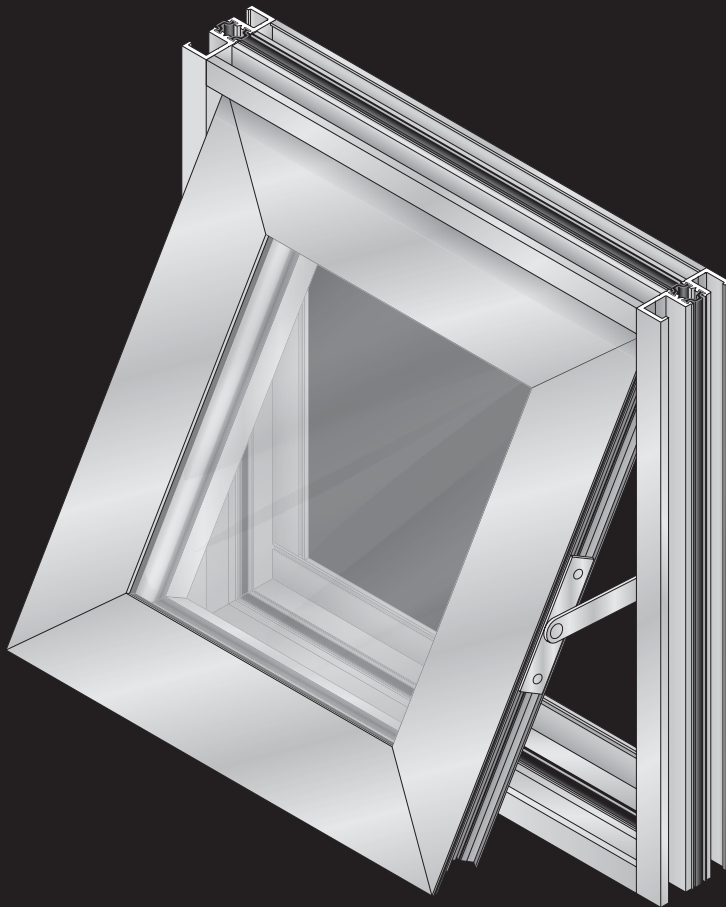


# INSTALLATION INSTRUCTIONS

## SERIES 7400 WINDOW SYSTEM



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# SERIES 7400 WINDOW SYSTEM

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# INSTALLATION INSTRUCTIONS

## GENERAL NOTES

### 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 quantity and keep records of where various materials are stored.

#### C. KEEP MATERIAL 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.***

The rapidly changing technology within the architectural aluminum products industry demands that United States Aluminum reserve the right to revise, discontinue or change any product line, specification or electronic media without prior written notice.

**NOTE:** Dimensions in parentheses ( ) are millimeters unless otherwise noted.

Other metric units shown in this manual are:

m - meter	Kg - kilogram
Pa - pascal	KPa - kilopascal
MPa - megapascal	N - newton

# 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 general nature and cover most conditions.
2. **INSTALLATION.** All materials are to be installed plumb, level and true.
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. United States 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. Gap between expansion members should be based on temperature at time of installation.
11. **WATER HOSE TEST.** As soon as a representative amount of the wall has been glazed (500 square feet or 46.5 m<sup>2</sup>) a water hose test should be conducted in accordance with AAMA 501.2 specifications to check the installation. On all jobs the hose test should be repeated every 500 square feet (46.5m<sup>2</sup>) during the glazing operation.
12. **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.).
13. **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.

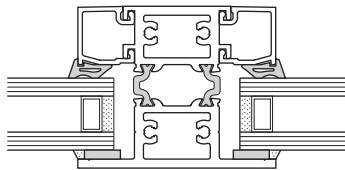
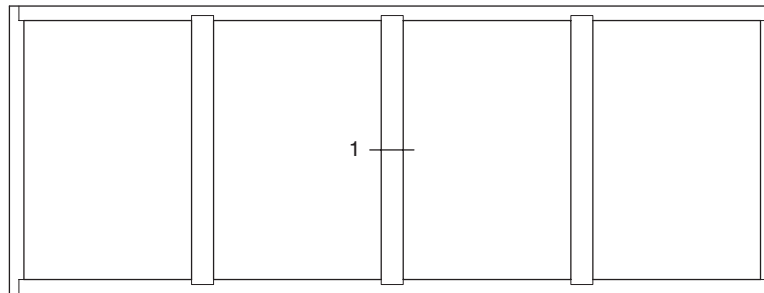
# SERIES 7400 INSTALLATION INSTRUCTIONS

These instructions cover installation and glazing of project-out awning, project-in awning, casement, fixed, and combination windows.

