ALL WEATHER
ARCHITECTURAL ALUMINUM

# SERIES 8000 THERMALLY BROKEN ALUMINUM SLIDING DOOR

PRODUCT SPECIFICATIONS | EXTRUSION DETAILS | TEST REPORTS

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ARCHITECTURAL ALUMINUM

# SERIES 8000
# THERMALLY BROKEN ALUMINUM SLIDING DOOR

## INTRODUCTION

Series 8000 product line uses 6063 extruded aluminum age hardened to a T-6 rating for strength and durability. The profiles for this series are extruded as two separate parts and are then joined into a single profile using thermal struts. The aluminum extrusions are knurled and then crimped along the thermal profile to ensure a tight grip. The finished profile is now thermally broken providing both improved thermal performance as well as improved condensation resistance. We currently are using two 14.6 mm offset thermal strut in the frame, 31.9 struts in the lead stiles, top and bottom, and a 24 strut on the interlocker.

The Series 8000 Sliding Door line is available in the following finishes:

- Class I Clear Anodized**
- Class I Bronze Anodized**
- Standard White
- Custom Anodized
- 70% Kynar Paint Color
- A combination of the above finishes on the Interior vs. Exterior
- Before the interior and exterior profiles are joined with the thermal strut, they can be painted or anodized with separate colors for a two-toned window.

*** Indicates Finishes In Stock.*

## STRUCTURAL TESTING

Series 8000 sliding patio door meets AAMA standards as listed below: (Please see test reports located in the back of this section for door sizes.)

- Series 8000 Thermal Break Sliding Door XO – SD – C30

All Weather has comprehensive files containing all historical testing. Each of the tests in the proceeding list are current, however, our archived testing may be more specific for your particular project and will be provided upon request.

## ACOUSTICAL TESTING

Series 8000 sliding patio door meets the following STC performance ratings:

- STC 37 / OITC 29 ¼" over 3⁄16" with a 1" OA
- STC 37 / OITC 30 ¼" Lami over 3⁄16" with a 1" OA
- STC 38 / OITC 31 5⁄32" over 3⁄8" Lami with a 1" OA

## THERMAL TESTING

Series 8000 sliding patio door has been simulated and tested according to NFRC 100/200/500.

- U-Factor as low as .32 at standard NFRC Size

## CONSTRUCTION

Corners of frame, vent and fixed panels are square cut and screwed together for structural integrity. All muntin and other intermediate bars are firmly attached to their cross joints and their abutting sash sections. The frame sill contains weep provisions. All surfaces to be glazed are marine glazed.

## HARDWARE

### Handles

Our standard handle is a pull handle on the vent with an interior thumb-turn locking mechanism. Keyed exterior locks are available with this handle. Flush-mount (recessed pull) handles are available as an upgrade. If a keyed lock is desired with the flush-mount, a separate Adams Rite keyed locking cylinder will be installed.

### Rollers

Standard rollers are 3" stainless steel precision bearing rollers.

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## SCREENS

Screens are made of extruded aluminum to match the window frame and use charcoal fiberglass mesh. Ultraview mesh is available upon request. Standard screens available on XO, OX, OXXO configurations.

## GLAZING

The Series 8000 offers a 1" OA on insulating glass units.

## WEATHER-STRIPPING

Our Series 8000 Sliding patio doors are weather stripped with pile weather-stripping. All of the weather-stripping utilizes triple-fin and quiet-fin technology to reduce noise during operation and improve weathering performance.

## INSTALLATION GUIDELINES

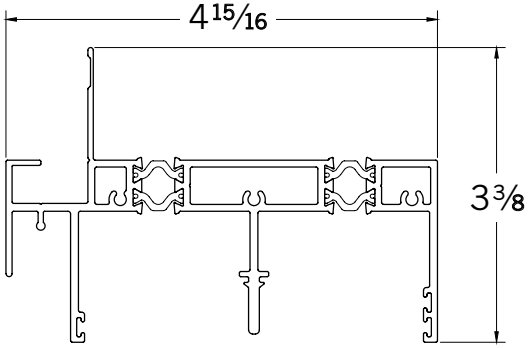
- Units ship with glazed panels and knock down frame for on-site assembly.
- All doors must be installed in prepared openings in accordance with AAMA recommendations and the below-listed manufacturers' recommendations. *If shop drawings are required, please refer to approved shop drawings for installation.*
- Each unit must be installed level, plumb and square with a ¼" clearance on the jambs and the header of the door.
- For nail-on applications the header must not be nailed. You may place a nail ½ inch above the fin and bend it over the fin, to allow for header deflection.
- Remove wet plaster, mortar, stucco and cement immediately. (Note: doors should only be cleaned with mild soap and water.)
- Do not set items on the sill or use it for any other purpose.
- In nail-on applications, a bead of caulking material should be applied to the inside nail-on fin just before installation to insure a water-tight seal between the building and the door.
- Any attachment screws or bolts should be sealed during the process of installation.
- The 8000 frame is hollow so a clearance hole for the head of the fastener should be used to fasten the outer most web to the building. The head of the fastener must be sealed to the frame and the clearance hole should be filled and capped.
- After installation is completed, building paper and stucco wire, if a stucco application, should overlap the window nail-on flange.

## CARE & MAINTENANCE

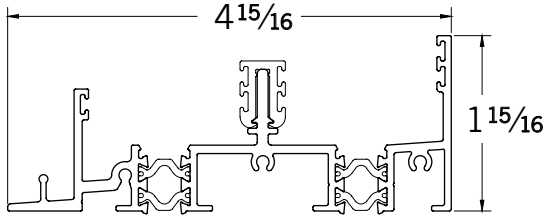
- Doors should be kept free of all dust, dirt, paint and plaster.
- The sill should be kept clean at all times. A vacuum cleaner with a crevice attachment is recommended.
- Doors should only be cleaned with mild soap and water.
- **Caution:** Damage will occur to the finish and to the sealed glass unit if solvents, petroleum products, or caustic chemicals, such as acetone or paint thinner are used to clean window frames. Damage caused by this type of abuse is not covered under warranty.

# SERIES 8000
# ASSEMBLY DRAWINGS

## 821 HEAD

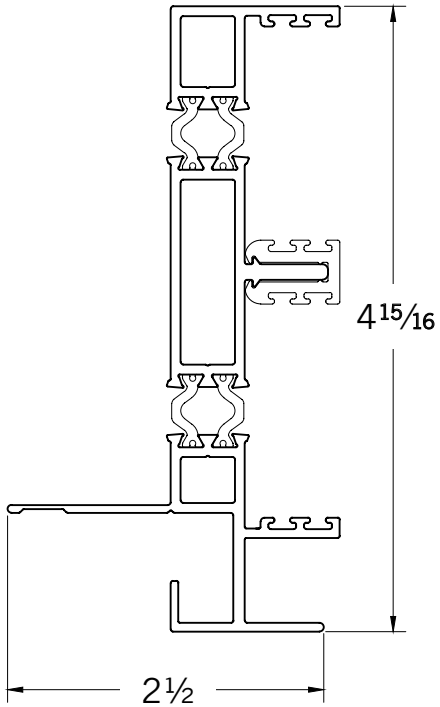



## 822 SILL



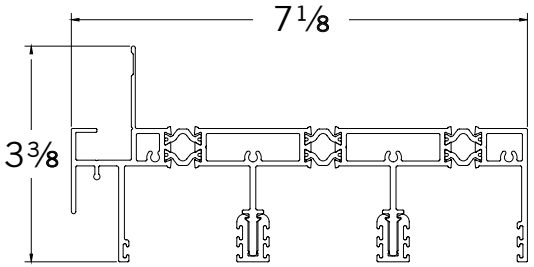
# SERIES 8000
# ASSEMBLY DRAWINGS

## 823 JAMB



# SERIES 8000
# ASSEMBLY DRAWINGS

## 831 HEAD 3 TRACK

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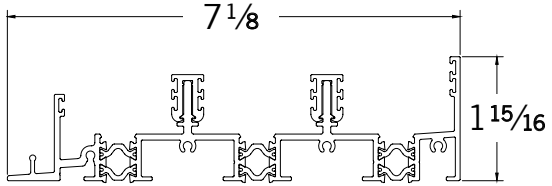

