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 ensure that products selected for use on projects comply with all 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.

The rapidly changing technology within the architectural aluminum products industry demands that U.S. 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 publication are:
m - meter Kg - kilogram
Pa - pascal KPa - kilopascal
MPa - megapascal
I. GENERAL DESCRIPTION

Work Included: Furnish all necessary materials, labor, and equipment for the complete installation of aluminum framing as shown on the drawings and specified herein. (Specifier Note: It is suggested that related items such as aluminum entrance doors, glass, and sealants be included whenever possible).

Work Not Included: Structural support of the framing system, interior closures and trim. (Specifier list other exclusions).

Related Work Specified Elsewhere: (Specifier list).

QUALITY ASSURANCE

Drawings and specifications are based on the Series 4500 Curtain Wall System as manufactured by U.S. Aluminum. Whenever substitute products are to be considered, supporting technical literature, samples, drawings, and performance data must be submitted 10 days prior to bid in order to make a valid comparison of the products involved. Test reports certified by an independent test laboratory must be made available upon request.

PERFORMANCE REQUIREMENTS

Air Infiltration: shall be tested in accordance with ASTM E 283. Infiltration shall not exceed .06 CFM per square foot (.0003m³/sm²) of fixed area when tested at 6.24 psf (300 Pa).

Water Infiltration: shall be tested in accordance with ASTM E 331. No water penetration at test pressure of 20 psf (958 Pa).

Structural Performance: shall be tested in accordance with ASTM E 330 and based on:
• Maximum deflection of L/175 of the span
• Allowable stress with a safety factor of 1.65

The system shall perform to this criteria under a windload of (Specify) psf.

System shall exceed maximum seismic lateral displacement requirements specified in section 1628.8.2 of the Uniform Building Code, 1994 edition. Upon successful completion of the Phase I seismic testing, the curtain wall shall once again be subjected to and must successfully pass the air and water infiltration tests specified above before proceeding to Phase II testing.

Thermal Performance: Series 4500 shall be tested in accordance with AAMA 1503, and NFRC-100.

Testing Procedures: ASTM 283, E 331, and E 330 - Laboratory performance testing. AAMA 503-08 - Newly installed curtain walls. AAMA 511-08 - Installed curtain walls after six months.

II. PRODUCTS MATERIALS

Extrusions shall be 6063-T5 alloy and temper (ASTM B221 alloy T5 temper). Fasteners, where exposed, shall be aluminum, stainless steel or zinc plated steel in accordance with ASTM A 164. Perimeter anchors shall be aluminum or steel, providing the steel is properly isolated from the aluminum. Glazing gaskets shall be E.P.D.M. elastomeric extrusions.

FINISH

All exposed framing surfaces shall be free of scratches and other serious blemishes. Aluminum extrusions shall be given a caustic etch followed by an anodic oxide treatment to obtain...

(Specify one of the following):

______#11 Clear anodic coating
______#22 Dark Bronze anodic coating
______#33 Black anodic coating

A Fluoropolymer paint coating conforming with the requirements of AAMA 2605. Color shall be (Specify a U.S. Aluminum standard color).

FABRICATION

Framing members shall provide for straight-in glazing on all sides with through sight lines and no projecting stops or face joints. Glass and panel framing shall be two part construction consisting of a back member and face section. The system shall provide for complete thermal isolation. Vertical and horizontal framing members shall have a nominal face dimension of 2-1/4" (57.2). Overall depth shall be (Specify).

All exterior and interior members shall be internally joined with a non-reversible and non-conductive injection molded thermoplastic connector capable of withstanding a direct pull of not less than 350 pounds (159 kg) each. The system shall have an integral extruded internal flashing for the head and all intermediate horizontals to provide continuous flashing of any infiltrated water to the exterior through pressure relieved horizontal weep holes.

Face clips shall be such a design as to provide for the exterior face member to be engaged by pushing it straight into the clip. The face clips shall be designed so they can be easily removed for deglazing.

