

MODEL 2500XT (XTREMETHERM) THERMAL ALUMINUM CURTAIN WALL SYSTEM



SCAN

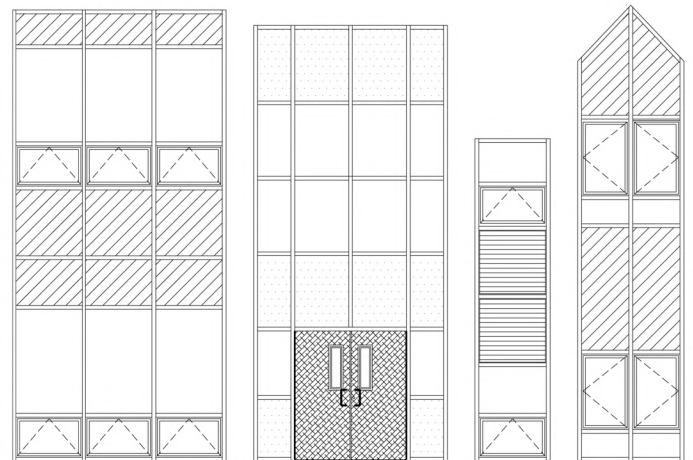


Precision-Engineered for Thermal Excellence

The Capitol 2500XT Thermal Curtain Wall System is a premier solution for commercial projects, engineered for large openings and demanding building envelopes. It delivers exceptional thermal performance and structural integrity through its slim 2-1/2" sightline and advanced 15/16" polyamide strut thermal break.

Innovative design separates hot and cold temperature transfer, significantly improving U-value and energy efficiency. This exterior glazed system seamlessly integrates Capitol's FRP and aluminum doors, operable window inserts, and integral miniblinds with access panel.

Diverse Design Opportunities



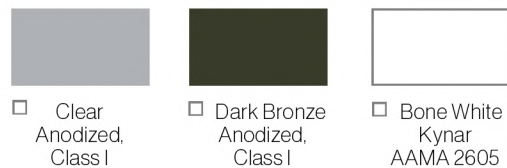
Warranty Protection

We stand behind the quality of our products with comprehensive warranties. Our focus on reliability and longevity help minimize contractor callback and ensure long-term customer satisfaction.



- Curtain Wall - 3 years
- Anodize - 5 years
- Kynar 2605 - 10 years

Frame Finish Color Selections



* Custom color selections available upon request.

MODEL 2500XT (XTREMETHERM)

SECURE, DURABLE, AND DESIGNED FOR SUCCESS

Engineered for large-scale commercial projects, the 2500XT offers a perfect blend of architectural aesthetics, superior strength, thermal high performance, and unparalleled durability designed to enhance your building's thermal efficiency and maximize your investment.



Exceptional Thermal Efficiency

Achieve superior energy efficiency and reduced heat transfer with the advanced 15/16" thermally broken polyamide strut, ensuring consistent indoor climates and lower operational costs.



Robust Structural Integrity

Benefit from unrivaled structural strength capable of supporting expansive glass areas and meeting demanding building envelopes, with versatile framing options and optional internal steel reinforcement.



Seamless Architectural Integration

Gain complete design freedom. Integrates seamlessly with Capitol's FRP and aluminum doors, operable window inserts, and integral miniblinds with access panel, offering extensive customization, all contributing to a unified and modern aesthetic.



Superior Water & Moisture Protection

Ensure advanced protection against the elements with zone-glazed design. Offers exceptional resistance to water penetration and maintaining the building's integrity in all conditions.



MODEL 2500XT (XTREMETHERM)

TECHNICAL SPECS + HIGHLIGHTS

MATERIAL STANDARDS

Extruded aluminum framing members are made from ASTM B 221, 6063-T6 alloy and temper. The structural thermal barrier is a polyamide nylon reinforced glass fiber material.

THERMAL BREAK

An advanced 15/16" polyamide strut thermal barrier separates exterior and interior aluminum framing members.

GLAZING SYSTEM

A pressure plate, screwed into the back member, provides a structural component to securely hold the infill in place. A snap-on beauty cap then conceals the pressure plate and its fasteners, providing a clean aesthetic finish.

GLAZING GASKETS

Glazing gaskets are molded or extruded EPDM, designed as a compression-type to provide a watertight seal. This system is exterior glazed.

UNIFORM LOAD

A static air design load of 40 psf is applied in the positive and negative direction. Deflection will not exceed $L/175$ of the clear span of any framing member at design load. At structural test load (1.5 times the design load), no glass breakage or permanent set exceeding 0.2% of clear spans will occur.

