INSTALLATION INSTRUCTIONS

SERIES 487-AR (ACOUSTICALLY-RATED) DOUBLE GLAZE OFFICE PARTITION SYSTEM

WITH 1-1/2" TRIM





Phone: (800) 421-6144 • Fax: (800) 582-7501 crlaurence.com • usalum.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 (CRL Cat. Nos. BC5GL or BC17A).
- 7. ACOUSTICAL 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.

IMPORTANT: READ THIS MANUAL THOROUGHLY BEFORE BEGINNING INSTALLATION

HANDLING, STORAGE, AND PROTECTION OF ALUMINUM

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.*

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SYSTEM REQUIREMENTS

Maximum wall thickness: 4-7/8" (124 mm).

Maximum unsupported total load on each sill: 50 lbs. (23 kg) each.

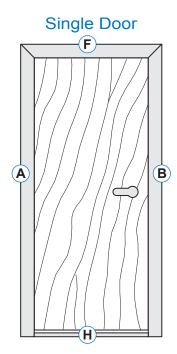
Note: Additional shim support under the sill member is required for any loads over 50 lbs (23 kg).

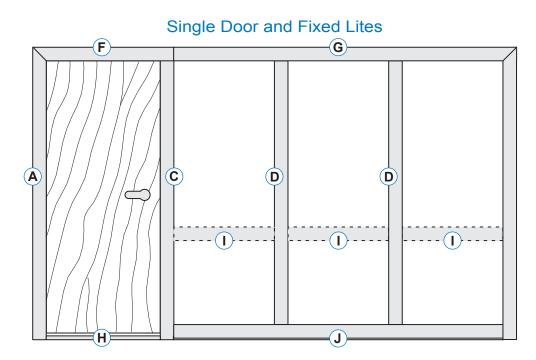
Interior use only.

EXTRUSION IDENTIFICATION

Your order has been carefully fabricated, inspected, and packaged to work order specifications. We have placed an Indicator Label on the inside or back side of each part before final packaging. Use the Identification Key (below) to organize and lay out each Series 487 Office Partition System before proceeding with the assembly process. The Key is viewed from the Push Side of the Door.

Technical support is available online at crlaurence.com and by phone at (800) 262-5151. Please have your Sales Order Number for easy reference.





- (A) Hinge Jamb
- B Strike Jamb
- C Strike Jamb / Fixed Mullion
- (D) Intermediate Vertical
- (E) Sidelite Wall Jamb

- Door Head
- Sidelite Head
- (H) Door Threshold
- Intermediate Horizontal
- Sidelite Sill

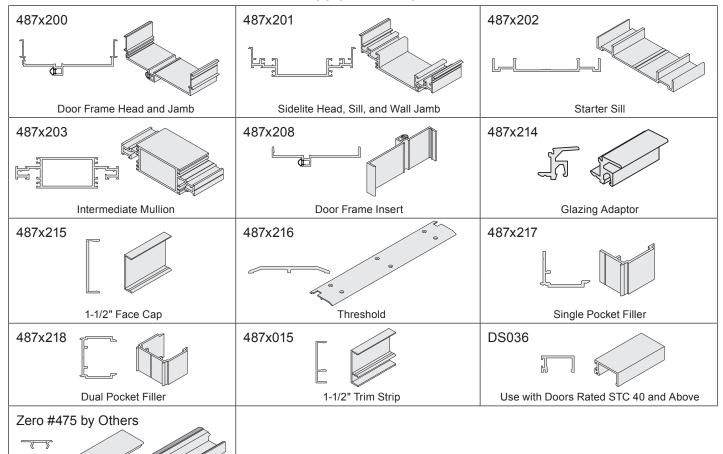


PARTS IDENTIFICATION

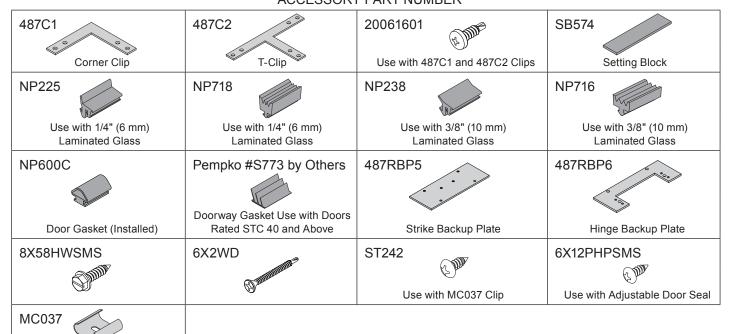
Adjustable Door Seal Body and Cover Use with Doors Rated STC 40 and Above

Snap Clip for DS036

EXTRUSION PART NUMBER



ACCESSORY PART NUMBER

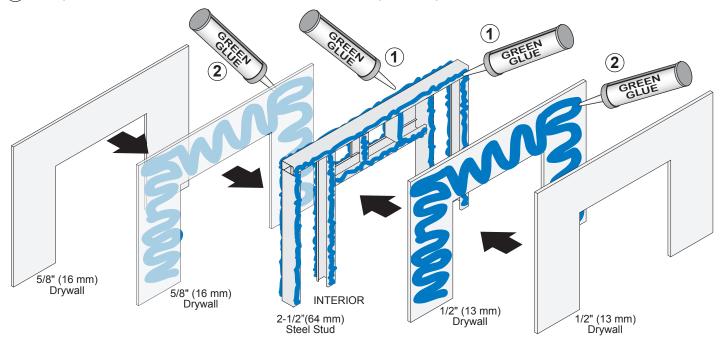


SOUND RATED DRYWALL INSTALLATION

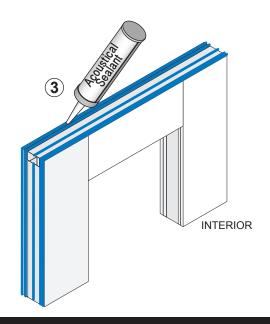
Follow instructions below for typical STC 52 rated wall installations. Refer to the CRL shop drawings for overall layout and to confirm dimensions.

