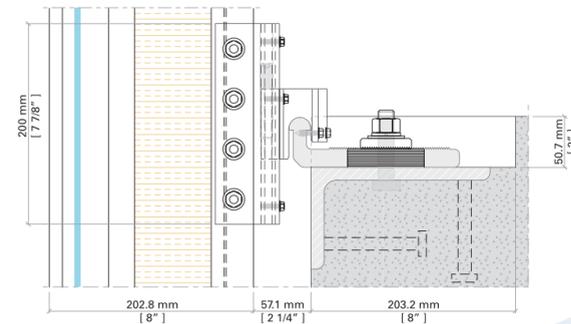


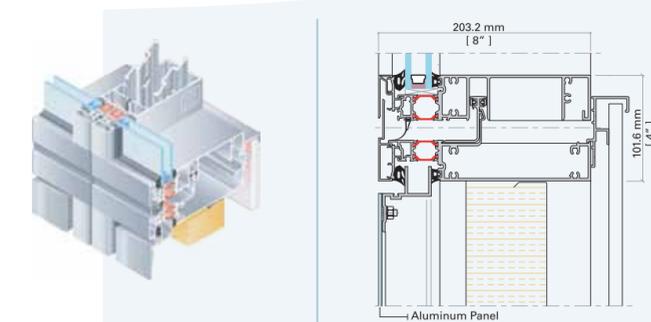
## SYSTEM FEATURES

- High performance fully unitized pre-glazed curtain wall system
- Pressure equalized rain screen design
- Available in variations of fully captured, 2 sided and 4 sided structural silicone bond
- System is fully thermally broken, incorporating glass fiber reinforced structural thermal breaks
- Fully adjustable structural aluminum alloy anchors with no welding required
- Standard and custom profiles

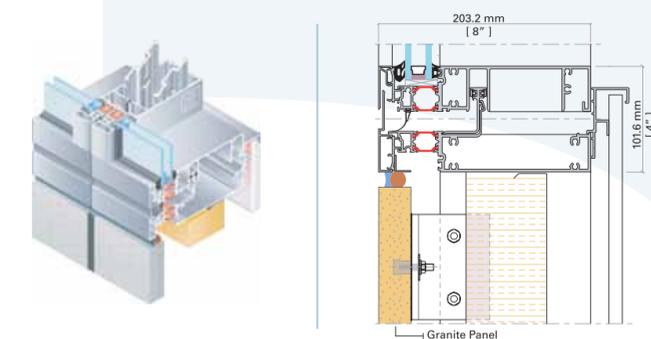
Anchor Detail



Fully Capped Expansion Joint / Aluminum Panel



Fully Capped Expansion Joint / Granite Panel



SUNSCREENS

GRANITE

TERRACOTTA

HORIZONTAL FEATURE CAPS

SUNSHADES

## THERMO 3 SERIES HIGH PERFORMANCE UNITIZED CURTAIN WALL SYSTEMS

### PERFORMANCE

#### Air Infiltration

Air infiltration shall not exceed 0.03 cfm/ft<sup>2</sup> when tested in accordance with ASTM E283 with a pressure differential of 6.24 psf.

#### Water Infiltration

There shall be no infiltration of water to the interior face of the system assembly when tested in accordance with ASTM E331. Water application (5 gal/hr/ft<sup>2</sup>) at a pressure differential up to 20 psf.

#### Dynamic Water Resistance

There shall be no infiltration of water to the interior face of the system assembly when tested in accordance with ASTM 501.1-83. Water application (5 gal/hr/ft<sup>2</sup>) at a pressure differential of 12.5 psf.

#### Structural Performance

The deflection of any framing member in a direction normal or perpendicular to the plane of the wall when subjected to a uniform load shall not exceed L/175 of the clear span or 3/4" maximum when tested in accordance ASTM 330.

#### Thermal

Average weighted system "U" value for the wall assembly shall not exceed 0.25 btu/hr/ft<sup>2</sup>-F°. This value may vary according to glass selection, framing configuration and spandrel to vision ratios. Please contact the manufacturer for detailed analysis for specific projects.

Condensation Resistance Factor (CRF) – minimum 75 when tested in accordance with AAMA 1503-98. Values may increase according to frame configuration.

### MATERIALS

- All framing component extrusions shall be 6063 T6 alloy
- Structural extruded components (anchor assemblies) shall be 6061 T6 alloy
- Fasteners shall be 300 series stainless steel to weather side of assembly and zinc or cadmium plated to the "dry side" of the wall assembly
- Glazing gaskets shall be EPDM or silicone as required and in sufficient durometer for purpose

### FINISH

- Anodizing conforming to Aluminum Association specification AA-M12C22A31
- Acrylic Enamel Paint conforming to AAMA 603.8
- Fluoropolymer Paint conforming to AAMA 605.2
- Finishes available in a variety of standard and custom colours

### FEATURES

- System can accommodate infill materials ranging in thickness from 1/8" to 1 3/4"
- Aluminum rain screen panels in sheet or composite, with concealed fixings and dry gasket joint systems
- Triple glazing
- Granite and stone in flush glazed or projected applications
- Terracotta
- Vertical feature fins
- Horizontal custom sunshades
- Standard and custom exterior profile caps
- Concealed window washing guides and restraints
- Light shelves
- Dual finishes
- Concealed "zero sight-line" operable vents