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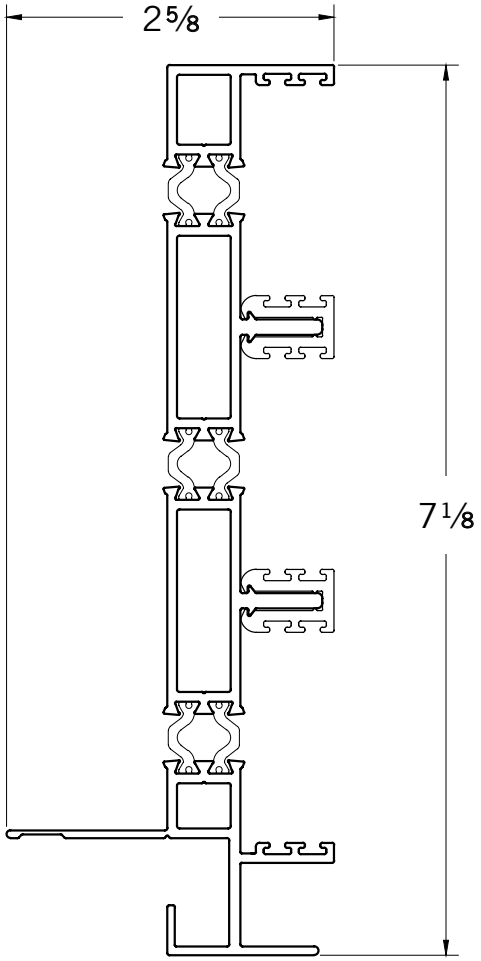
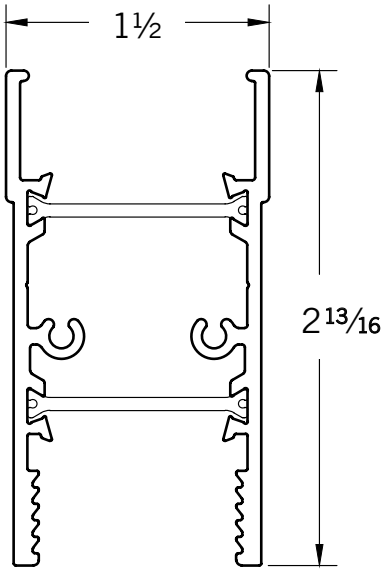
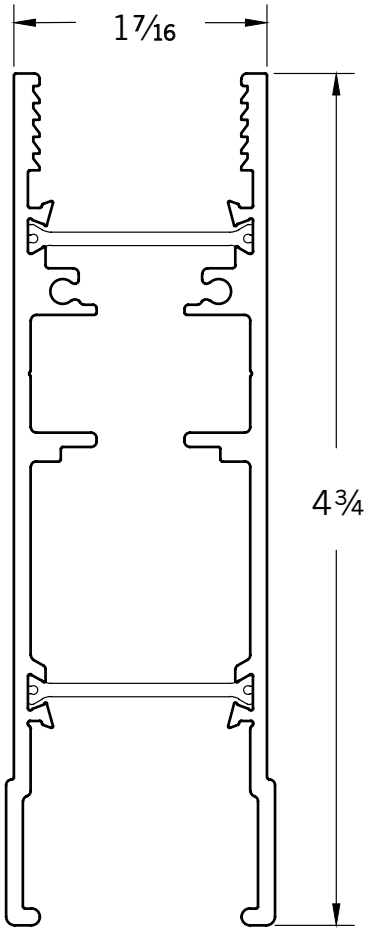


# SERIES 8000
# ASSEMBLY DRAWINGS

## 801 TOP RAIL

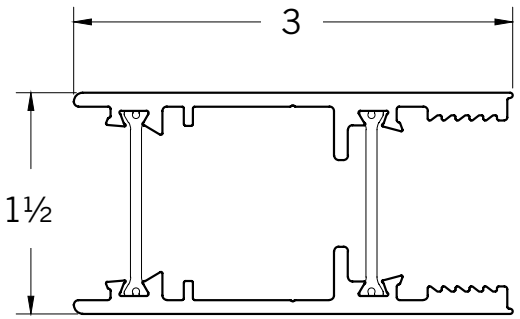



## 802 BOTTOM RAIL



# SERIES 8000
# ASSEMBLY DRAWINGS

## 803 LEAD STILE

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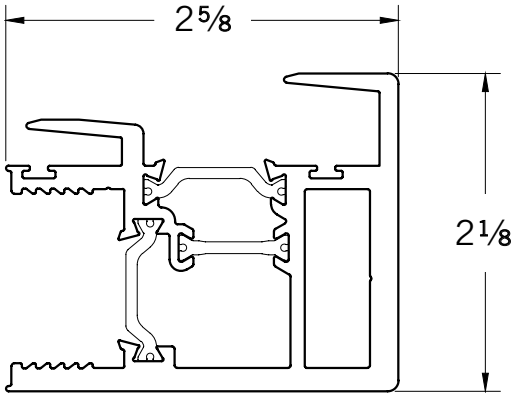
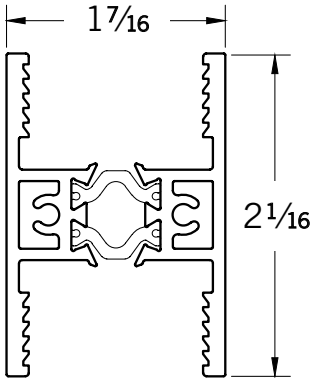
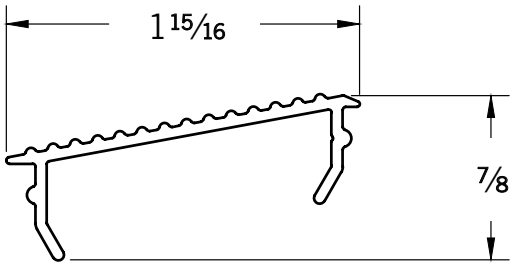



## 806 TDL BAR



# SERIES 8000
# ASSEMBLY DRAWINGS

## 811 THRESHOLD

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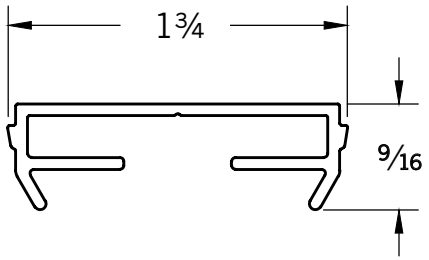