III. EXECUTION INSTALLATION

All glass framing shall be set in correct locations as shown in the details and shall be level, square, plumb, and in alignment with other work in accordance with the manufacturer’s installation instructions and approved shop drawings. All joints between framing and the building structure shall be sealed in order to secure a watertight installation.

PROTECTION AND CLEANING

After installation the General Contractor shall adequately protect exposed portions of aluminum surfaces from damage by grinding and polishing compounds, plaster, lime, acid, cement or other contaminants. The General Contractor shall be responsible for final cleaning.
The Series 4500 and 4500SG Curtain Walls feature pressure relieved horizontals with a unique, integral UNIflash™ System to literally sweep infiltrated water to the exterior. UNIflash™ eliminates the secondary operation of installing rigid vinyl internal flashing in horizontals as required by similar systems. Exterior and interior members are internally joined with a non-conductive injection molded thermoplastic connector providing total thermal isolation which allows superior thermal performance. Dual colors can be achieved by specifying different finishes for exterior face members and interior mullions. The system features either stick or panel type erection with no exposed joint fasteners.

Series 4500SG is offered in stick or panel erected systems combining the horizontal members of Series 4500 with structural silicone glazed vertical mullions. The two-sided silicone system creates the appearance of a glass wall with horizontal feature strips.

### Series 4500
- **Captured Vertical Glazed Curtain Wall**

<table>
<thead>
<tr>
<th>SERIES 4500</th>
<th>FACE WIDTH</th>
<th>BACK MEMBER DEPTH</th>
<th>OVERALL DEPTH</th>
<th>GLAZING INFILL</th>
<th>GLAZING METHOD</th>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4500</td>
<td>2-1/4&quot; (57.2)</td>
<td>4&quot; (101.6)</td>
<td>6&quot; (152.4)</td>
<td>1/4&quot; (6)</td>
<td>Exterior</td>
<td>Low to Mid-Rise Buildings Where Exterior Glazing is Desired</td>
</tr>
<tr>
<td>4500SG</td>
<td>4&quot; (101.6)</td>
<td>5&quot; (127)</td>
<td>7&quot; (177.8)</td>
<td>1&quot; (25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8&quot; (203.2)</td>
<td>10&quot; (254)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Glass Sizes**
- Glass Width and Glass Height = Daylight Opening + 1" (25.4)

Refer to Details for Glass Bites at Structural Silicone Mullions

---

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

USA Patent No. 5,839,236; UK Patent No. 9802018.3; Canada Patent No. 2,228,181
Special Features

Injection Molded End Dams at vertical to horizontal joints ensure any moisture that gets in the system is flushed out. For more information on accessories, see pages 24-J7 through 29-J7.

NOTE: To accelerate installation times with pinpoint accuracy of Horizontal Shear Blocks to Curtain Wall Mullions, see pages 56-P1 and 57-P1.

The two-piece vertical adds the versatility of screw race joinery and panel installation for window wall applications. A tubular horizontal attaches to the vertical and filler plate through screw splines. Open back head and sill horizontals allow for easy access for anchorage.
Injection Molded Water Diverters continue the patented integral Uniflash™ design in the silicone glazed system. See page 28-J7 for additional information.

Reusable Twist-In Temporary Glass Retainers are used to support the glass until the structural silicone has fully cured in accordance with silicone manufacturer’s recommendations. See page 28-J7 for additional information.

GLAZING OPTIONS

<table>
<thead>
<tr>
<th>GLAZING</th>
<th>EXTERIOR GASKETS</th>
<th>INTERIOR GASKETS</th>
<th>POCKET REDUCER</th>
<th>HORIZONTAL FACE CAPS</th>
<th>VERTICAL FACE CAPS</th>
<th>SETTING BLOCK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; (6)</td>
<td>NP726</td>
<td>NP716</td>
<td>TW709</td>
<td>TW917</td>
<td>TW912</td>
<td>SB725</td>
</tr>
<tr>
<td>1&quot; (25)</td>
<td>NP726</td>
<td>NP716</td>
<td>TW917</td>
<td>TW912</td>
<td>SB710</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: To accelerate installation times with pinpoint accuracy of Horizontal Shear Blocks to Curtain Wall Mullions see pages 56-P1 and 57-P1.
Typical Details

