# **INSTALLATION INSTRUCTIONS**

# ENTICE SERIES PREMIUM ENTRANCE SYSTEM EXTERIOR GLAZE





Phone: (800) 421-6144 • Fax: (800) 582-7501 crlaurence.com • crl-arch.com

#### **GENERAL INSTALLATION NOTES**

#### **Recommended Guidelines For All Installations:**

- 1. **REVIEW CONTRACT DOCUMENTS.** Check shop drawings, installation instructions, architectural drawings, and shipping lists to become thoroughly familiar with the project. The shop drawings take precedence and include specific details for the project. Note any *field verified* notes on the shop drawings prior to installing. The installation instructions are of a general nature and cover most conditions.
- 2. INSTALLATION. All materials are to be installed plumb, level, and true. Install operable windows preglazed only.
- 3. **BENCH MARKS.** All work should start from bench marks and/or column lines as established by the architectural drawings and the general contractor with guaranteed accuracy. Working from these datum points and lines determine:
  - a) The plane of the wall in reference to offset lines provided on each floor.
  - b) The finish floor lines in reference to bench marks on the outer building columns.
  - c) Mullion spacing from both ends of masonry opening to prevent dimensional build-up of daylight opening.
- **4. FIELD WELDING.** All field welding must be adequately shielded to avoid any splatter on glass or aluminum. Results will be unsightly and/or structurally unsound. Advise general contractor and other trades accordingly. All field welds of steel anchors must receive touch-up paint (zinc chromate) to avoid rust.
- 5. SURROUNDING CONDITIONS. Make certain that construction which will receive your materials is in accordance with the contract documents. If not, notify the general contractor in writing and resolve differences before proceeding with work.
- **6. ISOLATION OF ALUMINUM.** Aluminum to be placed in direct contact with uncured masonry or incompatible materials should be isolated with a heavy coat of zinc chromate or bituminous paint.
- 7. SEALANTS. Sealants must be compatible with all materials with which they have contact, including other sealant surfaces. Consult with sealant manufacturer for recommendations relative to joint size, shelf life, compatibility, cleaning, priming, tooling, adhesion, etc. It is the responsibility of the *Glazing Contractor* to submit a statement from the sealant manufacturer indicating that glass and glazing materials have been tested for compatibility and adhesion with glazing sealants, and interpreting test results relative to material performance, including recommendations for primers and substrate preparation required to obtain adhesion. The chemical compatibility of all glazing materials and framing sealants with each other and with like materials used in glass fabrication must be established. This is required on every project.
- **8. FASTENING.** Within the body of these instructions "fastening" means any method of securing one part to another or to adjacent materials. Only those fasteners used within the system are specified in these instructions. Due to the varying perimeter conditions and performance requirements, perimeter and anchor fasteners are not specified in these instructions. For perimeter and anchor fasteners refer to the shop drawings or consult the fastener supplier.
- 9. BUILDING CODES. Due to the diversity in state/provincial local, and federal laws and codes that govern the design and application of architectural products, it is the responsibility of the individual architect, owner, and installer to assure that products selected for use on projects comply with all the applicable building codes and laws.
  U.S. Aluminum exercises no control over the use or application of its products, glazing materials, and operating hardware and assumes no responsibility thereof.
- 10. EXPANSION JOINTS. Expansion joints and perimeter seals shown in these instructions and in the shop drawings are shown at normal size. Actual dimensions may vary due to perimeter conditions and/or difference in metal temperature between the time of fabrication and the time of installation. Gaps between expansion members should be based on temperature at time of installation.
- **11. COORDINATION WITH OTHER TRADES.** Coordinate with the general contractor any sequence with other trades which offset curtain wall installation (i.e. fire proofing, back-up walls, partitions, ceilings, mechanical ducts, converters, etc.)
- **12. CARE AND MAINTENANCE.** Final cleaning of exposed aluminum surfaces should be done in accordance with AAMA 609.1 for anodized aluminum and 610.1 for painted aluminum.

crlaurence.com 2 CRL

## HANDLING, STORAGE, AND PROTECTION

The following precautions are recommended to protect the material against damage. Following these precautions will help ensure early acceptance of your products and workmanship.

#### A. HANDLE CAREFULLY.

All aluminum materials at job site must be stored in a safe place, well removed from possible damage by other trades. Cardboard wrapped or paper interleaved materials must be kept dry.

#### B. CHECK ARRIVING MATERIALS.

Check for quantities and keep records of where various materials are stored.

#### C. KEEP MATERIALS AWAY FROM WATER, MUD, AND SPRAY.

Prevent cement plaster or other materials from damaging the finish.

#### D. PROTECT THE MATERIALS AFTER ERECTION.

Protect erected frame with polyethylene or canvas splatter screen. Cement, plaster, terrazzo, other alkaline solutions, and acid based materials used to clean masonry are harmful to the finish. If any of these materials come in contact with the aluminum, immediately remove with water and mild soap.

IMPORTANT: READ THIS MANUAL THOROUGHLY BEFORE BEGINNING INSTALLATION

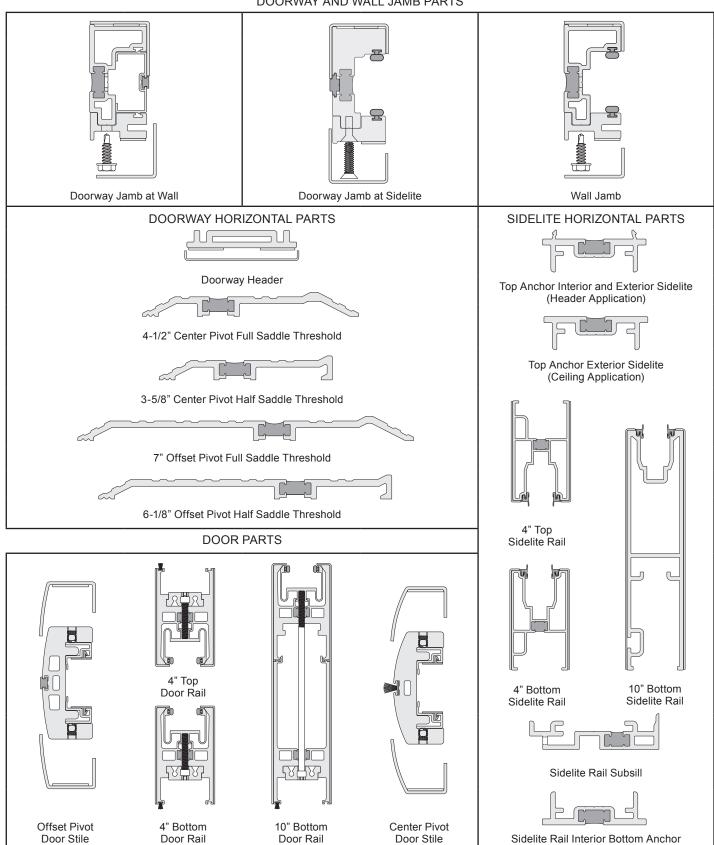
criaurence.com 3 CRL

# TABLE OF CONTENTS

| PARTS IDENTIFICATION                         | 5 - 6 |
|--|-------|
| SITE PREPARATION                             | . 7   |
| SINGLE / DOUBLE DOOR WITH FRAME INSTALLATION | - 10  |
| Threshold Installation                       | . 9   |
| Door Header Installation                     |       |
| Doorway Jamb at Wall Installation            | 10    |
| Apply Clad                                   |       |
| DOOR PREPARATION                             |       |
| DOOR INSTALLATION                            | 13    |
| DOOR WITH SIDELITE INSTALLATION 14           |       |
| Subsill Installation                         |       |
| Top Anchor and Header Installation           |       |
| Wall Jamb Installation                       |       |
| Top and Bottom Rail Installation             |       |
| Sidelite Glass Installation                  |       |
| Doorway Jamb at Sidelite Installation 20     |       |
| Doorway Jamb at Wall Installation            |       |
| Clad Installation                            |       |
| TRANSOM DOOR With SIDELITES INSTALLATION     |       |
| Transom Jamb Installation                    |       |
| Transom Top Rail Installation                |       |
| Transom Header Installation                  |       |
| Transom Glass Installation                   |       |
| Support Fin Installation                     |       |
| FIXED LITE INSTALLATION                      |       |
| Fixed Lite Top and Bottom Rail Installation  |       |
| Fixed Lite Glass Installation                |       |
| Intermediate Vertical Mullion Installation   |       |
| 90° INSIDE AND OUTSIDE CORNER INSTALLATION   |       |
| PERIMETER SEALING                            |       |
|  |       |
| GLASS REPLACEMENT FOR DOORS 34               |       |
| Remove Damaged Glass                         |       |
| Install Replacement Glass                    | - 36  |

# PARTS IDENTIFICATION

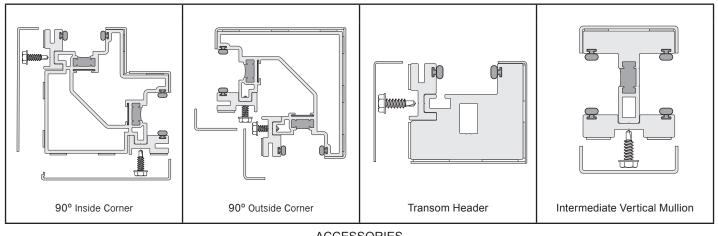
DOORWAY AND WALL JAMB PARTS



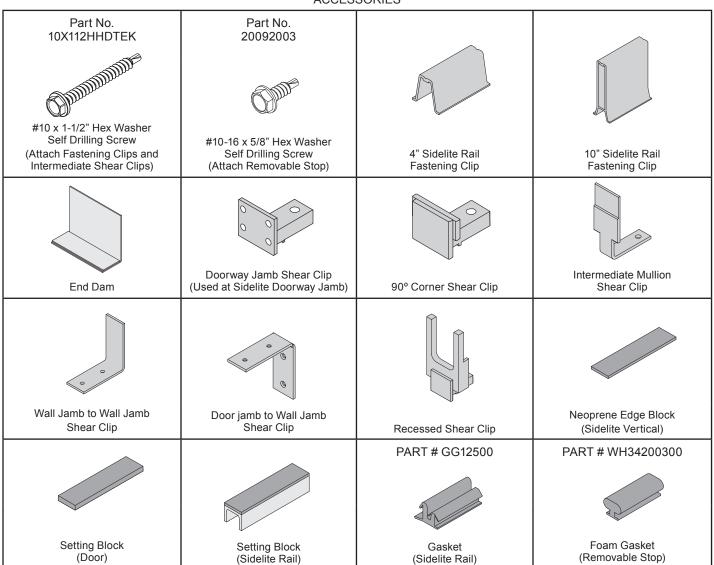
NOTE: For replacement parts, please contact Technical Sales at (800) 582-7501.

