



WAUSAU

WINDOW AND WALL
SYSTEMS



UCLA Luskin Conference Center . Hornberger + Worstell . Bohlin Cywinski Jackson . Photo Credit: Matthew Millman



INVENT™

FIXED AND PROJECTED WINDOWS AND WINDOW WALL

The Wausau Window and Wall Systems® INvent product family provides a proven chassis with the breadth of options necessary to meet the needs of design professionals nationwide. All INvent Series products are available in a variety of frame depths to optimize span versus wind load resistance, and are tested to meet stringent AAMA Architectural Window AW 100 Performance Class requirements.

Our designers, engineers and technicians ensure system performance, aesthetics, durability, ease of installation and building comfort.

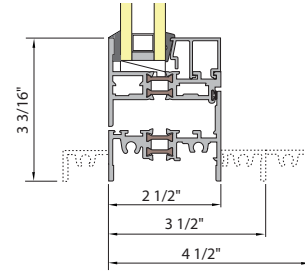
Wausau supports your sustainable design goals, and our reputation for workmanship is backed by an industry-leading warranty of up to 10 years.


...the future of windows...

www.wausauwindow.com 1.877.678.2983



2250i . 3250i . 4250i
4250i-OS Offset INvent
 Wausau's standard high-performance
 projected window product line



- 2-1/2", 3-1/2" and 4-1/2" frame depth with polyamide thermal barrier
- AAMA AW-100 Architectural Performance Class
- Fixed, project-in hopper, project-out awning, or casement
- Integral blinds with access doors available
- 1/8" wall thickness at hardware attachments
- Multi-lock hardware option for improved accessibility
- High recycled aluminum content, choice of 30,000 finish colors, including two-color option

Allowable Air	Water	NFRC U-Factor	CRF _f	STC OITC
0.10 cfm/sqft at 6.24 psf	15 psf	0.34 to 0.64 BTU/hr.sqft.*F	46 to 65	32 to 42 28 to 35

Test results may vary

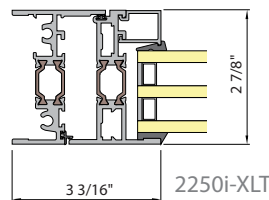
INvent 2250i Series
out-swing casement

Production line sampling, with inspection and water testing prior to shipment, helps ensure real-world performance equal to the laboratory.



INvent 2250i-XLT
Series awning vent

INvent -XLT
 Superior energy efficiency and
 condensation resistance



- 2-7/8", 3-7/8" and 4-7/8" frame depth
- XLT option features extra-wide polyamide thermal barrier
- AW-100 rating - Accepts triple glazing
- Glazed-in muntin grid option for historical renovation

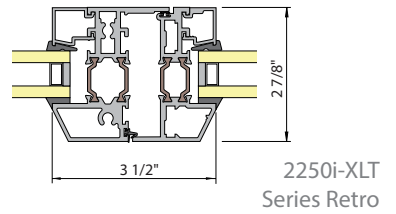
Allowable Air	Water	NFRC U-Factor	CRF _f	STC OITC
0.10 cfm/sqft at 6.24 psf	15 psf	0.21 to 0.60 BTU/hr.sqft.*F	59 to 68	32 to 42 28 to 35

Test results may vary



INvent Retro™ -XLT

Beveled, ogee or cove glazing rebates to replicate historical putty-glazed windows



- 2-7/8", 3-7/8" and 4-7/8" frame depth
- 18mm and 24mm XLT polyamide thermal barriers
- AAMA AW-100 Architectural Performance Class
- Optional equal sightlines at vents and fixed lites
- Triple glazing and integral blinds available
- Grid muntins or true divided lite (pictured)
- Optional decorative cove glazing beads (pictured)
- Optional multi-lock hardware for improved accessibility
- Innovative, French casement available (pictured)

Allowable Air	Water	NFRC U-Factor	CRF _f (est.) ^f	STC OITC
0.10 cfm/sqft at 6.24 psf	15 psf	0.39 to 0.64 BTU/hr.sqft.°F (est.)	46 to 60	31 to 42 26 to 35

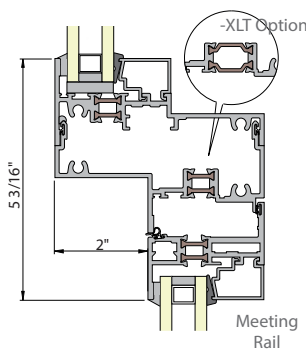
Test results may vary



INvent Simulated Double-Hung

Offset glass planes replicate double-hung sash, but easier to operate, durable, and weather-tight

- 3-1/2" to 4-7/8" frame depth with polyamide thermal barrier
- AAMA AW-100 Architectural Performance Class
- Fixed, hopper, awning, or casement
- Integral blinds with access doors available
- Architecturally flat 6 mm glass - No balances
- XLT option with glazed-in muntin grid for historical renovation (pictured)



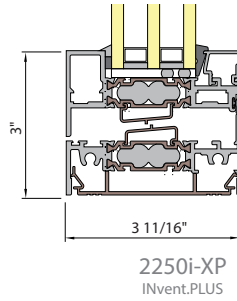
Type	Allowable Air	Water Resistance	NFRC U-Factor BTU/hr.sqft.°F (est)	CRF _f (est)	STC OITC
4250i or -XLT Fixed Upper	0.10 cfm/sqft at 6.24 psf	15 psf	0.23 to 0.58	56 to 71	32 to 42 28 to 35
4250i or -XLT Vent Lower			0.35 to 0.60	46 to 61	