SHEAR BLOCK ASSEMBLY FOR 1" (25) GLAZING

Refer to Page 24-J7 for Top and Bottom Anchor Numbers

Refer to Page 24-J7 for Top and Bottom Anchor Numbers

NOT TO SCALE

CURTAIN WALLS

Typical Details

SHEAR BLOCK ASSEMBLY FOR 1" (25) GLAZING

Refer to Page 24-J7 for Top and Bottom Anchor Numbers

Detailed Diagrams:

- TW917
- TW543
- TW443
- TW545
- TW445
- TW917
- TW546
- TW446
- NC900
- TW516
- TW416
- TW541
- TW441
- TW550
- TW410
- SB710
- SP250
- NP716
- NP726
- AP531
- AP431
- TW912
- NP726
- D.L.O.

Dimensions:

- 1/2" (12.7)
- 2-1/4" (57.2)
- 5" (127)
- 4" (101.6)
- 7" (177.8)
- 6" (152.4)
- 2-1/4" (57.2)
- 1/2" (12.7)
- ROUGH OPENING
- FRAME HEIGHT
- FRAME WIDTH

TYPICAL ELEVATION

Series 4500
- Thermally Isolated
- Captured Vertical Glazed Curtain Wall
- Structural Silicone Vertical Glazed Curtain Wall

Series 4500SG

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Online crlaurence.com By Phone (800) 421-6144 Ext. 5305
CURTAIN WALLS

Typical Details

PANEL ASSEMBLY FOR 1" (25) GLAZING

7" (177.8) System in Bold
6" (152.4) System Dashed

TW763/
TW704
TW563/
TW504
(Dashed)

TW766/
TW704
TW566/
TW504
(Dashed)

TW917

D.L.O.

SB710 Setting Block (Typical)

TYPICAL ELEVATION

TW917

NC900 (Typ.)

TW917

TW516

AP626
Optional Jamb Anchor

TW912

TW701/
TW704

TW501/
TW504
(Dashed)

TW702 (Heavy Wall)

TW07

TW715 (Light Heavy Wall)

TW515

(Typical)

NP716

NP250

Heavy-Duty

15/16" (Typ.)

(23.8)

NOT TO SCALE

TW416

(Dashed)

D.L.O.

1/2" (12.7)

Rough Opening

Frame Height

Rough Opening

Frame Width

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Typical Details

HIGH PERFORMANCE "SUPER MULLION" FOR 1" (25) GLAZING

**ALUMINUM**

**HIGH PERFORMANCE**

**SUPER MULLION**

**FOR 1" (25) GLAZING**

**FRAME HEIGHT**

**FRAME WIDTH**

**ROUGH OPENING**

**Anchor and Access Hole Centered on Horizontals**

**TW841**

**TW816**

**TW841**

**TW810**

**AP830** Shear Block

**AP854** Shear Block

**Refer to Page 24-J7 for Top and Bottom Anchor Numbers**

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Typical Details

90 DEGREE CORNERS

NOT TO SCALE
Typical Details

STRUCTURAL SILICONE GLAZED CORNER
CONDITIONS FOR 1" (25) GLAZING

Thermally Isolated • Series 4500SG

7" (177.8) System in Bold
6" (152.4) System Dashed

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CURTAIN WALLS

Typical Details

DOUBLe ACTING CENTER HUNG DOORS
AND FRAMING - 1" (25) GLAZING

Thermally Isolated
• Series 4500

7" (177.8) System in Bold
6" (152.4) System Dashed

NOTE: 5" (127) Back Members Shown;
4" (101.6) and 8" (203.2) Members Similar

Typical Elevation

Threshold

Floor Closer Dotted

NOT TO SCALE

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Online crlaurence.com  By Phone (800) 421-6144 Ext. 5305
Typical Details