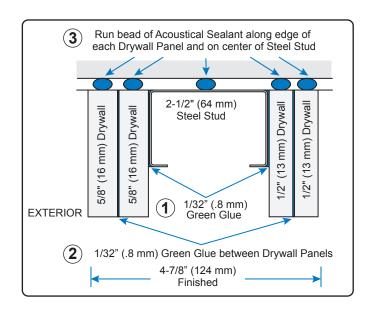
NOTE: Use 2-1/2" (64 mm) Steel Studs with two 1/2" (13 mm) Drywall Panels at interior and two 5/8" (16 mm) Drywall Panels at exterior. Separate panels with Green Glue as shown.

- 1) Apply 1/32" (.8 mm) Green Glue on Steel Studs and install first layer of Drywall Panels.
- (2) Apply 1/32" (.8 mm) Green Glue and install second layer of Drywall Panels.



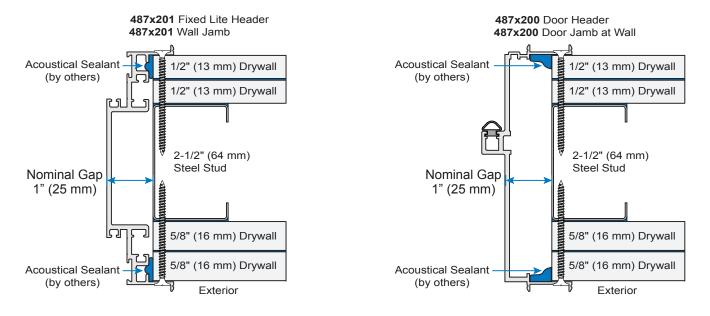
3 Run bead of Acoustical Sealant along edge of each Drywall Panel. Run another bead on center of Steel Studs at ceiling and sides.



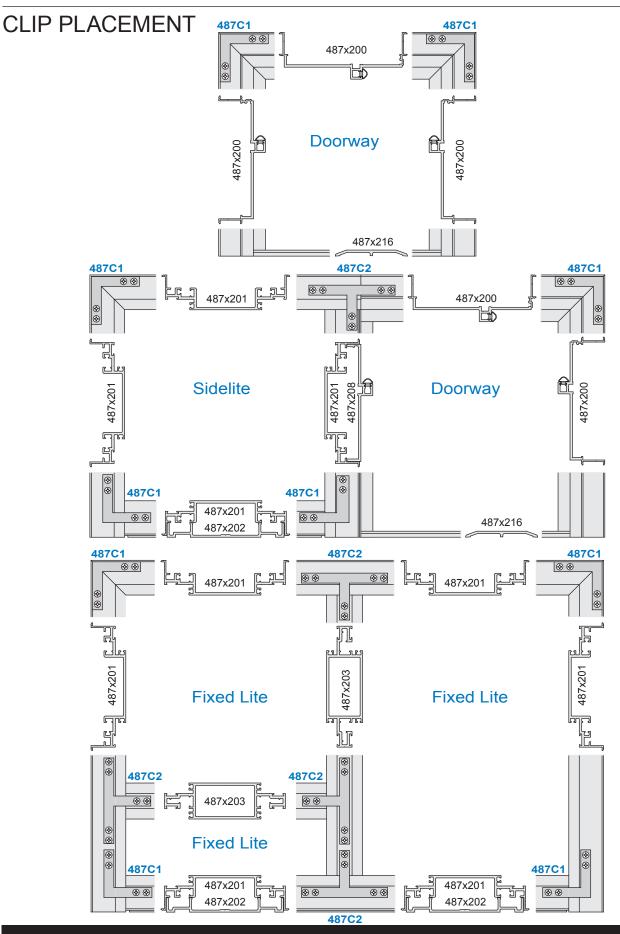


INSTALLATION NOTES The 487 Office Partition system requires that all rough openings have a maximum 4-7/8" (124 mm) finished wall thickness. NOTE: Ensure drywall thickness finishes at a standard 4-7/8" (124 mm). Cut wallboard flush with the metal stud. Ensure drywall is square and plumb. Check Measurements. If needed, shave wallboard to finish wall at 4-7/8" (124 mm) 1/2" (13 mm) Drywall 1/2" (13 mm) Drywall Critical Dimension 4-7/8" (124 mm) Finished Wallboard 2-1/2" (64 mm) Cut Flush to Steel Stud Steel Stud Critical Dimension 4-7/8" (124 mm) Interior Finished 5/8" (16 mm) Drywall 5/8" (16 mm) Drywall Exterior