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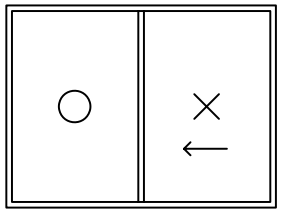
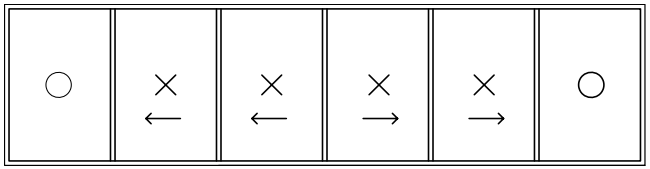


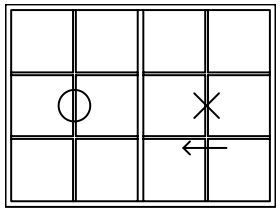
**OX** SLIDING DOOR

PAGE 13



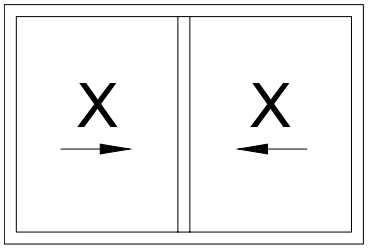
**OXXXO** SLIDING DOOR

PAGE 17



**OX** SLIDING DOOR
WITH TDL

PAGE 14




**XX** SLIDING DOOR

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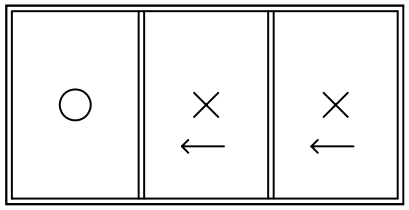
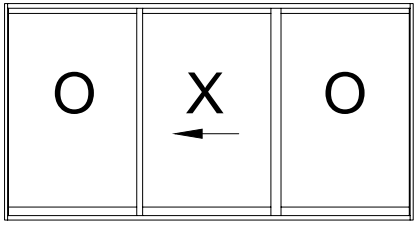


**OXX** SLIDING DOOR

PAGE 15




**OXO** SLIDING DOOR

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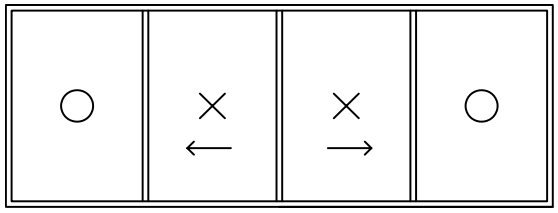
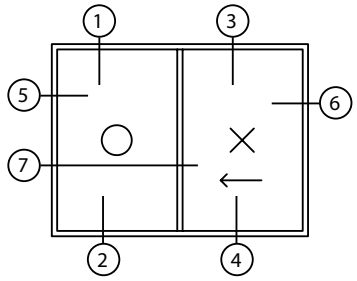


**OXXO** SLIDING DOOR

PAGE 16

# SERIES 8000
# ASSEMBLY DRAWINGS

## OX SLIDING DOOR

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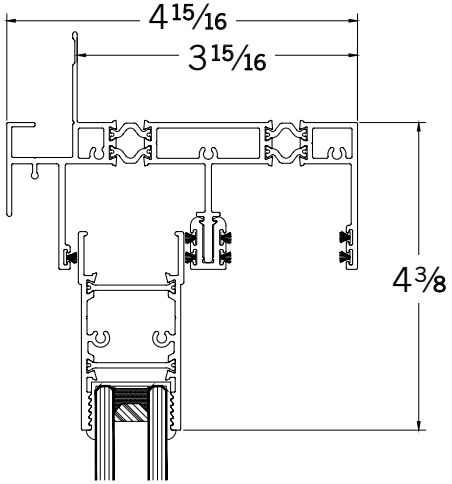


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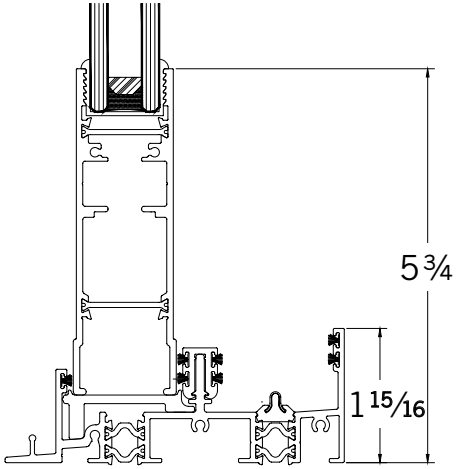


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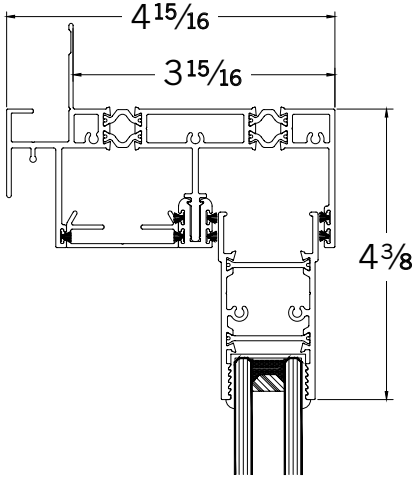


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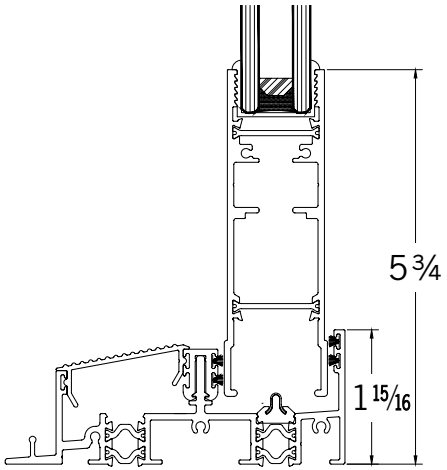


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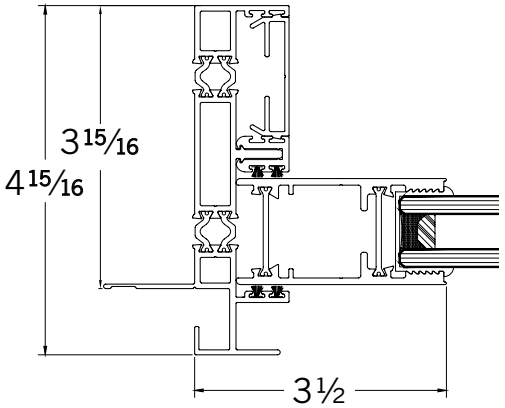


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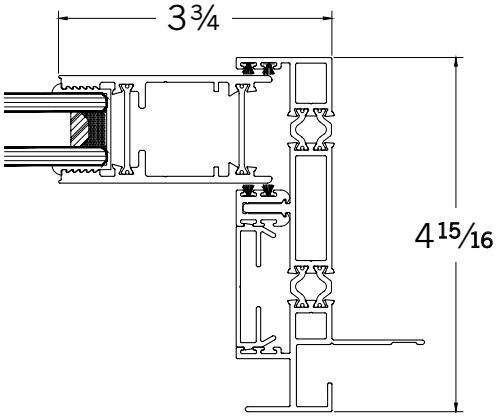


