

## **Definitions and Window Terminology**

**Air Chambers** - Small honeycomb spaces within the sash and frame which help to insulate and strengthen the window.

**Air Infiltration** - The amount of air that passes between a window sash and frame. In windows it is measured in terms of cubic feet or air per minute, per square foot of area. The lower the number, the less air the window lets pass through.

**Vent Latch** - Latch mechanism on the interior face of the sash which retains the window in a partially open position for ventilation.

**Angled Exterior** - A sloped extension from the frame that adds an aesthetically-pleasing dimension to the exterior of the window.

**Argon Gas** - An odorless, colorless, tasteless, non-toxic gas which is six times more dense than air. It is used to replace air between the glass panes to reduce temperature transfer.

**Awning** - A top-hinged window that swings outward for ventilation.

**Bay Window** - An angled combination of three windows that project out from the wall of the home. The windows are commonly joined at 30- or 45-degree angles.

**Beveled Exterior** - An angled extension from the frame that adds an aesthetically-pleasing dimension to the exterior of the window.

**Bow Window** - An angled combination of windows in 3-, 4- or 5-lite configurations. The windows are attached at 10-degree angles to project a more circular, arced appearance.

**Cam Lock and Keeper** - The mechanisms which pull the sash together when placed in the locked position.

**Casement** - A window with a side-hinged sash that opens outward for ventilation.

**Celcon® Rollers** - Self-lubricating rollers that are found in Slider windows and patio doors, that will not mar and are corrosion resistant.

**Condensation Resistance Factor** - A measure of the effectiveness of a window or glazing system to reduce the potential for condensation.

The higher the condensation resistance factor, the more efficient the window and glazing system.

**Conduction** - Energy transfer from one material to another by direct contact.

**Constant force Balance System** - Device for holding vertically sliding sash in any desired position through the use of a spring or weight to counterbalance the weight of the sash.

**Convection** - Heat transfer by currents that flow from a warm surface to a colder one.

**Coved Exterior** - An arced extension from the frame that adds an aesthetically-pleasing dimension to the exterior of the window.

**Dead-air Space** - The space between the panes of glass of an I.G. unit.

**Deadlite** - A piece of glass or I.G. unit with a sash profile around it; not set within the main frame of a window unit.

**Tru-Sash Pivot System** - An exclusive hinge-type system used on hung windows. This system attaches the sash to the balance, creating perfect alignment between the sash and frame, while allowing the sash to tilt inward for cleaning.

**Double Hung** - A window that has two operable sash which slide vertically.

**Double-strength Glass** - Glass with a thickness of approximately 1/8".

**Egress Code** - The code that requires a minimum opening of a window for persons to exit or firefighters to enter a building.

**Extruded Screen Frame** - Different from a Rollformed frame, this frame is pressed through a form or die.

**Fusion-welded** - The process of joining materials by melting them together with extreme heat (over 500°F), resulting in the materials uniting into a one-piece unit.

**Geometric** - Specially designed windows classified as either Straight line Geometrics such as rectangles, triangles, trapezoid, octagons, pentagons, etc., or Radius Geometrics which include Half-rounds, Quarter-rounds, Circles, Ellipses, Eyebrows, etc.

**Glass** - Available Styles: clear, bronze tinted and grey tinted.

**Glazing** - The process of sealing the glass to the sash.

**Grids** - Decorative horizontal or vertical bars installed between the glass panes to create the appearance of the sash being dividing into smaller lites of glass.

**Head** - The horizontal top portion of the main frame.

**Hopper** - A window with a bottom-hinged sash that opens inward for ventilation.

**I.G. Unit (Insulating Glass Unit)** - Two or more lites of glass separated by a spacer and hermetically sealed at the glass edges.

**Intercept® Spacer System** - Spacer system using a U-channel design to reduce the number of conduction paths.

**J-channel** - Integral extension on the outside of a new construction window that eases installation on siding applications.

**Jamb** - Vertical sections of the main frame.

**Keeper Rail** - The horizontal section of the sash where the keeper is attached.

**Keeper Stile** - The vertical section of the sash where the keeper is attached.

**Laminated Glass** - Specially designed glass where two panes of glass are bonded to a durable interlayer, providing increased safety, UV protection and noise reduction. If the window or door gets broken the glass will adhere to the plastic interlayer-preventing glass fallout in the home.