# PARTS IDENTIFICATION (CONTINUED)

CORNER, TRANSOM AND INTERMEDIATE VERTICAL FRAME PARTS



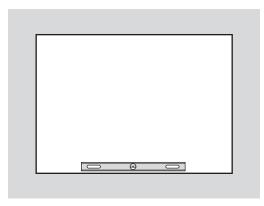
#### **ACCESSORIES**



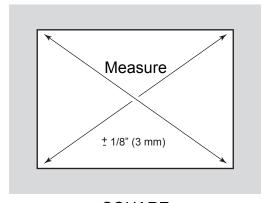
NOTE: For replacement parts, please contact Technical Sales at (800) 582-7501.

## SITE PREPARATION

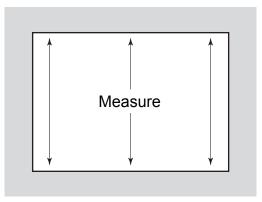
- 1. Review and measure the opening.
- 2. Verify rough window opening size 1/2" (12.7) clearance in both width and height. Verify framing is plumb, straight, and true around opening. Measure opening at each end and at center vertically and horizontally. Make corrections to openings as required. Measure opening diagonally to check squareness. Chip concrete high points to flush and rounded corners to square.



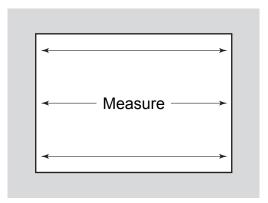
**LEVEL** 



**SQUARE** 

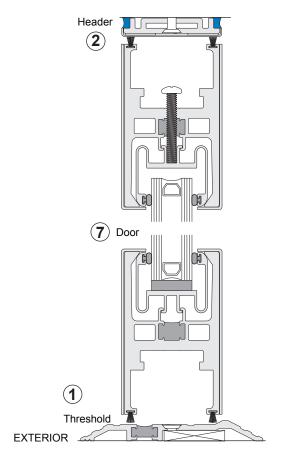


**VERTICAL DIMENSION** 

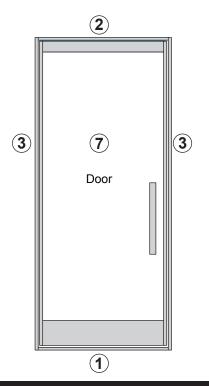


HORIZONTAL DIMENSION

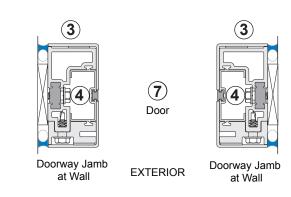
# SINGLE / DOUBLE DOOR WITH FRAME INSTALLATION

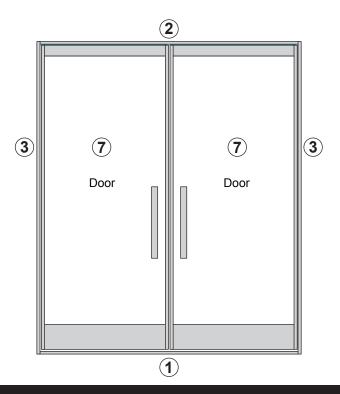


NOTE: 4" Bottom Rail Shown. 10" Bottom Rail Optional.

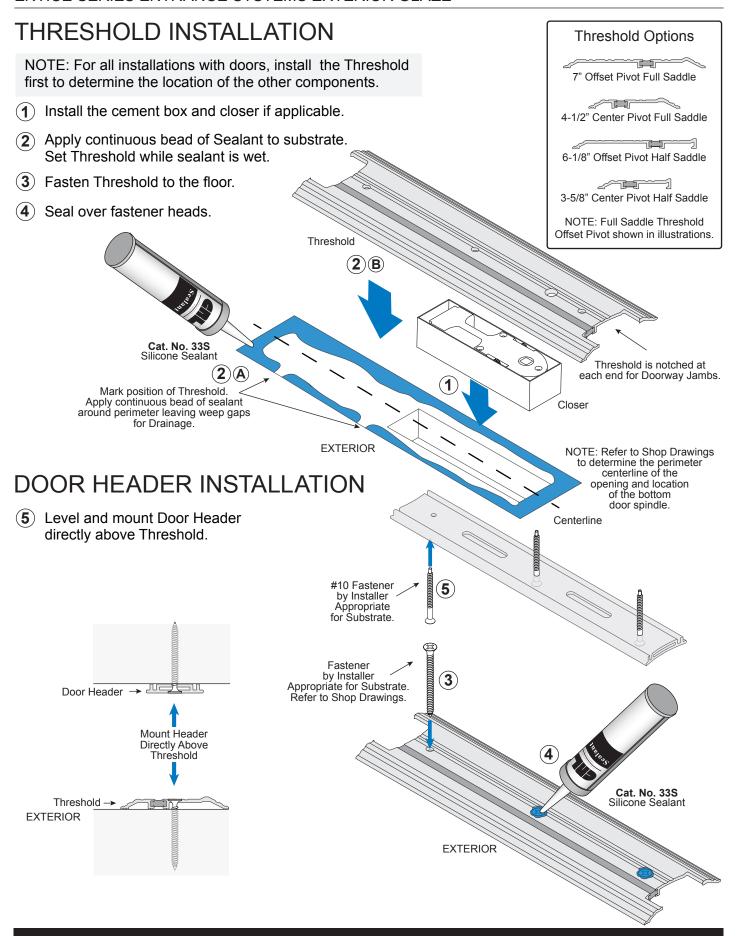


#### Door with Frame Installation Order 1 Threshold Page 9 **2** Door Header Page 9 (3) Doorway Jamb at Wall Page 10 Doorway Insert Page 10 **(5)** Jamb and Header Clad Page 10 (6) Door Preparation Page 11 - 12 **(7) Door Installation** Page 13 (8) Finishing and Sealing Page 33

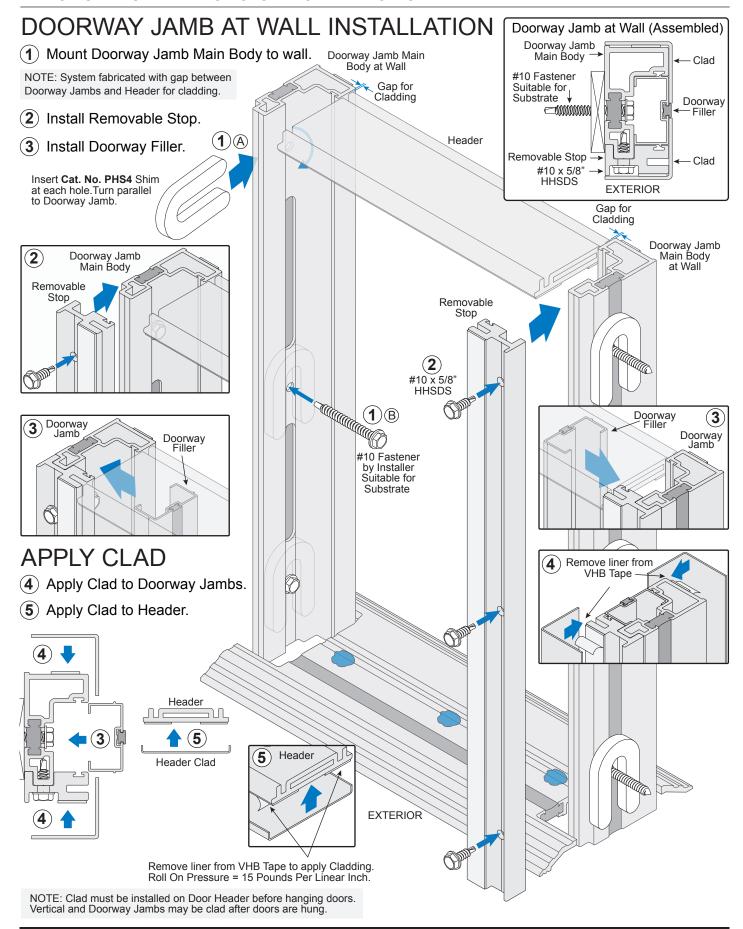




crlaurence.com 8 CRL



crlaurence.com 9 CRL



crlaurence.com 10 CRL

## DOOR PREPARATION

## Unpacking

The doors for the Entice System are shipped fully assembled and glazed. The glass may shift during shipping so it is important to follow the preparation procedures to ensure the door is square. Use two or more people to lift doors. NOTE: Clad on vertical stiles is applied after door is installed.



