EXCEPTIONAL PERFORMANCE WITH EXPANSIVE AESTHETICS

2500 UT Unitwall® System

The 2500 UT Unitwall® System marries the elegant aesthetic of a gleaming glass, unitized curtain wall with ultra-thermal performance built into the design. The 2500 UT Unitwall® System is a cost-effective, unitized framing system that reduces the time required to fabricate, assemble, glaze and install.

With a variety of flexible options – from four-sided captured exterior covers to structural silicone glazed (SSG) or structural glazing tape (SGT) configurations – this sturdy, high-performance system is ideal for commercial applications, mid- to high-rise projects and more.

The 2500 UT Unitwall® System employs a continuous polyamide thermal break vertically and horizontally, providing ultra-thermal performance levels in a cost-effective unitized curtain wall system. In addition, the one-piece polyamide thermal break eliminates pressure plates and fasteners, reducing the amount of metal used and time required to assemble the system. Additionally, its ultrathermal performance allows architects and designers to take their vision to a new level, regardless of climate or location. The 2500 UT unitized curtain wall system's virtually seamless walls of glass connect interior building spaces comfortably with the outside world, elevating performance and expanding aesthetics.

ECONOMY & FLEXIBILITY

The 2500 UT Unitwall® System provides options that allow architects and contractors to meet tough project timelines, while delivering enhanced thermal performance and lower overall operating costs for building owners. Unitized construction accelerates installation while minimizing disruption to the surrounding area or existing tenants, making it an exceptional choice for new or retrofit applications, particularly in urban areas or where space is limited.

The system is available to glazing contractors in stock lengths, fabricated or pre-assembled and glazed – offering the flexibility to meet a range of budgets, worker availability and timelines.

- With stock lengths, glazing contractors can provide fabrication and pre-glazing under controlled conditions in their own shop.
- Factory-fabricated and glazed units make it easier to meet tight construction schedules, reduce field labor costs and lessen the demand for job site equipment.
- SGT option offers the aesthetic of structural glazing without the cure time required by silicone, helping to speed up final delivery times.

Cost savings on metal and fabrication materials can be realized when compared to a typical curtain wall configuration.

BUILT-IN PERFORMANCE

The 2500 UT Unitwall® System has performance built into the design. Three-way adjustable anchoring addresses construction variations at the floor slab. Stacked joints are designed for +/- 3/4" (19 mm) of total vertical movement to account for building expansion and contraction. Two-piece verticals leverage a continuous snap engagement to provide maximum strength while eliminating the time-consuming process of installing antibuckling clips and rotating the adjoining unit around the clips and into place.

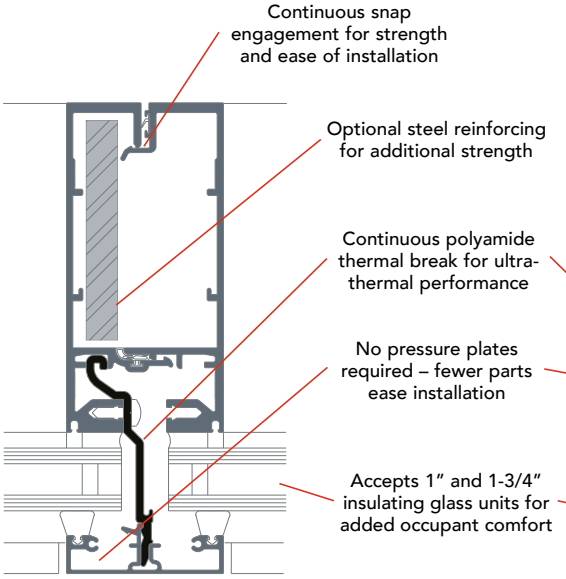
PERFORMANCE TEST STANDARDS

The 2500 UT Unitwall® System has been tested in accordance with all major standards for curtain walls:

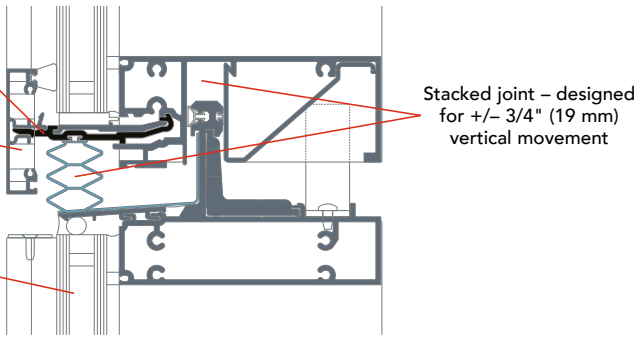
Air Infiltration	ASTM E283, NFRC 400, AAMA 501
Water – Static	ASTM E331, AAMA 501
Water – Dynamic	AAMA 501.1
Structural – Uniform Wind Load	ASTM E330, AAMA 501
Thermal Cycling	AAMA 501.5
Seismic Performance	AAMA 501.4, AAMA 501.6
Inter-story Vertical Movement	AAMA 501.7
Thermal Transmittance – U-factor	AAMA 1503, AAMA 507, NFRC 100
Condensation Resistance (CRF, I, CR)	AAMA 1503, CSA A440.2, NFRC 500
Overall Solar Heat Gain Coefficient (SHGC, VT)	AAMA 507, NFRC 200
Sound Transmission (STC, OITC)	AAMA 1801, ASTM E90, ASTM E1425

AESTHETICS

The 2-1/2" profile of the 2500 UT unitized curtain wall system allows for maximum design opportunities from the base chassis. The four-sided captured system allows for crisp sightlines, while the four-sided SSG and SGT options deliver a seamless transition between units. The combination of captured horizontals with vertical SSG or SGT mullions offers a design accent.

