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

Project: Hewitt Associates Building; Lincolnshire, IL

Online usalum.com  By Phone (800) 262-5151 Ext. 5305
Online cr Laurence.com  By Phone (800) 421-6144 Ext. 5305
CURTAIN WALLS

Specifications

SECTION 08 44 13 ALUMINUM CURTAIN WALL SYSTEMS

<table>
<thead>
<tr>
<th>SERIES</th>
<th>FACE WIDTH</th>
<th>BACK MEMBER DEPTH</th>
<th>OVERALL DEPTH</th>
<th>GLAZING INFILL</th>
<th>GLAZING METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2100</td>
<td>2&quot; (50.8)</td>
<td>2-7/8&quot; (73)</td>
<td>4-15/16&quot; (125.4)</td>
<td>1&quot; (25)</td>
<td>Exterior</td>
</tr>
<tr>
<td>2200</td>
<td>2&quot; (50.8)</td>
<td>4&quot; (101.6)</td>
<td>6-1/16&quot; (154)</td>
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<td></td>
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<tr>
<td></td>
<td>5&quot; (127)</td>
<td>7-1/16&quot; (179.4)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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 Series 2100 or Series 2200 Curtain Wall Systems 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 meet the FIXED rating.

Water Infiltration: shall meet the (select up to B7) rating. Wind load resistance shall meet the (select up to C5) rating. Intermediate Mullions and horizontals shall be designed to withstand loading in accordance with the National Building Code of Canada. Condensation resistance temperature index for the framing system shall be a minimum of 60.6. Structural performance shall be based on CSA standard CAN3-S157 “Strength Design in Aluminum” and a maximum deflection of L/175 of the span.

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. System shall provide conventional glass support at horizontal, vertical, and perimeter members.

Series 2100 shall provide structural silicone support at intermediate verticals. Horizontal members and jamb configurations shall allow for pockets to receive E.P.D.M. elastomeric extruded glazing gaskets. Interior vertical glass spacers shall be extruded silicone compatible E.P.D.M. All materials that come in contact with the silicone should be tested for compatibility. Samples of aluminum vertical Mullions should be submitted to the silicone manufacturer for adhesion evaluation.

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 AAAM 2605. Color shall be (Specify a U.S. Aluminum standard color).

FABRICATION

All Mullions and horizontals shall have flexible (PVC) thermal break material located on exterior side of glass plane. Exterior glazing seal gasket shall be secured by extruded aluminum pressure plates fastened to main grid members. Provisions shall be made at all sealed horizontals to weep moisture accumulation to the exterior. A cover shall be snapped over pressure plate to show only a sharp, uninterrupted exterior profile.

Series 2200 framing members shall provide for straight-in glazing on all sides, with clean sight lines and no projecting stops or face joints. Vertical and horizontal framing members shall have a nominal width of 2" (50.8). Overall depth of system shall be (Specify). System shall provide for horizontal framing so that all fasteners at intersection of horizontal and vertical members will be concealed. There shall be no exposed fasteners at perimeter sections. Series 2100 system shall accommodate 1" (25) glazing infill and framing system shall provide a flush glazing appearance with no intermediate verticals visible from the outside.
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.

Glass shall be set from outside. Structural silicone shall be applied from inside and silicone weatherseal from outside (after structural silicone has fully cured). Reusable twist-in temporary glass retainers shall be used during structural curing period. Structural silicone must be applied in strict accordance with the silicone manufacturer’s instruction for surface preparation, priming, application, and curing time.

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.