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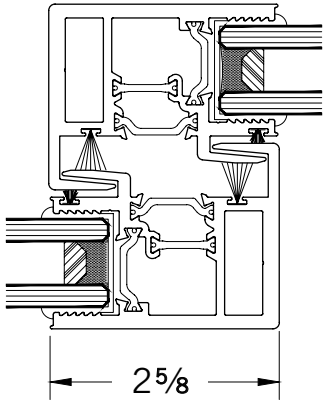
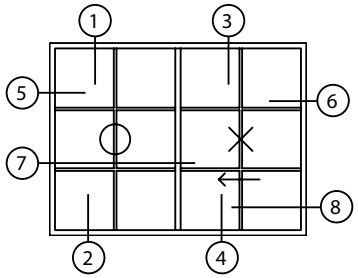


## OX SLIDING DOOR

WITH TDL

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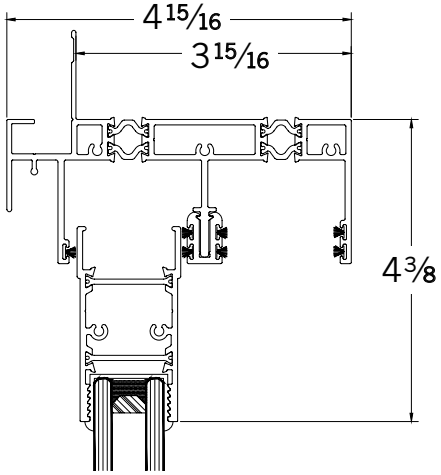


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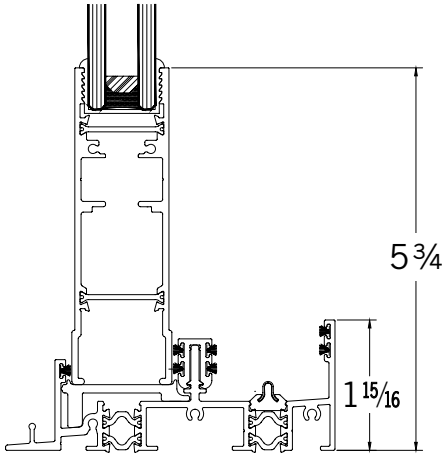


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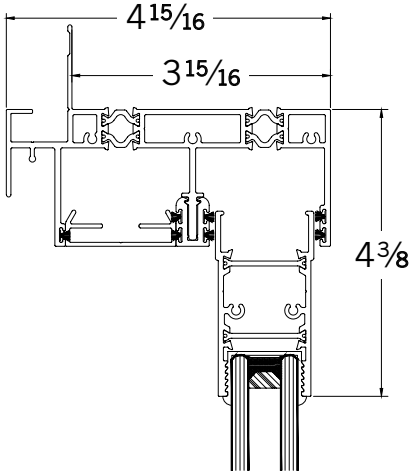


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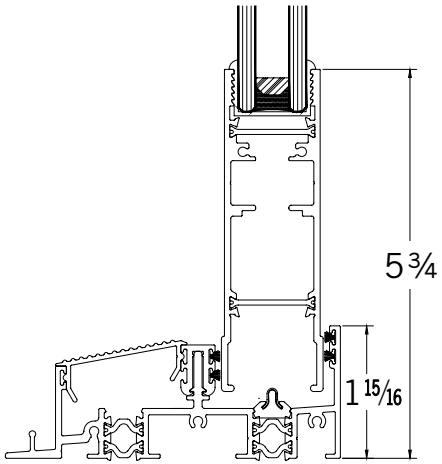


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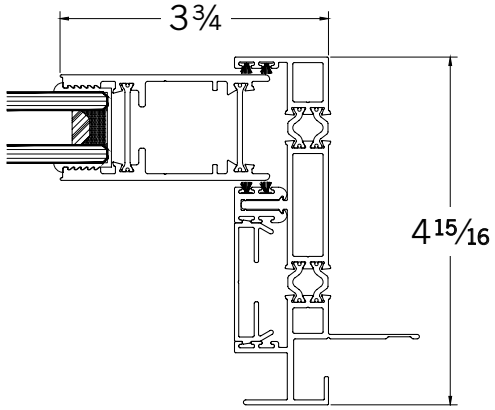


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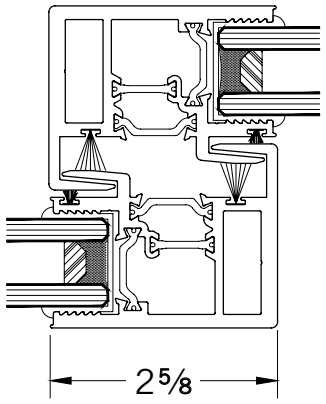


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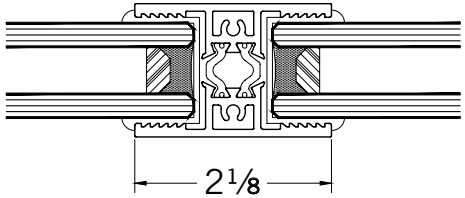
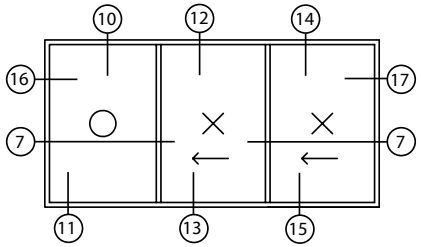


# SERIES 8000
# ASSEMBLY DRAWINGS

## OXX SLIDING DOOR

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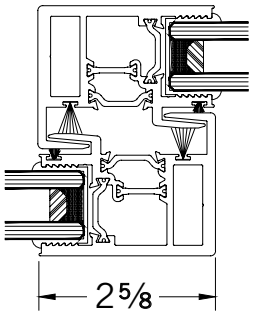


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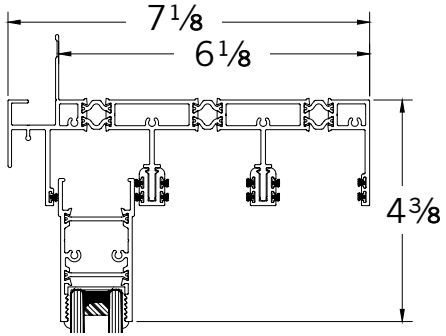


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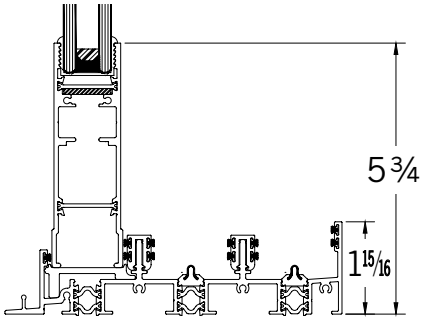


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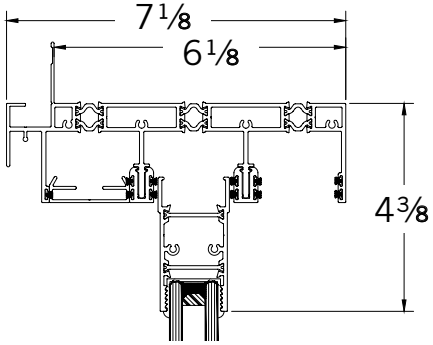