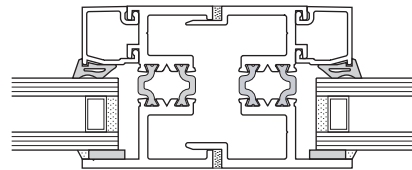
Allow a minimum clearance of 1/8" (3) around the perimeter. Awning, casement and fixed light frames are pre-fabricated, sealed and assembled at the factory. Some multi-bay fixed light applications may require minor assembly in the field. Awning and casement windows may be glazed in the shop or on the jobsite. All fixed lights must be glazed on the jobsite after frame installation.

Due to the disparity of national and local building codes, these installation instructions do not address specific perimeter application or building envelope issues. It is the responsibility of the Glazing Contractor to insure that all applicable codes are met in the installation of this system.

Consult factory if more than four (4) bays of adjacent fixed lights are used. See **(DETAIL A)**.



1  
STANDARD



1  
OPTIONAL STACKING

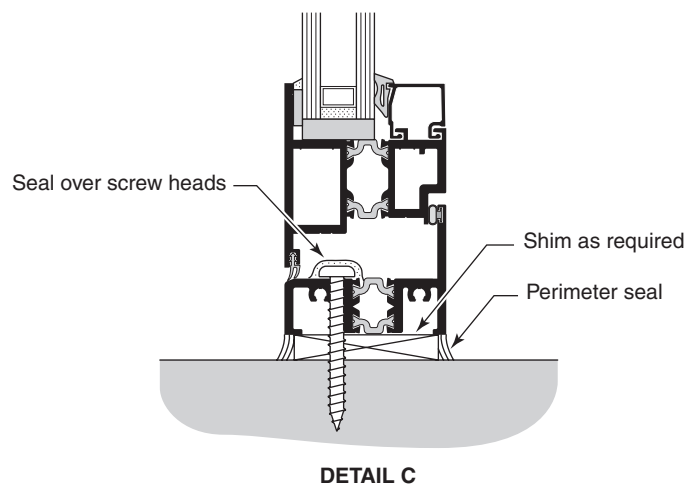
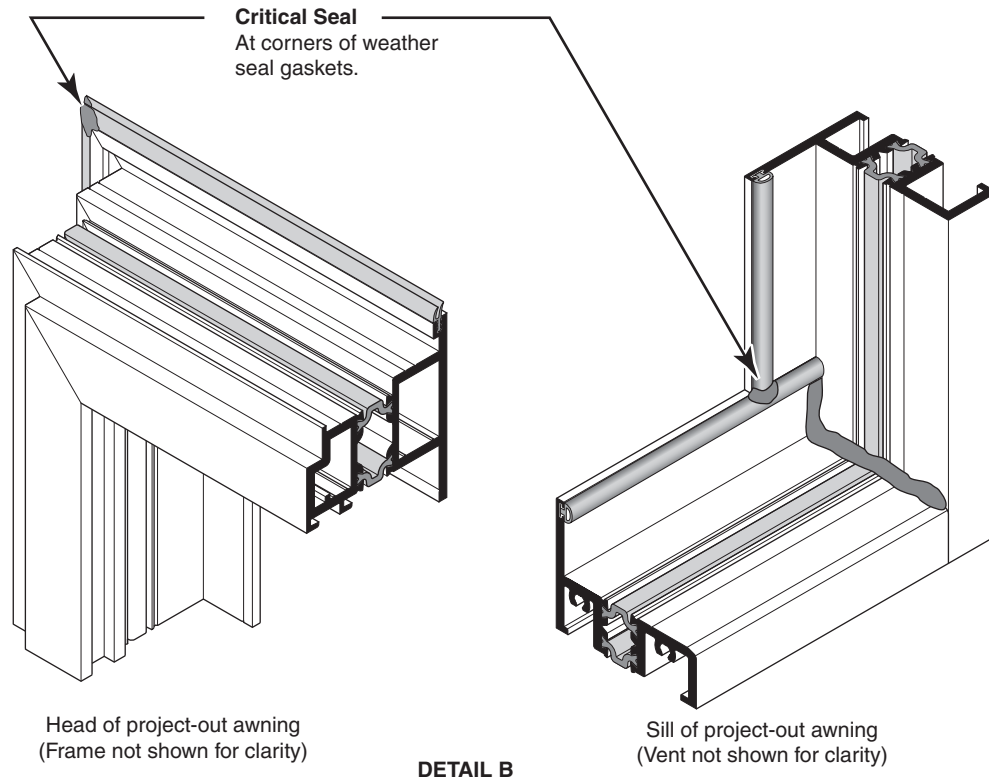
FIXED LIGHT INTERMEDIATE MULLION

