

C.R. LAURENCE CO., INC.

CRL RETRACTABLE SCREEN DOOR Installation Instructions

INTERNAL MOUNT INSTALLATION INSTRUCTIONS

(NOTE) Please read the Optional Pressure-Fit Installation Instructions found at the end of this Installation Guide.

- 1: Determine the exact location of where the door cassette will be mounted in the door frame. Carefully measure the inside height of your door jamb at this location. Take into consideration any door stops and any bottom sill slope.
- 2: Lay the door cassette on a flat surface; identify which end of the cassette has the tape measure decal. This is the end, which will be cut when sizing the door. Measure and mark the cassette 3/8" (9.5mm) less than the door opening. Holding the cassette and pull bar tight, cut to length.
- 3: Turn cassette upright with the cut side down and give a gentle tap against the floor to shake any loose saw cut shavings from inside of the tube. Next, very carefully de-burr the inside of the round aluminum screen cloth tube. The inside edge should be free of any sharp edges or burrs (Diagram 2).
- 4: Locate the end cap from the hardware box and mount to the cassette using the two #8 x 1" pan head screws (Diagram 3).
- 5: To mount the black plastic latch keeper to the edge of the pull bar, first slide the mohair weather-stripping away from the center of the pull bar, clearing a 1-3/4" (45 mm) space. Using the plastic keeper as a guide, drill two pilot holes for the screws. Install the keeper to the pull bar using the two #8 x 1" pan head screws. Trim any excess weatherstripping from the end of the pull bar and insert the top and bottom guides (Diagram 4).
- 6: Measure jamb height on opposite side from cassette similar to step 1. Lay jamb channel on a flat surface and cut 1/8" (28.6 mm) shorter than the measured jamb height. Locate latch hook, back plate and # 8 x 1/2" (12.7 mm) flat head screw. Assemble back plate to latch hook and install screw. Do not tighten screw. With the back plate loose on the latch hook slide the back plate into the jamb channel so that the back plate engages the slot in the bottom of the channel. Make sure that the latch hook is pointed up-ward, slide to the middle of the channel and tighten temporarily (Diagram 5).
- 7: Locate both black plastic angle supports and two # 6 x 1/4" (6.4 mm) pan head screws from hardware box. Thread screws into jamb channel angle supports, **Do Not Tighten**. Slip angles (long leg) into the slot in each end of the pull bar. Once the angle has been completely inserted more than a 1/2" (12.7 mm) from the channel end, tighten the screw temporarily locking the angle into place (Diagram 6).
- 8: Measure the door jamb width at both the top and bottom. Hold top and bottom rails together, make sure that ends are flush. Subtract 2-1/8" (47.6 mm) from the measured width and cut both rails to length at the same time (Diagram 7). NOTE: Mount the deep channel 1-7/16" (36 mm) at the top, and the 1" (25 mm) channel at the bottom.
- 9: Lay each rail on a flat surface on its side. Using a flat edge screwdriver and hammer, gently crimp the weatherstrip channel at the very end of the channel to prevent the weatherstrip from moving within the channel (Diagram 8). **Note:** This mohair weatherstrip must be tightly crimped to prevent any slippage. (This step is very important to prevent the mohair from sliding within the channel and getting wrapped up in the cassette when the door is allowed to retract. If this occurs it will prevent the door from retracting completely.)
- 10: Installing the door into the jamb. Install the cassette into the door opening tight against the jamb. Install one screw into the top end cap and one into the bottom. Place the side jamb channel just outside of the door opening and slip the bottom channel onto the angle support, at the same time slip the opposite end into the face of the cassette engaging the bottom end cap. Slide this bottom of the frame into the jamb so that it stays together. Slightly un-thread the small screw holding the angle support in place and let the angle support with channel drop tightly against the bottom sill. Re-tighten screw so that angle bracket holds this channel in place. Repeat this process for the top channel. Once the channels are set into the door opening, plumb the channels and drill two holes 3/16" (4.8 mm) diameter through the side channel. Install two #8 x 1" (25.4 mm) flat head screws into the jamb holding the side channel tight against the jamb.
- 11: Installation of the Pull Handle. Choose a comfortable handle height, being careful to select an area that does not interfere with the entry door handle set. Position the handle with the through screw holes against the interior side of the pull bar (Diagram 11). Make sure that the handle is aligned as shown. Using the handle as a guide, drill two 3/16" (5 mm) diameter holes through the pull bar. Attach inside and outside pulls with the 1-1/4" (31.8 mm) screws included. Close the door to ensure it pulls freely and retracts back into the cassette.
- 12: Pull door closed to the side jamb channel, look at the location of the plastic keeper slot in the pull bar, using a soft pencil, mark the top of the slot on the face of the side jamb channel. Slide top of hook latch along channel until top of hook matches or is 1/8" (3.2 mm) higher than this height (Diagram 12). Once this is done, pull the door closed. Lift the door slightly to clear the top of the plastic hook, let the door rest on the hook. This should hold the door in the closed position until lifted. Most likely, the hook height will need to be adjusted several times, until the perfect height is obtained.