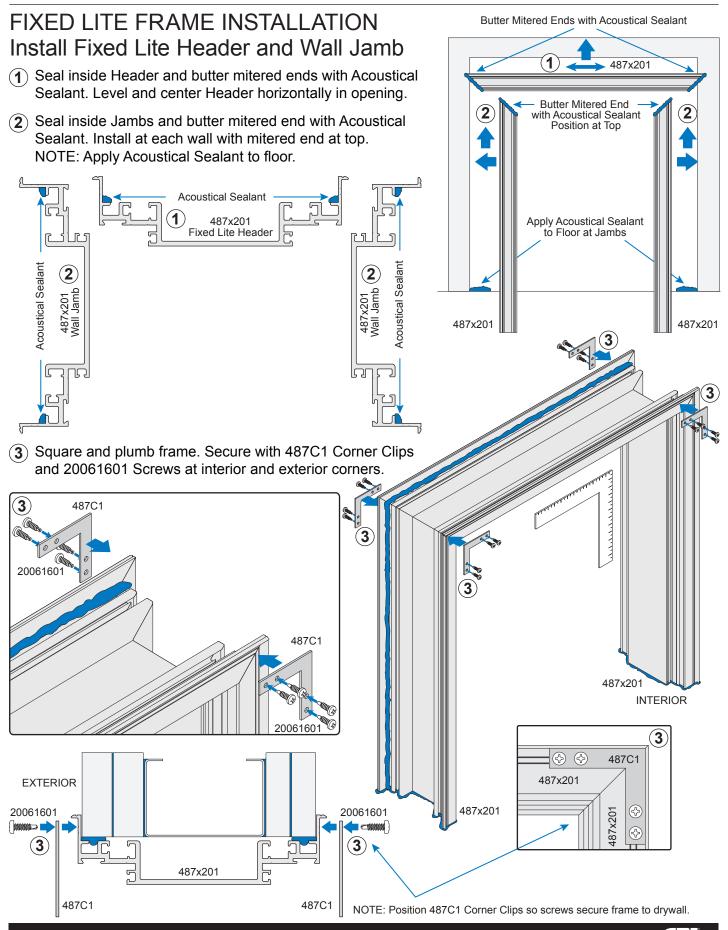
Maintain a nominal gap to allow for plus or minus adjustments when leveling and plumbing. Use 1" (25 mm) gap for sill, sidelite head and wall jambs and 3/4" (19 mm) nominal gap for door frame at wall.



Unless requested otherwise, all vertical members are cut with an additional 1-5/8" (41.3 mm) scribe length to allow for varying unlevel floor conditions. Do not trim scribe from the notched end of door frame or mitered ends of jambs, glass stops and trim strips.



WEALUMINUM



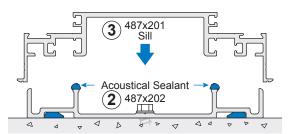
FIXED LITE FRAME INSTALLATION (CONTINUED)
Install Starter Sill and Sill

1 Apply Acoustical Sealant to bottom of 487x202 Starter Sill. Center in opening and secure.



NOTE: Starter Sill is cut 1/8" (3 mm) shorter than the D.L.O.

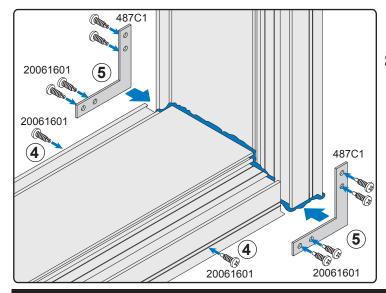
- (2) Apply Acoustical Sealant to Starter Sill.
- 3 Butter ends of 487x201 Sill with Acoustical Sealant and install.

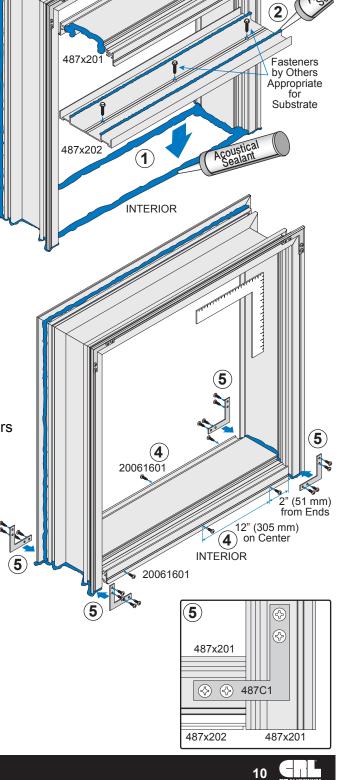


Level and secure Sill to Starter Sill at interior and exterior with 20061601 Screws. Space screws 2" (51 mm) from ends and 12" (305 mm) on center.



(5) Secure to Jambs at interior and exterior bottom corners with 487C1 Corner Clips and 20061601 Screws.



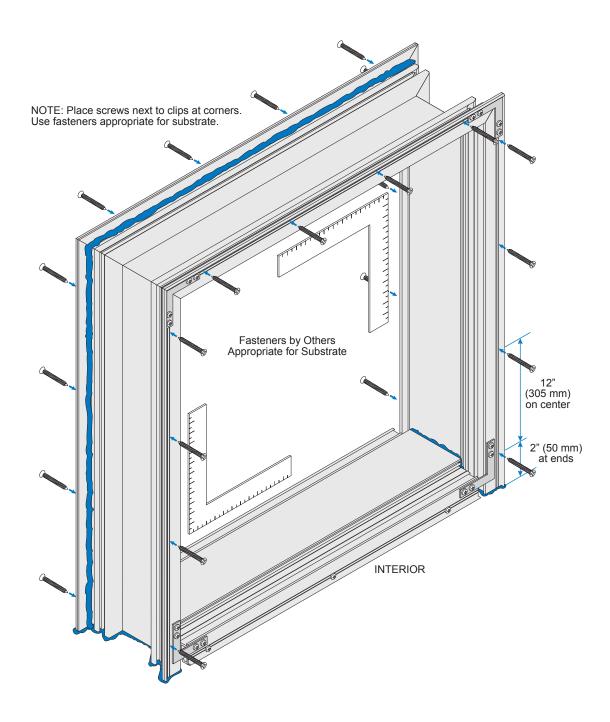


Butter Ends with Acoustical Sealant

FIXED LITE FRAME INSTALLATION (CONTINUED)

Secure Frame to Wall

Square and plumb frame. Secure frame to wall at interior and exterior. Space screws 2" (50 mm) from ends and 12" (305 mm) on center.