**DETAIL A**

# SERIES 7400

## FRAME INSTALLATION

1. Visually inspect all frames upon receipt to insure that baffles and weep gates have not been jarred loose during shipment. Additionally, inspect corners of all interior bulb gaskets at operable vents to insure they are thoroughly sealed. See (**DETAIL B**). Re-apply small joint sealant as required, leaving vent open for proper drying.
2. Shim as required around perimeter of frame. See (**DETAIL C**).
3. Set frame in opening plumb and level.
4. Secure frame to perimeter 3" (76) from corners and 12" (305) O.C. or as instructed by shop drawings. For combination frames, place perimeter fasteners 3" (76) from intersection of horizontal and vertical members and 12" (305) O.C. or as instructed by shop drawings. Seal over perimeter fasteners.
5. Apply and tool perimeter sealant around framing. See (**DETAIL C**).



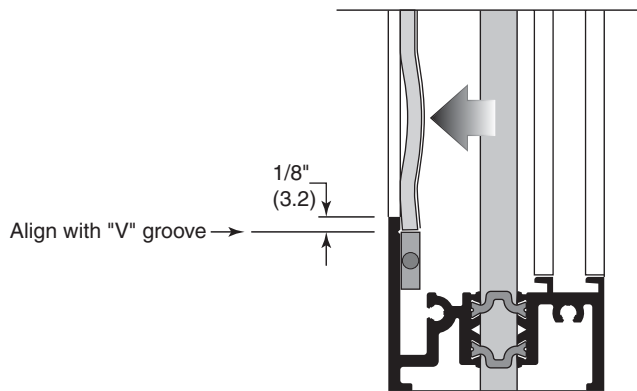
# GLAZING

## GLASS SIZES

Series 7400 = Daylight Opening (D.L.O.) + 1" (25.4).

**NOTE: This formula does not take into account glass tolerances.  
Consult glass manufacturer before ordering glass.**

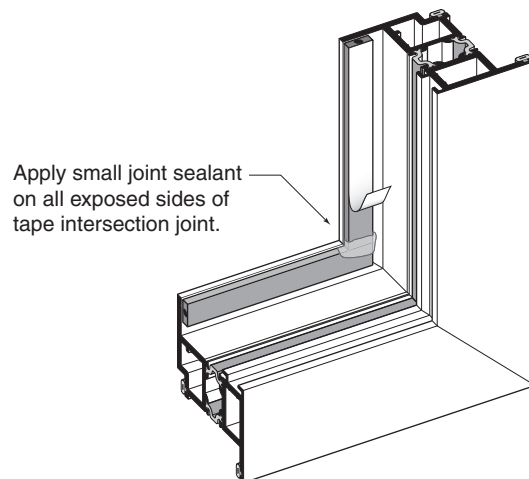
1. Cut interior wedge gasket (WH344) to size. Gaskets should be 1/8" (3) longer per foot of aluminum member to allow for shrinkage.
2. Place setting blocks at quarter points or as instructed by shop drawings.
3. Clean glazing fins with solvent prior to applying WH275 pre-shimmed glazing tape.
4. Apply tape full length of horizontal members, flush with the top of the fin. Apply tape to the vertical members, butting tight to the horizontal tape, leaving an extra amount at each end to insure a tight joint. See (**DETAIL D**).