Project: Meydenbauer Convention Center; Bellevue, WA

Online usalum.com  By Phone (800) 262-5151 Ext. 5305
Online crlaurence.com  By Phone (800) 421-6144 Ext. 5305
Based on the popular Series 3150/3250, Series 2100/2200 Curtain Wall Systems offer a reduced sightline for low to mid-rise applications where exterior glazing is desired. Complementing the efficiency of insulating glass, Series 2100/2200 Curtain Walls are thermally improved by a continuous thermal spacer interlocked with the horizontal and vertical pressure plates. Dual colors can be achieved by specifying different finishes for the exterior face covers and interior mullions. Extruded aluminum shear blocks with concealed mechanical attachment allows for a concealed horizontal to vertical joinery without exposed screws. These joint intersections also have concealed Injection Molded End Dams for controlling any infiltrated water. Series 2100/2200 Curtain Walls are designed for both Shear Block and Screw Spline installation. The Screw Spline System incorporates a unique split vertical mullion for straight-in installation of each bay, special perimeter members for easy anchorage to the structure, and the option to shop install and seal end dams. Three mullion depths are offered to accommodate various structural loads.

**Technical Data**

**Thermally Improved**
- Series 2100
- Series 2200

<table>
<thead>
<tr>
<th>SERIES</th>
<th>WIDTH</th>
<th>DEPTH</th>
<th>GLAZING INFILL</th>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2100</td>
<td>2&quot; (50.8)</td>
<td>4-15/16&quot; (125.4)</td>
<td>1&quot; (25) and/or 1/4&quot; (6)</td>
<td>Low-Rise to Mid-Rise Buildings Where Exterior Glazing is Desired</td>
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<tr>
<td>2200</td>
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<td>6-1/16&quot; (154)</td>
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<tr>
<td></td>
<td></td>
<td>7-1/16&quot; (179.3)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GLASS SIZES**

For Series 2100 Glass Width
- Daylight Opening + 1-5/8" (41.2) at Intermediate
- Daylight Opening + 1-5/16" (33.3) at Jambs
- Daylight Opening + 1" (25.4)

For Series 2200 Glass Height
- Daylight Opening + 1" (25.4)

*These formulae do not take into account glass tolerances. Consult glass manufacturer before ordering glass.

For custom size and profile extrusions please visit usalum.com
Special Features

Injection Molded Closure Plates at top and bottom of verticals ensure a continuous perimeter seal. See page 29-J1 for additional information.

Top and Bottom "T" Anchors provide for expansion and positive attachment to surrounding conditions (Shear Block installation only). See pages 27-J1 and 28-J1 for additional information.

Injection Molded End Dams are sealed in place to control infiltrated water. See page 29-J1 for additional information.

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

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-J1 for additional information.
Two Piece Vertical Mullions offer Screw Spline attachment of horizontals, and allow for shop assembly of frame panels. Unique perimeter members simplify anchorage to structure.

Injection Molded End Dams are sealed in place to control infiltrated water. See page 29-J1 for additional information.

Extruded Aluminum Shear Blocks are furnished to ensure extra strong horizontal to vertical joinery. See page 29-J1 for additional information.

**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**

**VERTICAL MULLIONS SHEAR BLOCK ASSEMBLY FOR 1" (25) GLAZING**

Gaskets NP430 for Exterior and NP420 for Interior, Typical. SP250 Spacer Used at All Butt Glazed Locations.

**NOTE:** Part numbers shown are available in 24' (7.3 m) stock lengths. Visit usalum.com for more information.

**SERIES 2100**

- Structural Silicone Vertical Glazed Curtain Wall

**SERIES 2200**

- Captured Vertical Glazed Curtain Wall

**NOT TO SCALE**
CURTAIN WALLS

Typical Details

HORIZONTAL MULLIONS SHEAR BLOCK ASSEMBLY
FOR 1" (25) GLAZING

Gaskets NP430 for Exterior
and NP420 for Interior, Typical.

NOTE: Part numbers shown are
available in 24' (7.3 m) stock lengths.
Visit usalum.com for more information.

TYPICAL ELEVATION

1/2" Joint
(12.7) (Typ.)

CW220 (Typ.)

AP202 (Typ.)

Refer to ACCESSORIES, Page 27-J1 and 28-J1
for Tee Anchor Requirements (Typ.)

