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<th>Code</th>
<th>Description</th>
<th>Model</th>
<th>Quantity</th>
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<td>Anti-Lift Top Roller with Flush and Surface Mount Fittings</td>
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<td>Wall Mount Bi-Parting Sliders Kit</td>
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<td>Left Hand Door Stop</td>
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<td>LS405R</td>
<td>Right Hand Door Stop</td>
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<td>Right Hand Softbrake Kit</td>
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**Kit Contains:**

- L2400: 2 LS400, 1 LS104, 5 LS402, 1 LS407, 2 LS307
- LS405L: 1 LS104, 1 LS405L, 1 LS405R, 1 LS505L, 2 LS307
- LS405R: 1 LS104, 1 LS405L, 1 LS405R, 1 LS505L, 2 LS307
- LS403: 3 LS402, 1 LS407
- LS106: 1 LS402, 1 LS407
- LS412: 1 LS106
- LS240: 2 LS400, 1 LS104, 5 LS402, 2 LS307
INTRODUCTION

Thank you for purchasing the CRL Laguna Series Sliding Glass Door System. We have upgraded our popular Laguna Series Sliding Glass Door System to now include an ‘anti-lift’ feature. Through a combination of additions and very subtle changes, we have improved the performance, safety, and security while maintaining a clean, simple look. The Laguna Series Sliding Glass Door System can be attached to glass or directly to the side of a sufficiently reinforced wall. The adjustable Top Rollers make final adjustments quick and easy, without the need to remove the door. Their smooth operation and solid stainless steel construction minimizes maintenance issues. CRL provides you with all the glass attachment fasteners for either flush mounting, requiring a countersunk hole, or surface mounting, requiring a straight hole. The glass attachment fasteners accommodate either 3/8" or 1/2" (10 or 12 mm) tempered glass.

Standardized sets allow you to make planning and purchasing quick and easy for basic installations. We offer four different kits; two for wall mounting, and two for glass mounting. Available accessories give you the opportunity to customize the standard sets to accommodate the most imaginative designers.

IMPORTANT: READ THIS MANUAL THOROUGHLY BEFORE BEGINNING INSTALLATION.

SYSTEM LIMITATIONS

Minimum Door Width: 37-13/16" (960 mm)
Maximum Door Width: 53-9/16" (1.36 m)
Maximum Door Height: 98-7/16" (2.5 m)
Maximum Weight: 220 lbs (100 kg)

NOTE: Laminated glass cannot be used in these systems.

GLASS FABRICATION

Hole fabrication is required prior to tempering. The placement and type of hole is determined by each configuration. First determine if the system is a glass mount or wall mount and whether it has one or more sliding doors.

The glass fabrication for each of the following basic layouts are detailed in this section:

Wall Mount: Single Slider, Bi-Parting Sliders
Wall Mount with Softbrake: Single Slider, Bi-Parting Sliders
Glass Mount: Single Slider, Single Slider with Sidelite

All kits include both flush and surface mount fasteners. Identify your specific kit model and refer to the following pages for specific hole locations.

PLEASE NOTE: SYSTEMS WITH SOFTBRAKES REQUIRE DIFFERENT GLASS FABRICATION.
GLASS FABRICATION (CONTINUED)
LSWM5_ Wall Mount Single Slider

NOTE: Adequate structural framing required to support Wall Mount fasteners and weight of glass door.

- DOOR GLASS HEIGHT \( A = DOH + \frac{1}{2}" \) [12 mm]
- DOOR GLASS WIDTH \( B = DOW + 4" \) [102 mm]
- TRACK LENGTH \( C = (DOW \times 2) + 6" \) [152 mm]
  \( D = DOW + 2 \)
  \( E = (B) + 2 - 1" \) [25 mm]
CRL LAGUNA SERIES SLIDING GLASS DOOR SYSTEM

GLASS FABRICATION (CONTINUED)
LSWM6_ Wall Mount Bi-Parting Sliders

**NOTE:** Adequate structural framing required to support Wall Mount fasteners and weight of glass door.

- **Wall Mount Clamp Location**
- **DOOR GLASS HEIGHT** $A = DOH + \frac{1}{8}'' [12 \text{ mm}]$
- **DOOR GLASS WIDTH** $B = (DOW + 2') + \frac{1}{4}'' [48 \text{ mm}]$
- **TRACK LENGTH** $C = (DOW 	imes 2') + 2'' [51 \text{ mm}]$
- $D = DOW + 4$
- $E = DOW + 4$