#### Cut the Capillary Tube

A breathing tube is installed to stabilize the glass panel during travel. Cut and seal tube before installation.

## Check Handle Alignment

Panic Handles can shift during shipping. Check alignment and adjust when necessary.

crlaurence.com 11 CRL

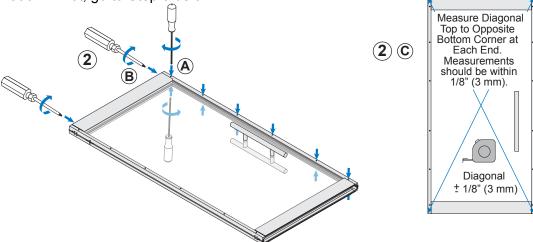
# DOOR PREPARATION (CONTINUED)

#### Adjust Door to Square

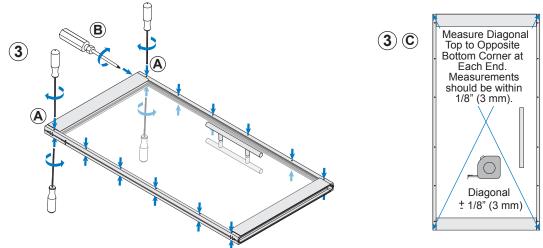
In most cases, using the Adjuster Screws to raise or lower the handle side of the door will solve the problem. Use a Phillips Screwdriver to turn Adjuster Screws. Check the diagonal measurements again. If the door is square move on to installation. If not, try Step 2 below



2 Loosen the set screws on both sides of the Lead Štile with included Hex Driver. Use Phillips Screwdriver to turn Adjuster Screws. Check measurements again. If the door is square, tighten the set screws and move on to installation. If not, go to Step 3 below.



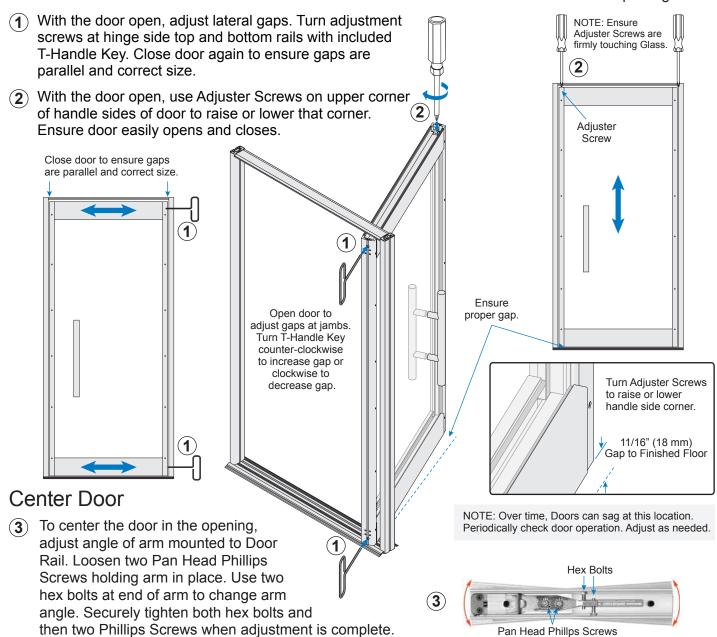
(3) Loosen set screws on both sides of Lead and Pivot Stiles. Use Phillips Screwdriver to turn Adjuster Screws. Make sure glass fully rests on bottom setting block. Check measurements. When the door is square, tighten all set screws and move on to installation.



criaurence.com 12 CRL

#### DOOR INSTALLATION

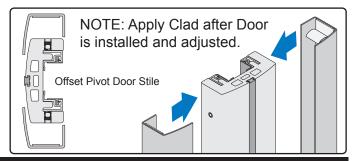
Use two or more people to lift and install the doors. After installation, follow the instructions below to adjust. NOTE: Installation varies with hardware selection. Consult Installation Instructions in hardware packages.



#### Install Clad on Vertical Door Stiles

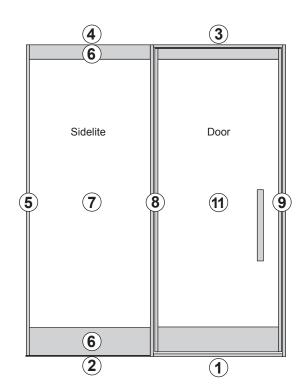
4 Remove liner from VHS Tape and apply Clad to Vertical Stiles. Roll On Pressure = 15 Pounds Per Linear Inch.



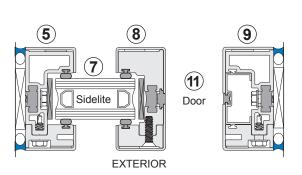


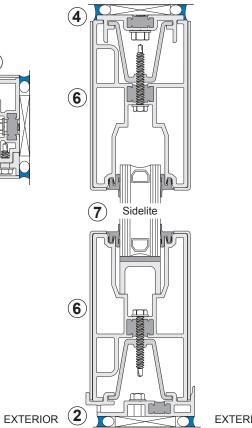
crlaurence.com 13 CRL

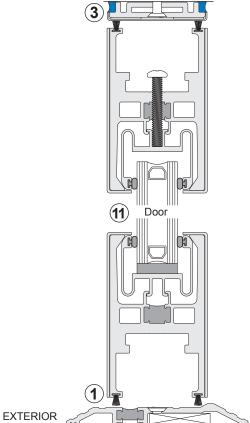
# DOOR WITH SIDELITE INSTALLATION



| Door with Sidelite Installation Order |              |  |
|---------------------------------------|--------------|--|
| 1 Threshold                           | Page 9       |  |
| 2 Subsill                             | Page 15      |  |
| 3 Door Header                         | Page 16      |  |
| 4 Top Anchor                          | Page 17      |  |
| <b>5</b> Wall Jamb                    | Page 17      |  |
| 6 Top and Bottom Rail                 | Page 18      |  |
| Sidelite Glass                        | Page 19      |  |
| 8 Doorway Jamb at Sidelite            | Page 20 - 21 |  |
| Doorway Jamb at Wall                  | Page 21      |  |
| <b>10</b> Clad                        | Page 22      |  |
| ① Door                                | Page 11 - 13 |  |
| 12 Finishing and Sealing              | Page 33      |  |

