

Visionary Design and Advanced Functionality Combine to Deliver Maximum Results



Southeast Division Police Station
Edmonton, Alberta
ARCHITECT
IBI Group Architects, Engineers, Edmonton, Alberta
GLAZING CONTRACTOR
Cantech Glass Contracting Inc., Edmonton, Alberta
PHOTOGRAPHY
© CJ Berg

Providing panoramic views of the outdoors while meeting stringent Canadian CAN/CSA-A440 performance requirements is a tough challenge. Kawneer set out to address the assignment, and its 5500/5525 Thermal Windows are the result.

Ideal for new and retrofit construction, 5500/5525 Thermal Windows enable the designer to maximize the vision area while maintaining the thermal integrity of the exterior façade.

By employing its high-performance glass-reinforced nylon 6/6 IsoWeb™ thermal break technology, 5500/5525 Thermal Windows meet or exceed the highest performance levels set forth by CAN/CSA-A440 for windows. With outstanding condensation resistance and thermal transmittance performance capabilities, the 5500/5525 series raises the standards for design, functionality and performance.

PERFORMANCE

The high-performing 4" (101.6 mm) deep 5500 Thermal Window and 5" (127 mm) deep 5525 Thermal Window achieve a significantly superior condensation index (I value) and thermal transmittance (U-factor). A recessed interior leg provides the ability to interface with air and vapor barriers to ensure the continuity of the seal at the window perimeter.

The windows have a vented and drained rain screen cavity and accommodate both 1" (25.4 mm) and 1-3/4" (44.45 mm) sealed glass units.

The structural aspects of the product are enhanced through the thermal break connecting the exterior portion of the frame to the interior portion. The technology permits composite action, thus achieving greater load resistance while still offering design flexibility. Additionally, the "top hat" feature of the 5525 Thermal Window provides a deeper 5" frame for thicker wall construction and greater structural capability.

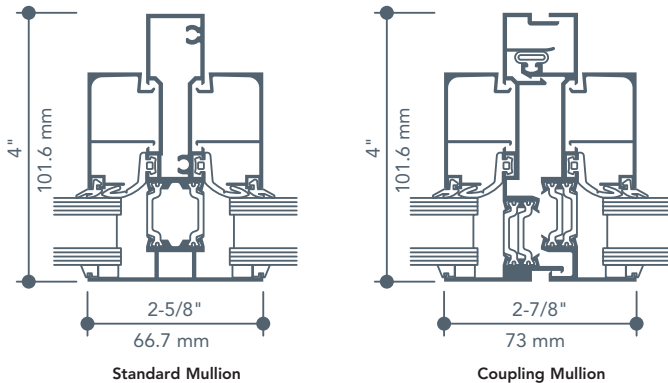
PERFORMANCE TEST STANDARDS*

Windows are tested in accordance with CSA A440-00 and AAMA/WDMA/CSA 101/I.S.2/A440-08 (NAFS 08).

Air Performance	ASTM E283
Water Performance	ASTM E331
Uniform Static Structural Performance	ASTM E330
Life Cycle	AAMA 910
Forced Entry	ASTM F588
Thermal	CSA A440-00, AAMA 507, AAMA 1503, NFRC 102, NFRC 100/200/500

* Test results available from Kawneer. Contact your Kawneer sales representative for more information.

Comparison of standard mullion with coupling mullion, which allows for multi-modular or strip window applications (5500 Thermal Window shown, 5525 Thermal Window similar)



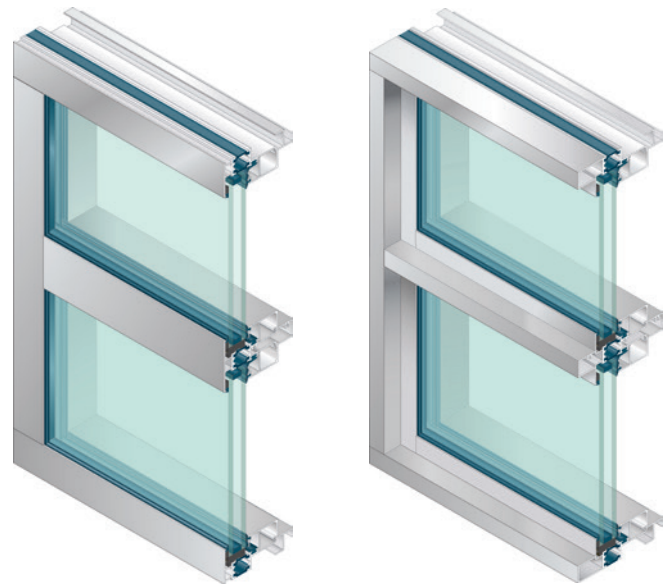
FABRICATION AND INSTALLATION

5500/5525 Thermal Windows can be installed in punched and strip openings. A specially designed coupling mullion allows the windows to be installed in a multi-modular strip application. Horizontal muntins are available as well.

Glass is installed and replaced from the interior side of the window. 5500/5525 Thermal Windows also accept a full range of project-out, project-in and casement vents.

AESTHETICS

Kawneer's 5500/5525 Thermal Windows offer the versatility in design and the high performance required for today's building applications. Whether it is the overall flush appearance provided by the 5500 Thermal Window with its extreme frontal placement of glass or the distinctive "top hat" accent feature of the 5525 Thermal Window you are looking for, this window provides an ideal solution.



5500 Thermal Window with Flush Appearance

5525 Thermal Window with "Top Hat" Accent Feature

The vents have 45° mitered corners, which give the window a smooth and attractive appearance. Other options include Euro-groove multi-point locking hardware and multiple locking handle styles and finishes.

5500/5525 Thermal Windows can fit the aesthetics of almost any project with a maximum vision area and high overall thermal integrity, coupled with considerable flexibility in design selection.