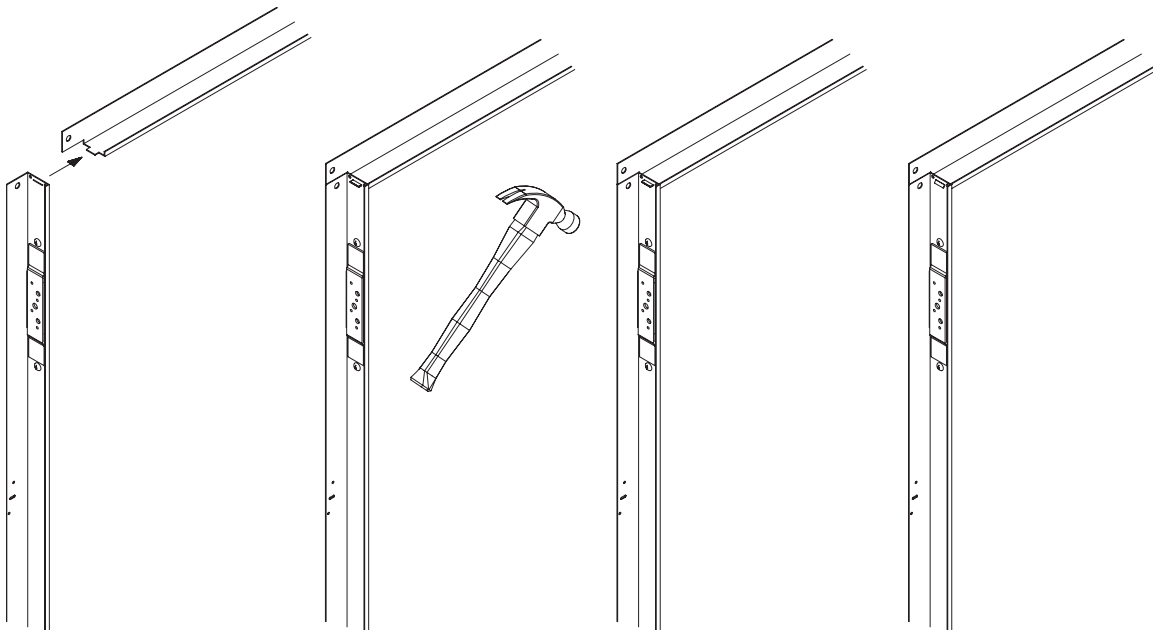
A steel L-frame double door is shipped in two separate packages and needs to be partially assembled before it can be installed. In one box you will find the active door slab pre-hung to the steel L-frame hinge side. In the same box will be the threshold, which will not be attached.

In the other box you will find the inactive door slab with the aluminum astragal attached and pre-hung to the steel L-frame hinge side. In this box you will also find the steel L-frame header also unattached.

Unpackage both doors and lay both doors on a flat surface or saw horses taking care not to scratch or damage the new doors. The doors should be lying down with inside of the doors facing up and the strike sides of the two doors almost touching.

15.3 Attach the Header Frame

Once the doors are lying flat and positioned correctly begin by attaching the header steel L-frame. The header steel L-frame is attached by sliding the tab of the header steel L-frame into the tab of both steel L-frame hinge frames. After the tab is in both slots in the hinge frames, bend the tab down with a hammer on the outside of the hinge frames until the tab is bent all the way down. Do this to both hinge frames.

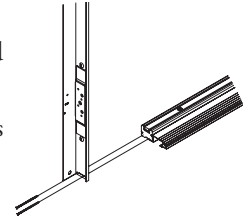


Steel L-Frame Double Door Installation

15.4 Attach the Threshold

After the header steel L-frame has been attached it is time to attach the threshold. Lay the threshold with the cap tight against the sweeps of both doors and the sloped part of the threshold down.

The threshold is attached to the steel L-frame hinge frames by fastening two #8 x 3/4" screws through the hinge frames into the threshold.



15.5 Activate the Slide Bolts

After the header steel L-frame and threshold have been attached to the hinge side steel L-frames and while the doors are still laying flat, open the active door to access the aluminum astragal attached to the inactive door. While someone is holding the active door open slide the top slide bolt up into the header frame and the bottom slide bolt down into the threshold.

After the slide bolts have been activated into the header and threshold close the active door and lock the deadbolt of the active door into the inactive door. This will keep both doors closed until the door has been installed. If the active door does not have a deadbolt some method of holding the active door shut must be devised. One method that can be used is tying the active door to the inactive door through the lockset holes with soft cotton rope.