OFFSET PIVOT OR BUTT HUNG DOORS AND FRAMING - 1" (25) GLAZING

Thermally Isolated • Series 4500

7" (177.8) System in Bold
6" (152.4) System Dashed

NOTE: 5" (127) Back Members Shown; 4" (101.6) and 8" (203.2) Members Similar

NOT TO SCALE
CURTAIN WALLS

Typical Details

1" (25) TO 1/4" (6)
TRANSITION GLAZING

1. TW917
2. TW709
3. TW917
4. TW709
5. TW704
6. TW709
7. TW719

• SERIES 4500
  Captured Vertical Glazed Curtain Wall

• SERIES 4500SG
  Structural Silicone Vertical Glazed Curtain Wall

Thermally Isolated

• Series 4500
• Series 4500SG

7" (177.8) System in Bold
6" (152.4) System Dashed

NOT TO SCALE

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Online crl Laurence.com  By Phone (800) 421-6144 Ext. 5305
Typical Details

STRUCTURAL SILICONE GLAZED CORNER CONDITIONS FOR 1" (25) TO 1/4" (6) TRANSITION GLAZING

90 DEGREE CORNERS

7" (177.8) System in Bold
6" (152.4) System Dashed

135 DEGREE CORNERS

7" (177.8) System in Bold
6" (152.4) System Dashed

NOT TO SCALE
**CURTAIN WALLS**

**Typical Details**

**MID-SPAN ANCHORS AND MULLION SPLICE**

**NOTE:** Series 4500 Details Shown; Series 4500SG Similar.

**SECTION DETAIL**

1. **FIXED ANCHOR**
   (DEADLOAD ANCHOR)

   **NOTE:** Anchor Type and Size Varies Per Job Requirements

**TYPICAL ELEVATION**

**NOT TO SCALE**

---

**Thermally Isolated**

- Series 4500
- Series 4500SG
Typical Details

MID-SPAN ANCHORS AND MULLION SPLICE

**NOTE:** Series 4500 Details Shown; Series 4500SG Similar.

1. **EXPANSION ANCHOR** (WINDLOAD ANCHOR)
   - **NOTE:** Anchor Type and Size Varies Per Job Requirements

2. **SPLICE JOINT**
   - **NOTE:** Joint Width Should be Based on Mullion Length and Temperature Differential. A 1/2" (12.7) Gap Allows for 1/4" (6.4) Movement.
CURTAIN WALLS

Windload Charts

CAPTURED VERTICAL MULLIONS
FOR 1" (25) GLAZING

Limitation of vertical mullions for:
- CURVES A = 15 PSF (718 Pa)
- CURVES B = 20 PSF (957 Pa)
- CURVES C = 25 PSF (1197 Pa)
- CURVES D = 30 PSF (1436 Pa)

SHEAR BLOCK ASSEMBLY

Mullions designed for L/175 deflection ratio and for the following allowable working stresses:
- Aluminum alloy 6063-T6: allowable stress for windload 12,929 psi. (89 MPa)
- Steel reinforcing allowable stress for windload 26,666 psi. (183 MPa)

Curves represent the limit values and are based on criteria for simple beam, uniformly loaded, using the distribution of wind forces on the wall with rectangular loading. Glass is not considered as contributing to resistance of deflection.

Mullion Spacing in Feet (meters)

PANEL ASSEMBLY

Not recommended for heights greater than 15 feet.
**Windload Charts**

**CAPTURED VERTICAL MULLIONS**

**FOR 1" (25) GLAZING**

<table>
<thead>
<tr>
<th>Limitation of vertical mullions for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURVES A = 15 PSF (718 Pa)</td>
</tr>
<tr>
<td>CURVES B = 20 PSF (957 Pa)</td>
</tr>
<tr>
<td>CURVES C = 25 PSF (1197 Pa)</td>
</tr>
<tr>
<td>CURVES D = 30 PSF (1436 Pa)</td>
</tr>
</tbody>
</table>