# SOTA WALL®

## THERMO 3 SERIES

### HIGH PERFORMANCE UNITIZED CURTAIN WALL SYSTEMS



# SOTA WALL®

## THERMO 3 UNITIZED CURTAIN WALL SYSTEM

Sotawall Inc., already a leader in the design and manufacture of pre-glazed, unitized curtain walls, has developed the **Thermo 3** series to provide improved thermal performance. **Thermo 3** incorporates Ensinger "Insulbar" technology; a polyamide thermal break common in use in high performance windows, and now due to the increased demand for energy efficiency in building envelopes, is being adapted for use in curtain wall applications.

A polyamide thermal break is ideally suited to curtain wall applications due to the structural properties of the material and the similar co-efficient of thermal expansion to that of aluminum. The glass fiber reinforced nylon provides a complete separation between internal and external components and eliminates the need for screw applied glass retainers. Conventional thermally broken curtain walls use PVC thermal breaks and screw applied retainers that have significantly reduced thermal performance

due to thermal properties of the PVC and thermal bridges created by screw fixings. The "Insulbar" provides minimal surface contact, which further reduces thermal conductivity. This design also allows the thermal separation to be more in line with the perimeter edge spacers of glazing units and provides continuity in the total system thermal break.

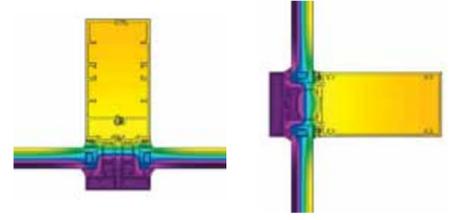
Many curtain walls require the use of high performance glass to

compensate for the reduced thermal performance of the framing. **Thermo 3** complements the use of high performance glazing and can reduce the overall wall system "U" factors by as much as 50%. This in turn leads to reduced energy consumption.

All of **Sotawall's** curtain wall products are designed, engineered, fabricated and assembled in-house to exacting standards and high levels of quality control.

## ENERGY EFFICIENCY

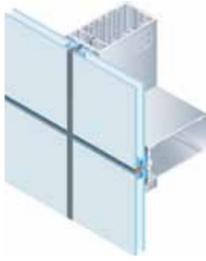
With ever-increasing demand for energy efficient buildings, **Sotawall Inc.** is acutely aware of the importance that building envelopes play. We continually strive to provide thermally efficient designs without compromise to cost competitiveness. **Sotawall** uses 'Therm 5.1' and other related modeling software to evaluate the efficiency and compliance of our proprietary curtain wall designs to relevant building codes, regulations and specifications. In addition, we procure physical "hot box" and thermal cycling testing of our systems to provide more accurate assessment when required.



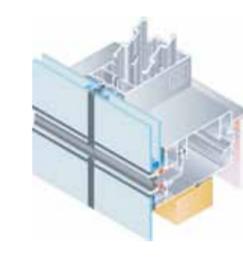
### 4 SIDED STRUCTURAL SILICONE GLAZED

- 7" system depth from glass face
- 3" wide mullions
- External flush appearance
- Integral alodine finished inserts ensure structural bond
- Optional vertical silicone gasket eliminates external work on site
- Vertical gasket can be replaced with wet rain screen weather seal
- Optional perimeter "Picture Frame" trim
- Integral concealed window washing guide track available
- All external components are thermally broken
- Concealed Vents
- Concealed fasteners