AP204 (Typ.)

AP205 (Typ.)

SERIES 2200
Captured Vertical
Glazed Curtain Wall

Online usalum.com By Phone (800) 262-5151 Ext. 5305
Online crlaurence.com By Phone (800) 421-6144 Ext. 5305
Typical Details

VERTICAL MULLIONS SCREW SPLINE ASSEMBLY
FOR 1" (25) GLAZING

Gaskets NP430 for Exterior and NP420 for Interior, Typical.
SP250 Spacer Used at All Butt Glazed Locations.

NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths. Visit usalum.com for more information.

NOT TO SCALE
CURTAIN WALLS

Typical Details

HORIZONTAL MULLIONS SCREW SPLINE ASSEMBLY
FOR 1" (25) GLAZING

Gaskets NP430 for Exterior
and NP420 for Interior, Typical.

NOTE: Part numbers shown are
available in 24' (7.3 m) stock lengths.
Visit usalum.com for more information.
Typical Details

VERTICAL MULLIONS PREASSEMBLED
MULTI-LIGHT UNITS FOR 1" (25) GLAZING

Gaskets NP430 for Exterior
and NP420 for Interior, Typical.

NOTE: Part numbers shown are available in 24’ (7.3 m) stock lengths.
Visit usalum.com for more information.

---

Thermally Improved
- Series 2100
- Series 2200

---

NOT TO SCALE
CURTAIN WALLS

Typical Details

HORIZONTAL MULLIONS PREASSEMBLED
MULTI-LIGHT UNITS FOR 1" (25) GLAZING

Gaskets NP430 for Exterior
and NP420 for Interior, Typical.

NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths.
Visit usalum.com for more information.

NOT TO SCALE
Typical Details

90 DEGREE INSIDE AND OUTSIDE CORNER CONDITION FOR 1" (25) GLAZING

NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths. Visit usalum.com for more information.

SERIES 2100
Structural Silicone Vertical Glazed Curtain Wall

SERIES 2200
Captured Vertical Glazed Curtain Wall

NOT TO SCALE

Online usalum.com    By Phone (800) 262-5151 Ext. 5305
Online crlaurence.com    By Phone (800) 421-6144 Ext. 5305
CURTAIN WALLS

Typical Details

1/4" (6) TRANSITION GLAZING

NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths. Visit usalum.com for more information.

NOTE: 2-7/8" (73) Back Member Shown; 4" (101.6) and 5" (127) Member Similar

Thermally Improved
• Series 2100
• Series 2200

Series 2100
Structural Silicone Vertical Glazed Curtain Wall

Series 2200
Captured Vertical Glazed Curtain Wall

NOT TO SCALE
Typical Details

DOOR FRAMING

Gaskets NP430 for Exterior and NP420 for Interior, Typical.

NOTE: Doors are available in stock to accommodate 36” x 84” (914 x 2134) and 72” x 84” (1829 x 2134) door openings. Visit usalum.com for more information.

NOTE: 2-7/8” (73) Back Member Shown; 4” (101.6) and 5” (127) Members Shown in Parentheses

ALUMINUM GASKETS

NP430 for Exterior and NP420 for Interior, Typical.

THERMALLY IMPROVED

Series 2100
Series 2200

OFFSET HUNG DOOR

SERIES 2200
Captured Vertical Glazed Curtain Wall

SERIES 2200
Captured Vertical Glazed Curtain Wall

NOT TO SCALE
CURTAIN WALLS

Typical Details

DOOR FRAMING
WITH FLUSH DOOR ADAPTOR
(For Series 2200 Only)

NOTE: 2-7/8" (73) Back Member Shown;
4" (101.6) and 5" (127) Members
Shown in Parentheses

NOTE: Doors are available in stock to accommodate 36" x 84" (914 x 2134) and 72" x 84" (1829 x 2134) door openings. Visit usalum.com for more information.