**SHEAR BLOCK ASSEMBLY**

**TW541**

- *TW541 I = 6.599 (274.67 x 10^5)*
- *S = 2.077 (34.04 x 10^3)*

**TW541 With SS501**

- *Steel Stiffener I = 2.556 (106.39 x 10^5)*
- *S = 1.186 (19.44 x 10^3)*
- *IAL+STL = 14.011 (583.18 x 10^2)*

**PANEL ASSEMBLY/HEAVY WALL MULLIONS**

**TW502/TW504**

- *TW502/TW504 I = 5.476 (227.93 x 10^3)*
- *S = 2.034 (33.33 x 10^3)*

**TW502/TW504 With SS401**

- *Steel Stiffener I = 1.428 (59.44 x 10^3)*
- *S = 0.846 (13.86 x 10^3)*
- *IAL+STL = 9.617 (400.29 x 10^2)*

**Not recommended for heights greater than 15 feet.**
CURTAIN WALLS

Windload Charts

CAPTURED VERTICAL MULLIONS FOR 1" (25) GLAZING

<table>
<thead>
<tr>
<th>Mullion Height in Feet (meters)</th>
<th>Mullion Spacing in Feet (meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>(1)</td>
</tr>
<tr>
<td>16</td>
<td>(1.5)</td>
</tr>
<tr>
<td>15</td>
<td>(2)</td>
</tr>
<tr>
<td>14</td>
<td>(2.5)</td>
</tr>
<tr>
<td>13</td>
<td>(3)</td>
</tr>
<tr>
<td>12</td>
<td>(3.5)</td>
</tr>
<tr>
<td>11</td>
<td>(4)</td>
</tr>
<tr>
<td>10</td>
<td>(4.5)</td>
</tr>
<tr>
<td>9</td>
<td>(5)</td>
</tr>
</tbody>
</table>

Limitation of vertical mullions for:
CURVES A = 15 PSF (718 Pa)
CURVES B = 20 PSF (957 Pa)
CURVES C = 25 PSF (1197 Pa)
CURVES D = 30 PSF (1436 Pa)

Thermally Isolated
• Series 4500

PANEL ASSEMBLY

TW701/TW704
I = 6.932
(288.53 x 10^4)
S = 1.936
(31.73 x 10^3)

SS501
Steel Stiffener
I = 2.556
(106.39 x 10^4)
S = 1.186
(19.44 x 10^3)
IAL+STL = 13.804
(574.57 x 10^4)

Not recommended for heights greater than 15 feet.

PANEL ASSEMBLY/HEAVY WALL

TW702/TW704
I = 8.804
(366.45 x 10^4)
S = 2.460
(40.32 x 10^3)

SS501
Steel Stiffener
I = 2.556
(106.39 x 10^4)
S = 1.186
(19.44 x 10^3)
IAL+STL = 16.216
(674.96 x 10^4)

Not recommended for heights greater than 15 feet.
CURTAIN WALLS

Windload Charts

CAPTURED HIGH PERFORMANCE VERTICAL MULLIONS FOR 1" (25) GLAZING

Limitation of vertical mullions for:
CURVES A = 15 PSF (718 Pa)
CURVES B = 20 PSF (957 Pa)
CURVES C = 25 PSF (1197 Pa)
CURVES D = 30 PSF (1436 Pa)

Project: Kaiser Permanente, Downey, CA

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CURTAIN WALLS

Windload Charts

STRUCTURAL SILICONE GLAZED VERTICAL MULLIONS FOR 1" (25) GLAZING

Limitation of vertical mullions for:
CURVES A = 15 PSF (718 Pa)
CURVES B = 20 PSF (957 Pa)
CURVES C = 25 PSF (1197 Pa)
CURVES D = 30 PSF (1436 Pa)

SHEAR BLOCK ASSEMBLY

PANEL ASSEMBLY/HEAVY WALL

Thermally Isolated • Series 4500SG

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**Windload Charts**

**STRUCTURAL SILICONE GLAZED VERTICAL MULLIONS FOR 1” (25) GLAZING**

Limitation of vertical mullions for:
- CURVES A = 15 PSF (718 Pa)
- CURVES B = 20 PSF (957 Pa)
- CURVES C = 25 PSF (1197 Pa)
- CURVES D = 30 PSF (1436 Pa)