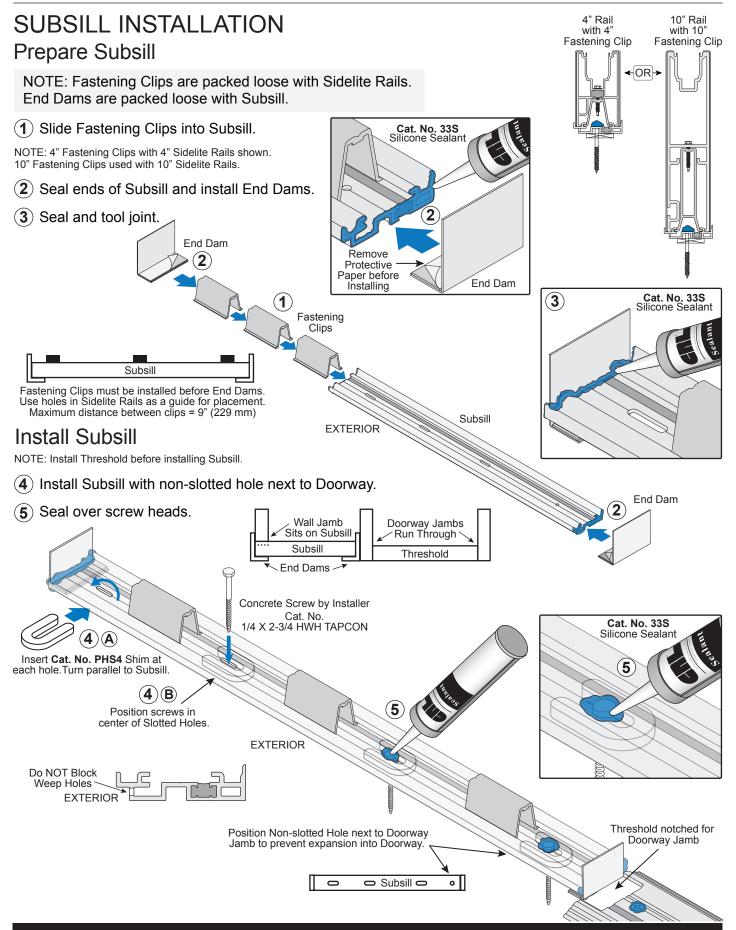




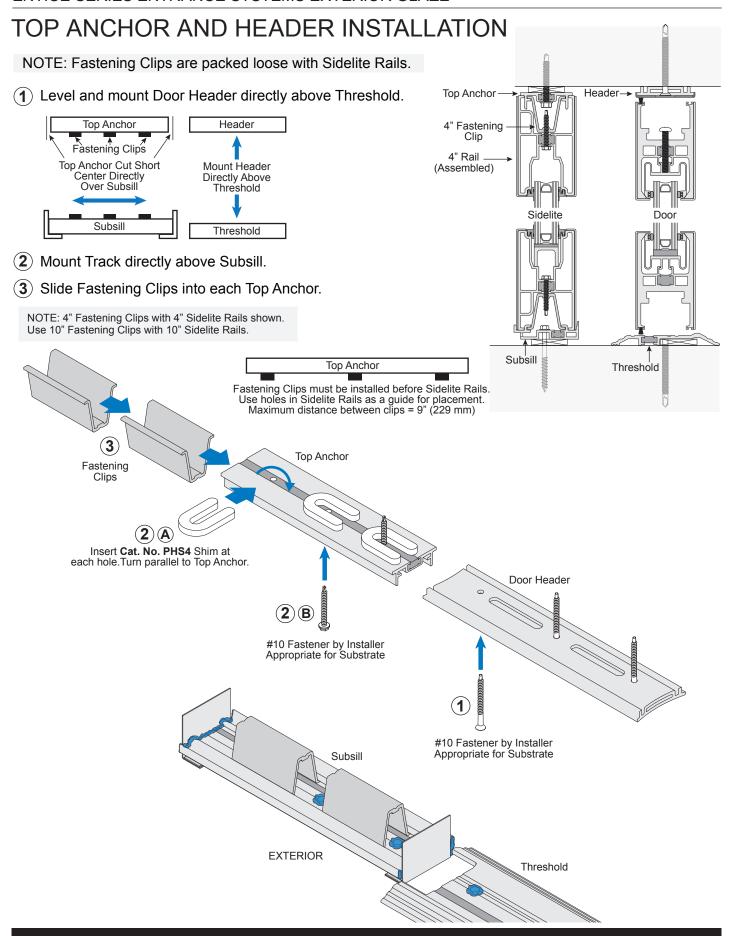


NOTE: Follow instructions on Page 7 for Site Preparation and continue on Page 9 for Threshold Installation.

crlaurence.com 14 CRL



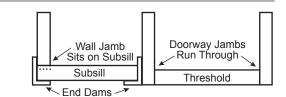
crlaurence.com 15 CRL

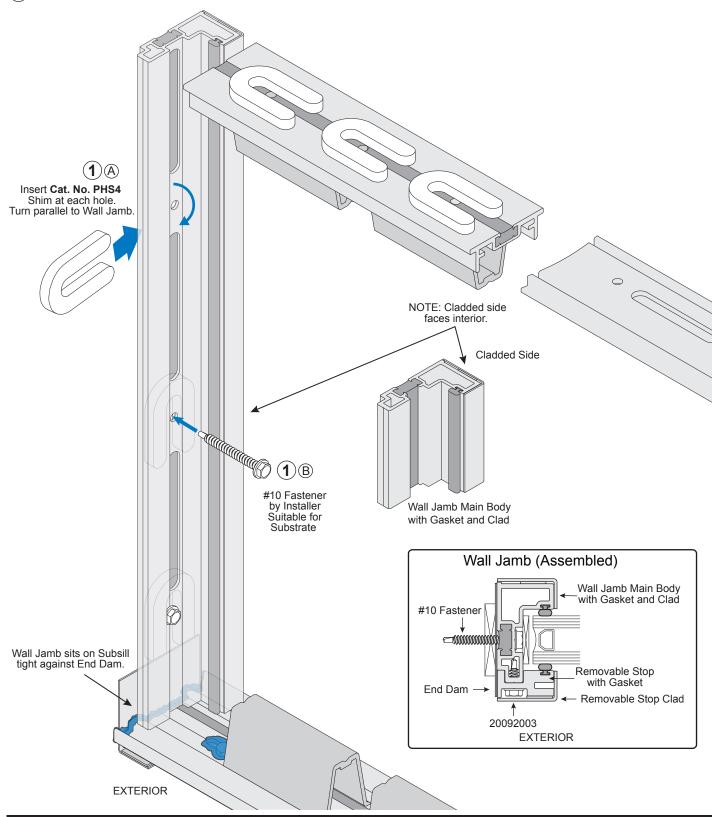


crlaurence.com 16 CRL

#### WALL JAMB INSTALLATION

- 1 Fit Wall Jamb Main Body on the Subsill with cladded side facing interior. Push it tight against End Dam and wall.
- (2) Shim and fasten to the wall.

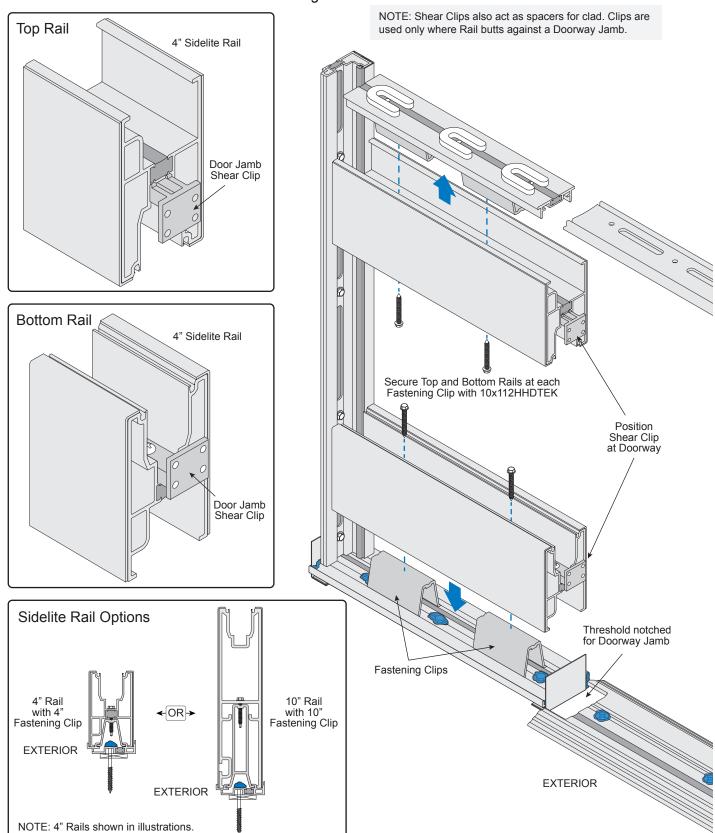




crlaurence.com 17 CRL

#### TOP AND BOTTOM RAIL INSTALLATION

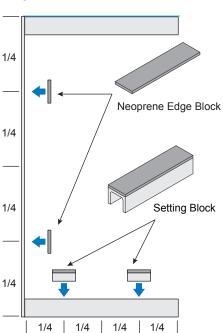
Install Top and Bottom Rails with Shear Clips positioned at Doorway Jamb. Secure at each Fastening Clip with #10 x 1-1/2" Hex Washer Head Self-Drilling Screws.

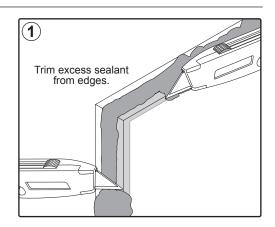


crlaurence.com 18 CRL

#### SIDELITE GLASS INSTALLATION

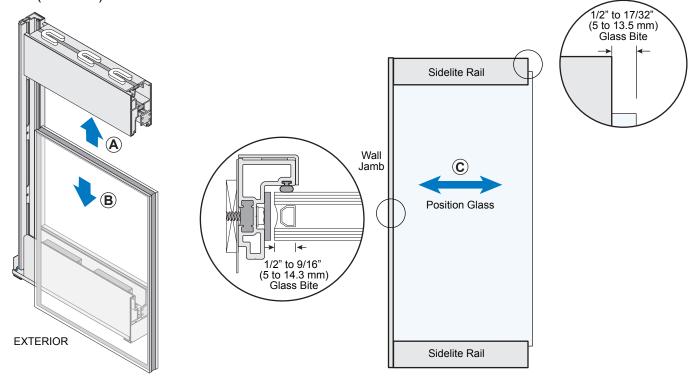
- 1 Trim edges of the glass at face and sides with a sharp utility knife to remove any excess Silicone Sealant.
- 2 Place Setting Blocks at quarter points in Bottom Rail and Edge Blocks at quarter points inside Wall Jamb pocket.



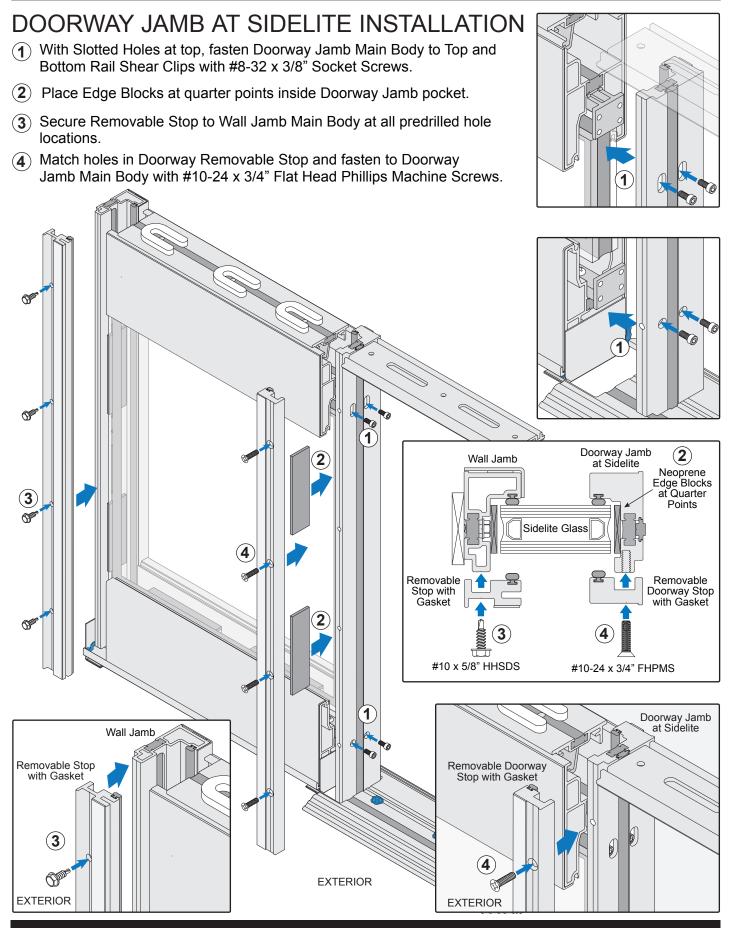


NOTE: Setting Blocks are packed loose with Sidelite Rails.