NOT TO SCALE

Online usalum.com  By Phone (800) 262-5151 Ext. 5305
Online crlaurence.com  By Phone (800) 421-6144 Ext. 5305
Typical Details

DOOR FRAMING

NOTE: 2-7/8" (73) Back Member Shown; 4" (101.6) and 5" (127) Members Shown in Parentheses

NOTE: Doors are available in stock to accommodate 36" x 84" (914 x 2134) and 72" x 84" (1829 x 2134) door openings. Visit usalum.com for more information.

Center Hung Door

Series 2200
Captured Vertical Glazed Curtain Wall

Thermally Improved
• Series 2100
• Series 2200
Deflection criteria to be in accordance with AAMA TIR-A11 - L/175 or L/240 + 1/4" (6.4 mm) for spans greater than 13'-6" (4.1 m) but less than 40'-0" (12.2 m). Codes and specifications may vary. No single lite of glass shall deflect more than 3/4" (19 mm). Glass is not considered as contributing to resistance of deflection. Aluminum alloy 6063-T6 allowable stress for windload is 15,200 psi. (89 MPa), and steel reinforcing allowable stress for windload is 21,600 psi. (183 MPa).

These charts include unbraced length analysis and are based on at least one horizontal being placed at the midpoint of the span. For other applications, please contact U.S. Aluminum Technical Sales at (800) 262-5151, or visit our web site at usalum.com.
Windload Charts
CAPTURED VERTICAL MULLIONS
FOR 1" (25) GLAZING SHEAR BLOCK ASSEMBLY

Deflection criteria to be in accordance with AAMA TIR-A11 - L/175 or L/240 + 1/4" (6.4 mm) for spans greater than 13'-6" (4.1 m) but less than 40'-0" (12.2 m). Codes and specifications may vary. No single lite of glass shall deflect more than 3/4" (19 mm). Glass is not considered as contributing to resistance of deflection. Aluminum alloy 6063-T6 allowable stress for windload is 15,200 psi (89 MPa), and steel reinforcing allowable stress for windload is 21,600 psi (183 MPa).

These charts include unbraced length analysis and are based on at least one horizontal being placed at the midpoint of the span. For other applications, please contact U.S. Aluminum Technical Sales at (800) 262-5151, or visit our web site at usalum.com.
Deflection criteria to be in accordance with AAMA TIR-A11 - L/175 or L/240 + 1/4" (6.4 mm) for spans greater than 13'-6" (4.1 m) but less than 40'-0" (12.2 m). Codes and specifications may vary. No single lite of glass shall deflect more than 3/4" (19 mm). Glass is not considered as contributing to resistance of deflection. Aluminum alloy 6063-T6 allowable stress for windload is 15,200 psi (89 MPa), and steel reinforcing allowable stress for windload is 21,600 psi (183 MPa).

These charts include unbraced length analysis and are based on at least one horizontal being placed at the midpoint of the span. For other applications, please contact U.S. Aluminum Technical Sales at (800) 262-5151, or visit our web site at usalum.com.
Windload Charts

Deflection criteria to be in accordance with AAMA TIR-A11 - L/175 or L/240 + 1/4" (6.4 mm) for spans greater than 13'-6" (4.1 m) but less than 40'-0" (12.2 m). Codes and specifications may vary. No single lite of glass shall deflect more than 3/4" (19 mm). Glass is not considered as contributing to resistance of deflection. Aluminum alloy 6063-T6 allowable stress for windload is 15,200 psi (89 MPa), and steel reinforcing allowable stress for windload is 21,600 psi (183 MPa).

These charts include unbraced length analysis and are based on at least one horizontal being placed at the midpoint of the span. For other applications, please contact U.S. Aluminum Technical Sales at (800) 262-5151, or visit our web site at usalum.com.

Structural Silicone Chart

Stress on structural silicone should not exceed 20 PSI (137 KPa) for a 6:1 safety factor.

