

## *Pella Architect Series Windows - Specifications*

### **Wood Windows**

- Wood Interior – Ready for site finishing.
- Wood windows are treated with EnduraGuard® triple wood protection formula —advanced protection against moisture, decay and stains caused by mold and mildew, as well as termite damage.
- Wood Aluminum Clad Exterior finished with EnduraClad® protective finish, in a multi-step baked on finish process.
- Exterior Cladding Color – Custom Color Matched to Home Exterior

### **Custom Sized Windows for Proper Fit**

#### **Glass**

- Insulated Low-E Advanced Glazing with Argon Gas

#### **Dual Weather Stripping**

- Flexible santoprene compressed between frame and sash for positive seal on all four sides.
- Secondary polyvinyl chloride leaf type weather strip between edge of sash and frame.

## **Frame**

Overall frame depth is 5" for a wall depth of 3 11/16". Full frame replacement – not a pocket install.

## **Hardware**

### **Roto Operator Assembly**

- Steel worm gear sash operator with hardened gears.
- Operator base is zinc die cast with painted finish.
- Operator linkage, hinge slide, and hinge arms are 300 series stainless steel.
- Exposed fasteners are stainless steel.
- Hardware will exceed 1,000 hours of salt spray exposure per ASTM B 117.
- Finish of integrated fold-away crank is baked enamel.
- SureLock system – a single handle locking system operates positive acting arms that reach out and pull the sash into a locked position.
- Lock handle finish is baked enamel.

### **Screens**

- InView screens are vinyl coated 18/18 mesh fiberglass screen cloth complying with SMA 1201, set in aluminum frame fitted to inside of the window.
- Screen frame finish is baked enamel.

## **Installation Process**

- Installation Includes:
  - Rubber Sill Application
  - Foam Filled Insulation
  - Head Flashing
  - Matching Interior Trim Casing
- Installers Certifications:
  - Pella Certified
  - Installation Masters Certification

**Windows must meet or exceed Energy Star Rating Criteria**

## Energy Star Performance

### Energy Star “Whole Unit” Residential Window Performance Guidelines

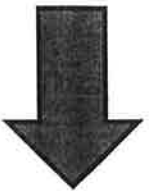
Northern Region	U-Factor	Solar Heat Gain Coefficient - SHGC
	.31 or lower	Any

The rate of heat loss is indicated in terms of the **U-factor (U-value)** of a window assembly.

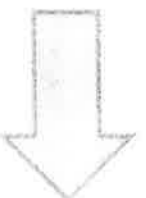
**Solar Heat Gain Coefficient (SHGC)** measures the fraction of solar energy transmitted and tells you how well the product blocks heat caused by sunlight. SHGC is measured on a scale of 0 to 1; values typically range from 0.25 to 0.80. The lower the SHGC, the less solar heat the window transmits.

### Pella Architect Series – Vented Casement and Fixed Casement Performance

	U-Factor	Solar Heat Gain Coefficient - SHGC
Fixed Casement	.28	.30
Vented Casement	.29	.26



The blue arrow represents the amount of cold air entering the home from the outside.



The yellow arrow represents the amount of heat/UV light entering the home from the outside.

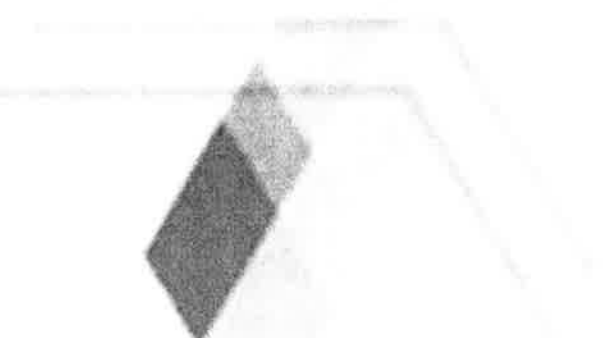
## Advanced Low-E Insulating Glass with Argon

**Best Use:** Locations with hot and cold weather extremes.

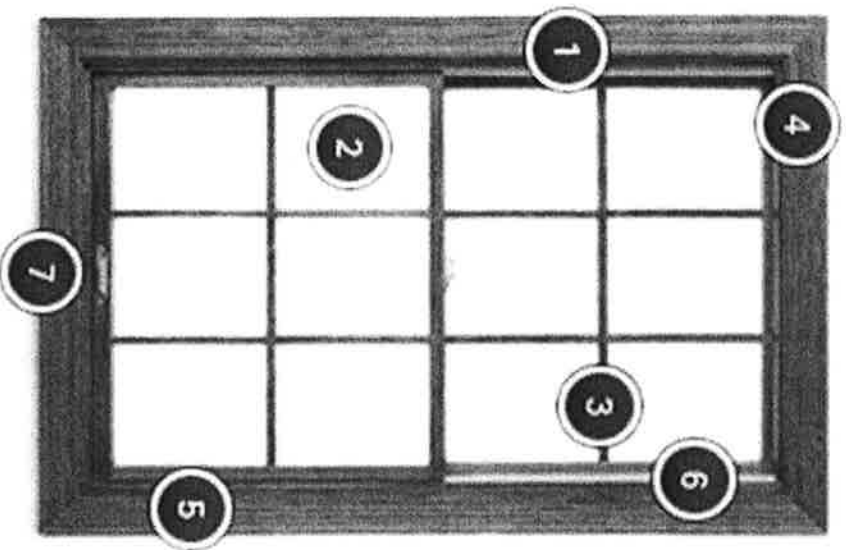
**Energy Efficiency:**  
Features insulation glass with a Low-e coating made from two translucent layers of silver to increase comfort year-round.