SURFACE MOUNT INSTALLATION INSTRUCTIONS

- 1: Carefully examine the entire door frame surface, to insure that the door cassette, top and bottom channels, and side jamb channel will all mount flush to the surface of the opening.
- 2: Locate the top and bottom mounting brackets in the hardware kit. Start by mounting the lower bracket to the wall as low as possible for support of the cassette and lower rail. Determine location of upper bracket, making sure the upper bracket is plumb with the lower bracket. "Mount brackets temporarily to obtain measurement between brackets."
- 3: Measure the height distance between brackets. Lay the door on a flat surface, look for the tape measure label on the end of the cassette showing which end to cut. Measure the cassette from the opposite end, and mark cassette 5/16" (7.9 mm) shorter than the distance measured between mounting brackets. Holding the pull bar tightly against the cassette, cut both cassette and pull bar at the same time (Diagram 1).

- 4: Turn cassette upright with the cut side down and give a gentle tap against the floor to shake any loose saw cut shavings from inside of the tube. Next, very carefully de-burr the inside of the round aluminum screen cloth tube. The inside edge should be free of any sharp edges or burrs (Diagram 2).
- 5: Locate the end cap from the hardware kit. Install onto end of cassette and attach with 2 each # 8 x 1" pan head sheet metal screws, included. Slip pull bar guides into the top and bottom of pull bar (Diagram 4).
- 6: Measure overall length of assembled cassette; lay the side jamb channel on a flat surface and cut to the same length as the cassette.
- 7: Drilling the mounting holes on the side jamb channel is a two step process (Diagram 13). First, a few inches in from either end of the channel, and close to the bottom of the channel (to prevent interference with the pull bar) drill a 1/8" (3.2 mm) diameter pilot hole through both legs of the channel. Second, drill a 5/16" (7.9 mm) diameter hole through one leg only. This larger outer hole is to allow a screw driver shank to reach the head of the mounting screw. Repeat this process on the opposite end of the channel and again in the center of the channel length.
- 8: Install plastic hook latch (hook in the up position), into jamb channel, slide toward the center of the channel and tighten to temporarily hold into position (Diagram 5). Slip plastic angle brackets, long leg with screw into channel (Diagram 6). Position plastic angle brackets so that they are at each end of the jamb channel, slide retainers to prevent angles from sliding into jamb channel.
- 9: Mount the side jamb channel onto the surface of the door opening, across from the cassette; making sure that channel is parallel and plumb with the cassette.
- 10: Measure the width of the opening from the outer edge of the cassette to the outer edge of the side jamb channel. Make this measurement at both the top and bottom of the opening. With top and bottom rails together, make sure that ends are flush (Diagram 7). Subtract 1-3/4" (45 mm) from the measured width and cut both rails to length at the same time. NOTE: Mount the deep channel 1-7/16" (36 mm) at the top, and the 1" (25 mm) channel at the bottom.
- 11: Lay each rail on a flat surface on its side. Using a flat edge screwdriver and hammer, gently crimp the weatherstrip groove at the very end of the channel and inside of the channel to prevent the weatherstrip from moving within the groove (Diagram 8). (This step is very important to prevent the mohair from sliding within the channel and getting wrapped up in the cassette when the door is allowed to retract. If this occurs it will prevent the door from retracting completely.)
- 12: Slip the top and bottom rails onto the cassette and side jamb channels, engaging the plastic angles at the ends of the channel. Depending on mounting conditions, it may be necessary to drill mounting screw holes as described in step #7.
- 13: Carefully examine how much support the bottom channel has on the door threshold. Depending on several variables including slope, it may be necessary to shim the channel for additional support.
- 14: Installation of the Pull Handle. Choose a comfortable handle height, being careful to select an area that does not interfere with the entry door handle set. Position the handle with the through screw holes against the interior side of the pull bar (Diagram 11). Make sure that the handle is aligned as shown. Using the handle as a guide, drill two 3/16" (5 mm) diameter holes through the pull bar. Attach inside and outside pulls with the #8 x 1-1/4" (31.8 mm) screws included. Close the door to ensure it pulls freely and retracts back into the cassette.
- 15: Pull door closed to the side jamb channel, look at the location of the plastic catch slot in the pull bar, using a soft pencil, mark the top of the slot on the face of the side jamb channel. Slide top of hook latch along channel until top of hook matches or is 1/8" (3.2 mm) higher than this height (Diagram 12). Once this is done, pull the door closed. Lift the door slightly to clear the top of the steel hook, let the door rest on the hook. This should hold the door in the closed position until lifted. Most likely, the hook height will need to be adjusted several times, until the perfect height is obtained.
- 16: Snap screw-hole plugs into the holes in the side jamb channel and top and bottom rail where necessary to finish the installation.