Series 2100 offers a contact width of 7/16" (11.1).

**NOTE:** The maximum shorter span of glass may be the width or the height dimension.

E.G. for 5' x 7' (1.52 m x 2.13 m) check 5' (1.52 m) for 7' x 5' (2.13 m x 1.52 m) check 5' (1.52 m)

**THESE LIMITATIONS ARE RELATED ONLY TO THE SILICONE JOINT CAPABILITY. ALUMINUM MEMBERS SHOULD ALSO BE CHECKED FOR WINDLOAD AND DEADLOAD.**
CURTAIN WALLS

Windload Charts

STRUCTURAL SILICONE GLAZED VERTICAL MULLIONS SHEAR BLOCK ASSEMBLY FOR 1” (25) GLAZING

Deflection criteria to be in accordance with AAMA TIR-A11 - L/175 or L/240 + 1/4” (6.4 mm) for spans greater than 13'-6” (4.1 m) but less than 40'-0” (12.2 m). Codes and specifications may vary. No single lite of glass shall deflect more than 3/4” (19 mm). Glass is not considered as contributing to resistance of deflection. Aluminum alloy 6063-T6 allowable stress for windload is 15,200 psi. (89 MPa), and steel reinforcing allowable stress for windload is 21,600 psi. (183 MPa).

These charts include unbraced length analysis and are based on at least one horizontal being placed at the midpoint of the span. For other applications, please contact U.S. Aluminum Technical Sales at (800) 262-5151, or visit our web site at usalum.com.

I = 1.233 (51.32 x 10^4)
S = 0.824 (13.50 x 10^3)
Steel Stiffener
I = 0.530 (22.060 x 10^4)
S = 0.471 (7.718 x 10^3)
IAL+STL = 2.770 (115.30 x 10^4)

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)
CURVES E = 40 PSF (1915 Pa)
Windload Charts

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

Deflection criteria to be in accordance with AAMA TIR-A11 - L/175 or L/240 + 1/4" (6.4 mm) for spans greater than 13'-6" (4.1 m) but less than 40'-0" (12.2 m). Codes and specifications may vary. No single lite of glass shall deflect more than 3/4" (19 mm). Glass is not considered as contributing to resistance of deflection. Aluminum alloy 6063-T6 allowable stress for windload is 15,200 psi (89 MPa), and steel reinforcing allowable stress for windload is 21,600 psi (183 MPa).

These charts include unbraced length analysis and are based on at least one horizontal being placed at the midpoint of the span. For other applications, please contact U.S. Aluminum Technical Sales at (800) 262-5151, or visit our web site at usalum.com.

SCREW SPLINE ASSEMBLY

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)
CURVES E = 40 PSF (1915 Pa)

Steel Stiffener
I = 2.643 (110.01 x 10^4)
S = 1.191 (19.517 x 10^3)
IA+STL = 12.611 (524.90 x 10^4)

I = 0.331 (13.777 x 10^4)
S = 0.331 (5.424 x 10^3)
IA+STL = 2.269 (94.44 x 10^4)
CURTAIN WALLS

Windload Charts

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

Deflection criteria to be in accordance with AAMA TIR-A11 - L/175 or L/240 + 1/4" (6.4 mm) for spans greater than 13'-6" (4.1 m) but less than 40'-0" (12.2 m). Codes and specifications may vary. No single lite of glass shall deflect more than 3/4" (19 mm). Glass is not considered as contributing to resistance of deflection. Aluminum alloy 6063-T6 allowable stress for windload is 15,200 psi. (89 MPa), and steel reinforcing allowable stress for windload is 21,600 psi. (183 MPa).