3 Lift and set glass into pocket. Position glass with 1/2" (12.7 mm) minimum glass bite at Wall Jamb and 1/2" (12.7 mm) minimum extended over end of Sidelite Rail.



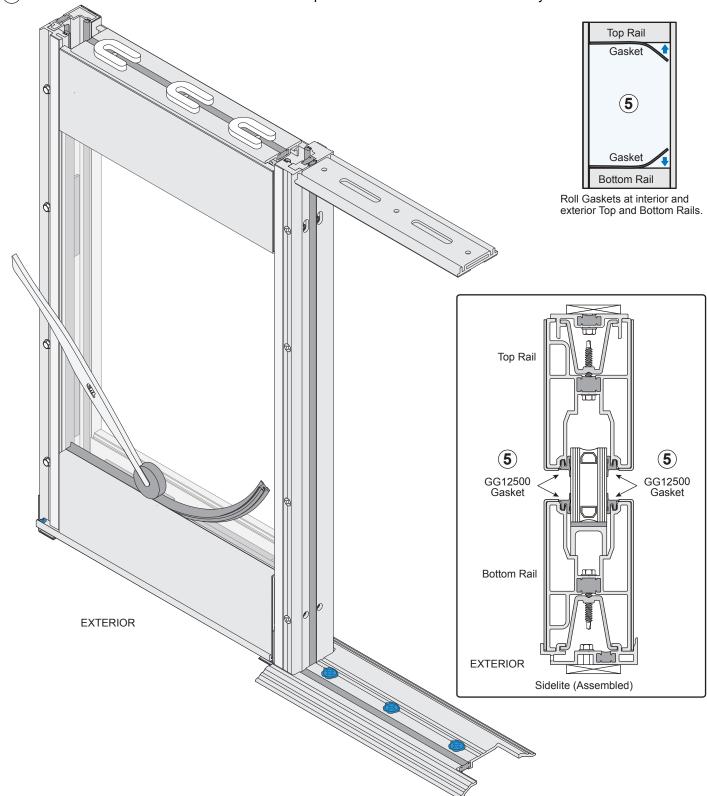
crlaurence.com 19 CRL



crlaurence.com 20 CRL

# DOORWAY JAMB AT SIDELITE INSTALLATION (CONTINUED)

(5) Roll GG12500 Gaskets into both sides of Top and Bottom Rails with a CRL Vinyl Roller.

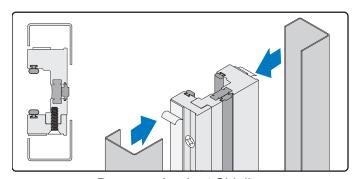


DOORWAY JAMB AT WALL INSTALLATION

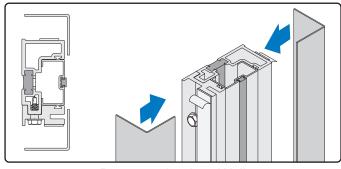
Follow instruction on Page 10 to install Doorway Jamb at wall, and then Pages 11 - 13 to prepare and hang door. Install remaining clad as shown on Page 22 and then finish installation on Page 33.

#### **CLAD INSTALLATION**

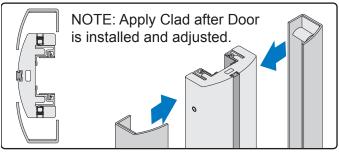
Remove liner from VHB Tape and apply Cladding. Roll On Pressure = 15 Pounds Per Linear Inch.



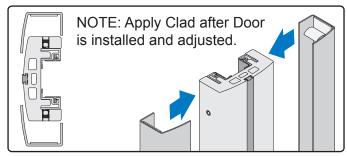
Doorway Jamb at Sidelite



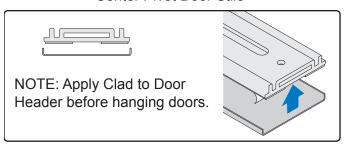
Doorway Jamb at Wall



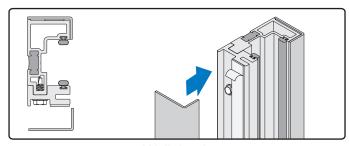
Center Pivot Door Stile



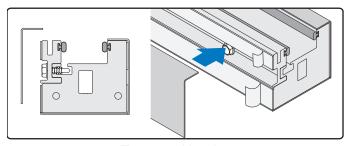
Offset Pivot Door Stile



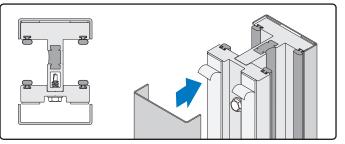
Door Header



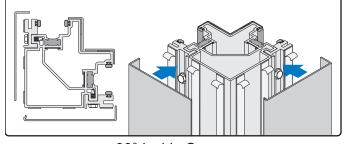
Wall Jamb



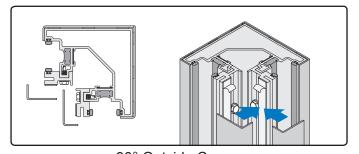
Transom Header



Intermediate Mullion



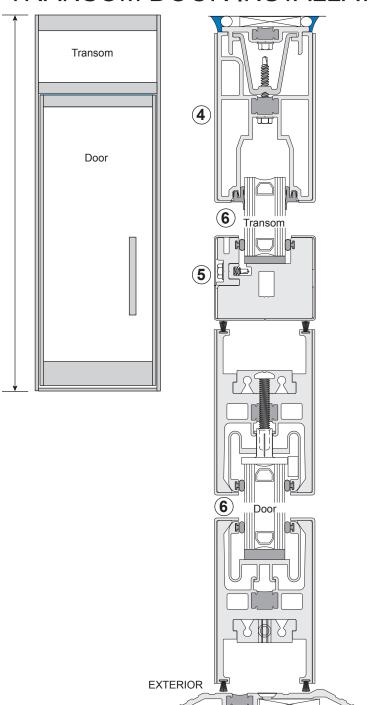
90° Inside Corner



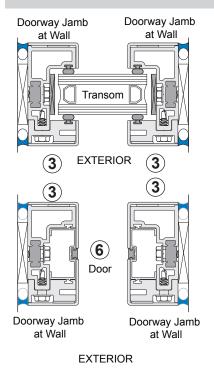
90° Outside Corner

crlaurence.com 22 CRL

# TRANSOM DOOR INSTALLATION

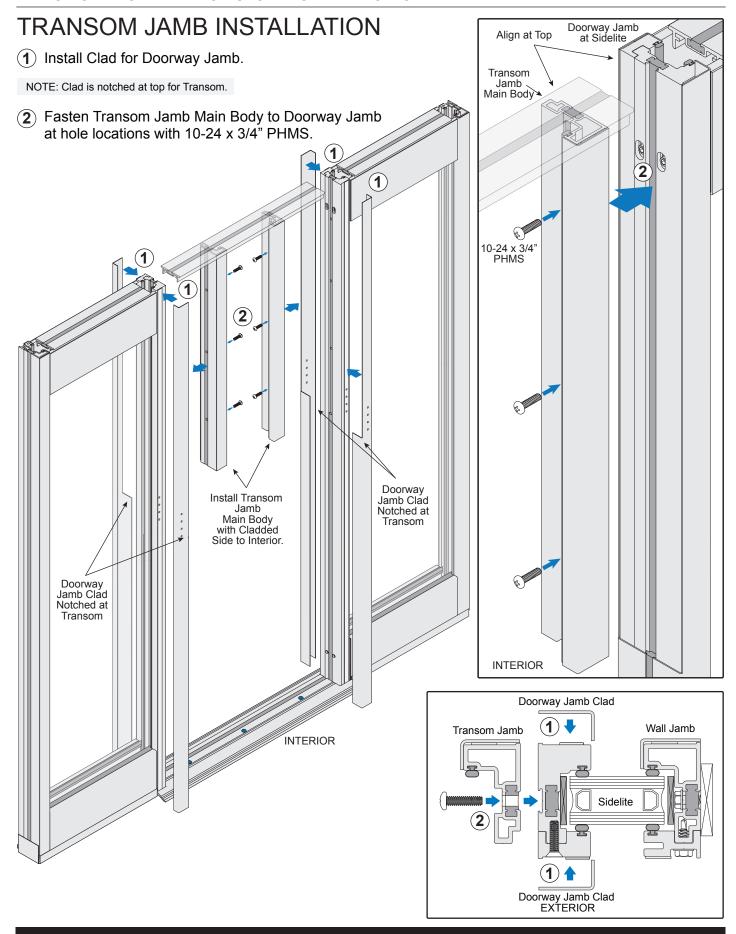


| Transom Door Installation Order |              |  |  |
|---------------------------------|--------------|--|--|
| 1 Threshold                     | Page 9       |  |  |
| 2 Top Anchor                    | Page 17      |  |  |
| 3 Transom Doorway Jambs         | Page 24      |  |  |
| 4 Transom Top Rail              | Page 25      |  |  |
| 5 Transom Header                | Page 25      |  |  |
| 6 Transom Glass                 | Page 26      |  |  |
| 7 Clad                          | Page 22      |  |  |
| 8 Door                          | Page 11 - 13 |  |  |
| Finishing and Sealing           | Page 33      |  |  |
| 10                              |              |  |  |
| 11)                             |              |  |  |