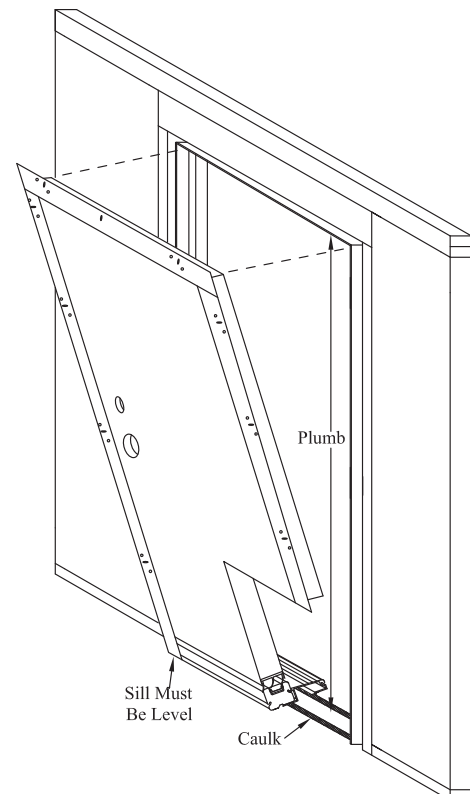
From this point on the double door will be installed the same way a single door is installed.

15.6 Caulking

Apply two heavy beads of caulk where the new threshold will meet the floor.

15.7 Installing the New Steel L-Frame Double Door

Keeping the new double door pre-hung in the steel l-frame set the door into the opening, threshold first with the top of the new door leaning into the home. Set the threshold firmly into the caulking and tilt door into the opening.



Steel L-Frame Double Door Installation

15.8 Temporarily Tack Steel L-frame

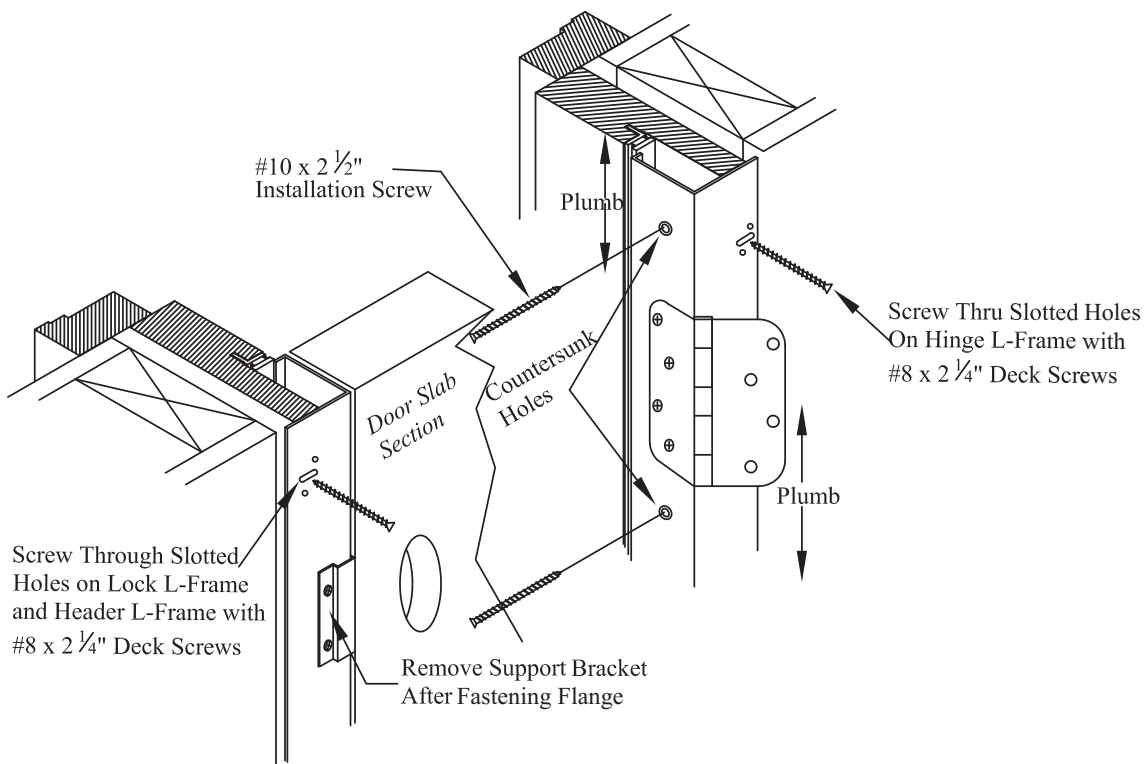
Temporarily tack the frame into the opening with 8d nails. Use two nails on both sides and one in the header.

After the door is temporarily tacked into place unlock the deadbolt, close the door and check the margins. Margins should be approximately 1/8" between the door slab and the steel l-frame on all sides.