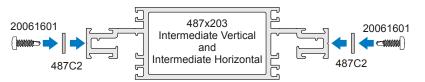


NOTE: If no Intermediate Vertical and/or Horizontal Mullions are required, proceed to Frame Sealing on Page 12.

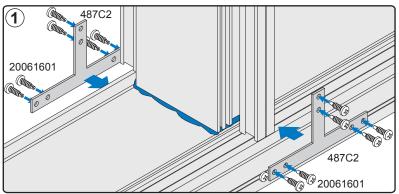


FIXED LITE FRAME INSTALLATION (CONTINUED) Install Intermediate Vertical and Horizontal Mullions

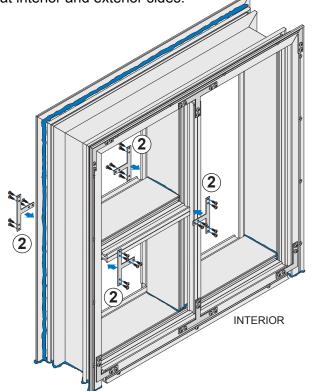
NOTE: Install 487x203 Intermediate Verticals before installing 487x203 Intermediate Horizontals. Butter ends with Acoustical Sealant before installing.

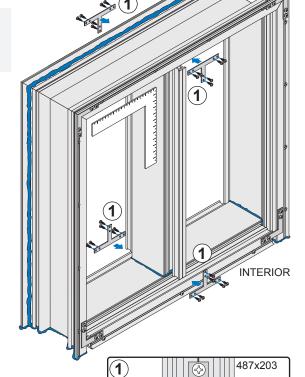


1 Install Intermediate Verticals between Sidelite Header and Sill. Square and plumb. Secure with 487C2 T-Clips and 20061601 Screws at interior and exterior top and bottom.



2 Install Intermediate Horizontals. Square and plumb. Secure with 487C2 T-Clips and 20061601 Screws at interior and exterior sides.

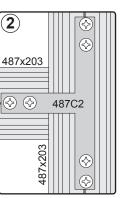


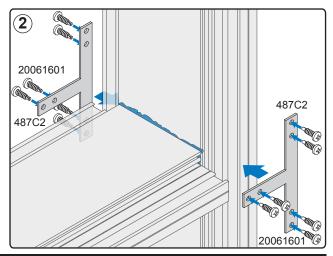


487C2

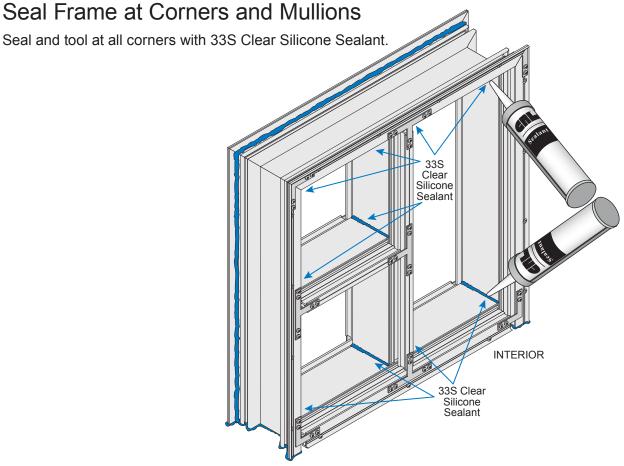
487x201 with 487x202

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FIXED LITE FRAME INSTALLATION (CONTINUED)



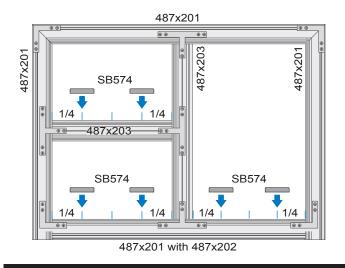
GLAZING SEQUENCE

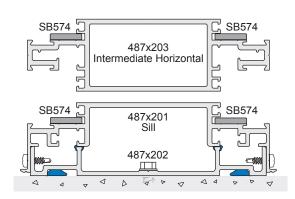
Glass Size

Glass Size = D.L.O. + 5/8" (16 mm) or allow 5/16" (8 mm) Glass Bite at Each Pocket

Install Setting Blocks

Place SB574 Setting Blocks at quarter points in each interior and exterior opening.





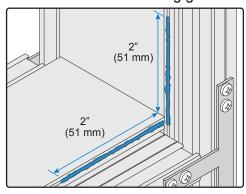
INTERIOR

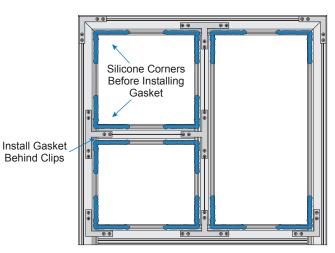
GLAZING SEQUENCE (CONTINUED)

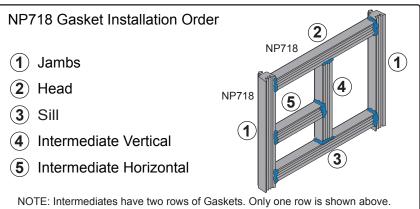
Install NP718 Gaskets

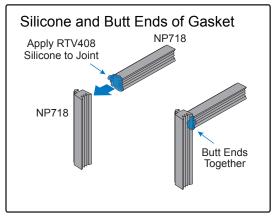
Install NP718 Gasket in pieces in the order shown below. Before inserting gasket, apply Silicone at each corner of frame. Silicone and butt ends of gaskets. Install at interior and exterior.