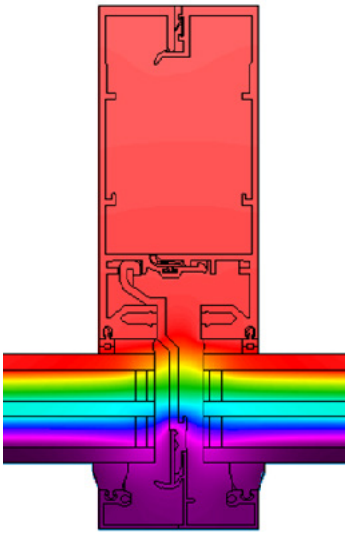


VERTICAL CAPTURED MULLION

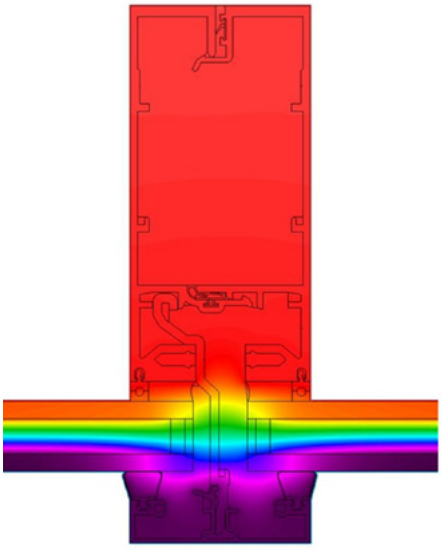


HORIZONTAL STACKED JOINT

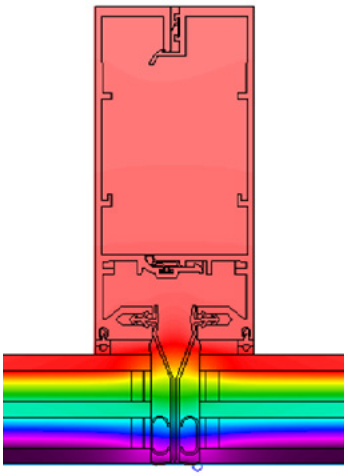
THERMAL SIMULATIONS SHOWING TEMPERATURE VARIATIONS FROM EXTERIOR/COLD SIDE TO INTERIOR/ WARM SIDE



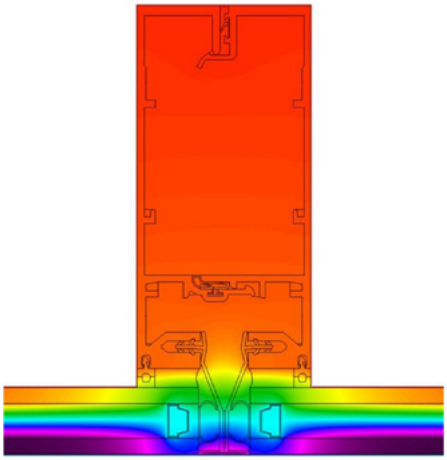
2500 UT UNITWALL® CAPTURED



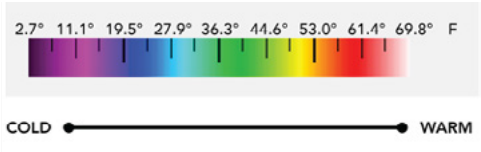
2500 UT UNITWALL® PLUS OPTION CAPTURED

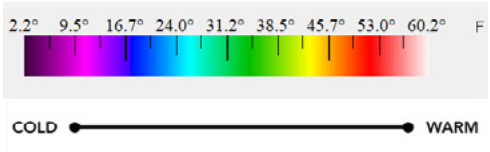


2500 UT UNITWALL® 4-SIDED SSG



2500 UT UNITWALL® PLUS OPTION 4 SIDED SSG





Thermal Transmittance 1 (BTU/hr • ft 2 • °F)

Glass U-Factor [3]	Overall U-Factor [4]
0.48	0.50
0.46	0.48
0.44	0.47
0.42	0.45
0.40	0.43
0.38	0.41
0.36	0.40
0.34	0.38
0.32	0.36
0.30	0.34
0.28	0.32
0.26	0.31
0.24	0.29
0.22	0.27
0.20	0.25
0.18	0.24
0.16	0.22
0.14	0.20
0.12	0.18
0.10	0.17

2500 UT Unitwall® System
THERMAL PERFORMANCE MATRIX (NFRC SIZE)

2500 UT PLUS - CAPTURED SYSTEM

1" Double Glazed Stainless Steel Glass Chair and Warm-Edge Glazing Spacer

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix 2

Glass SHGC [3]	Overall SHGC [4]
0.75	0.67
0.70	0.63
0.65	0.58
0.60	0.54
0.55	0.50
0.50	0.45
0.45	0.41
0.40	0.36
0.35	0.32
0.30	0.27
0.25	0.23
0.20	0.18
0.15	0.14
0.10	0.10
0.05	0.05

Visible Transmittance 2

Glass VT [3]	Overall VT [4]
0.75	0.67
0.70	0.62
0.65	0.58
0.60	0.53
0.55	0.49
0.50	0.44
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

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