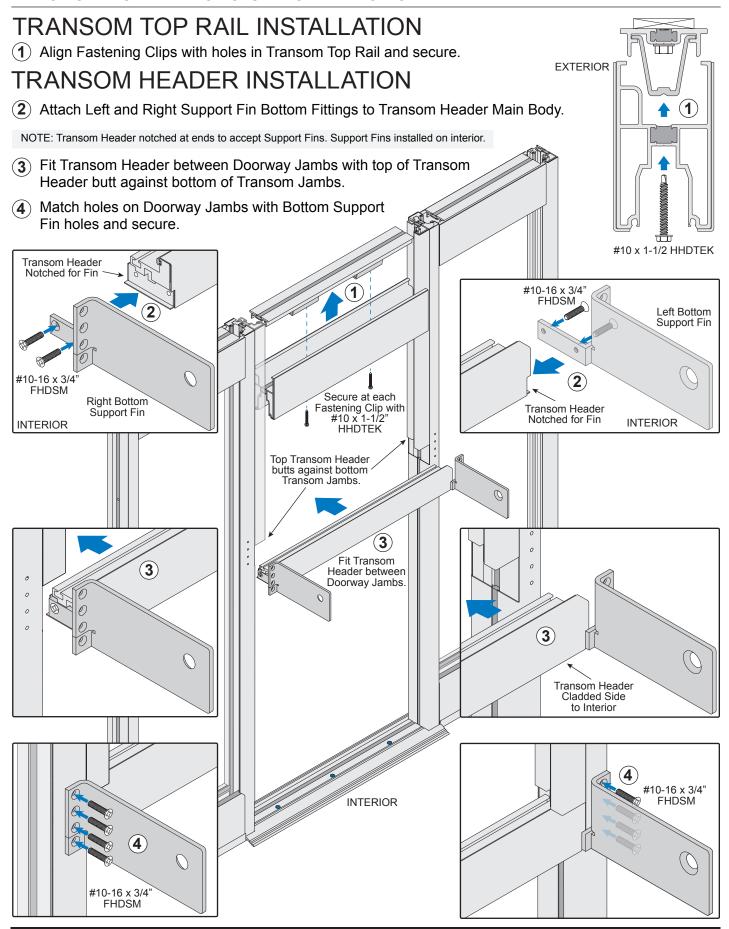


Begin on Page 7 for Site Preparation. Follow instructions to install Door with Sidelite beginning on Page 9 for Threshold Installation and continue on Pages 15 - 21.

NOTE: Skip Step 1 on Page 16 and instead of the Door Header, install a Top Anchor above the Threshold.



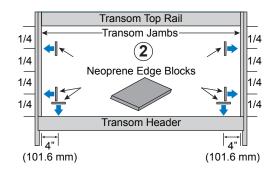
crlaurence.com 24 CRL

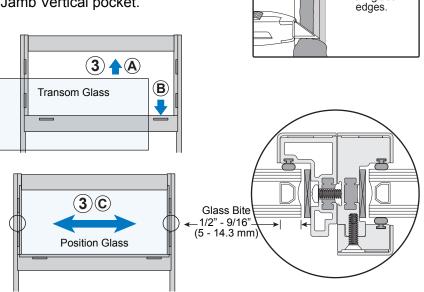


crlaurence.com 25 CRL

#### TRANSOM GLASS INSTALLATION

- 1 Trim edges of the glass at face and sides with a sharp utility knife to remove any excess Silicone Sealant.
- 2 Place Setting Blocks 4" from each end of Transom Header and Edge Blocks at quarter points inside Transom Jamb Vertical pocket.
- (3) Lift and set glass into pocket. Center.



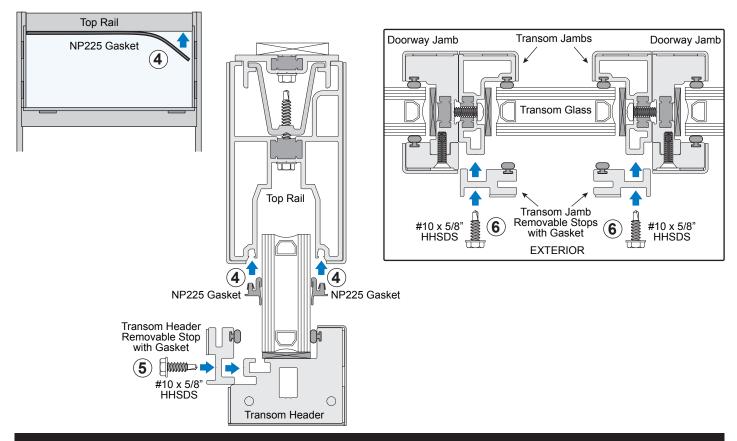


**(1**)

Trim excess

sealant from glass

- (4) Roll NP238 Gaskets into both sides of Top Rail with a CRL Vinyl Roller.
- (5) Install Removable Stop for Transom Header and secure with screws at all predrilled hole locations.
- 6 Install Removable Stops for Transom Jambs and secure with screws at all predrilled hole locations.

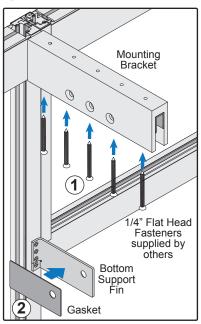


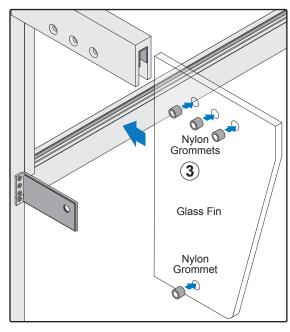
crlaurence.com 26 CRL

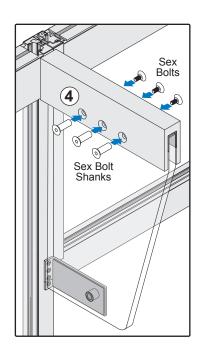
#### SUPPORT FIN INSTALLATION

NOTE: Go to Page 22 to install Clad before proceeding with the Support Fin Installation.

- 1 Position Mounting Bracket flush against cladded Doorway Jambs. Secure to ceiling.
- (2) Place Gasket on Bottom Support Fin.
- (3) Fit Nylon Grommets in holes in Glass Fin and slide into Mounting Bracket.
- Secure Fin to Mounting Bracket with Sex Bolts and Sex Bolt Shanks.

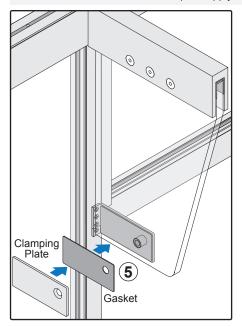


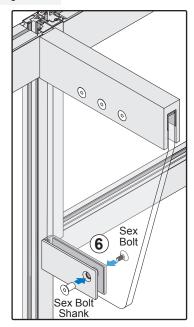


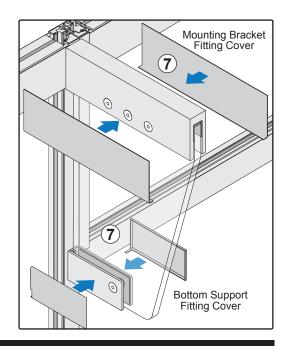


- **5** Position Clamping Plate and Gasket with Bottom Support Fin.
- 6 Secure with Sex Bolt and Sex Bolt Shank.
- 7 Install Fitting Covers to both sides of Mounting Brackets and Bottom Support Fins.

NOTE: Remove liner from VHB Tape to apply Fitting Covers.