WATER & AIR RESISTANCE

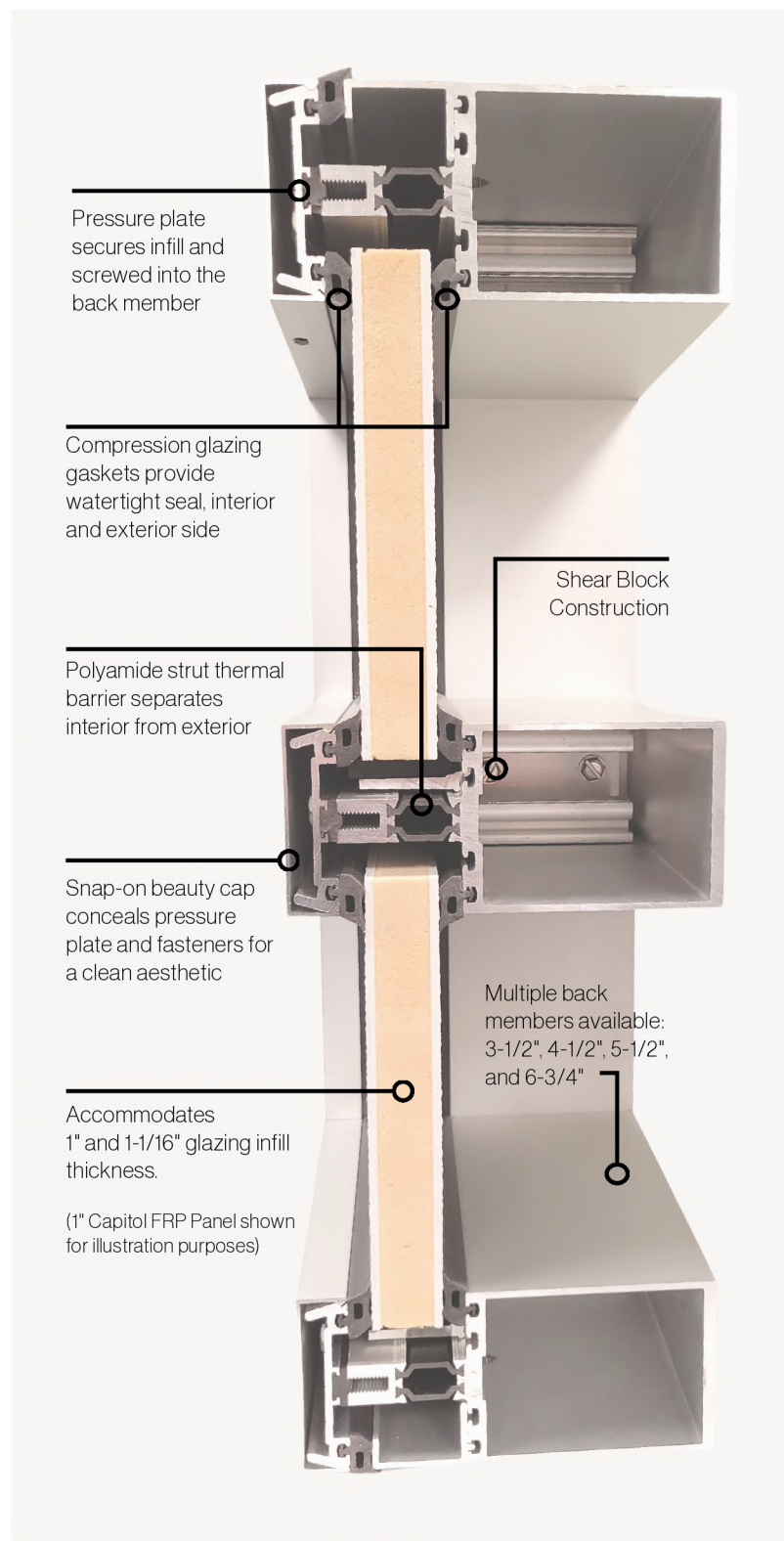
The system is zone-glazed and provides a watertight seal with no leakage at an air pressure differential of 15 psf. Air infiltration will not exceed 0.1 CFM/ft² at a static air pressure differential of 6.27 psf. The system's design includes internal weep and drainage to the exterior to manage any water that may inadvertently enter.

PERFORMANCE & COMFORT

The system is engineered to be free from rattles, wind whistles, and noise due to thermal and structural movement and wind pressure.

OPTIONAL INTEGRATIONS

The system is designed for single-source integration with other Capitol products, including FRP, flush, and stile aluminum doors. Optional components such as window inserts and integral blinds can also be provided.



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TEST RESULTS SUMMARY



= Structural Test



= Performance Test

ARCHITECTURAL TESTING PERFORMED

ASTM E 283-04: Determines the rate of air leakage through exterior products under specified pressure differences across the specimen.

ASTM E 330-02: A test method for the structural performance of exterior products by uniform static air pressure difference.

ASTM E 331-00: A test method for the water penetration of exterior products by uniform static air pressure difference.

AAMA 1503-09: Measures the thermal transmittance (u-value) and condensation resistance of fenestration products. This test uses a hot box and cold box to simulate different temperatures, and is the basis for the NFRC ratings.