Test results may vary

INvent.PLUS 2250i-XP

European benchmark thermal performance -
Designed for U.S. architectural preferences

- Best-in-class NFRC U-Factors as low as 0.16 BTU/hr.sqft.*F (fixed) and 0.20 BTU/hr.sqft.*F (operable)
- AAMA AW-100 Architectural Performance Class
- 3-11/16" frame depth with 44 mm polyamide thermal barrier and foam cavity fillers
- Incorporates engineered polymers and aluminum extrusions where their inherent material properties are best suited
- Narrow sightlines and flush, convection-baffled, operable vents
- Fixed; in- or out-swing casement; top-hinged, hopper or awning vents (detail)
- 1" exterior glass offset complements curtainwall and storefront systems
- Heavy butt hinges or concealed, stainless steel, four-bar friction hinges easily carry triple glazing



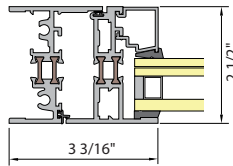
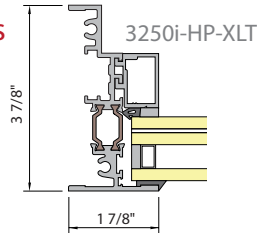
Allowable Air	Water	NFRC U-Factor	CRF _f	STC OITC
0.10 cfm/sqft at 6.24 psf	15 psf	0.16 to 0.51 BTU/hr.sqft.*F	46 to 65	32 to 42 28 to 35

Performance can vary with glass and hardware package selected.
Minimum vent sizes apply for certain hardware packages.

INvent-HP and -BHM

Hurricane Impact and Blast Hazard- Mitigating Fixed and Operable Windows

- 2-1/2" to 4-7/8" frame depth
- Fixed, awning, or casement; integral blinds with access doors available
- Multi-lock hardware option
- Large "D" missile and essential facilities "E" missile impact-tested to ASTM E1996 and Miami-Dade TAS protocols for Wind Zones 1-4 including HVHZs
- Various 2250i and 3250i-BHM configurations achieve ASTM F1642 "Minimal Hazard" or "No Hazard" rating when shock tube-tested at 6 psi peak, 42 psi.msec impulse
- Various 4250i-BHM configurations achieve GSA ISC Performance Conditions 1, 2, 3a or 3b, when shock tube-tested at 10 psi peak, 89 psi.msec impulse



2250i-BHM
6 psi-42 psi-msec

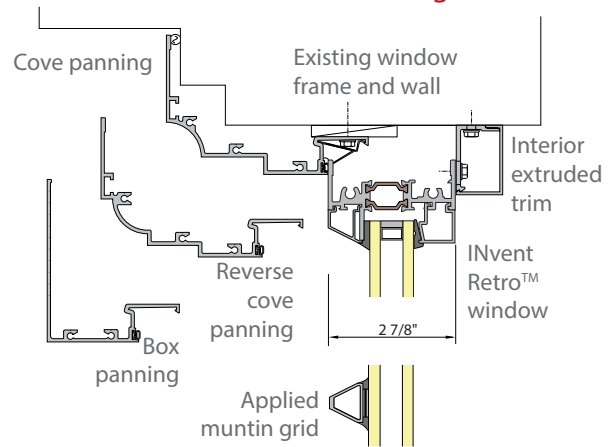
Allowable Air	Water	NFRC U-Factor	CRF _f	STC OITC
0.10 cfm/sqft at 6.24 psf	15 psf	0.34 to 0.64 BTU/hr.sqft.*F	46 to 65	32 to 42 28 to 35

Test results may vary



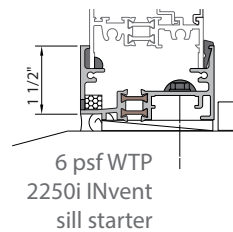


Window Replacement Panning and Muntin Grids



Removal of existing operable sash only, leaving frames in place, speeds installation and minimizes disruption. Extruded aluminum "panning" prepares the opening.

Muntins are available as true divided lites, glazed-in grids, silicone-applied or between-glass muntins.



Ease of Installation Receptors and Anchors

All INvent Series products are available with the same consistent family of accessories, to minimize installation time, and help ensure field quality control.

Window Hardware For Occupant or Custodial Operation - "ADA" Accessibility Options



Between-Glass Blinds Low maintenance and glare control

- Available with 1" or 5/8" aluminum slats in 16 standard colors
- Occupant privacy and glare tilt control with slip-clutch feature
- Concealed raise-lower cords for uniform exterior appearance
- Hinged interior doors for custodial access
- Dual- or triple-glazed options for control of solar heat gain



Leaving existing windows in place? Check out Wausau's S.E.A.L. interior accessory windows for sound, energy, air and light control



Greenpoint Landing · Brooklyn, NY · Handel Architects

INvent™ fixed and projected windows may be finished in a color palette of more than 30,000 choices, including new **copper anodize**. Polyamide thermal barriers facilitate different interior and exterior frame finishes. Liquid or powder paint coatings are applied using VOC-free processes. The frosty, matte finish of eco-friendly anodize is ideal for Wausau's high recycled content aluminum framing.



ADA Accessibility for Windows

Wausau's accessible projected windows are **laboratory-proven capable** of operating with one hand using a force of five pounds or less, to unlock, open, close, and lock, without tight grasping, pinching or twisting of the wrist.

- All INvent™ Series and the 4250-Z Zero Sightline Series
- Project-out awning, in-swing or out-swing casement
- AAMA Architectural AW-100 Performance Class
- No reductions in air, water or structural performance for laboratory testing of accessible vents



Operating Force Test
Roto-operator force-to-open



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