15.9 Fasten New Steel L-frame

If the margins are correct open the door and fasten the 2-1/4" installation screws through each countersunk hole in the steel l-frame, checking the margins as you go.

After all the screws are installed close the door and complete the nailing on the inside of the L-frame.



Steel L-Frame Double Door Installation

15.10 Apply Stops and Weatherstrip

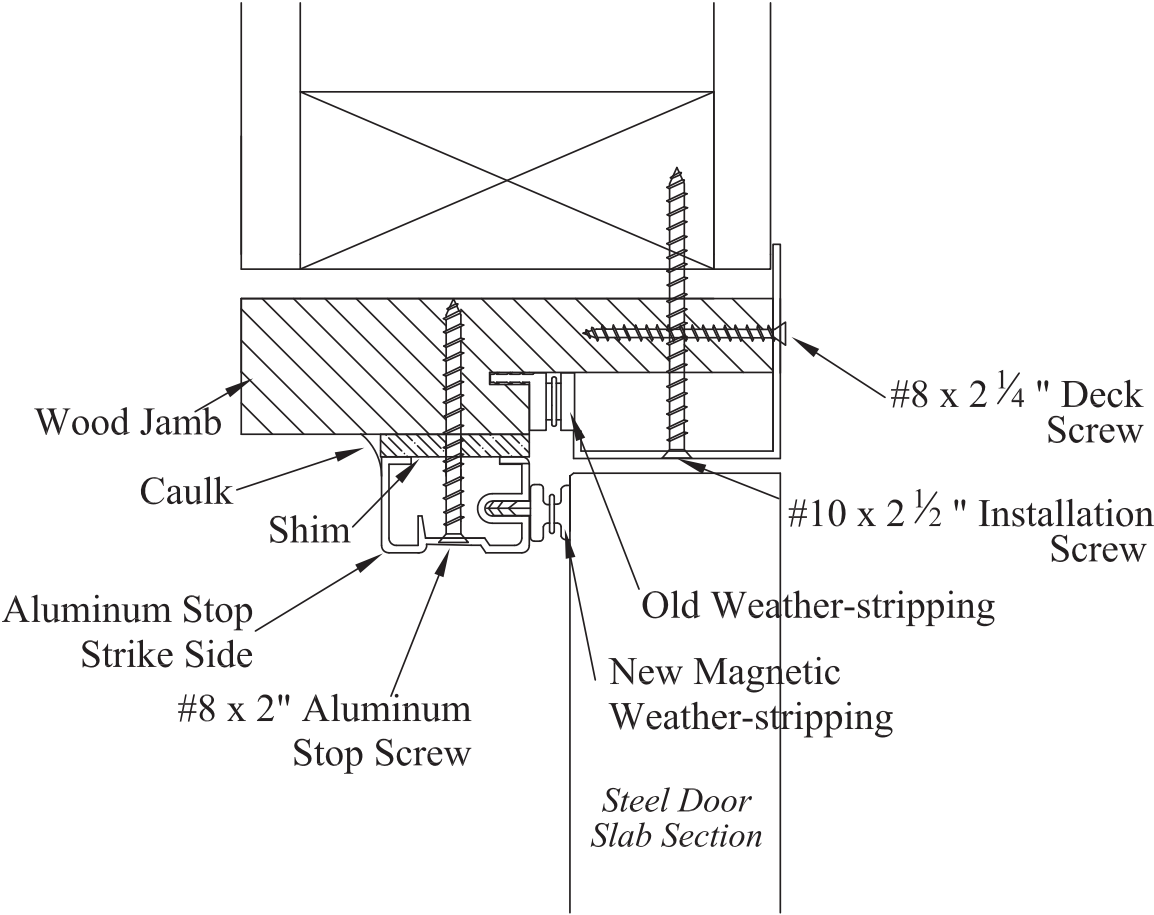
After the entire door is fastened on the inside go to the outside of the door. Caulk around the threshold making sure to caulk where the threshold meets the steel L-frame. After the caulking is complete close the door. If the door has a deadbolt lock the deadbolt to keep the door closed. If the door does not have a deadbolt install the lockset so the door remains shut while you are installing the aluminum stops.

With the door closed install the aluminum stops with the weatherstrip making good contact to the door.

If the new door is a steel door the magnetic weatherstrip is installed on the strike and header of the door while the compression "bulb" type weatherstrip is installed on the hinge side.

It may be necessary to shim behind the aluminum stop to allow the weatherstrip to make contact to the door slab.

Use the 2-1/4" stop screws and fasten the aluminum stops through the countersunk holes.