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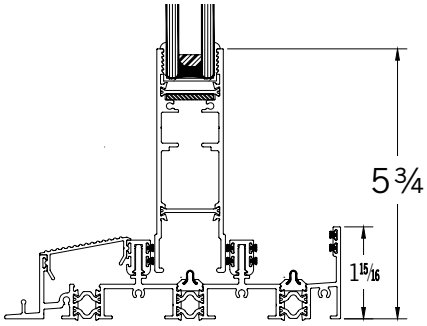


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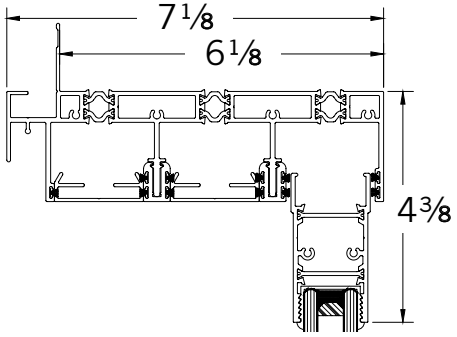


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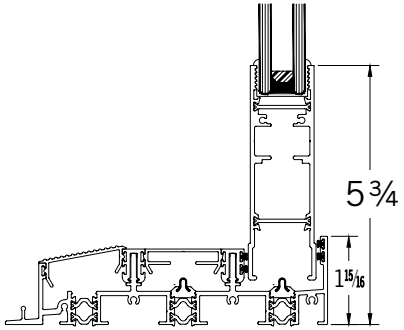


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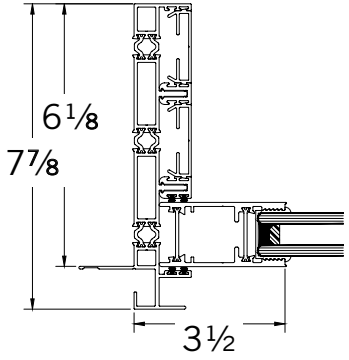


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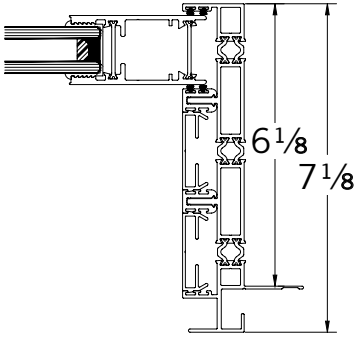
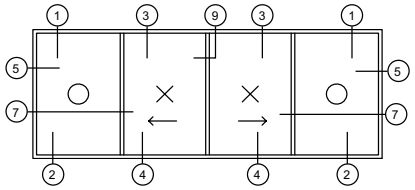


# SERIES 8000
# ASSEMBLY DRAWINGS

## OXXO SLIDING DOOR

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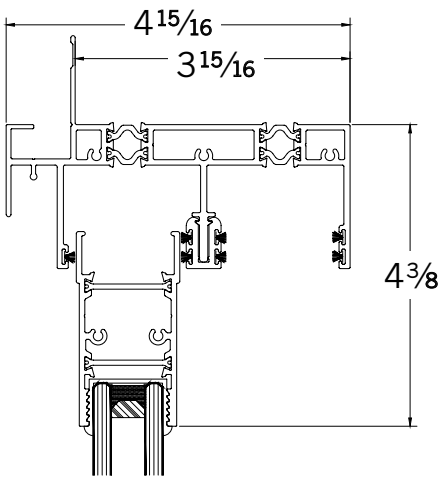


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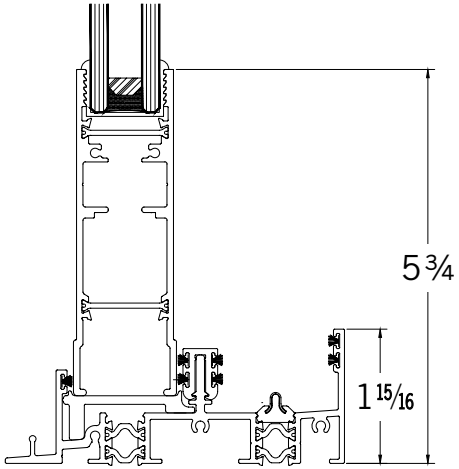


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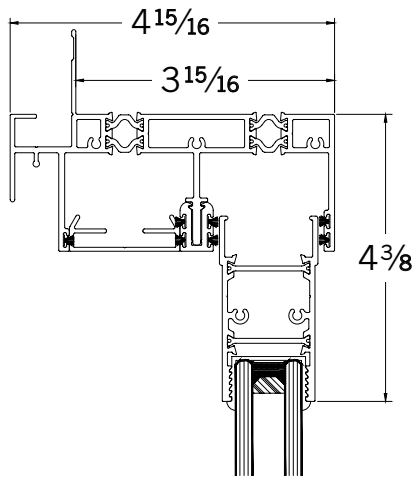


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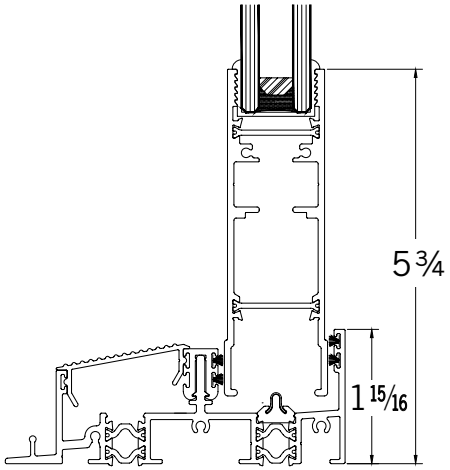


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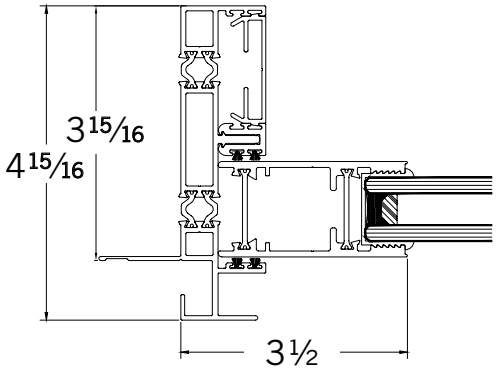


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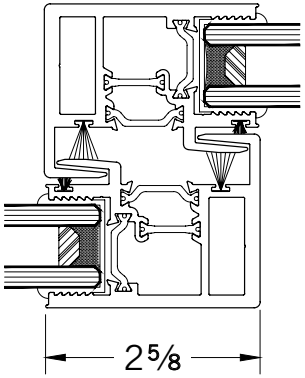


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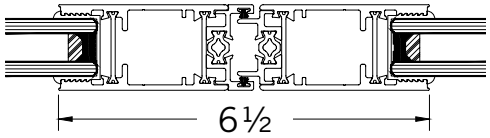
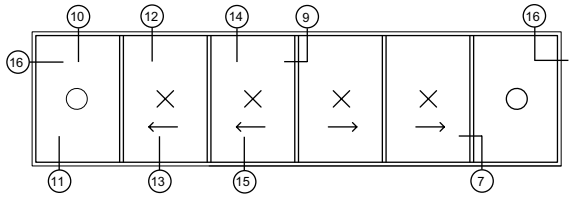