---

**SHEAR BLOCK ASSEMBLY**

**TW810**
- I = 19.839
  - (825.76 x 10^4)
- S = 5.016
  - (82.21 x 10^3)

**TW515/TW504**
- I = 5.094
  - (212.03 x 10^6)
- S = 1.587
  - (26.01 x 10^3)

---

**PANEL ASSEMBLY/HEAVY WALL**

**TW515/TW504**
- I = 5.094
  - (212.03 x 10^6)
- S = 1.587
  - (26.01 x 10^3)

---

**SS401**
- Steel Stiffener
  - I = 1.428
    - (59.44 x 10^6)
  - S = 0.846
    - (13.86 x 10^3)
  - IAL+STL = 7.261
    - (302.23 x 10^4)

---

**SS801**
- Steel Stiffener
  - I = 9.598
    - (399.50 x 10^6)
  - S = 2.625
    - (43.02 x 10^3)
  - IAL+STL = 47.673
    - (1984.31 x 10^4)

---

**Not recommended for heights greater than 15 feet.**

---

**TW610 With SS801**
- I = 19.839
  - (825.76 x 10^4)
- S = 5.016
  - (82.21 x 10^3)

---

**Series 4500SG**
- Structural Silicone Vertical Glazed Curtain Wall
Deadload charts are based on 1/8" (3.2) maximum allowable deflection at the center point of the horizontal member and on a glass weight of 6.5 psf (31.74 Kg/m²) for 1" (25) glass.

Glass shall rest on two setting blocks located at:
- CURVES A: 1/4 points
- CURVES B: 1/8 points or 8" (203.2) from corners, whichever is larger

**Shear Block Assembly**

```
<table>
<thead>
<tr>
<th>Height of Glass (Feet)</th>
<th>Mullion Span (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2.0</td>
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</tr>
<tr>
<td>6.0</td>
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<tr>
<td>7.0</td>
<td>8.0</td>
</tr>
<tr>
<td>8.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>
```

**Panel Assembly**

```
<table>
<thead>
<tr>
<th>Height of Glass (Feet)</th>
<th>Mullion Span (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>2.0</td>
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<tr>
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<td>7.0</td>
<td>8.0</td>
</tr>
<tr>
<td>8.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>
```

**Thermally Isolated**
- Series 4500
- Series 4500SG

---

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## Curtains Walls

### Accessories

**FOR 1/4" (6) AND 1" (25) GLAZING**

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DETAIL</th>
<th>DESCRIPTION</th>
<th>PKG. QTY.</th>
<th>FOR MULLION DEPTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4&quot; (101.6) 5&quot; (127) 8&quot; (203.2)</td>
</tr>
<tr>
<td>AP514</td>
<td><img src="AP514" alt="image" /></td>
<td>Intermediate Vertical Anchor for TW441</td>
<td>12</td>
<td><img src="bullet" alt="bullet" /></td>
</tr>
<tr>
<td>AP513</td>
<td><img src="AP513" alt="image" /></td>
<td>Intermediate Vertical Anchor for TW410</td>
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<td>AP707</td>
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<td>Intermediate Vertical Anchor for TW541</td>
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<td>AP712</td>
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<td>AP812</td>
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<td>AP604</td>
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<tr>
<td>AP516</td>
<td><img src="AP516" alt="image" /></td>
<td>Wall Jamb Anchor for TW441 and TW416</td>
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<tr>
<td>AP511</td>
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<tr>
<td>AP634</td>
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<td>AP711</td>
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<tr>
<td>AP607</td>
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<td>Optional Perimeter Anchor for all Jamb Mullions</td>
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**Thermally Isolated**
- Series 4500
- Series 4500SG