![Diagram of CRL LAGUNA SERIES SLIDING GLASS DOOR SYSTEM](image-url)
GLASS FABRICATION (CONTINUED)

LSGM5_ Glass Mount Single Slider

DOOR GLASS HEIGHT \( A = \text{DOH} + \frac{1}{2}" [12 \text{ mm}] \)

DOOR GLASS WIDTH \( B = \text{DOW} + 2" [51 \text{ mm}] \)

TRACK LENGTH \( C = (B) \times 2 - 3" [76 \text{ mm}] \)

\( \frac{B}{E} = (F) + 2 - 4\frac{3}{8}"[116 \text{ mm}] \)

\( E = \text{DOW} + 2 - 1" [25 \text{ mm}] \)

TRANSOM WIDTH \( F = \text{DOW} - \frac{1}{4}" [6 \text{ mm}] \)
GLASS FABRICATION (CONTINUED)
LSGM6_ Glass Mount Single Slider with Sidelites

**DOOR GLASS HEIGHT** $A = DOH + \frac{1}{2}" [12 \text{ mm}]$

**DOOR GLASS WIDTH** $B = DOW + 4" [102 \text{ mm}]$

**TRACK LENGTH** $C = B \times 2$

$$D = (F + 2) - 3 \frac{1}{8}" [90 \text{ mm}]$$

$$E = DOW + 2$$

**TRANSOM WIDTH** $F = DOW - \frac{1}{4}" [6 \text{ mm}]$

**Center Line of tube and fastener Reference point above top of door opening**

**Glass Mount Clamp LS403BS**
Wall Mount Clamp Location

NOTE: Adequate structural framing required to support Wall Mount fasteners and weight of glass door.

NOTE: Softbrakes handed with fixed mount 1-11/16" from end. Center next clamp at joint. Install Softbrakes to track before mounting clamps to wall.

GP = Glass Projection
NOTE: Standard Glass Projection from wall with door fully open is 4" [102 mm].

NOTE: Adequate structural framing required to support Wall Mount fasteners and weight of glass door.

DOOR GLASS HEIGHT \( A = \text{DOH} + \frac{1}{2}" [12 \text{ mm}] \)

DOOR GLASS WIDTH \( B = \text{DOW} + 4" [102 \text{ mm}] \)

TRACK LENGTH \( C = (\text{DOW} \times 2) - 21-3/4" [553 \text{ mm}] - \text{GP} \)

SOFTBRAKE LENGTH = 14" [356 mm] with End Cap

\( D = C + 3 \)

\( E = 12-5/16" [313 \text{ mm}] \)
CRL LAGUNA SERIES SLIDING GLASS DOOR SYSTEM

GLASS FABRICATION (CONTINUED)
LSWM8_ Wall Mount Bi-Parting Sliders with Softbrake

LEFT HAND SOFTBRAKE → TRACK LENGTH C → RIGHT HAND SOFTBRAKE

DOOR GLASS WIDTH B → DOOR GLASS WIDTH B → 1-11/16" [43 mm]

1-11/16" [43 mm]

1-11/16" [43 mm]

2-5/16" [59 mm]

9" [229 mm]

9" [229 mm]

9" [229 mm]

9" [229 mm]

2-5/16" [59 mm]

2-5/16" [59 mm]

2-5/16" [59 mm]

2-5/16" [59 mm]

DOOR GLASS HEIGHT A

DOH (Door Opening Height)

DOW (Door Opening Width)

1/4" [6 mm]

2" [51 mm]

2" [51 mm]

3/8" [10 mm]

Wall Mount Clamp
LS402BS

Center Line of tube
Reference point above top of door opening

DOOR GLASS HEIGHT A = DOH + ½" [12 mm]

DOOR GLASS WIDTH B = (DOW + 2) + 1¾" [48 mm]

TRACK LENGTH C = DOW - 26" [660 mm] - GP

SOFTBRAKE LENGTH = 14" [356 mm]

D = C + 3

E = 12- 5/16" [313 mm]

NOTE: Standard Glass Projection with door fully open is 4" [102 mm].

NOTE: Adequate structural framing required to support Wall Mount fasteners and weight of glass door.

Wall Mount Clamp Location
NOTE: Softbrake are handed with a fixed clamp 1-11/16" from end. Center next clamp at joint. Install right and left Softbrake for each door with ends butted at center. Begin installation at center.

Note: Dotted line indicates edge of finished opening.
INSTALL HARDWARE: WALL MOUNT

1. Attach Wall Mount Clamps to Sliding Tube

Cut Sliding Tube to length. Prepare on a flat surface to keep Wall Mount Clamps aligned. Place Clamps in correct position. Refer to hole location details for correct Clamp spacing. Hand tighten to hold Sliding Tube.