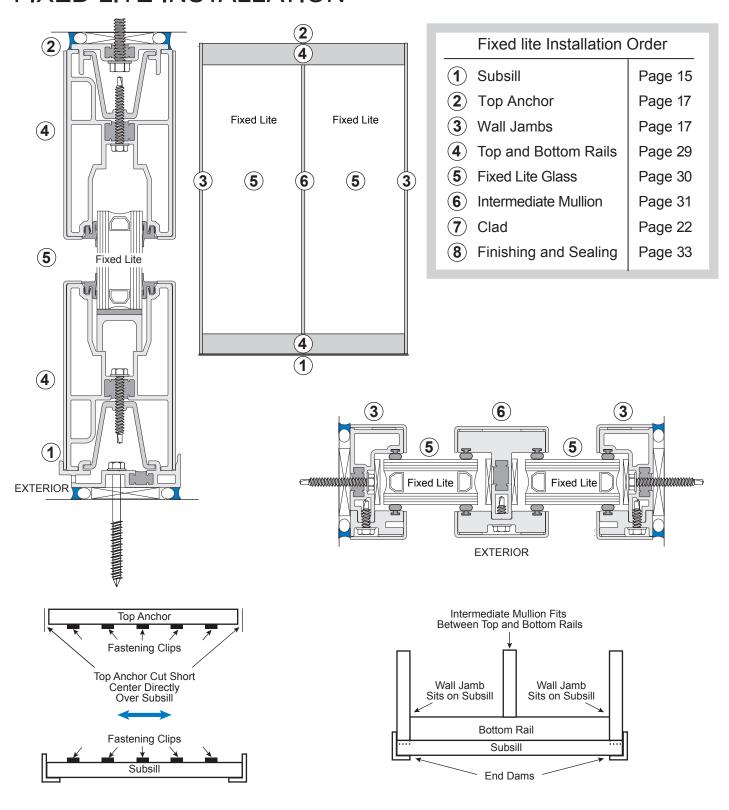






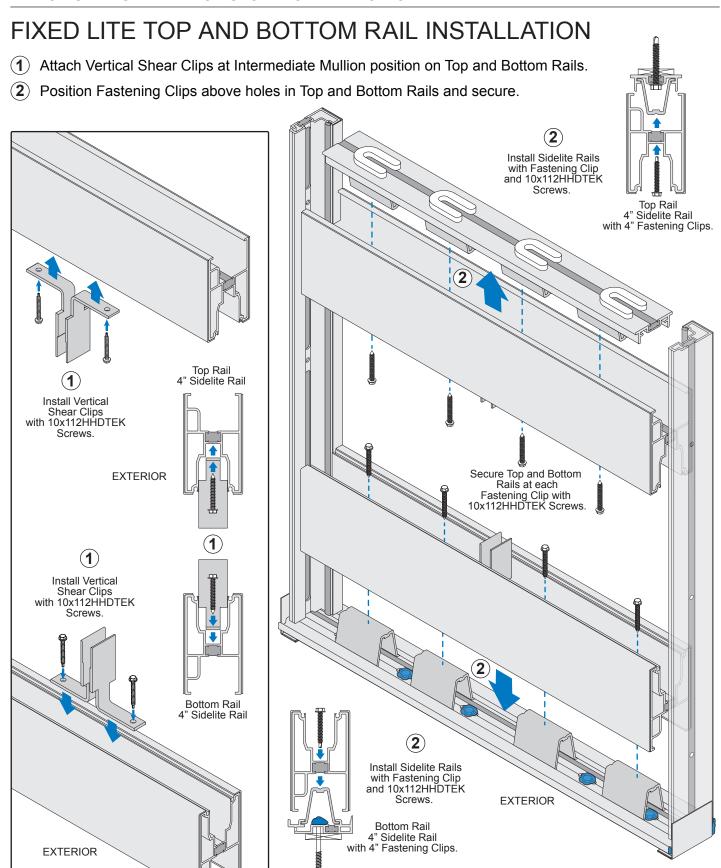
crlaurence.com 27 CRL

## FIXED LITE INSTALLATION



Begin with instructions on Page 7 for Site Preparation. Then install Subsill as shown on Page 15 and center Top Anchor above it as shown on Page 17. (Top Anchor is cut 1/2" (12.7 mm) short.) Continue with Wall Jamb Installation on Page 17.

crlaurence.com 28 CRL

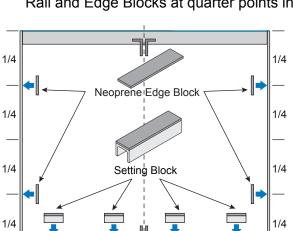


crlaurence.com 29 CRL

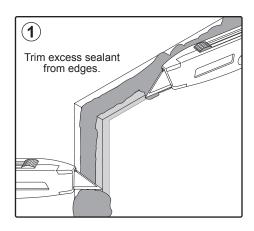
NOTE: 4" Rails with 4" Fastening Clips shown in illustrations. Use 10" Fastening Clip with 10" Rails.

#### FIXED LITE GLASS INSTALLATION

- 1 Trim edges of the glass at face and sides with a sharp utility knife to remove any excess Silicone Sealant.
- Place Setting Blocks at quarter points in each section of Bottom Rail and Edge Blocks at quarter points inside Wall Jamb pocket.

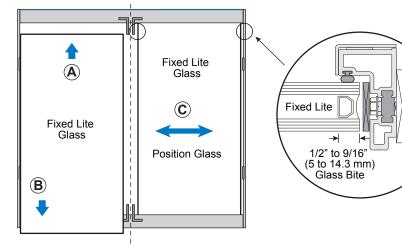


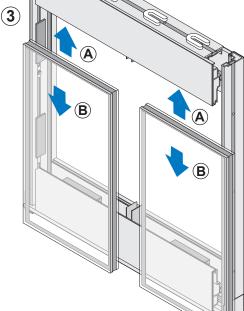
1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4



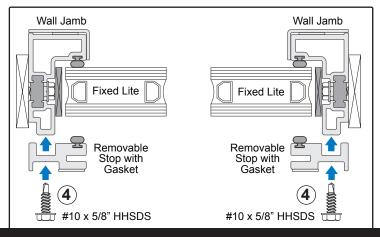
NOTE: Setting Blocks are packed loose with Sidelite Rails.

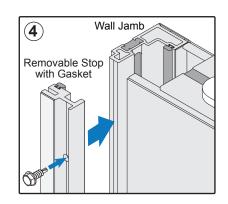
3 Lift and set each glass panel into pocket and center.



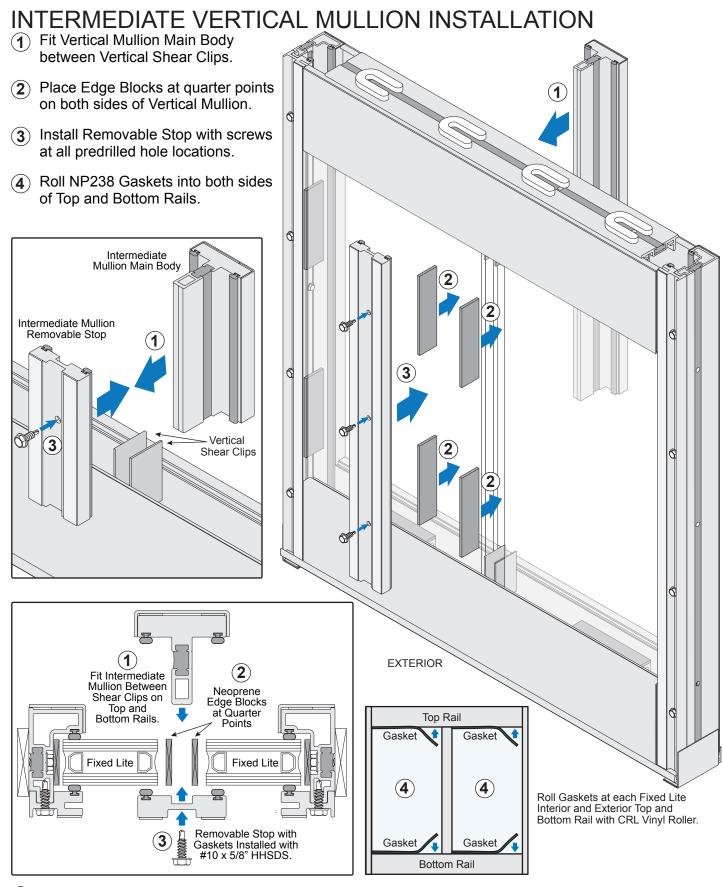


4 Secure Removable Stop to Wall Jamb Main Body at all predrilled hole locations.





crlaurence.com 30 CRL

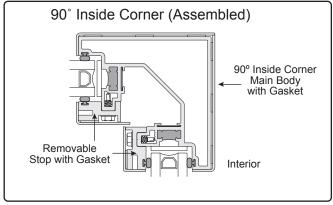


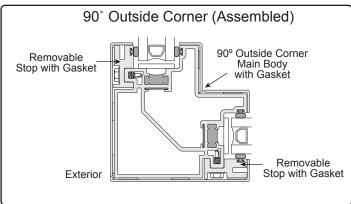
(5) Install clad as shown on Page 22 and then finish installation on Page 33.

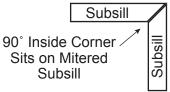
crlaurence.com 31 CRL

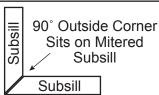
# 90° INSIDE AND OUTSIDE CORNER INSTALLATION

- 1. Install Mitered Subsill and Top Anchor above.
- 2. Install Corner Main Body and Wall or Doorway Jambs on either side of it.