FRENCH DOOR INSTALLATION INSTRUCTIONS (Double Door Installations Requires Two Single Door Kits)

- 1: Determine if door will be mounted internally (within the door jamb), or on the surface. Read the installation instructions for whichever single door install instructions apply, and then follow these additional steps to complete the installation for two doors mounted together. **Note:** The side jamb channels, pull bar keeper, or latch hook are not needed for French Door installations.
- 2: To determine top and bottom rail length, first mount both door cassettes, and measure the overall width at the bottom, (from outer edge of each cassette). Align both bottom rails together, making sure that the ends are flush so that both rails can be cut at the same time. Take the overall width and divide by 2, and then deduct 2-1/4" (57 mm) from each channel. Mark the channels with a soft pencil and cut to length. Follow this step for cutting the top channels as well.
- 3: Lay each top and bottom channel on a flat surface. Using a flat edge screw driver and hammer, gently crimp the weatherstrip channel on the end of the inside of the channel to prevent the weatherstrip mohair from moving within the channel. (This step is very important to prevent the mohair from sliding within the channel and getting wrapped up in the cassette when the door is allowed to retract. If this occurs it will prevent the door from retracting completely.) NOTE: Mount the deep channel 1-7/16" (36 mm) at the top, and the 1" (25 mm) channel at the bottom.

Important Note: Carefully examine the pull bar on each door. You will notice that there is a slot on both the inner and outer surface of the pull bar. One of these slots is wider than the other. You must make sure that the wide slot, for both doors is toward the inside of the house. The locking clips inside of the top and bottom splice will only work with the wide slot. To reverse the pull bar so that the wide slot is inside, simply remove a pull bar end guide. Pull the pull bar several inches away from the cassette. While holding the screen cloth tightly preventing it from retracting into the cassette, slip the pull bar from the edge of the screen, reverse it and reinstall with end guide.

- 4: Locate the top and bottom channel splice in the hardware box. This splice joins the ends of the two channels (both top and bottom) in the center of the opening and has a locking tab to hold the doors in the closed position. **Important Note:** Position the splice so that the locking tabs are to the inside of the house. If the locking tabs are reversed (top to bottom) the doors will not unlatch when the handle is twisted slightly.
- 5: Test each door before drilling the handle mounting holes. Pull each door individually toward the center allowing the door's pull bar to lock into the splice. Twist the door pull bar slightly releasing the door so that it will retract. Installation of the Pull Handles. Once the doors are installed, choose a comfortable handle height, being careful to select an area that does not interfere with the entry door handle set. Position the handle with the through screw holes against the interior side of the pull bar (Diagram 11). Make sure that the handle is aligned as shown. Using the handle as a guide, drill two 3/16" (5 mm) diameter holes through the pull bar. Attach inside and outside pulls with the 1-1/4" (31.8 mm) screws included. Attach opposite handle set at the same height.
- 6: Both doors should pull freely into the center of the opening until each door engages the top and bottom catches. To unlock the doors from the catch, just give a slight twist on the handle to disengage the catch.