2. Position Level to Wall

Ensure Sliding Tube is level. Drill pilot hole for fasteners to be used. (not included) Secure with screw properly anchored to the substrate. (not included)
3. Mount the Wall Mount Clamps

Loosen Wall Clamp and remove Sliding Tube.

Move bottom part of Clamp down to drill pilot hole.

Secure to substrate with adequate fastener (not included).

Return bottom part of Clamp to upright position.

4. Install Left and Right Door Stops

Slide left and right Door Stops onto Sliding Tube.

Ensure each Stop clears outboard Clamp when replacing Tube.

When Tube is level, tighten the Wall Clamps.

*© Blue Loctite Threadlocker is recommended on all screw threads during final assembly.
INSTALL HARDWARE: GLASS MOUNT

1. Attach Glass Mount Clamps

Use either Surface or Flush Mount.

- Countersunk Hole
- Straight Hole

Blue Loctite Threadlocker

Tighten to 11 ft-lbs, 15Nm

Flush Mount Fittings with Glass Mount Clamp.

Surface Mount Fittings with Glass Mount Clamp.

2. Assemble Glass Mount Clamps

- Loosely assemble
- Hand tighten

HEX = 3mm

3. Install Left and Right Door Stops

- Slide left and right Door Stops onto Sliding Tube.
- Ensure each Stop clears outboard Clamp when replacing Tube.
- When Tube is level, tighten the Glass Clamps.

* Blue Loctite Threadlocker is recommended on all screw threads during final assembly.
PREPARE AND HANG DOOR

4. Prepare Top Rollers

Use spanner head tool to remove Anti-Lift and Door Mount Fittings and loosen Top Roller.

Loosen Top Roller so it easily moves up and down.

Remove Anti-lift Block and store in a safe place.

Remove Mounting Fittings and store in a safe place.

5. Mount Top Rollers Onto Door

Tighten to 11 ft-lbs, 15Nm

Countersunk Hole

OR

Straight Hole

Flush Mount Fittings with Top Roller

Surface Mount Fittings with Top Roller

NOTE: Mounting posts have minimal adjustment to help with incorrectly located holes in glass.
6. Hang Door

Place Top Rollers onto Sliding Tube. Support weight of door at level and tighten Set Screw at top of Roller.

- Place Top Rollers onto Tube.
- Ensure door is level and plumb.
- Support door weight and use Set Screw in Top Roller to adjust height.
- Tighten Top Roller with Spanner Head Tool.
7. Install Floor Guide

Adjust to fit $\frac{3}{8}$" (10 mm) or $\frac{1}{2}$" (12 mm) glass doors.

Remove door. Position Floor Guide so it is aligned to wall. The door overlaps 2" (51 mm).

Mark, drill and install.

Plumb door to vertical. Mark centerline.

Hang door again making sure it is engaged with the floor guide.
8. Install Anti-Lift Block

Fit Anti-Lift Block under Sliding Tube.
Tighten with Spanner Head Tool.
Adjust Anti-Lift Block so Roller moves freely through Mounting Clamps.

9. Install Floor Mount Door Stops

Position door in open and closed locations and then adjust Track Stop.
Slide Track Stop until it contacts Bracket.
Position Floor Stop so glass contacts it at same time.

Install Floor Mount Door Stops below Left and Right Door Stops. Rubber side faces door.

Lift Rubber Cover to install.

NOTE: The Floor Mount Door Stops may also be mounted to the wall.
10. Place Glass Edge Protectors

Position one inch from bottom of door.

NOTE: For use with double doors.

11. Install Sliding Tube End Caps

Use a dab of RTV408C silicone to hold cap in place.

Insert into each end of Sliding Tube.
INSTALL ACCESSORIES

1. Install Wall Mount End Cap (For LSGM5BS Only)

Use when top Sliding Tube terminates into a wall. Use instead of last Mounting Clamp. Mount to wall.

- Loosen Set Screw to remove Wall Mount.
- Loosen Set Screws.
- Slide onto Tube.
- Rest Tube on Glass Clamps to mark position.
- Install Wall Mount. Rest Tube on Glass Clamps and fit into Mount.

Ensure Sliding Tube is level. Tighten Set Screws in Wall Mount and Glass Clamps.

* Blue Loctite Threadlocker is recommended on all screw threads during final assembly.