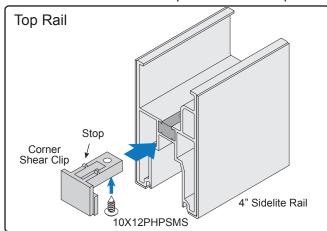


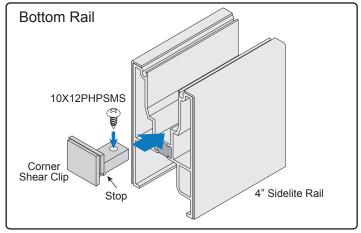




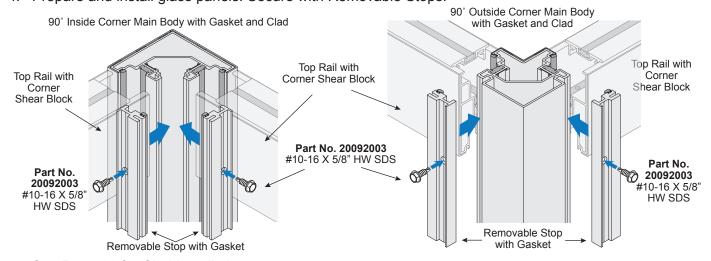


3. Install Corner Shear Clip into ends of Top and Bottom Rails next to Corner.





4. Prepare and install glass panels. Secure with Removable Stops.



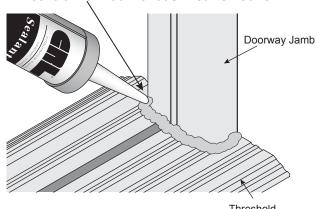
5. See Page 22 for Clad Installation.

crlaurence.com 32 CRL

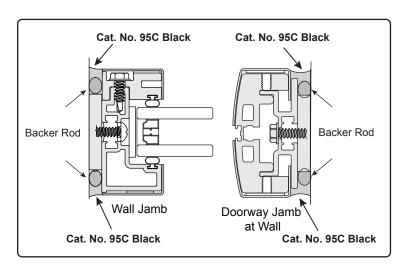
## PERIMETER SEALING

1. Seal around Doorway Jamb at Threshold.

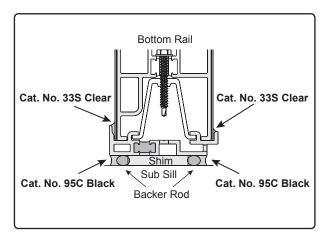
Seal around Doorway Jamb at notched Threshold with **Cat. No. 33S Clear Silicone**.



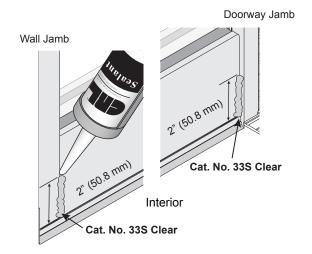
3. Install Backer Rod and seal perimeter with **Cat. No. 95C** Silicone Sealant at all shimmed areas inside and outside.



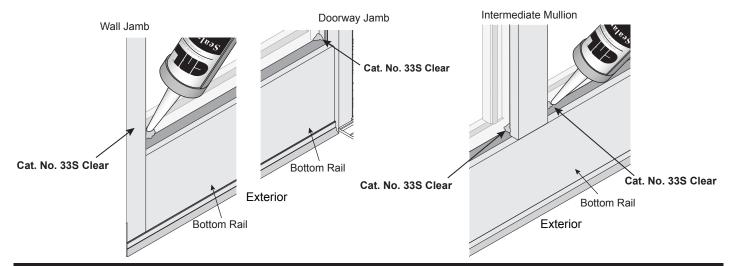
2. Seal joints between Bottom Rail and Subsill inside and outside.



 Seal interior perimeter at all verticals 2" (203 mm) up from ground where they meet Bottom Rails.



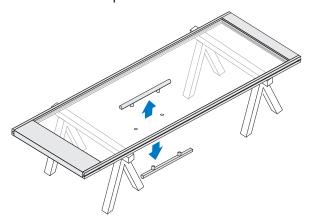
5. Seal outside bottom corners where all verticals meet Bottom Rails.



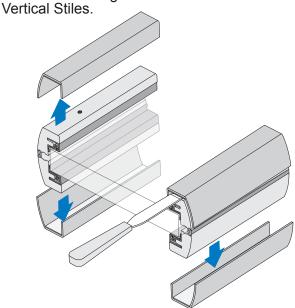
crlaurence.com 33 CRL

# **GLASS REPLACEMENT FOR DOORS** REMOVE DAMAGED GLASS

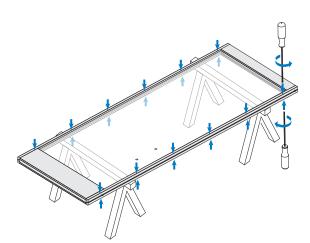
1 Support door on sturdy sawhorses. Remove door handles and panic or exit devices and store in a safe place.



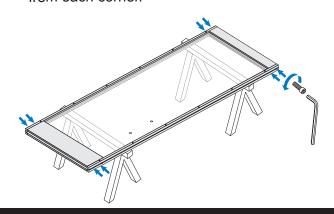
Remove Cladding from both sides of **(2**)



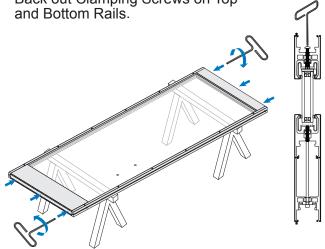
(3) Loosen Set Screws on both sides of Vertical Stiles.



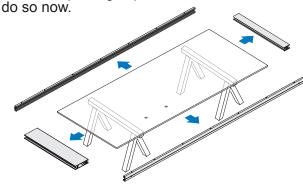
(5) Remove Socket Head Cap Screws from each corner.



Back out Clamping Screws on Top and Bottom Rails.



Remove Vertical Stiles and Top and Bottom Rails. If Gaskets are not in good condition, remove them. If replacing Top and Bottom Rail Cladding,

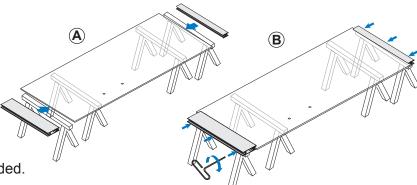


#### INSTALL REPLACEMENT GLASS

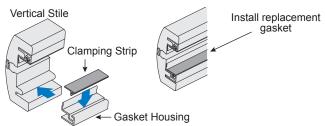
1 Verify replacement glass size and mounting hole placement for handles.



Place Top and Bottom Rails and tighten Clamping Screws. NOTE: Ensure Rails are properly supported until secured to Vertical Stiles.

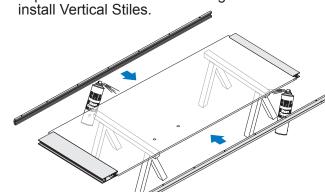


(3) Replace Gaskets in Vertical Stiles if needed.

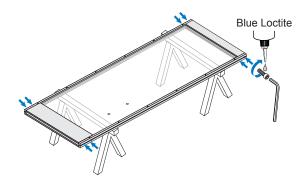


NOTE: The Vertical Stiles may be installed as three separate pieces. First apply the Clamping Strip to the glass, then fit the Gasket Housing over it and finally slide the Vertical Stile over it. This works well with oversized glass thickness.

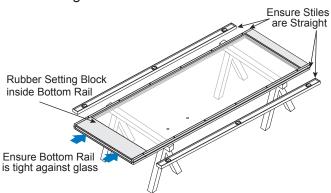
Spray glass edges with Cat. No. 1973 to prevent Gaskets from binding and install Vertical Stiles.



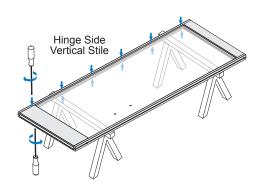
(5) Apply Blue Loctite to Socket Head Cap Screws and fasten Vertical Stiles to Top and Bottom Rails.



6 Push frame at bottom to ensure Setting Block is in contact with glass. Ensure Bottom Rail is tight against glass and Vertical Stiles are straight.



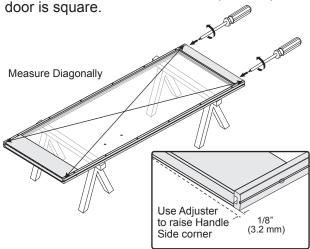
Tighten Set Screws evenly on Hinge Side of the Vertical Stiles. Torque 1/8 turn past tight.



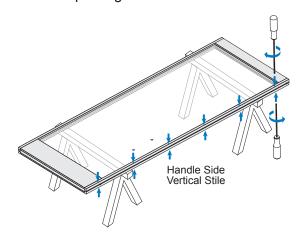
crlaurence.com 35 CRL

# INSTALL REPLACEMENT GLASS (CONTINUED)

Turn both adjuster screws in top rail clockwise until stops contact glass. Measure diagonally to corners. If needed, turn Adjuster again to raise corner a maximum of 1/8" (3.2 mm) until door is square.

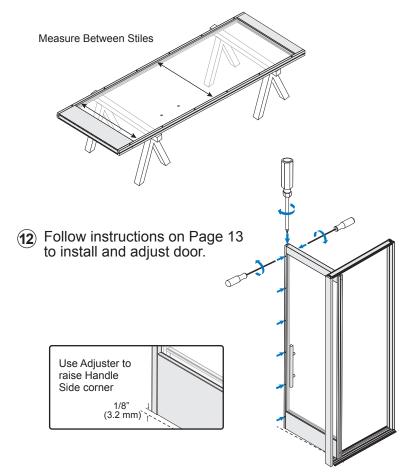


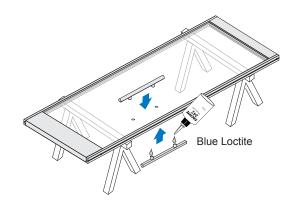
(9) Tighten Set Screws evenly on Handle Side of the Vertical Stiles. Torque 1/8 turn past tight.



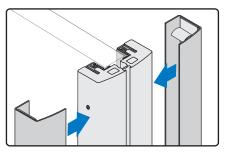
Measure between Vertical Stiles near Bottom Rail and again at middle to ensure Stiles are straight.







Remove liner from VHS Tape and apply Cladding to Vertical Stiles.



Roll On Pressure = 15 Pounds Per Linear Inch

NOTE: If Handle Side sags, loosen Set Screws and turn Adjuster to raise. Then tighten Set Screws.