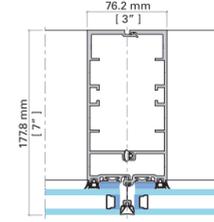
### 4 Sided Silicone



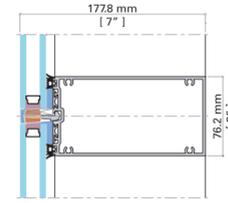
### 4 Sided Silicone Expansion Joint



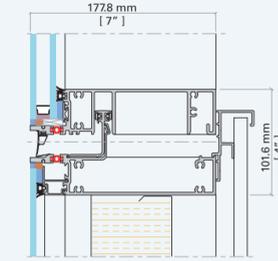
### M01



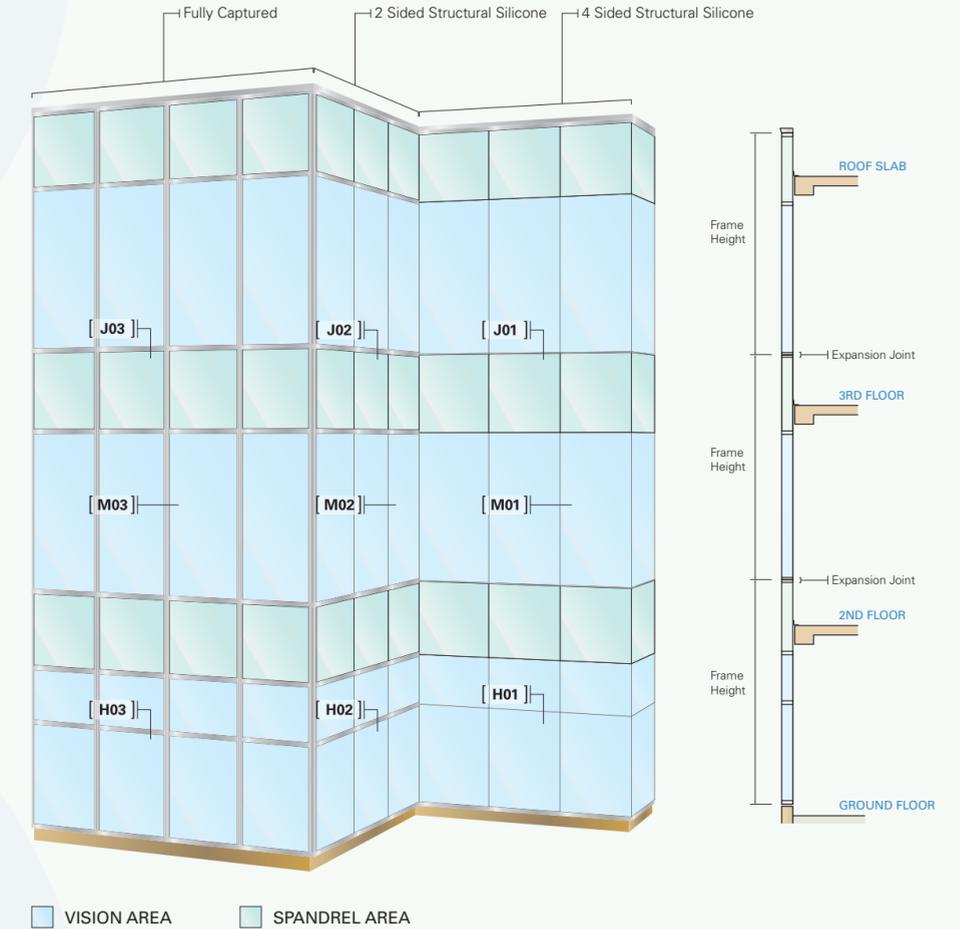
### H01



### J01



### ELEVATION



VISION AREA SPANDREL AREA

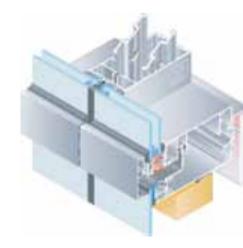
### 2 SIDED VERTICAL STRUCTURAL SILICONE GLAZED

- 8" system depth from cap face
- 3" wide mullions
- Vertical flush appearance
- Integral alodine finished inserts ensure structural bond
- Optional vertical silicone gasket eliminates external work on site
- Vertical gasket can be replaced with wet rain screen weather seal
- External components are thermally broken using "Insulbar" technology
- Horizontal caps available in standard 1" deep and in a variety of custom profiles
- Concealed vents
- Concealed fasteners

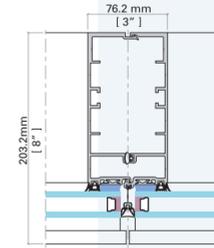
### 2 Sided Capped



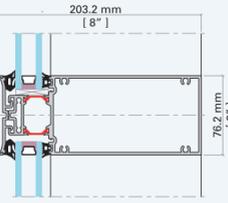
### 2 Sided Capped Expansion Joint



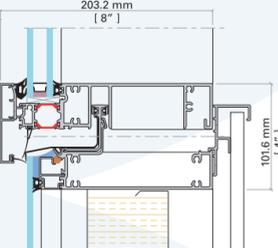
### M02



### H02



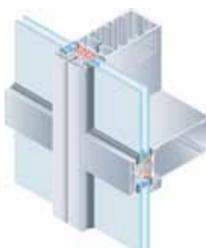
### J02



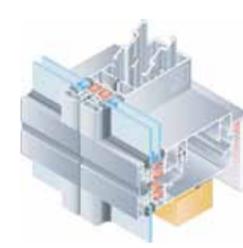
### 4 SIDED FULLY CAPTURED SYSTEM

- 8" system depth
- 3" wide mullions
- Vertical split caps with integral rain screen gaskets
- Vertical and horizontal caps available in standard 1" depth and custom depths and shapes
- External components are thermally broken using "Insulbar" technology
- Horizontal caps can incorporate concealed window washing restraints
- Concealed vents & fasteners
- Spandrel areas can incorporate monolithic or double glazed, metal panels, granite or terracotta
- Concealed internal reinforcement to accommodate high span and high wind load requirements

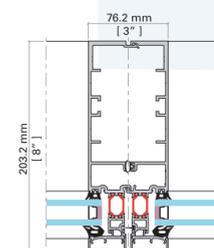
### Fully Capped



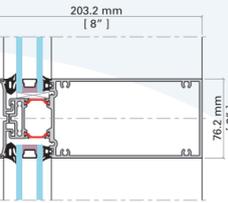
### Fully Capped Expansion Joint



### M03



### H03



### J03