**Inter locking Meeting Rail** - A meeting rail which overlaps and interlocks both sash.

**Lift Handle** - A handhold for raising and lowering the sash. Handle implies that the handhold is not continuous across the sash.

**Lift Rail** - A handhold for raising and lowering the sash. Rail implies that the handhold is continuous across the sash.

**Lite** - A unit of glass in a window.

**Lock Rail** - The horizontal section of the sash where the cam lock is attached.

**Lock Stile** - The vertical section of the sash where the cam lock is attached.

**Low E (Emissivity) Glass** - Glass with a transparent metallic oxide coating applied onto or into a glass surface. The coating allows short-wave energy to pass through but reflects long-wave infrared energy which improves the U-value.

**Main Frame** - The head, sill and jambs sections of a window.

**Mechanically Fastened Frame** - Refers to frames fastened with screws.

**Meeting Rail** - The horizontal sections of a pair of sash that meet when the sash are closed.

**Mesh** - Fabric made of either fiberglass or aluminum, used in the making of screens.

**Mullion** - A vertical or horizontal connecting unit between two or more windows.

**Nailing Fin** - An extrusion attached to the main frame of a window used to secure the unit to the rough opening.

**Obscure Glass** - Glass that has been made translucent instead of transparent.

**Oriel** - A window with the meeting rail located off center of the frame. Most oriels have a 60/40 configuration.

**Patio Door** - A glass door that slides open and close on adjustable tandem rollers. Available in 2- or 3-lite configurations with the

**Picture** - A window that has no moveable sash.

**R-value** - Resistance a material has to heat flow. The higher the R-value, the greater the resistance.

**Rail** - The horizontal sections of the sash.

**Raised Exterior** - An angled extension from the frame that adds an aesthetically pleasing dimension to the exterior of the window.

**Relative Humidity Condensation Point** - The relative humidity level at which visible water vapor or other liquid vapor begins to form on the surface of the sash or frame, based on an inside temperature of 70° F and an outside temperature of 0° F. The higher the percentage, the more moisture the air can hold before condensation will occur.

**Rollformed Screen Frame** - A method of fabrication in which a flat (usually metal) material is placed on a machine where the material is formed into shape using differently shaped rollers and pressure.

**Sash** - The part of the window which contains the glass.

**Sill** - The horizontal, bottom section of the main frame.

**Sash-Lok Sill** - sloped sill design, with ½ inch leg for added protection against wind and water penetration.

**Single Hung** - A window in which one sash slides vertically and the other sash is fixed.

**Single-strength Glass** - Glass with a thickness of approximately 3/32".

**Slider Window** - A window in which the sash move horizontally. Sliders are available in a 2- or 3-lite configuration, with the 3-lite having operable end vents.

**Sloped sill** - The sill of the window that has a downward slope to the outside. This sill has sufficient degree of slope to aid in water runoff.

**Solar Heat Gain Coefficient** - The percentage of heat gained from both direct sunlight and absorbed heat. The smaller the number, the greater the ability to reduce solar heat gain.

**Spacer** - Material placed between two or more pieces of glass in order to maintain a uniform width between the glass, and prevent sealant distortion.

**Stile** - The vertical sections of the sash.

**Tape Glazing** - Two-sided tape used to secure and seal the glass to the sash.

**Tempered Glass** - Glass with a surface compression of not less than 10,000 psi, or an edge compression of not less than 9,700 psi. When broken, the glass breaks into pebbles instead of shards.

**Tilt Latch** - Mechanism that unlocks the sash and allows it to tilt in from the main frame.

**Tilt-in/lift-out Sash** - A sash that can be tilted to the interior and removed for cleaning and is manufactured by welding.

**U-value** - Amount of heat transferred through a material. The lower the U-value, the slower the rate of heat flow and the better the insulating quality.

**UV Block** - The percent of ultraviolet rays blocked from being transmitted through the glass. The higher the number the lower the percentage of ultraviolet rays transmitted through the window.

**Visible Light Transmittance** - The percentage of light that is transmitted through glass in the visible light spectrum (380 to 720 nanometers). The higher the number the higher the percentage of visible light transmitted through the window.

**Weatherstripping** - Material used to form a weather-resistant seal around operable sash.

**Weep Slots** - Slots or holes in the sill (bottom) member of the sash frame that allows water to escape. Weep flaps add a vinyl flap to keep insects out.