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**Contact Information**

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## CURTAIN WALLS

### Accessories

FOR 1/4" (6) AND 1" (25) GLAZING

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<thead>
<tr>
<th>PART NO.</th>
<th>DETAIL</th>
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<th>PKG. QTY.</th>
<th>FOR MULLION DEPTHS</th>
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<tbody>
<tr>
<td>SL511</td>
<td></td>
<td>Mullion Splice Sleeve for TW441</td>
<td>12</td>
<td>4” (101.6) ●</td>
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<td>SL710</td>
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<td>Mullion Splice Sleeve for TW541</td>
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<td>4” (101.6) ●</td>
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<tr>
<td>SL512</td>
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<td>Mullion Splice Sleeve for TW410</td>
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<td>4” (101.6) ●</td>
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<td>SL711</td>
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<td>Mullion Splice Sleeve for TW550</td>
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<td>4” (101.6) ●</td>
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<tr>
<td>SL811</td>
<td></td>
<td>Mullion Splice Sleeve for TW841 and TW810</td>
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<td>4” (101.6) ●</td>
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<tr>
<td>SL572</td>
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<td>Mullion Splice Sleeve for TW470</td>
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<td>4” (101.6) ●</td>
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<td>SL772</td>
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<td>Mullion Splice Sleeve for TW580</td>
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<td>SL823</td>
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<td>Mullion Splice Sleeve for TW823</td>
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<td>Mullion Splice Sleeve for TW420</td>
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<td>SL721</td>
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<td>Mullion Splice Sleeve for TW560</td>
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<td>SL573</td>
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<td>Mullion Splice Sleeve for TW581</td>
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<tr>
<td>AP890</td>
<td></td>
<td>Shear Block for 90 Degree Corners (Includes One Left Block, One Right Block, and Screws)</td>
<td>1 Set</td>
<td>4” (101.6) ●</td>
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<td></td>
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<td>4&quot; (101.6)</td>
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<tr>
<td>AP569</td>
<td><img src="AP569.png" alt="Image" /></td>
<td>Shear Block for Inside 90 Degree Corners (Includes One Left Block, One Right Block, and Screws)</td>
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<tr>
<td>AP568</td>
<td><img src="AP568.png" alt="Image" /></td>
<td>Shear Block for Outside 90 Degree Corners (Includes One Left Block, One Right Block, and Screws)</td>
<td>1 Set</td>
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<tr>
<td>AP528</td>
<td><img src="AP528.png" alt="Image" /></td>
<td>Shear Block for Inside 135 Degree Corners (Includes One Left Block, One Right Block, and Screws)</td>
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<tr>
<td>AP524</td>
<td><img src="AP524.png" alt="Image" /></td>
<td>Shear Block for Outside 135 Degree Corners (Includes One Left Block, One Right Block, and Screws)</td>
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<tr>
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<td>AP708</td>
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<tr>
<td>AP727</td>
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<tr>
<td>AP726</td>
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<td>DJ751</td>
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<td>Drill Jig for Screw Spline Assembly</td>
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<td>DJ750</td>
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<td>4&quot; (101.6)</td>
<td>5&quot; (127)</td>
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<td>SL506</td>
<td><img src="image1.png" alt="Illustration" /></td>
<td>Vertical Wall Jamb Splice Sleeve for TW416</td>
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<tr>
<td>SL706</td>
<td><img src="image2.png" alt="Illustration" /></td>
<td>Vertical Wall Jamb Splice Sleeve for TW516</td>
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<td>SL834</td>
<td><img src="image3.png" alt="Illustration" /></td>
<td>Vertical Wall Jamb Splice Sleeve for TW816</td>
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<tr>
<td>SL712</td>
<td><img src="image4.png" alt="Illustration" /></td>
<td>Vertical Face Cap Splice Sleeve for TW912</td>
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<tr>
<td>SL717</td>
<td><img src="image5.png" alt="Illustration" /></td>
<td>Horizontal Face Cap Splice Sleeve for TW917</td>
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<tr>
<td>SL618</td>
<td><img src="image6.png" alt="Illustration" /></td>
<td>Vertical Corner Face Cap Splice Sleeve for TW818</td>
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<td><img src="image7.png" alt="Illustration" /></td>
<td>Water Deflector Outside 90 Degree Corners</td>
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<tr>
<td>WD524</td>
<td><img src="image8.png" alt="Illustration" /></td>
<td>Water Deflector 135 Degree Corners</td>
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<td>AP431</td>
<td><img src="image9.png" alt="Illustration" /></td>
<td>Shear Block for 4&quot; (101.6) Members (Includes Screws)</td>
<td>20</td>
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<tr>
<td>AP531</td>
<td><img src="image10.png" alt="Illustration" /></td>
<td>Shear Block for 5&quot; (127) Members (Includes Screws)</td>
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<tr>
<td>AP830</td>
<td><img src="image11.png" alt="Illustration" /></td>
<td>Shear Block for 8&quot; (203.2) Head and Sill (Includes Screws)</td>
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<tr>
<td>AP854</td>
<td><img src="image12.png" alt="Illustration" /></td>
<td>Shear Block for 8&quot; (203.2) Intermediate Horizontals (Includes Screws)</td>
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<tr>
<td>MS212</td>
<td><img src="image13.png" alt="Illustration" /></td>
<td>Screw for Attaching TW719 to TW420 or TW560 1/4&quot;-20 x 3/4&quot; (19) HWHCS with SRG5</td>
<td>200</td>
<td>●</td>
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<tr>
<td>MS229</td>
<td><img src="image14.png" alt="Illustration" /></td>
<td>Screw for Attaching TW823 to TW560 1/4&quot;-20 x 4-1/2&quot; (114.3) HHCS, Zinc Plated</td>
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**For 1/4" (6) and 1" (25) Glazing**

