



**SIDE-LOAD**  
SERIES 8050  
SINGLE HUNG



**TILT-SASH**  
SERIES 8100  
SINGLE HUNG



Almond and Grid Optional  
**PREMIUM**  
SERIES 8300  
DOUBLE HUNG



Grid Optional  
**ADVANCED**  
SERIES 8700  
DOUBLE HUNG



Grid Optional  
**ULTIMATE**  
SERIES 8900  
DOUBLE HUNG

## KEY STRUCTURAL / PERFORMANCE FEATURES

Design Pressure Rating (Structural Rating)	DP-50	DP-50	DP-35	DP-35/50	DP-60
Air Infiltration Rating @ 25mph	0.01	0.26	0.10	0.04	0.08
U-Value Standard Low-E Argon (Thermal Transmittance)	0.31	0.33	0.31	0.32	0.29
U-Value Ultra Low-E Argon	0.30	0.30	0.30	0.29 (w DBS)	0.29
Window Core (Sash Reinforcement)	Extruded Aluminum	Extruded Aluminum	Extruded Aluminum	Extruded Aluminum	Fiberglass Insulkor
Vinyl Weight (36x60) Window Without Glass	12.8 lbs	15.8	18.2 lbs	21.4 lbs	25.8 lbs
Frame Chambers	13	9	6	6	11
Sash Chambers	5	7	2	2	5

## GENERAL FEATURES

Accidental Glass Breakage Warranty	Optional	Optional	Optional	25 years	Lifetime
Standard Glass Warranty	0 – 15	0 – 15	15 – 30	25 – Lifetime	Lifetime
Accessory Groove	N/A	N/A	N/A	Yes	Yes
Nail Fin	N/A	N/A	N/A	Optional (Integrated)	Optional (Applied)
Easy Tilt In Sash	Side Load	Yes	Yes	Yes	Yes
Fully Welded Construction	Yes	Yes	Yes	Yes	Yes
Sill Design	True Slope	True Slope	True Slope	True Slope	True Slope
Injected InsulKor™ Foam Frame Option	N/A	N/A	Optional	N/A	Optional
Intercept Warm Edge Glass Technology	Standard	Standard	Standard	Standard	Standard
Triple Pane R-5 Glass Option	N/A	N/A	N/A	N/A	Optional
Insulated Glass Thickness	3/4"	3/4"	3/4"	3/4"	3/4"
Screen Frame Material	Roll Form Aluminum	Roll Form Aluminum	Extruded Aluminum	Extruded Aluminum	Extruded Aluminum
Standard Screen Size	1/2	1/2	1/2	1/2	Full
Sash Profile	Square	Square	Square	Rounded	Decorative
Sash Balance Type	Block & Tackle	Block & Tackle	1/2" Coil	1/2" Coil	3/4" Coil
Equal Sight Line Sash	No	No	No	Yes	Yes
Balance Covers	No	No	Yes	Yes	Yes
Standard Night Latches	N/A	N/A	2	2	2
Solid Colors	White/Almond	White/Almond	White/Almond	White/Almond	White/Almond
Exterior Painted Colors	N/A	N/A	9	N/A	9
Exterior Laminate Colors	N/A	N/A	N/A	Bronze	N/A
Interior Woodgrain Laminates	N/A	N/A	N/A	N/A	3
Hardware Options	N/A	N/A	N/A	N/A	Brass/Nickel
Jamb Adjusters	N/A	N/A	6 (3 on each side)	6 (3 on each side)	6 (3 on each side)

## Glossary of Terms

Air Chambers	Small honeycomb spaces within the sash and frame extrusions that help to insulate and strengthen the window. <b>Our 8900 series window has 11 frame chambers.</b>
Air Infiltration	The amount of air leaking in and out of a building through cracks in walls, windows and doors. Windows are tested by independent labs at a 25 MPH force. The leaking air is measure in cubic feet per minute. The industry standard is less than .30 or 30% of a cubic foot of air. <b>Atrium windows can be as low as .08 for our 8900 series windows.</b>
Argon	A gas that is heavier than air and can be used to fill the airspace of an insulated glass unit. Argon is a safe, colorless, odorless, tasteless, non-toxic gas, which is six times denser than air. Argon increases the insulating value of an insulated glass unit as well as improves sound insulation.
Balance (Coil or Constant Force)	The system in the side jambs of a single or double-hung window that helps open and support the weight of the sash. Coil Balances offer a quiet smooth operating sash.
Beveled Exterior	An extension of the vinyl frame that adds an aesthetically pleasing dimension to the exterior of the window.
Design Pressure	The pressure a product is designed to withstand. This value is a measure of a product's capacity to withstand the forces of wind loading, in both positive and negative directions, while it is closed and locked. The higher the DP rating the more structurally sound the window will be. <b>Atrium boasts the industry's highest rating on any Vinyl Double Hung: DP-60.</b>
ENERGY STAR®	A government-backed program helping businesses and individuals protect the environment through the use of high-efficiency products. ENERGY STAR® qualifying products, such as windows and doors, mean these items use less energy, save money and help protect the environment in the specified region.
Fusion Welded	Refers to frames and sash attached together with intense heat. <b>All Atrium products are constructed this way.</b>
Glazing Bead	A removable, decorative trim around the glass.
Insulated Glass (IG)	A combination of two or more panes of glass hermetically sealed with optimal air space for energy efficiency. This space may or may not be filled with an inert gas, such as argon.
Low-E (Emissivity) Glass	Glass treated with a thin transparent coating of metal oxide and silver. Allows natural light and short-wave heat energy to freely penetrate glass during the winter while reflecting long-wave heat energy back outside during the summer months. Keeps your home cool in the summer and warm in the winter. It reduces the penetration of ultraviolet rays to minimize fading of carpet and draperies.
Meeting Rail	The point at which the horizontal sections of the top and bottom sash meet. On sliders, the meeting rail is vertical. <b>All Atrium products have an interlocking lock and meeting rail.</b>
R-Value	Resistance to thermal transfer or heat flow. Higher R-Value numbers indicate greater insulating value. It is the inverse of the U-Value ( $R=1/U$ ).
Sill	The main horizontal member forming the bottom of the frame of a window or door. <b>All Atrium double hung windows have a true sloped sill to ensure perfect water run of with no need to drain the water through the sill.</b>
U-Value (U-Factor)	The rate of heat transfer through a window or door. <b>The lower the U-value, the better the insulating properties of the unit or glazing system.</b>
Weather Stripping	Variously shaped metal, vinyl, plastic or fiber strips that fit tightly against the window or doorframe to resist air infiltration through cracks.
Wind Load	Force extended on a surface by moving air. <b>Atrium products are the industries strongest rated in correlation with our High DP ratings. The higher the wind capacity the stronger the window will be.</b>
Warm Edge Glass	The spacing system between the panes of glass with properties that conduct less than standard aluminum spacers that touch the glass without a thermal break.