## INSTALLATION INSTRUCTIONS

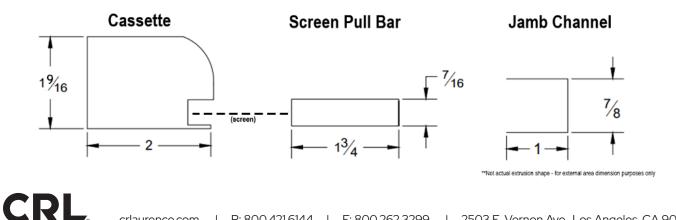
# **CRL RETRACTABLE SCREEN DOOR**



- Α. Cassette
- В. Side Jamb Channel
- Top Channel 1-7/16" Tall C.
- Bottom Channel 1" Tall D.
- 3-piece Handle E.
- F. End Cap
- G. Corner Angles

- H. Surface Mount Brackets
- Ι. Pull Bar Guides
- **Channel Splice** J.
- Latch Hook and Back Plate К.
- L. Latch Keeper
- M. Screen Pull Bar

### **CRL** Retractable Door Measurements



# Surface Mount:

## Internal and Surface Mount Installation Instructions:

- 1. Determine the exact location of where the cassette (A) will be mounted, inside the frame or on the surface of the door frame.
  - Internal Mount: Carefully measure the inside height of your door frame and take into consideration any door stops and sills.
    Surface Mount: Examine the surface of the door frame and make sure that the door cassette, top and bottom channels and side jamb channel will mount flush to the surface of the opening.
- 2. Locate the side of the cassette that has the measurement marks, this will be the only side of the cassette which can be cut to achieve the required height.
  - Surface Mount: Locate the top and bottom mounting brackets (H) and start by mounting the lower bracket to the wall. Assure the bracket is as low to the ground as possible to allow for support of the bottom channel (D). Adjoin the cassette and screen pull bar and cut this cassette assembly to the appropriate length after fitting it onto the surface of the frame.
  - Internal Mount: Measure, mark & cut the cassette assembly, the resulting length requires a deduction of 3/8"(9.5mm) from the door opening inside height. If using the measurement marks cut exactly at the opening height mark. If measuring with a tape, you must deduct 3/8" from the opening height, then make your cut.
  - ▲ Note: The cassette measurement marks already account for the 3/8" deduction required, simply cut at the mark equal to the inside height.

\*\*Example: if your inside height is 78" cut at the 78" cassette measurement mark. If using a tape measure, deduct 3/8" from 78" and make your cut. Both methods will yield a length of 77-5/8" for this example.



- 3. Once cut, turn the cassette assembly upright with the cut side down and give it a gentle tap against the floor to shake out any loose debris from the inside of the tube.
- 4. Using a deburring tool; debur the inside of the round aluminum screen cloth tube and make sure the inside edge is free of any sharp edges as shown in Diagram 2.



5. Locate the end cap (F) from the hardware box and affix it to the cassette using a #8 x 1" pan head screw as shown in Diagram 3.



Diagram 3

- 6. Side Jamb channel preparation:
  - **Surface Mount:** Place the bottom of the cassette on top of the lower bracket and plumb it against the wall. Once secured, mount the upper bracket. Measure the length of the assembled cassette, then cut the side jamb channel to the same length.
  - Internal Mount: Deduct 1/8" (3.2mm) from the door opening inside height determined in Step 1 and cut the side jamb channel.
- 7. Now prepare the Screen Pull Bar by determining the desired location for the latch keeper, mark the keeper location on the mohair, slide the mohair weather-stripping part of the way out from the screen pull bar (M) and cut at the determined location leaving the other half portion in the channel.
- 8. Install the latch keeper (L) by sliding it into the mohair channel of the screen pull bar, followed by the remaining mohair weatherstripping that was pulled out, assure they are butted up tightly leaving no gaps in this run. Cut any excess mohair from the ends and crimp all ends of Mohair weather-stripping channel as mentioned in Step 16 and shown in Diagram 7.

#### ▲ It is essential to crimp the channel ends to prevent the mohair strip from coming out and binding up inside the coil

- 9. Use the keeper as a guide to drill two pilot holes in through the center of the screen pull bar. Using the two #8 screws provided, fasten the keeper to the screen pull bar.
- 10. Finish assembling the screen pull bar by inserting a pull bar guide (I) into each end, as shown in Diagram 4



Diagram 4

- 11. Next, find the latch hook, backplate (K), and two #8-1/2" flat head screws to install onto the door jamb.
- 12. Slide the backplate into the slot at the bottom of the door jamb extrusion as shown in Diagram 5. Once the backplate slips into the slot, attach the latch hook into the designated hole using the two screws, but DO NOT TIGHTEN. The final location of the hook will be determined once the jamb is fully installed into the door frame. Make sure that the hook is pointed upwards.