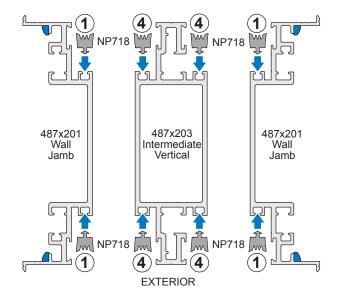
Silicone frame reglets 2" (51 mm) at corners before installing gasket.

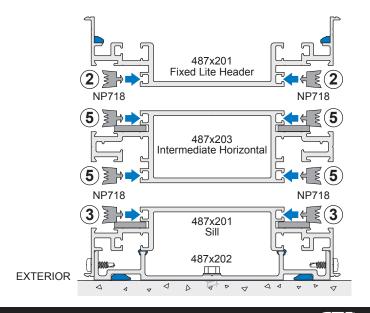










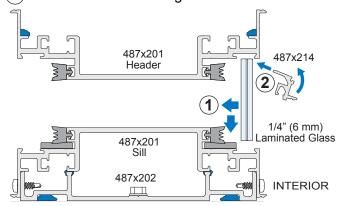


GLAZING SEQUENCE (CONTINUED)

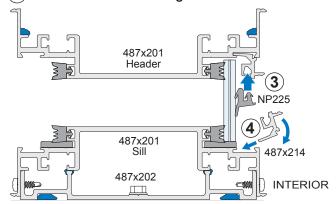
Install Glass Panels

Install one panel at a time. Horizontal 487x214 Glazing Beads run through. Install NP225 Gasket in continuous loop for each opening. Cut Gasket 1/8" (3 mm) longer per foot. Crowd into reglet.

- 1 Place Glass Panel on Setting Blocks and center in opening. Hold vertical.
- Insert 487x214 Glazing Bead at Head.



- (3) Use 1" (25 mm) pieces of NP225 Gasket near ends of Head to temporarily hold glass.
- Insert 487x214 Glazing Bead at Sill.



(5) Use 1" (25 mm) pieces of NP225 Gasket near ends of Sill.

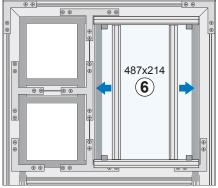
INTERIOR

Insert temporary NP225 Gaskets near ends of Panel. Remove when installing continous gasket.

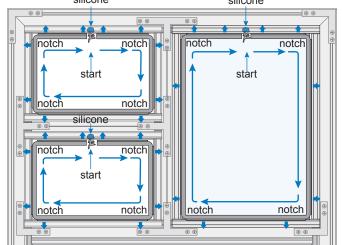
NOTE: Exterior Header to Sill

panel shown. Others similar.

(6) Install 487x214 Glazing Bead at Verticals.



Cut NP225 Gasket 1/8" (3 mm) longer per foot and crowd into reglet. Begin at center top and notch at corners. Silicone joint. silicone silicone





(8) Repeat Steps 1 - 7 above to install Exterior Panels.

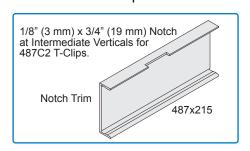
TRIM INSTALLATION

Install 487x015 Trim Plates on 487x200 Door Header and Jambs. Install 487x215 Trim Plates on 487x201 and 487x203 members. Position mitered ends as shown below. Notch Horizontal Trim Plates at Intermediate Verticals for 487C2 T-Clips.

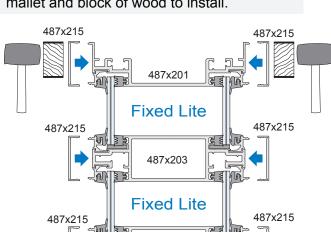
487x215

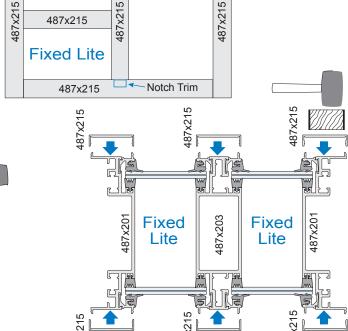
Fixed Lite

487x215



NOTE: Tap 487x215 Trim Plates with rubber mallet and block of wood to install.