2. Install Thru-Glass Pull FP214BS (Optional)

For 3/8" (10 mm) to 1/2" (12 mm) Tempered Glass

- Thread together.
- 1-7/8" (48 mm) Hole
3. Install Ceiling Mount Clamp LS412BS (Optional)
Use to replace wall mount clamps. Attaches to structural ceiling sufficient to support the load of the sliding glass doors up to 220 lbs (100 kg). Position the centerline of the Sliding Tube 4-7/16” (113 mm) down from ceiling with 3/16” (5 mm) up or down adjustment.

Loosen set screws. Tighten set screws. Turn base to raise or lower. Loosen clamp to install sliding tube.

Ensure Sliding Tube is level. Tighten Clamp again.

Blue Loctite Threadlocker is recommended on all screw threads during final assembly.
4. Install Softbrake (Optional for Wall Mount Applications)

Cut Sliding Tube per instructions. Insert Left Softbrake with Left Door Stop into one end and Right Softbrake with Right Door Stop into the other. Follow instructions for Wall Mount Hardware on Pages 11 - 12, centering a Clamp at each joint. Continue on Pages 14 - 17 to finish the installation.

NOTE: When adjusting Anti-Lift height on Page 15 make sure it triggers Softbrake.

NOTE: Cut Sliding Track per instructions. See Pages 9 and 10.

NOTE: For Bi-Parting Doors refer to hole location details on Page 10 for Clamp spacing. Butt Left and Right Softbrakes at center of opening. Center Wall Clamps at all other joints.

A
B

Right Softbrake shown. Left Softbrake similar.

Softbrake Clamp Pin

Loosen and remove Softbrake Clamp from each Softbrake.

NOTE: Softbrake Clamp pin fits in hole in bottom of Softbrake to hold Sliding Tube in position. Install Softbrake Clamps after Wall Clamps are installed to ensure proper location. Follow Steps 1 through 4 on Pages 11 and 12 to install Wall Clamps and Sliding Tube.

NOTE: For Bi-Parting Doors refer to hole location details on Page 10 for Clamp spacing. Butt Left and Right Softbrakes at center of opening. Center Wall Clamps at all other joints.
MAINTENANCE
Inspect roller assemblies at routine intervals for smooth operation. Remove debris that might accumulate on the upper track surface. Assure that each roller assembly is straight and tight. Also check all spanner nuts and tighten if necessary. **Do not overtighten.** Glass fracturing could occur. Replace any glass panel that shows fracturing or chipping on edges or around drilled holes. Worn or broken components should be replaced immediately by qualified personnel.

Do not lubricate the track or rollers. Lubricants will attract dirt, creating a dirty roller surface and interfering with the system's smooth operation. See below for cleaning procedures.

CARE AND CLEANING OF STAINLESS STEEL
Satin polished Stainless Steel is one of the most durable and easiest finishes to maintain. Although stainless steel is generally resistant to corrosion, the surface is susceptible to cosmetic deterioration by the effects of salt water and air-borne chemicals which may result in small brown spots appearing on its surface (this process is likely to be accelerated in coastal areas). These spots in no way affect the strength, integrity or longevity of the product, they are simply superficial discolorations that require cleaning to restore the stainless steel to its original appearance. Stainless steel finishes should be cleaned with rubbing motions in the same direction as the grain texture with a foam spray cleaner, such as CRL Cat. No. CRL841 Stainless Steel Polish & Cleaner, which cleans, polishes and protects stainless steel without hard rubbing and polishing. A coating of CRL841 resists finger prints, grease and water splatter and helps preserve the factory finish.

Wipe with a clean, dry cloth such as CRL Cat. No. 1550 Lint-Free Glass Wipes, which are made with four plies of strong, white paper and reinforced in both directions with an extra ply of tough nylon. These highly absorbent rugged wipes will stand up to the most demanding shop work.

For repair of damaged finishes, satin stainless steel can be rubbed with one of the following abrasive pads:

CRL Cat. No. SB7447F - CRL 3M™ Scotch-Brite™ Fine Pad

Stainless steel finishes should be rubbed in the same direction as the grain texture.

For **LONG TERM PROTECTION** and use on **REPAIRED AREAS**, CRL offers an unsurpassed surface treatment system specifically designed to protect both glass and stainless steel.

CRL 6K Hydrophobic Surface Protection product is a two-step system.

- **Step One:** CRL Cat. No. PC6025 - 6K Pre-Clean Solution (250 ml bottle)
- **Step Two:** CRL Cat. No. 6K6025 - 6K Protectant Formula (250 ml bottle)

Proper application of the 6K system will offer surface protection for three years.

Visit crlaurence.com for more details.