- 13. Thread screws into corner angles (G) but do not tighten. These angles will slip into the top and bottom channels and into the side jamb channel to provide support during installation.
- 14. Measure the door opening width at the top and bottom of the entrance opening. Remember this width, as it will be critical in calculating the cut length of the top and bottom channels (C & D).
- 15. Before you cut, hold the top and bottom channels together and make sure the ends are flush
  - Surface Mount: Subtract 1-3/4" from the measured widths found in Step 14 and cut both channels to length.
  - Internal Mount: Subtract 2-1/8" from the measured widths found in Step 14 and cut both channels to length as shown in Diagram 6.
- A Please note: The deep 1-7/16" channel is mounted at the top and the 1" channel is mounted at the bottom



16. Lay each channel on its side and use a flat head screwdriver and hammer to gently crimp each end of the bottom and top channels so that the mohair weatherstrip stays intact as shown in Diagram 7. (It is very important to make sure the mohair is tightly crimped to prevent the mohair from sliding into the screen cassette and damaging the coil.)



Diagram 7

- 17. Place the door cassette into the door opening. Make sure that the curved face of the cassette is facing the outside of the house. Install one screw through the top and bottom end caps to hold the cassette in place.
- Take the side jamb channel and position it into the opening. Pre-drill through the middle center of the jamb channel, using a 1" #8 screw, fasten the channel onto your door frame. This will eliminate any deformation or movement of the side jamb channel.
- 19. Now slip the bottom channel into the face of the cassette and partially insert the plastic corner angles allowing for some adjustability. Push the bottom channel down, then slip it into the side jamb. Once all pieces have slid into the correct position tighten the corner angle screws and repeat the same process for the top channel.
- 20. Once the channels are set into the door opening plumb the channels and drill two 3/16" diameter holes through the top and bottom rails. Install two #8-1" flat head screws into the rails and tighten. Note: These screws are used to provide extra stability throughout the frame, therefore, screw location does not have to be precise.
- 21. **Installation of the Pull Handle (E)**: Choose a comfortable handle height that does not interfere with the entry door handle location. The two-piece handle set goes on the inside of the screen pull bar. Use the two-piece handle attachment as a guide to drill two 3/16" diameter holes. Attach the inside and outside pull with the two 1-1/4" screws that were included in the hardware box as shown in Diagram 8.



Diagram 8

22. Pull the screen door closed to determine the exact location of the latch keeper. Slide the hook along the channel until the hook is the same height or about 1/8" higher than the keeper. Once this is done pull the door closed, and lift and drop the keeper onto the hook to hold the screen closed, to open, simply lift up on the handle slightly and the screen will immediately begin to retract.

Congratulations! Your Installation is now complete

## French Door Installation Instructions

Note: (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 screwdriver 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 can 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 screen pull bar on each door. You will notice that there is a slot on both the inner and outer surface of the screen 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 screen pull bar several inches away from the cassette. While holding the screen cloth tightly preventing it from retracting into the cassette, slip the screen 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 screen pull bar to lock into the splice. Twist the door pull bar slightly releasing the door so that it will retract.
- 6. 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 screen pull bar. 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.
- 7. 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.

## Pressure-Fit Optional Parts For Internal Mount Only

The hardware box will also include

- a. Flat Cassette Springs (x4)
- b. Cone Spring (x1)
- c. Adhesive Backed Weatherstrip
- 1. 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.
- 2. Slip the four flat springs into the top and bottom of the cassette.
- 3. Apply the adhesive backed weatherstrip to the back of the cassette, running top to bottom between the top and bottom flat springs.
- 4. Insert the cone spring (large end toward cassette), between the bottom end cap and the mounting base.
- 5. To install into the jamb, first set the bottom of the cassette into the lower jamb corner. Then align the upper corner of the cassette to the top of the jamb. Push the cone spring down to compress it and snap the cassette into place. A small pry bar or large flat screwdriver may be required to accomplish this procedure.
- 6. 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.
- 7. 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.





## **TROUBLE SHOOTING**

The door does not retract back into the cassette; this problem is almost always the result of the top or bottom channel weather stripping 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. 17720, for a detailed adjustment guideline.