**Fade Protection:**  
Blocks up to 86% of the sun's ultraviolet rays to help protect furniture, window treatments and flooring from fade damage – yet allows in natural light.

**Argon:**  
Argon gas is inserted in the space between the two panes of glass to further reduce heat transfer, making your home even more energy efficient.



## Window Anatomy



1. Frame – The combination of the head, jambs and sill that forms the precise opening in which a window sash fits.
2. Glass – A framed sheet of glass within a window frame.
3. Grilles – Any bar that divides window glass into smaller panes. Also called a muntin, grid or windowpane divider.
4. Head – The main horizontal part forming the top of the window frame.
5. Jamb – The main vertical parts forming the sides of a window frame.
6. Sash – A single assembly of stiles and rails made into a frame for holding glass.
7. Sill – The main horizontal part forming the bottom of the frame of a window.

## Additional Window Parts

**Aluminum Clad** – Exterior wood parts covered with extruded aluminum, with a factory-applied finish to deter the elements.

**Argon** – An inert, nontoxic gas used in insulating glass units to reduce heat transfer.

**Casing** – Exposed molding or frame around a window, on either the inside or outside, to cover the space between the window frame or jamb and the wall.

**Egress Window** - A window big enough and low enough to the ground – per local building codes – that allows occupants to escape through the opening in an emergency, such as a fire.

**Fixed Panel** - An inoperable window panel.

**Integrated Crank with Fold-Away Handle** – A window crank that folds in on itself, improving operation and aesthetics by not interfering with room-side window treatments.

**Lock Handle** – A locking mechanism located on the handle of a window.

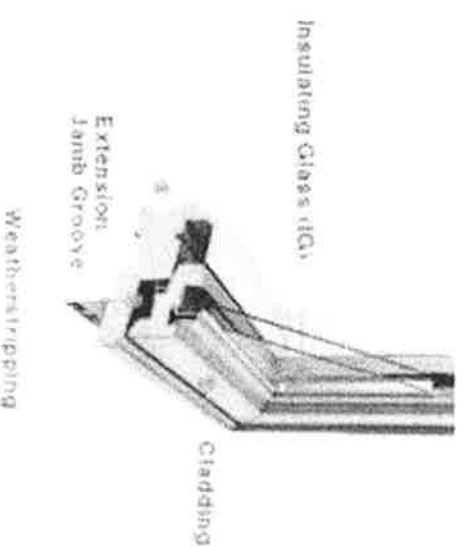
**Mullion** – A major structural vertical or horizontal member to combine two or more windows together.

**Operator** – Crank-operated device for opening and closing casement or awing windows.

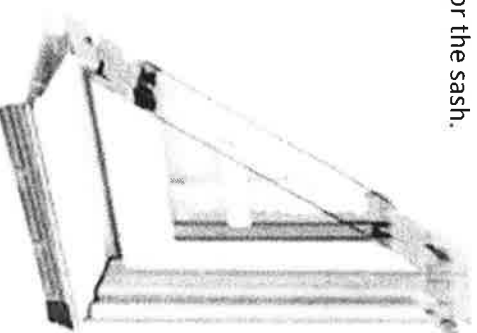
**Surelock** – Pella patented window operating system that reaches out to pull the window sash against the weather stripping for a tight seal.

**Vent** – The movable framework or sash in a glazed window that is hinged or pivoted to swing open.

**Weather Stripping** – A strip of resilient material for covering the joint between the window sash and frame in order to reduce air leaks and prevent water from entering the structure.



**Jambliner** – A strip which goes on the sides of a window frame to provide a snug fit for the sash.



## HARDWARE

Finish of integrated fold-away crank is baked enamel [

- Roto operator assembly
  - Steel worm gear sash operator with hardened gears.
  - Operator base is zinc die cast with painted finish.
  - Operator linkage, hinge slide, and hinge arms are 300 series stainless steel.
  - Exposed fasteners are stainless steel.

Hardware shall exceed 1,000 hours salt spray exposure per ASTM B 117