# SERIES 8000
# ASSEMBLY DRAWINGS

## OXXXXO SLIDING DOOR

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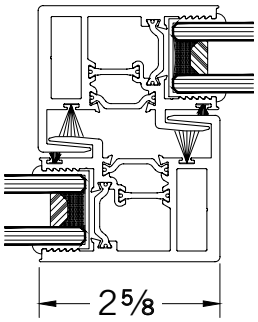


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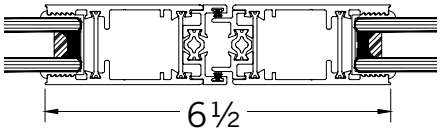


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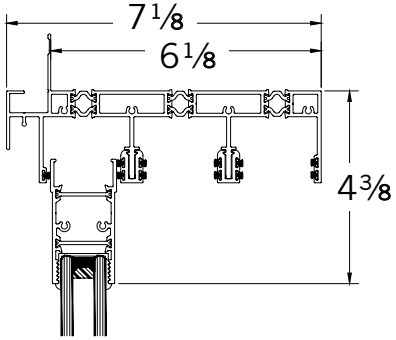


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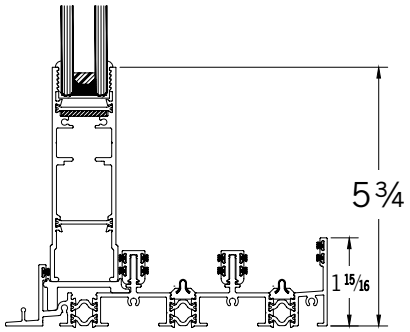


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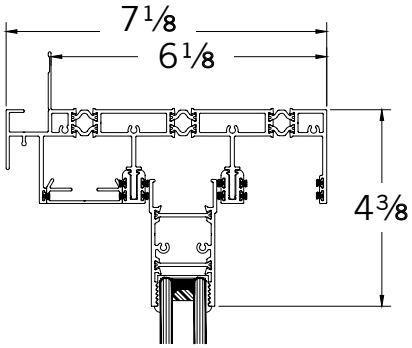


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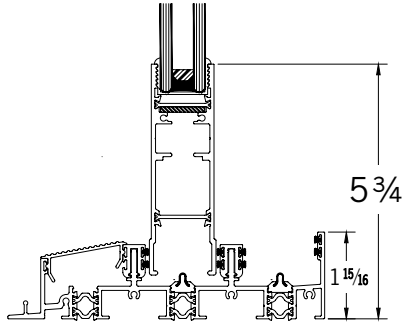


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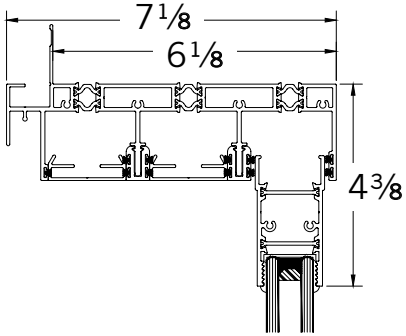


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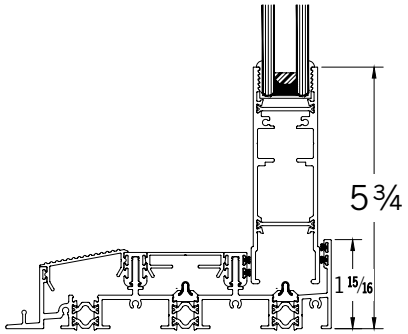


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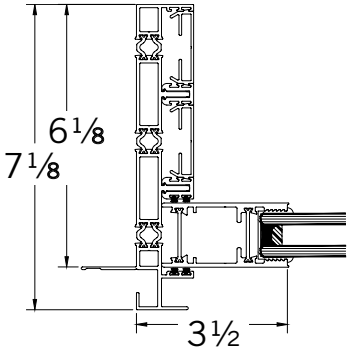
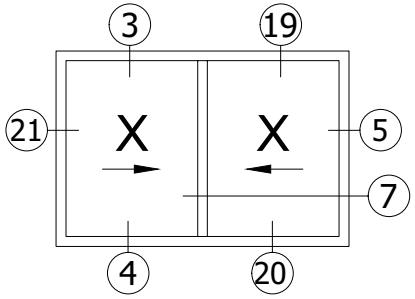


# SERIES 8000
# ASSEMBLY DRAWINGS

## XX SLIDING DOOR

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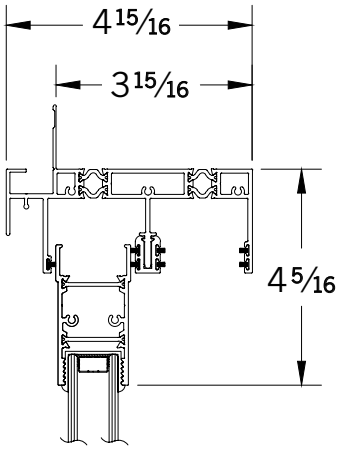


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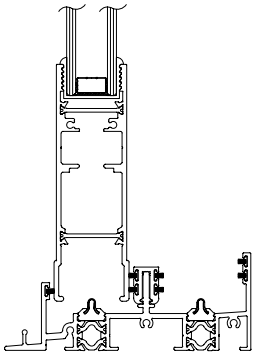

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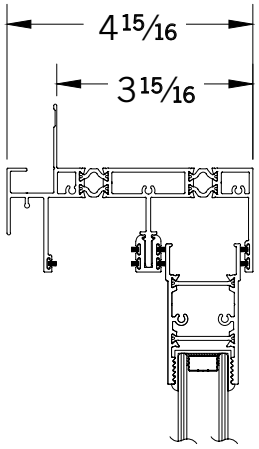


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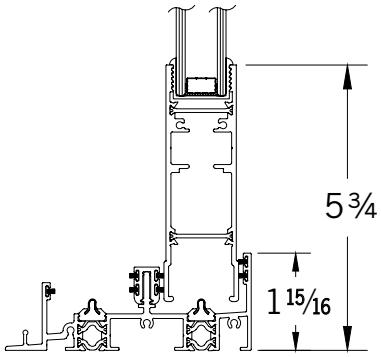


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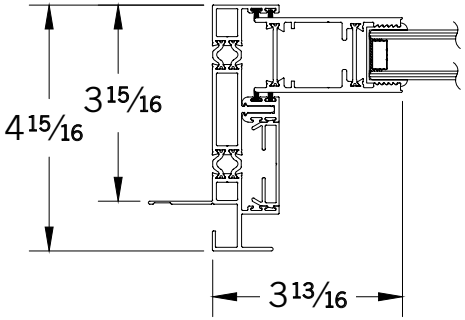


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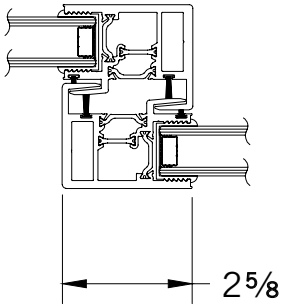