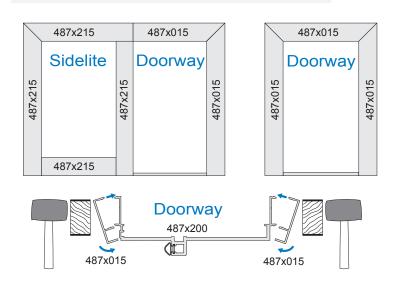


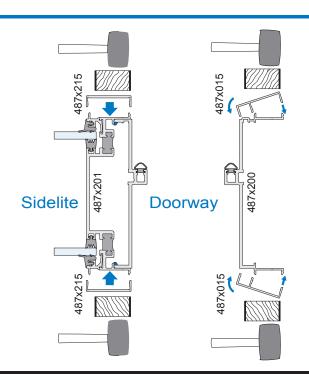


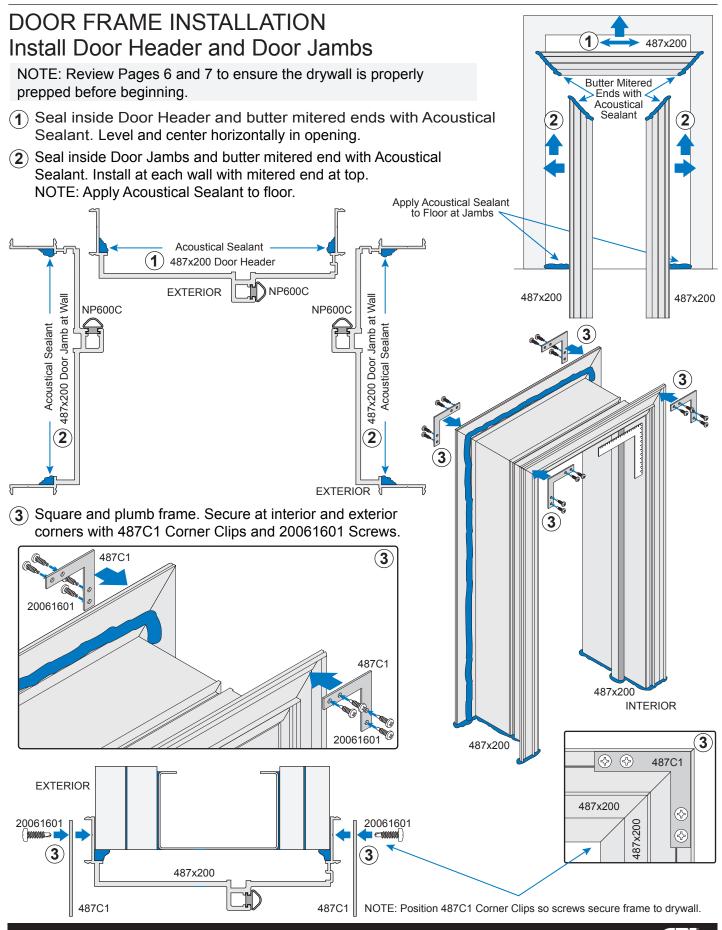
Notch Trim

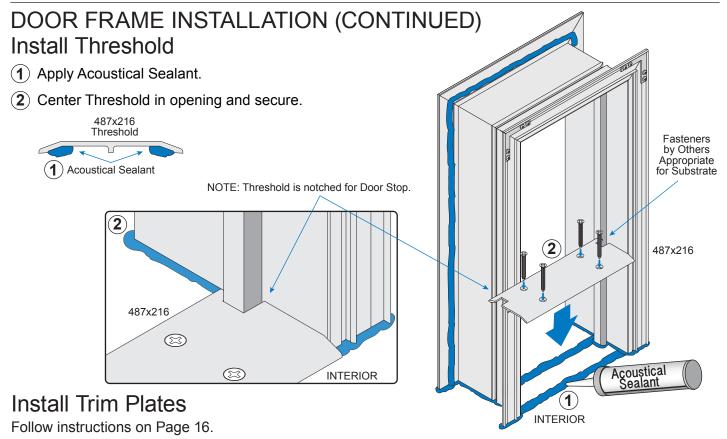
Fixed Lite

NOTE: Tap 487x015 Trim Plate with rubber mallet and block of wood to install at Doorway.









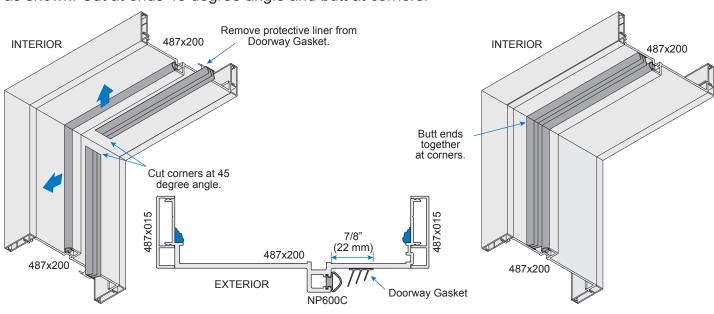
Hang and Adjust Door

Follow the Installation Instructions included with your door.

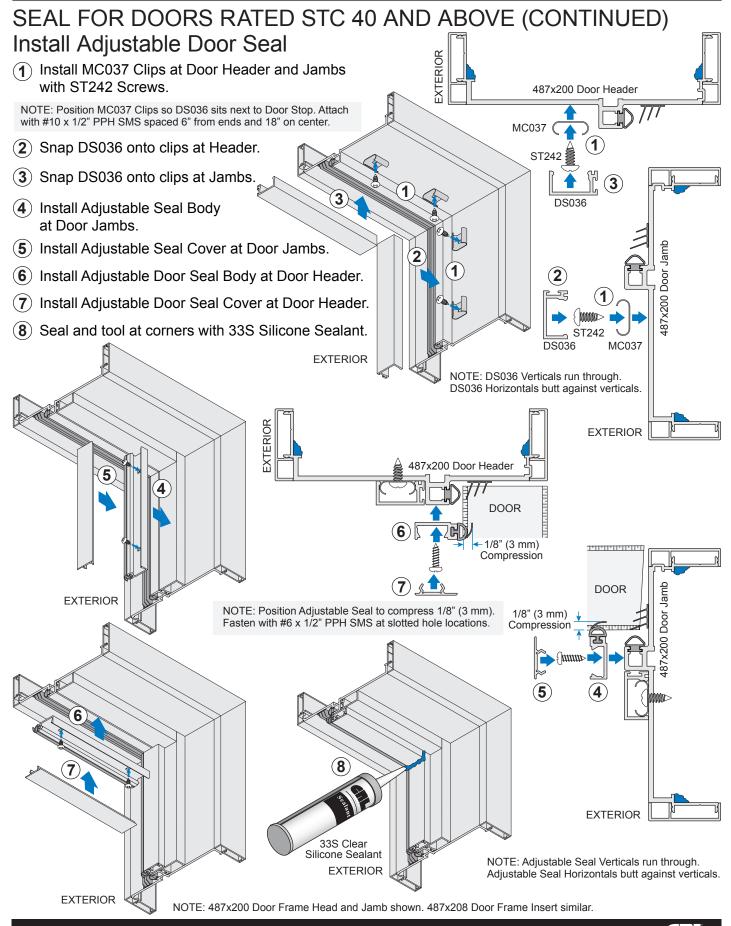
Install Closer (Optional)

SEAL INSTALLATION FOR DOORS RATED STC 40 AND ABOVE Install Doorway Gasket

Remove protective liner from back of Doorway Gasket. Install on Door Header and Jambs as shown. Cut at ends 45 degree angle and butt at corners.