SUMMARY OF RESULTS	TEST METHOD
Air Infiltration <0.1 L/s/m ² (<0.01 cfm/ft ²)	ASTM E283
Design Pressure +/- 4320 Pa (+/- 90.23 psf)	ASTM E330
Uniform Load Structural Test Pressure +/- 6480 Pa (+/- 135.34 psf)	ASTM E330
Water Penetration 720 Pa (15.04 psf)	ASTM E331
Thermal Transmittance U-Factor: 0.27	AAMA 1503-09
Condensation Resistance Factor - Frame (CRFf): 59	AAMA 1503-09
Condensation Resistance Factor - Glass (CRFg): 81	AAMA 1503-09

NFRC 100/200/500 COMPUTER SIMULATION (OTHER MAKEUPS AVAILABLE)

NFRC 100/200/500: A computer simulation test method that measures a product's energy performance (U-Factor, SHGC, VT, CR) based on computer simulations. It uses NFRC standards (100 for U-Factor, 200 for SHGC/VT, and 500 for Condensation Resistance) to ensure accurate ratings.

U-Factor (U-Value): The U-factor measures how well a product prevents heat from escaping. A lower U-factor means better insulation.

Solar Heat Gain Coefficient (SHGC): The SHGC indicates how much solar heat is let in. A higher SHGC means more heat gain. This is affected by glazing, number of panes, and coatings.

Visible Transmittance (VT): VT measures how much visible light passes through a product. A higher VT allows more daylight. Coatings and extra glass layers can reduce VT.

Condensation Resistance (CR): The CR measures the ability of a product to resist condensation on its interior surface. A higher CR means a better resistance to condensation.

GLAZING INFILL	U-FACTOR	SHGC	VT	CR
1" Clear SN68 #2 IGU	0.34	0.34	0.61	60
Add Argon Gas	0.31	0.34	0.61	63
Add 1/4" Clear Tmp BAP	0.26	0.24	0.56	59
Add Argon Gas + BAP	0.23	0.24	0.56	61
1" Bronze SN68 #3 IGU	0.34	0.29	0.36	60
Add Argon Gas	0.31	0.28	0.36	63
Add 1/4" Clear Tmp BAP	0.26	0.24	0.56	59
Add Argon Gas + BAP	0.23	0.24	0.56	61
1" Gray SN68 #3 IGU	0.34	0.26	0.30	60
Add Argon Gas	0.31	0.26	0.30	63
Add 1/4" Clear Tmp BAP	0.26	0.24	0.56	59
Add Argon Gas + BAP	0.23	0.24	0.56	61

2500XT CURTAIN WALL OVERALL SYSTEM DIMENSIONS				
Beauty Cap Sightline	2-1/2"	2-1/2"	2-1/2"	2-1/2"
Back Member Depth	3-1/2"	4-1/2"	5-1/2"	6-3/4"
Overall System Depth	5-13/16"	6-13/16"	7-13/16"	9-1/16"

MODEL 2500XT (XTREMETHERM)

EXPLORE THE POSSIBILITIES



SCAN

Explore Our Website for Additional Capitol Manufactured Products!



THE CAPITOL ADVANTAGE: YOUR PARTNER IN BUILDING SUCCESS

Decades of Expertise:

Leveraging extensive experience in architectural aluminum and glass to deliver proven, reliable solutions.

Uncompromising Quality:

Committed to superior craftsmanship and durable products that stand the test of time and performance demands.

Integrated Solutions:

Offering a full suite of seamlessly compatible systems for a unified building aesthetic and streamlined installation.

Performance Driven:

Engineering every product for exceptional thermal efficiency, structural integrity, and long-term value.

Dedicated Partnership:

Providing comprehensive support from initial design concepts through meticulous installation for every project.

Customization Capabilities:

Tailoring solutions to meet unique project specifications and help bring your precise design visions to life.



<https://www.capitol-windows.com>



WINDOWS

Discover quality and customization in our diverse range of window systems. Whether your project demands energy savings or unique aesthetics, our windows provide the perfect fit for the owner's specific architectural needs and long-term value.



ENTRANCES

Create impactful and secure entrances with Capitol's versatile door systems. Designed for diverse commercial applications, our doors offer a blend of style, durability, and security, backed by expert project support ensuring the best long-term solution for the building owner.



STOREFRONTS

Make a powerful first impression with Capitol's high-performance storefront solutions. Engineered for both stunning aesthetics and lasting durability, our systems seamlessly integrate with our window and door products, enhancing the building's appeal and long-term value for the owner.



CURTAIN WALLS

Unleash your design potential with our versatile and sustainable curtain wall systems. Designed for seamless integration and large-scale impact, our solutions offer exceptional thermal performance and weather protection, contributing to long-term energy savings and occupant comfort.