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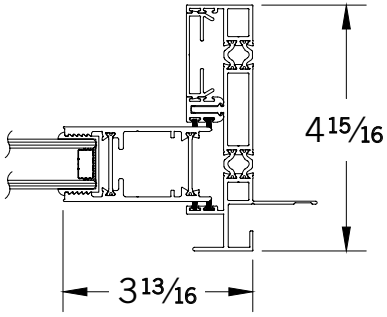
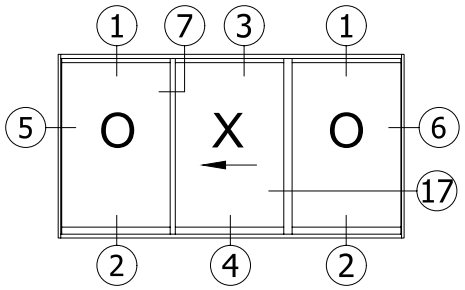


# SERIES 8000
# ASSEMBLY DRAWINGS

## OXO SLIDING DOOR

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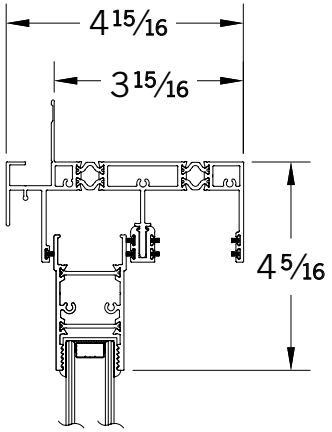


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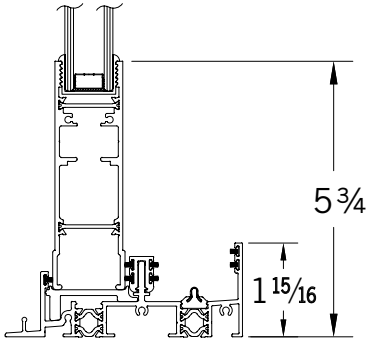


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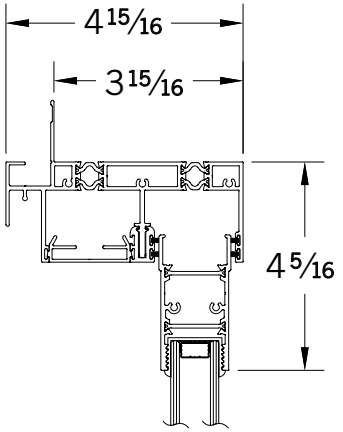


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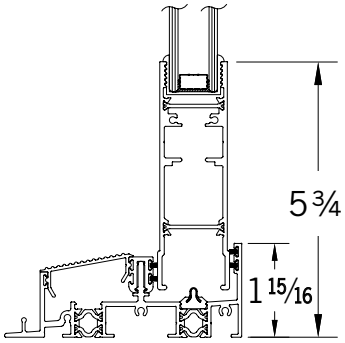


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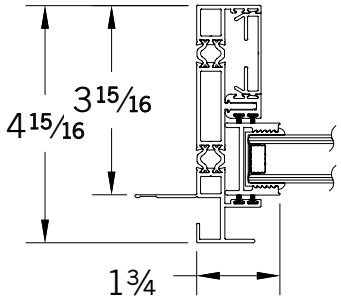


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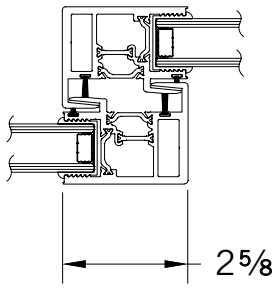


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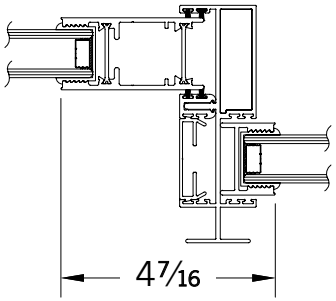


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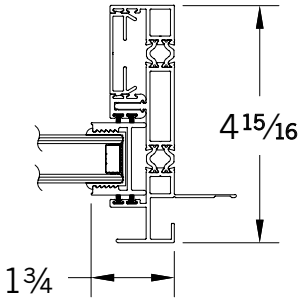

# SERIES 8000 TESTING

Architectural Testing

**TEST REPORT**

**Report No.:** A6963.01-301-44

**Rendered to:**

ALL WEATHER ARCHITECTURAL ALUMINUM
Vacaville, California

**PRODUCT TYPE:** 8000
**SERIES/MODEL:** Aluminum XO Sliding Glass Door

**SPECIFICATION:** AAMA/WDMA/CSA 101/I.S.2/A440-05, *Standard/Specification for Windows, Doors, and Unit Skylights.*

| Title | Summary of Results |
|---|---|
| Primary Product Designator | SGD-C30 2411 x 2107 (95 x 83) |
| Design Pressure | ±1440 Pa (±30.08 psf) |
| Air Infiltration | 1.17 L/s/m² (0.23 cfm/ft²) |
| Water Penetration Resistance Test Pressure | 220 Pa (4.59 psf) |

**Test Completion Date:** 03/29/2011

Reference must be made to Report No. A6963.01-301-44, dated 05/17/11 for complete test specimen description and detailed test results.

Architectural Testing

Test Report No.: A6963.01-301-44
Report Date: 05/17/11
Test Record Retention End Date: 03/29/15
Page 1 of 7

**1.0 Report Issued To:** All Weather Architectural Aluminum
777 Aldridge Road
Vacaville, California 95688

**2.0 Test Laboratory:** Architectural Testing, Inc.
2524 East Jensen Avenue
Fresno, California 93706
(559) 233 - 8705

**3.0 Project Summary:**

**3.1 Product Type:** 8000

**3.2 Series/Model:** Aluminum XO Sliding Glass Door

**3.3 Compliance Statement:** Results obtained are tested values and were secured by using the designated test method. The specimen tested successfully met the performance requirements for a **SGD-C30 2411 x 2107 (95 x 83)** rating.

**3.4 Test Dates:** 01/12/2011 - 03/29/2011

**3.5 Test Location:** Architectural Testing, Inc. test facility in Fresno, California.

**3.6 Test Sample Source:** The test specimen was provided by the client. Representative samples of the test specimen will be retained by Architectural Testing for a minimum of four years from the test completion date.

**3.7 Drawing Reference:** The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Architectural Testing per the drawings located in Appendix B. Any deviations are documented herein or on the drawings.