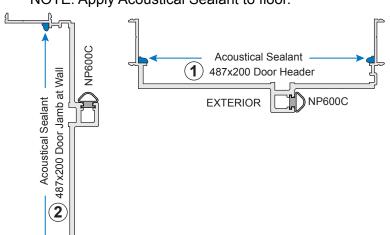


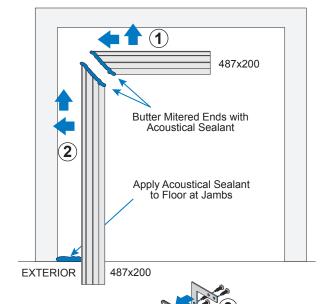
DOOR WITH SIDELITE FRAME INSTALLATION

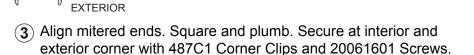
Install Door Header and Door Jamb

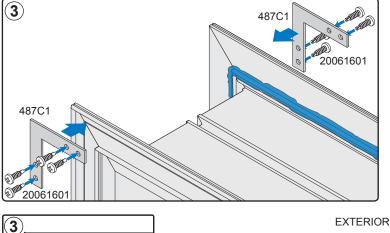
NOTE: Review Pages 6 and 7 to ensure the drywall is properly prepped before beginning.

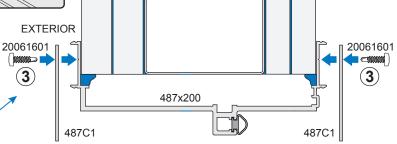
- (1) Seal inside Door Header and butter mitered end with Acoustical Sealant. Place mitered end at wall.
- (2) Seal inside Door Jamb and butter mitered end with Acoustical Sealant. Install at wall with mitered end at top. NOTE: Apply Acoustical Sealant to floor.











487x200

EXTERIOR

NOTE: Position 487C1 Corner Clips so screws secure frame to drywall.

(3)

487x200

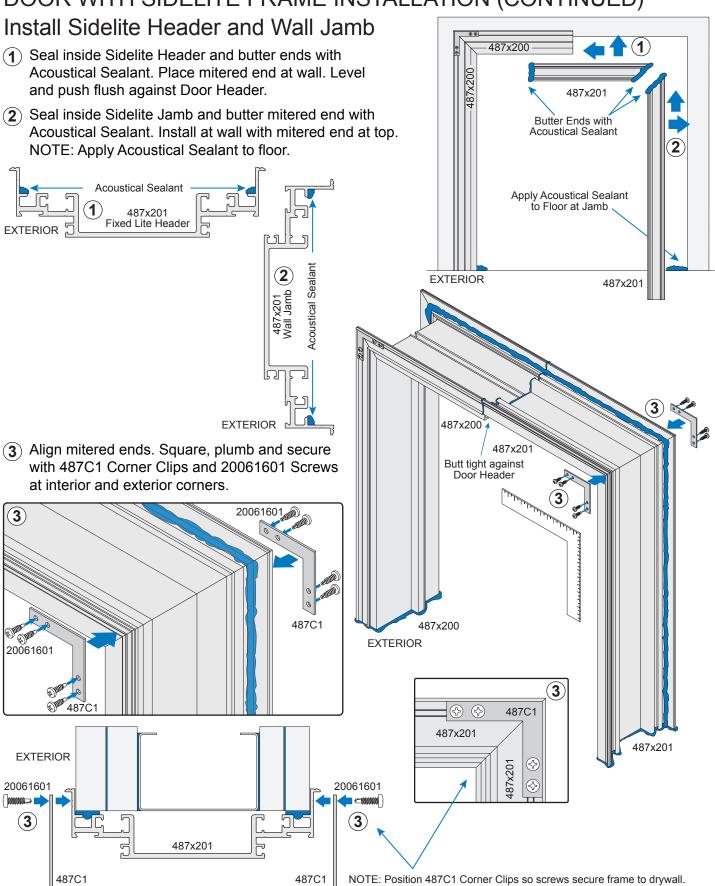
(4)

487x200

487C1

487×200

DOOR WITH SIDELITE FRAME INSTALLATION (CONTINUED)

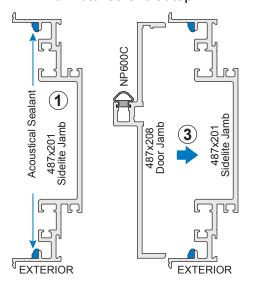


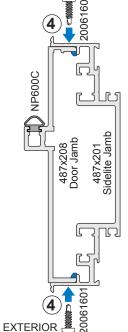
DOOR WITH SIDELITE FRAME INSTALLATION (CONTINUED) Install Sidelite Jamb at Door and Door Jamb

Seal inside Sidelite Jamb and butter top end with Acoustical Sealant.

2 Butt top of Sidelite Jamb against bottom of Sidelite Header at door. Position back of Sidelite Jamb flush with end of Sidelite Header.