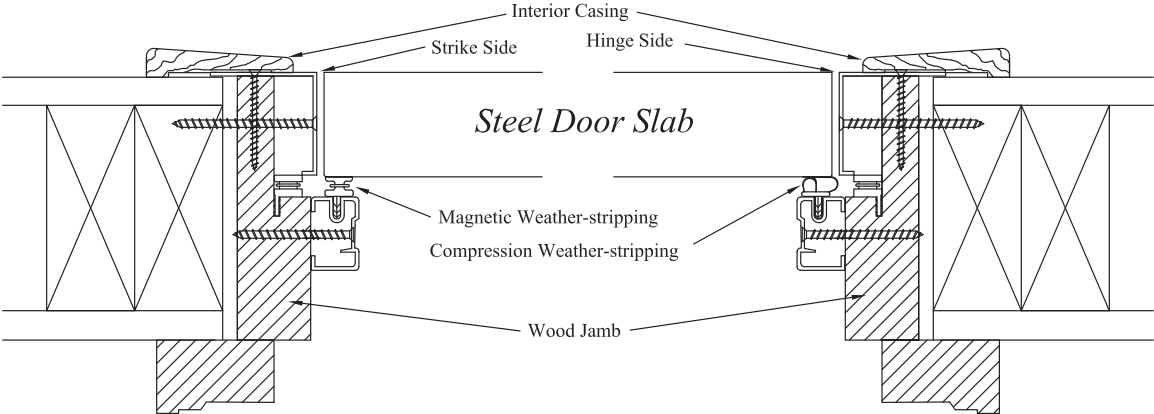
Steel L-Frame Double Door Installation

15.11 Install Strike Plates

After the aluminum stops are installed return to the inside of the house and install the lockset hardware. Operate the door a few times and make sure that the door seals well against the weatherstripping and latches well.

15.12 Finishing the Installation

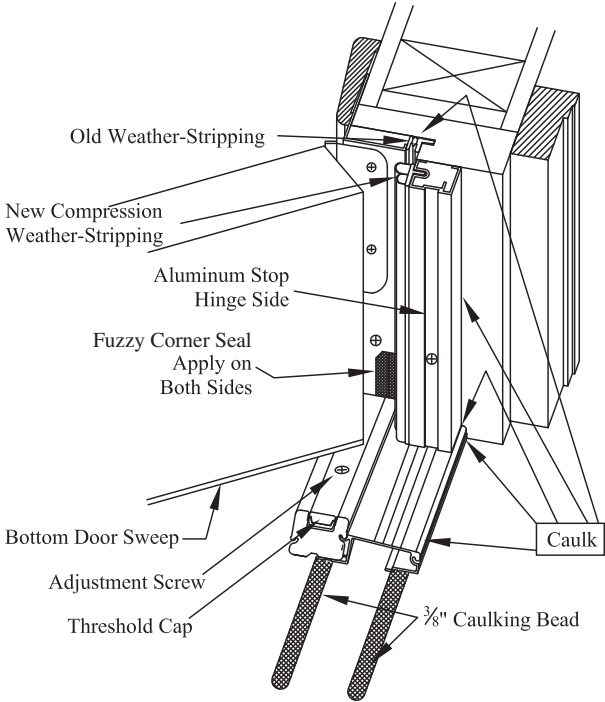
If the door operates well install the interior casing. Most of the interior side of the steel L-frame should be covered by the casing.



15.12.1 Caulking

After the casing has been installed go outside and caulk all around the exterior of the aluminum stops and where the threshold meets the floor. Adjust the threshold cap if necessary.

Clean up the job site and make sure the new door is clean.



Steel L-Frame Double Door Installation

15.13 Troubleshooting

Lets look at some common problems that may occur as the double door is being installed.

15.13.1 Astragal Margin too Small

If the active door slab is hitting the astragal on the inactive door it can be remedied by tightening the installation screws on either the active or inactive side to draw the steel L-frame closer to the existing wood frame, thus increasing the margin between the active and inactive door. In some circumstances it may be necessary to adjust both sides.

15.13.2 Astragal Margin too Large

If the margin between the active door and the astragal on the inactive door is too large and the door will not seal properly against the weatherstrip loosen the installation screws on either the active or inactive side.

15.13.3 Astragal Margin is Wider at Bottom than Top

If the margin between the astragal and the active door is wider at the top than at the bottom tighten the screws at the top of the steel L-frame on either the active or inactive side and pull steel L-frame closer to the existing wood frame.

15.13.4 One Door Higher than the Other

If one door is higher than the other door install a shim directly under the hinge frame of the lower door. For example if the active door is lower than the inactive door install a shim directly under the hinge frame of the active door.

Use this same technique if the head frame is level but there is a bigger gap between the head frame and one of the two doors. Install a shim directly under the hinge frame of the door that is lower than the other one.