These charts include unbraced length analysis and are based on at least one horizontal being placed at the midpoint of the span. For other applications, please contact U.S. Aluminum Technical Sales at (800) 262-5151, or visit our web site at usalam.com.
Deadload charts are based on 1/8’ (3.2) maximum deflection at the center point of the horizontal member and on a glass weight of 6.5 psf (31.74 Kg/m²). Glass shall rest on two setting blocks located at:

CURVES A: 4 points
CURVES B: 1/8 points or 8’ (203.2) from corners, whichever is larger.

### Deadload Charts

**HORIZONTAL MULLIONS SHEAR BLOCK ASSEMBLY 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>10</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
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<td>4</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2 1/8” (73)</td>
<td>2</td>
</tr>
</tbody>
</table>

#### CW200

\[ I_{yy} = 0.575 \times (23.93 \times 10^4) \]

<table>
<thead>
<tr>
<th>Mullion Height in Feet (meters)</th>
<th>Mullion Spacing in Feet (meters)</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>(1) (1.5) (2) (2.5)</td>
</tr>
<tr>
<td>9</td>
<td>(2) (2.5)</td>
</tr>
<tr>
<td>8</td>
<td>(3)</td>
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<td>7</td>
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<td></td>
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<td>4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2 1/8” (73)</td>
<td></td>
</tr>
</tbody>
</table>

#### CW204

\[ I_{yy} = 0.751 \times (31.26 \times 10^4) \]

<table>
<thead>
<tr>
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<th>Mullion Spacing in Feet (meters)</th>
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<td>(1) (1.5) (2) (2.5)</td>
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<td>3</td>
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<td>2 1/8” (73)</td>
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</table>

#### CW205

\[ I_{yy} = 0.998 \times (41.54 \times 10^4) \]

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<th>Mullion Spacing in Feet (meters)</th>
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<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2 1/8” (73)</td>
<td></td>
</tr>
</tbody>
</table>

**Series 2100**
- Structural Silicone Vertical Glazed Curtain Wall

**Series 2200**
- Captured Vertical Glazed Curtain Wall

For more information, visit [Online usalum.com](http://www.usalum.com) or contact us at (800) 262-5151 Ext. 5305. You can also visit [Online crlaurence.com](http://www.crlaurence.com) or contact us at (800) 421-6144 Ext. 5305.
Deadload Charts
HORIZONTAL MULLIONS SCREW SPLINE ASSEMBLY
FOR 1" (25) GLAZING

Deadload charts are based on 1/8" (3.2) maximum deflection at the center point of the horizontal member and on a glass weight of 6.5 psf (31.74 Kg/m²).
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.

<table>
<thead>
<tr>
<th>Mullion Height in Feet (meters)</th>
<th>Mullion Spacing in Feet (meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(1)</td>
</tr>
<tr>
<td>2</td>
<td>(1.5)</td>
</tr>
<tr>
<td>3</td>
<td>(2)</td>
</tr>
<tr>
<td>4</td>
<td>(2.5)</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**CW210**
$I_y = .623 \times (25.93 \times 10^4)$

**CW214**
$I_y = .858 \times (35.71 \times 10^4)$

**CW215**
$I_y = 1.077 \times (44.83 \times 10^4)$

Series 2000
- Structural Silicone Vertical Glazed Curtain Wall
- Captured Vertical Glazed Curtain Wall