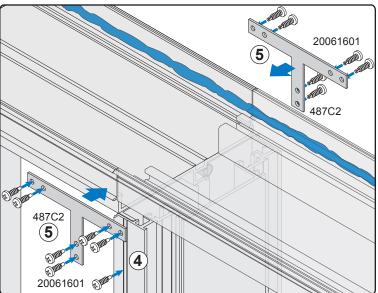
3 Fit Door Jamb into Sidelite Jamb with notched end at top.

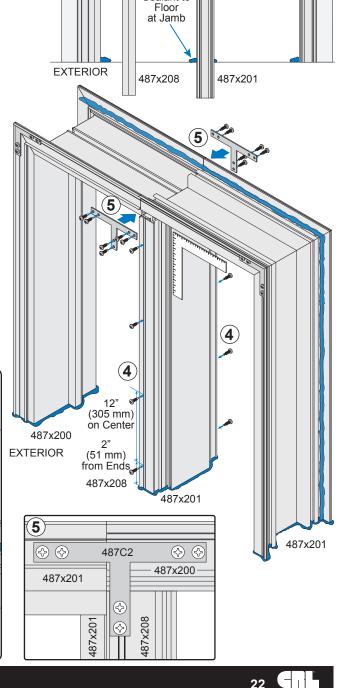






Secure to Header with 487C2 T-Clips and 20061601 Screws at interior and exterior.





Align Ends

Butter Ends

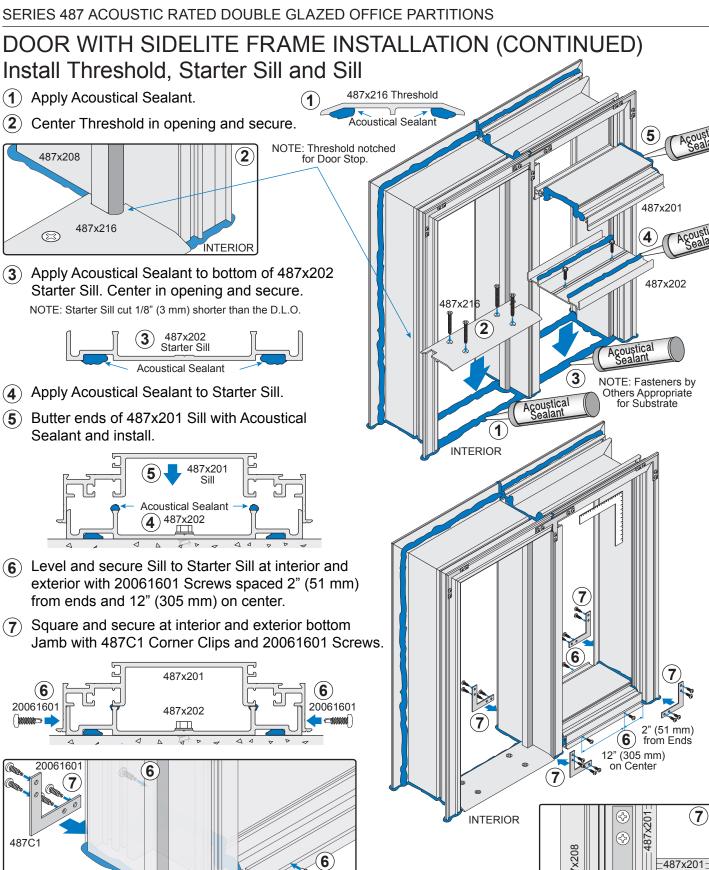
with Acoustical

Sealant

Apply Acoustical

Sealant to

(2)



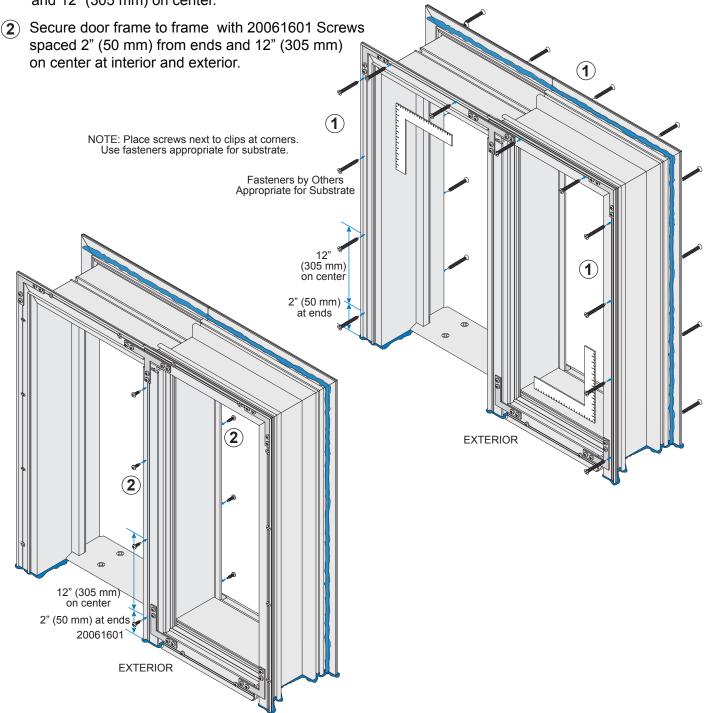
(33)

487C1

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DOOR WITH SIDELITE FRAME INSTALLATION (CONTINUED) Secure Frame to Wall

Square frame and secure to wall at interior and exterior with screws spaced 2" (50 mm) at ends and 12" (305 mm) on center.



Follow instructions on Page 13 to install Intermediate Mullions. If no Intermediate Mullions are required, seal and tool joints as shown on Page 14. Continue with glazing on Pages 14 - 16 and Trim Installation on Page 17. Follow steps on Page 19 to prepare and install door.