**3.8 List of Official Observers:**

| Name | Company |
|---|---|
| Seamus Porter | All Weather Architectural Aluminum |
| Jarod Hardman | Architectural Testing, Inc. |
| Jeffrey T. Osugi | Architectural Testing, Inc. |

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# SERIES 8000 TESTING

Architectural Testing

Test Report No.: A6963.01-301-44
Report Date: 05/17/11
Test Record Retention End Date: 03/29/15
Page 2 of 7

**4.0 Test Specification(s):**

AAMA/WDMA/CSA 101/I.S.2/A440-05, *Standard/Specification for Windows, Doors, and Unit Skylights.*

**5.0 Test Specimen Description:**

**5.1 Product Sizes:**

| Overall Area: 5.08 m² (54.68 ft²) | Width | | Height | |
|---|---|---|---|---|
| | millimeters | inches | millimeters | inches |
| Overall size | 2411 | 94-15/16 | 2107 | 82-15/16 |
| Active panel | 1221 | 48-1/16 | 2045 | 80-1/2 |
| Fixed panel | 1222 | 48-1/8 | 2045 | 80-1/2 |

**5.2 Frame Construction:**

| Frame Member | Material | Description |
|---|---|---|
| Head, sill, jambs | Thermally broken aluminum | |
| Threshold cover | Aluminum | At sill of active panel. |
| Roller track | PVC with stainless steel cap | Snap fit to the sill and held back 1/2" from each end. |
| Frame track filler | Aluminum | Each jamb and the head at the active panel. |
| Fixed panel setting block | PVC | Utilized at the fixed panel sill and held back 3-1/4" from the jamb. |
| Panel stops | Aluminum with rubber bumper | Head and sill at the fixed panel jamb. |
| Weather stripping holder | PVC | All members of the frame center leg. |

| | Joinery Type | Detail |
|---|---|---|
| All corners | Coped | Secured with three #8 x 1-1/2"square drive pan head screws and sealed with seam sealer. |

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Architectural Testing

Test Report No.: A6963.01-301-44
Report Date: 05/17/11
Test Record Retention End Date: 03/29/15
Page 3 of 7

**5.0 Test Specimen Description:** (Continued)

**5.3 Panel Construction:**

| Panel Member | Material | Description |
|---|---|---|
| All members | Thermally broken aluminum | The active panel interlocks were held back 3/4" from the bottom rail and 1-5/8" from the top rail. The fixed panel interlocks were held back 3/4" from the bottom rail and 1-5/8" from the top rail. The fixed panel was secured through the frame with #10 x 1" Phillips pan head self drilling screws approximately 24" from each end. |

| | Joinery Type | Detail |
|---|---|---|
| All corners | Butt jointed | Secured with two #8 x 3" square drive pan head screws. |

**5.4 Weatherstripping:**

| Description | Quantity | Location |
|---|---|---|
| 0.230" high polypile with triple center fin | 4 Rows | Head, sill and fixed panel jamb at the exterior track. |
| 0.190" high polypile with triple center fin | 4 Rows | Head, sill and active panel jamb at the interior track. |
| 0.550" high polypile with triple center fin | 1 Row | Each meeting stile. |
| 0.230" high polypile with triple center fin | 1 Row | Fixed panel meeting stile. |
| 0.190" high polypile with triple center fin | 1 Row | Active panel meeting stile. |

**5.5 Glazing:**

| Glass Type | Spacer Type | Interior Lite | Exterior Lite | Glazing Method |
|---|---|---|---|---|
| 1" IG | Aluminum spacer | 1/8" tempered | 1/8" tempered | Channel glazed and secured with a rubber boot. |

| Location | Quantity | Daylight Opening | | Glass Bite |
|---|---|---|---|---|
| | | millimeters | inches | |
| Active panel | 1 | 1071 x 1845 | 42-3/16 x 72-5/8 | 3/4" |
| Fixed panel | 1 | 1073 x 1845 | 42-1/4" x 72-5/8 | 3/4" |

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# SERIES 8000 TESTING



**5.0 Test Specimen Description:** (Continued)

**5.6 Drainage:**

| Drainage Method | Size | Quantity | Location |
|---|---|---|---|
| Weepnotch | 5/8" x 1/4" | 2 | Each end in sill screen track. |
| Weephole | 3/4" x 3/16" oval | 2 | 3/8" from each end through exterior sill leg. |
| Weepnotch | 1" x 1/8" | 2 | 1/2" from each end through intermediate leg in exterior sill track. |
| Weephole | 1" x 1/4" | 3 | 1-1/2" from each end and midspan through center sill leg. |

**5.7 Hardware:**

| Description | Quantity | Location |
|---|---|---|
| Stainless steel rollers | 2 | 9-1/4" from each end on bottom rail of active panel secured with two 1/4" -20 x 3/4" Phillips pan head screws with washers. |
| Lock handle assembly with deadbolt | 1 | 45° from bottom rail secured through the handle assembly with two 8-32 x 1-3/4" Phillips oval head screws and to the lock stile with two #10 x 1" Phillips flat head self drilling screws |
| Keeper | 1 | Opposite lock secured with four #10 x 3" Phillips pan head screws. |

**5.8 Reinforcement:** No reinforcement was utilized.

**5.9 Screen Construction:** No screen was utilized

**6.0 Installation:**

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/4-1/8" shim space. The exterior perimeter of the window was sealed with silicone.

| Location | Anchor Description | Anchor Location |
|---|---|---|
| Head, jambs | #12 x 1-1/4" Phillips flat head screws. | 3" from each end and 11-16" on center. |





**7.0 Test Results:** The temperature during testing was 19°C (66°F). The results are tabulated as follows:

| Title of Test | Results | Allowed | Note |
|---|---|---|---|
| **Operating Force,** per ASTM E 2068 | Initiate motion: 100 N (22.5 lbf)<br>Maintain motion: 52 N (11.7 lbf)<br>Lock: 16 N (3.5 lbf) | 180 N (40.5 lbf) max.<br>115 N (25.9 lbf) max.<br>100 N (22.5 lbf) max. | |
| **Air Leakage,** Infiltration per ASTM E 283 at 75 Pa (1.57 psf) | 1.17 L/s/m² (0.23 cfm/ft²) | 1.5 L/s/m² (0.3 cfm/ft²) max. | 1 |
| **Water Penetration,** per ASTM E 547 at 220 Pa (4.59 psf) | Pass | No leakage | 2 |
| **Uniform Load Deflection,** per ASTM E 330 taken at exterior meeting stile<br>+1440 Pa (+30.08 psf)<br>-1440 Pa (-30.08 psf) | <br>8.8 mm (0.35")<br>8.3 mm (0.33") | <br>Report Only | 4,5,6 |
| **Uniform Load Structural,** per ASTM E 330 taken at exterior meeting stile<br>+2160 Pa (+45.11 psf)<br>-2160 Pa (-45.11 psf) | <br>0.3 mm (0.01")<br>0.3 mm (0.01") | <br>5.9 mm (0.23") max. | 5,6 |
| **Forced Entry Resistance,** per ASTM F 842, Type: A / D - Grade: 10 | Pass | No entry | |
| **Deglazing,** per ASTM E 987<br>Operating direction, 320 N (71.9 lbf)<br>Remaining direction, 230 N (51.7 lbf) | <br>Pass<br>Pass | <br>Meets as stated<br>Meets as stated | |

# SERIES 8000 TESTING



**7.0 Test Results:** (Continued)

*Note 1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.*

*Note 2: Without insect screen.*

*Note 3: The client opted to start at a pressure higher than the minimum required. Test results are reported under Optional Performance.*

*Note 4: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440 for this product designation. The deflection data is recorded in this report for special code compliance and information only.*

*Note 5: Loads were held for 10 seconds.*

*Note 6: Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.*





The service life of this report will expire on the stated Test Record Retention End Date, at which time such materials as drawings, data sheets, samples of test specimens, copies of this report, and any other pertinent project documentation, shall be discarded without notice.

If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, Inc.

Jeff Osugi /ms

Digitally Signed for: Jeff Osugi by Marbelle Saavedra

Jeffrey T. Osugi
Technician

Digitally Signed by: Leaton Kirk

Leaton Kirk
Director – Regional Operations

JTO: ms

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Alteration Addendum (1)
Appendix-B: Drawings (18)

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