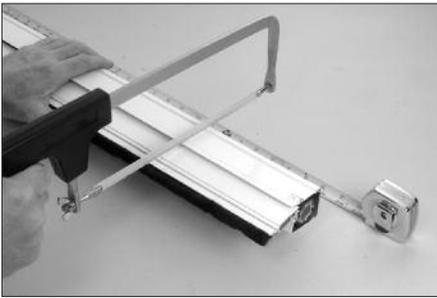


Diagram 1 - Cutting Cassette and Pull Bar



Diagram 2 - De-burring cut Cassette



Diagram 3 - Installing End Cap



Diagram 4 - Installing Pull Bar Guides

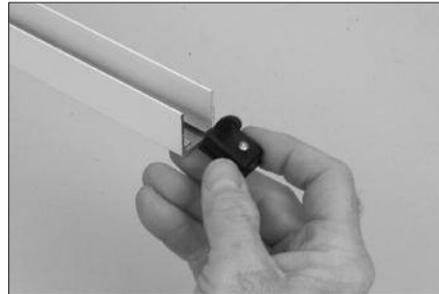


Diagram 5 - Installing Hook Latch



Diagram 6 - Installing Plastic Angle Brackets

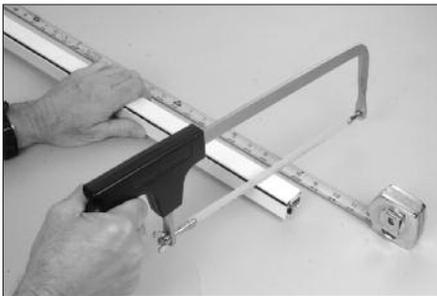


Diagram 7 - Cutting Top and Bottom Rails



Diagram 8 - Crimping Weatherstrip Channel

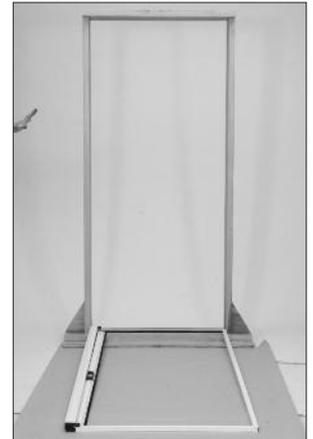


Diagram 9 - Engage all Four Corners of the Frame



Diagram 10 - Attaching Top into Header



Diagram 11 - Attaching Pull Handle



Diagram 12 - Adjusting Plastic Hook Latch

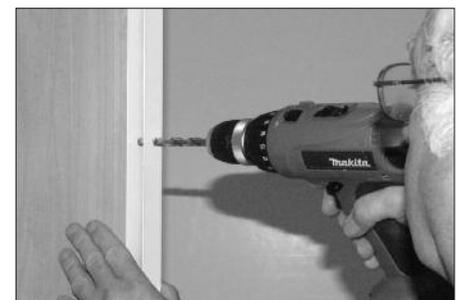
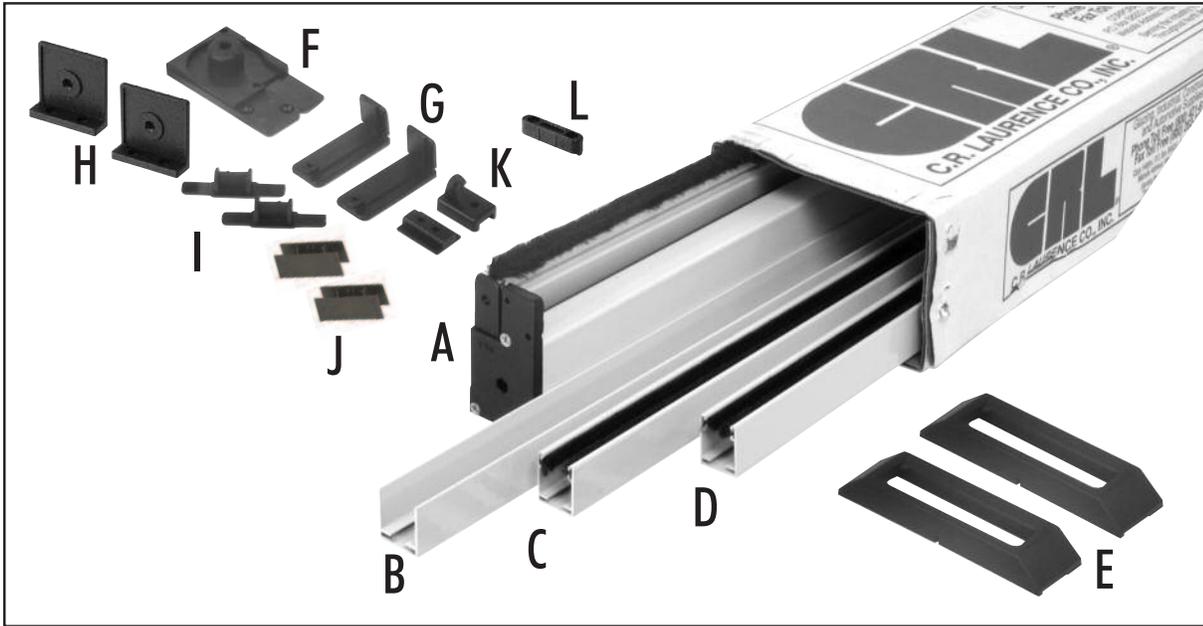


Diagram 13 - Prepping Side Jambs for Surface Mount Installations



Diagram 14 - Attaching Bottom Channels with Double Door Splice

CRL RETRACTABLE SCREEN DOOR PARTS LIST



- | | |
|-------------------------------------|---------------------------|
| A. Cassette | G. Corner Angles |
| B. Side Jamb Channel | H. Surface Mount Brackets |
| C. Top Channel 1-7/16" (36 mm) Tall | I. Pull Bar Guides |
| D. Bottom Channel 1" (25 mm) Tall | J. Channel Splice |
| E. Handle | K. Single Door Catch |
| F. Mounting Base | L. Single Door Keeper |

TROUBLE SHOOTING:

The door does not retract back into the cassette; this problem is almost always the result of the top or bottom channel weatherstripping slipping in the channel groove and creeping with the screen cloth back into the cassette. This binds up in the roller tube. To fix this problem remove the top and bottom channels and determine which of the four weatherstrips is loose and re-crimp firmly to prevent slippage.

The spring tension on the screen cassette can be adjusted. Please contact the **Glass and Glazing Department at C.R. Laurence ext. 7720**, for a detailed adjustment guideline.