**NOTE:**  
Tape must be cut 1/8" (3) long at each end. Press the cut ends against horizontal tape leaving excess material as shown in **Detail D**. Then press excess tape into place.

**DETAIL D**

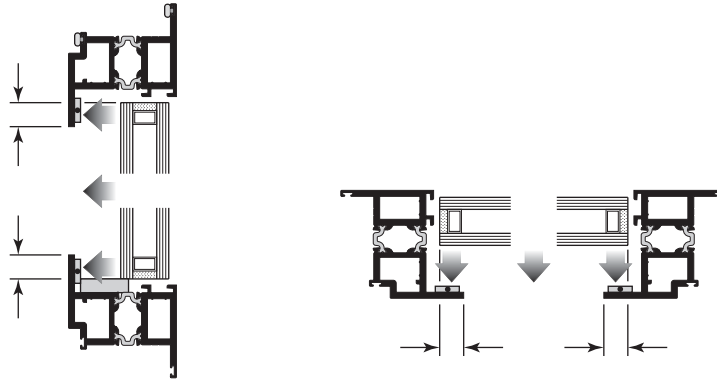
5. Prior to glazing, peel protective paper from the glazing tape. **DO NOT TOUCH** exposed tape surfaces with fingers or any tool. Seal tape intersections with small joint sealant. (See **DETAIL E**).  
**NOTE:** Do not leave glazing tape surface unprotected, paper should only be removed when glass is ready to be set.



**DETAIL D**

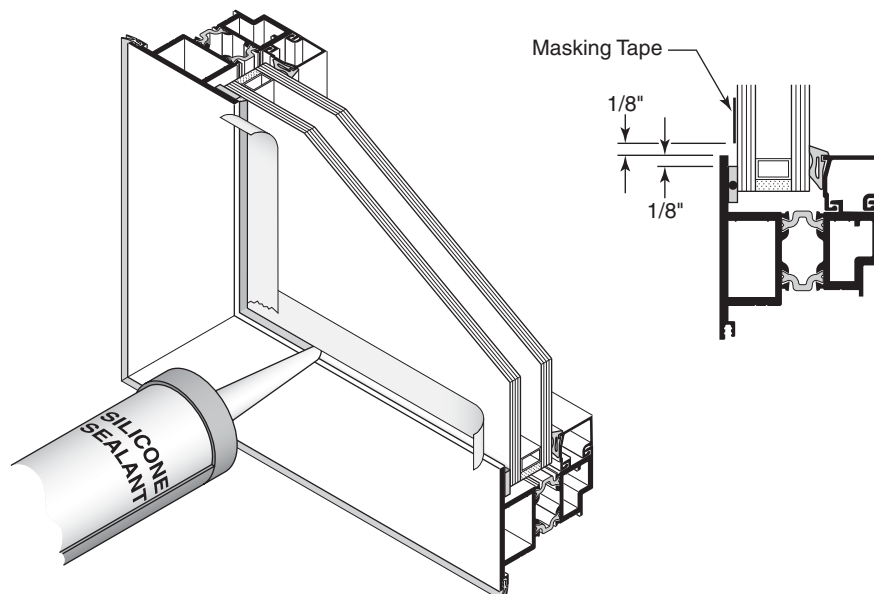
6. Before setting glass, clean all contact areas of glass with solvent. It is important that these cleaned areas are not touched or contaminated by foreign matter to insure a proper seal.
7. Install glass onto setting blocks. Before setting glass against tape, check for proper glass bite along the top and sides. Push glass firmly onto the glazing tape, making sure that all sides of the glass have uniform contact with the glazing tape. (See **DETAIL F**). Apply glazing stops and wedge gaskets to complete glazing.

**NOTE:** Glass must **NOT** be pulled away from the tape once contact is made. If this occurs, tape must be replaced and glass must be re-cleaned.



**DETAIL F**

8. Mask off perimeter of glass 1/8" (3.2) from aluminum fin to receive silicone cap bead. See **DETAIL G**
9. Fill the reveal with silicone sealant and tool.
10. After tooling and while sealant is still wet, carefully remove tape.



**DETAIL G**