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## CURTAIN 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>2-7/8&quot; (73)</td>
</tr>
<tr>
<td>AP311</td>
<td><img src="image" alt="AP311" /></td>
<td>Wall Jamb Anchor at Head and Sill for CW200</td>
<td>6</td>
<td>⬜</td>
</tr>
<tr>
<td>AP315</td>
<td><img src="image" alt="AP315" /></td>
<td>Wall Jamb Anchor at Head and Sill for CW260</td>
<td>6</td>
<td>⬜</td>
</tr>
<tr>
<td>AP312</td>
<td><img src="image" alt="AP312" /></td>
<td>Wall Jamb Anchor at Head and Sill for CW204</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>AP314</td>
<td><img src="image" alt="AP314" /></td>
<td>Wall Jamb Anchor at Head and Sill for CW234</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>AP316</td>
<td><img src="image" alt="AP316" /></td>
<td>Wall Jamb Anchor at Head and Sill for CW264</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>AP313</td>
<td><img src="image" alt="AP313" /></td>
<td>Wall Jamb Anchor at Head and Sill for CW205</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>AP317</td>
<td><img src="image" alt="AP317" /></td>
<td>Wall Jamb Anchor at Head and Sill for CW265</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>AP240</td>
<td><img src="image" alt="AP240" /></td>
<td>Intermediate Vertical Anchor at Head and Sill for CW200</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>AP260</td>
<td><img src="image" alt="AP260" /></td>
<td>Intermediate Vertical Anchor at Head and Sill for CW260</td>
<td>12</td>
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</tr>
<tr>
<td>AP244</td>
<td><img src="image" alt="AP244" /></td>
<td>Intermediate Vertical Anchor at Head and Sill for CW204</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Thermally Improved**
- Series 2100
- Series 2200

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

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## CURTAIN WALLS

### Accessories

#### FOR 1/4” (6) AND 1” (25) GLAZING

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2-7/8” (73)</td>
<td>4” (101.6)</td>
</tr>
<tr>
<td>AP255</td>
<td><img src="image" alt="Intermmediate Vertical Anchor at Head and Sill for CW234" /></td>
<td>Intermediate Vertical Anchor at Head and Sill for CW234</td>
<td>12</td>
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<tr>
<td>AP264</td>
<td><img src="image" alt="Intermmediate Vertical Anchor at Head and Sill for CW264" /></td>
<td>Intermediate Vertical Anchor at Head and Sill for CW264</td>
<td>12</td>
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</tr>
<tr>
<td>AP245</td>
<td><img src="image" alt="Intermmediate Vertical Anchor at Head and Sill for CW205" /></td>
<td>Intermediate Vertical Anchor at Head and Sill for CW205</td>
<td>12</td>
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</tr>
<tr>
<td>AP265</td>
<td><img src="image" alt="Intermmediate Vertical Anchor at Head and Sill for CW265" /></td>
<td>Intermediate Vertical Anchor at Head and Sill for CW265</td>
<td>12</td>
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<tr>
<td>SL284</td>
<td><img src="image" alt="Mullion Splice Sleeve for 4” (101.6) Mullions" /></td>
<td>Mullion Splice Sleeve for 4” (101.6) Mullions</td>
<td>12</td>
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<tr>
<td>SL285</td>
<td><img src="image" alt="Mullion Splice Sleeve for 5” (127) Mullions" /></td>
<td>Mullion Splice Sleeve for 5” (127) Mullions</td>
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<tr>
<td>NP430</td>
<td><img src="image" alt="Exterior Gasket" /></td>
<td>Exterior Gasket</td>
<td>250’ Roll</td>
<td>●</td>
</tr>
<tr>
<td>NP420</td>
<td><img src="image" alt="Interior Gasket" /></td>
<td>Interior Gasket</td>
<td>250’ Roll</td>
<td>●</td>
</tr>
<tr>
<td>SP250</td>
<td><img src="image" alt="Spacer Gasket for Butt Glaze" /></td>
<td>Spacer Gasket for Butt Glaze</td>
<td>250’ Roll</td>
<td>●</td>
</tr>
<tr>
<td>SB240</td>
<td><img src="image" alt="Edge Block 1-1/4” x 4” (31.8 x 101.6)" /></td>
<td>Edge Block 1-1/4” x 4” (31.8 x 101.6)</td>
<td>100</td>
<td>●</td>
</tr>
</tbody>
</table>