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<td>NC900</td>
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<td>Face Cap Retainer Clip</td>
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<td>RG700</td>
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<td>Temporary Glass Retainer for Butt Glaze Patent No. D295,952</td>
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<td>End Dam for Intermediate Horizontals</td>
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<td>WD705</td>
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<td>Water Diverter for Butt Glaze Head</td>
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<td>Water Diverter for Butt Glaze Horizontal</td>
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<td>CP700</td>
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<td>AP778</td>
<td><img src="image9.png" alt="AP778" /></td>
<td>Shear Block for Head and Sill at 90 Degree Corners (Includes One Left Block, One Right Block, and Screws)</td>
<td>1 Set</td>
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<tr>
<td>ST251</td>
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<td>Screw for Screw Spline Assembly #10 x 1&quot; (25) HWH SMS</td>
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<td>ST269</td>
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<td>Screw for Shear Block Assembly #12 x 2&quot; (51) PHL, PH, SMS, Zinc Plated</td>
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- **Thermally Isolated**
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For 1/4" (6) and 1" (25) glazing.
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<td><img src="image" alt="Gasket" /></td>
<td>Interior Gasket</td>
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<td><img src="image" alt="Gasket" /></td>
<td>Exterior Gasket</td>
<td>250' Roll</td>
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<tr>
<td>SP450</td>
<td><img src="image" alt="Gasket" /></td>
<td>Spacer Gasket for Butt Glaze</td>
<td>250' Roll</td>
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<tr>
<td>GT425</td>
<td><img src="image" alt="Gasket" /></td>
<td>Spacer Tape for Butt Glaze Corners 1/4&quot; (6) x 3/4&quot; (19)</td>
<td>50' Roll</td>
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<tr>
<td>WB701</td>
<td><img src="image" alt="Block" /></td>
<td>Edge Block 1-1/4&quot; (32) x 5/16&quot; (8) x 4&quot; (101.6)</td>
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<td>SB710</td>
<td><img src="image" alt="Block" /></td>
<td>Setting Block 4&quot; (101.6) Long</td>
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<td>SS401</td>
<td><img src="image" alt="Steel" /></td>
<td>Steel Stiffener for Use With 4&quot; (101.6) Back Members. ASTM A-559</td>
<td>16' (4.88 m) Stock Length</td>
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<tr>
<td>SS501</td>
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<td>16' (4.88 m) Stock Length</td>
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<tr>
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<td>Steel Stiffener for Use With 8&quot; (203.2) Back Members. ASTM A-559</td>
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