

## Casement Windows

### **Perma-Shield® Improved/E-Z Casement - 1999 to Present** **Perma-Shield® Enhanced Casement - 1995 to 1998** **Perma-Shield® Casement - 1966 to 1995**

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In 1966 Andersen Corporation introduced the revolutionary Perma-Shield Casement window. The unit was constructed much like a Primed Casement window, then completely clad in seamless, vacuum-formed vinyl. The Perma-Shield Casement window, along with the Perma-Shield Awning window introduced at the same time, was the first use of Andersen's patented Perma-Shield process.

#### **Features**

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##### **Sash**

Wood core, completely covered and sealed with rigid vinyl. Standard glazing is welded insulating glass (Thermopane® or Twindow®). The vinyl glazing beads, held in place by spring tension, are extruded so they can be removed for replacement.

##### **Weatherstrips**

Original Perma-Shield weatherstrip is glued to the sash profiles with vinyl-to-vinyl adhesive. Vinyl kerf-style weatherstrip was introduced in 1978.

##### **Hardware**

Equipped with a roto-lock operator. The sash lock has a reach-out action that pulls the sash tight to the frame, relieving stress on the operator. Hinges are detachable from a channel mounted on the frame. Original hardware is silver satin. Later vintage hardware is stone-color.

##### **Frame**

Treated, water-repellent wood core. Exterior frame and sill covered with rigid vinyl. Continuation of the rigid vinyl covering on frame forms perimeter flashing and anchoring fin. Inside stop is Ponderosa pine.

##### **Options**

Aluminum frame screen with aluminum wire cloth. Exterior finish, White, Terratone or Sandtone.

Removable double glazing with aluminum frame.

Interior grilles in narrow profile vinyl and wide profile polycarbonate. Exterior grilles in vinyl.

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## Milestones

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- 2003** Stormwatch™ Protection (Coastal Product) with design pressure upgrades, glass options, and structural enhancements introduced for Improved/E-Z Casement units.
- 2001** Forest green introduced.
- 1999** Improved hinge and lock system introduced.
- 1996** Sashless picture window introduced.
- 1995** Single actuation lock, 3 foot wide venting width introduced.
- 1991** Sandtone color introduced.
- 1989** Hardwood picture window grilles introduced.
- 1988** Argon gas added to the sealed space of High-Performance™ insulating glass.
- 1985** Flexible dual duometer bulb weatherstrip introduced.
- 1984** High-Performance™ insulating glass introduced.  
Tri-pane insulated glass discontinued on new units. Remains available as a replacement glazing.  
CX unit designation changed to CW.
- 1982** Blinds introduced for venting and stationary units.  
Split-arm operator introduced.
- 1981** Tri-pane insulated glass introduced.  
Silicone bed glazing first used to bond glass to sash.
- 1979** Casement lock design changed from four hole to three hole.
- 1974** Terratone color introduced.  
Stone-color straight-arm operator introduced.  
30° and 45° Angle Bay units introduced.
- 1966** Perma-Shield Casement unit introduced.