



(Series 160  
available with  
no J channel)

**PREMIUM**  
SERIES 150 SH



(Series 460  
available with  
no J channel)

**ADVANCED**  
SERIES 450 DH



**ULTIMATE**  
SERIES 8300 DH



(available  
with Integral  
Nail Fin)

**MAXIMUM**  
SERIES 8900 DH

## KEY STRUCTURAL / PERFORMANCE FEATURES

Design Pressure Rating (Structural Rating)	DP-50	DP-35 (Series 455 available with DP-50)	DP-35	DP-60
Window Core	Extruded Aluminum	Extruded Aluminum	Extruded Aluminum	Fiberglass Insulcore
Air Infiltration	0.26	0.02	0.10	0.08
Glass Thickness	3/4	3/4	3/4	3/4
U-Value Low-E Argon	0.32	0.32	0.29	0.29
U-Value Ultra Low-E Argon	0.30	0.29	0.29	0.29
Standard Spacer	Intercept	Intercept	Intercept	Intercept
Standard Spacer with Ultra Low-E	Duralite	Duralite	Intercept	Intercept

## FRAME FEATURES / OPTIONS

Welded Sash and Frame	Yes	Yes	Yes	Yes
True WM180 Brickmold	Yes	Yes	No	No
Integral Nail Fin	Yes	Yes	Optional	Optional (applied)
Integral J Channel	Yes	Yes	No	No
J Channel Depth	.625	.75	N/A	N/A
3 1/2" Flat Casing	N/A	Optional	N/A	N/A
Sill Design	True Slope	True Slope	True Slope	True Slope
Equal Sight Line Sashes	No	Yes	Yes	Yes
Sash Profile	Square	Rounded	Square	Decorative
Weep Holes in Frame	No	No	No	No
Balance Type	Block & Tackle	Block & Tackle	Coil	Coil
Balance Covers	N/A	N/A	Yes	Yes
2 Sash Locks over 27 1/4"	Yes	Yes	Yes	Yes
Window Opening Control Device	Optional (field applied)	Optional (factory applied)	Optional (factory applied)	Optional (factory applied)
Applied 4 9/16 or 6 9/16 FJ Primed Extension Jambs	Optional	Optional	N/A	Optional
Applied 4 9/16 or 6 9/16 Clear Pine Extension Jambs	Optional	Optional	N/A	Optional

## SCREENS

Half Screen Material	Roll Form	Roll Form	Extruded	Extruded
Full Screen Material	N/A	Extruded (optional)	Extruded	Extruded
Standard Screen Size	Half	Half	Half	Full

## COLOR OPTIONS

Solid White	Yes	Yes	Yes	Yes
Solid Almond	Yes	Yes	Yes	Yes
Solid Clay	Yes	Yes	N/A	N/A
Painted Colors	9	9	9	9
Wood Laminates	N/A	N/A	N/A	3
Black Exterior Laminate	Optional	N/A	N/A	N/A

## WARRANTY\*

Glass Warranty	15 Year	15 Year	25 Year	Lifetime
General Warranty	Lifetime	Lifetime	Lifetime	Lifetime
Glass Breakage Warranty	N/A	N/A	N/A	Lifetime

## 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 <sup>®</sup>	A government-backed program helping businesses and individuals protect the environment through the use of high-efficiency products. ENERGY STAR <sup>®</sup> 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.