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### CURTAIN WALLS

**Accessories**

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

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2-7/8&quot; (73)</td>
<td>4&quot; (101.6)</td>
</tr>
<tr>
<td>AP202</td>
<td></td>
<td>Shear Block for 2-7/8&quot; (73) Mullions (Includes screws)</td>
<td>20</td>
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<tr>
<td>AP204</td>
<td></td>
<td>Shear Block for 4&quot; (101.6) Mullions (Includes screws)</td>
<td>20</td>
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</tr>
<tr>
<td>AP205</td>
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<td>Shear Block for 5&quot; (127) Mullions (Includes screws)</td>
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<tr>
<td>AP287</td>
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<td>Shear Clip for 2-7/8&quot; (73) Mullions (Includes Screws)</td>
<td>20</td>
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<tr>
<td>AP404</td>
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<td>Shear Clip for 4&quot; (101.6) Mullions (Includes Screws)</td>
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<td>AP517</td>
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<td>Shear Clip for 5&quot; (127) Mullions (Includes Screws)</td>
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<tr>
<td>HD475</td>
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<td>End Dam for Captured Mullions</td>
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<tr>
<td>WD220</td>
<td></td>
<td>End Dam for Butt Glaze Mullions</td>
<td>50</td>
<td>●</td>
</tr>
<tr>
<td>CP220</td>
<td></td>
<td>Closure Plate for Captured Mullions</td>
<td>20</td>
<td>●</td>
</tr>
<tr>
<td>CP271</td>
<td></td>
<td>Closure Plate for Butt Glaze Mullions</td>
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<tr>
<td>CW368</td>
<td></td>
<td>Temporary Glass Retainer for Captured Mullions</td>
<td>50</td>
<td>●</td>
</tr>
<tr>
<td>MS222</td>
<td></td>
<td>Screw for Pressure Bar 1/4&quot;-20 x 1&quot; (25) HWHCS with SRG5</td>
<td>200</td>
<td>●</td>
</tr>
<tr>
<td>ST251</td>
<td></td>
<td>Screw for Screw Spline Assembly #10 x 1&quot; (25) HWH SMS</td>
<td>200</td>
<td>●</td>
</tr>
</tbody>
</table>

- Use for last bay horizontals

**Thermally Improved**

- **Series 2100**
- **Series 2200**
# CURTAIN WALLS

## Accessories

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

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td>2-7/8&quot; (73)</td>
</tr>
<tr>
<td>SB220</td>
<td></td>
<td>Setting Block for 1/4&quot; (6) Glass; 4&quot; (101.6) Long</td>
<td>100</td>
<td>✔</td>
</tr>
<tr>
<td>SB221</td>
<td></td>
<td>Setting Block for 1&quot; (25) Glass; 4&quot; (101.6) Long</td>
<td>100</td>
<td>✔</td>
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<tr>
<td>DJ020</td>
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<td>Drill Jig for Captured Vertical Mullions</td>
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<tr>
<td>DJ021</td>
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<td>Drill Jig for Structural Glaze Vertical Mullions</td>
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<td>✔</td>
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<tr>
<td>SS210</td>
<td></td>
<td>Steel Stiffener Fits in: CW230, CW239</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS211</td>
<td></td>
<td>Steel Stiffener Fits in: CW240, CW249</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS212</td>
<td></td>
<td>Steel Stiffener Fits in: CW250, CW259</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS213</td>
<td></td>
<td>Steel Stiffener Fits in: CW231, CW238</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS214</td>
<td></td>
<td>Steel Stiffener Fits in: CW241, CW248</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS215</td>
<td></td>
<td>Steel Stiffener Fits in: CW251, CW258</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS220</td>
<td></td>
<td>Steel Stiffener Fits in: CW200, CW260</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS221</td>
<td></td>
<td>Steel Stiffener Fits in: CW204, CW234, and CW264</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
<tr>
<td>SS222</td>
<td></td>
<td>Steel Stiffener Fits in: CW205, CW265</td>
<td>16' (4.88 m) Stock Length</td>
<td>✔</td>
</tr>
</tbody>
</table>

**Series 2100**

**Series 2200**