PRESSURE-FIT OPTIONAL PARTS FOR INTERNAL MOUNT ONLY:

The hardware box will also include:

- 4 each Flat Cassette Springs
- 1 each Cone Spring
- 1 length of Adhesive Backed Weatherstrip

The preferred method of internal mount is described at the beginning of this instruction sheet, however, you will find the items listed above in your hardware box. If you do not want to screw mount the top and bottom end caps to the head and sill, you can add these parts to the cassette to create a pressure fit.

First: slip the four flat springs into the top and bottom of the cassette.

Second: apply the adhesive backed weatherstrip to the back of the cassette, running top to bottom between the top and bottom flat springs.

Third: insert the cone spring (large end toward cassette), between the bottom end cap and the mounting base.

To install into the jamb, first set the bottom of the cassette into the lower jamb corner. Insert the upper corner into the jamb by compressing the cassette. This will compress the cone spring. A small pry bar or large flat screwdriver may be required to accomplish this procedure.

Next, push the cassette tight against the jamb; compressing the four flat springs as tight as possible. Rotate the cassette slightly providing easy access for slipping the top and bottom rails into the cassette end caps. Position the jamb channel and engage the corner angles into the top and bottom rails.

Holding the jamb channel tight against the exterior of the jamb, reach down and apply pressure to the outside surface of the jamb channel. This will compress the lower flat springs allowing the jamb channel to insert into the jamb opening. Repeat this step for the top.



C.R.L.

RDS Retractable Door Measurements

