

## WINDOW AND DOOR DICTIONARY

**AAMA:** American Architectural Manufacturers Association. A national trade association that establishes voluntary standards for the window, door, and skylight industry.

**Ambient Temperature:** the outdoor temperature.

**Architectural Shape Windows:** available in a variety of full and half circles, octagons, hexagons, and ovals, these windows fit a wide range of spaces to create an incredible focal point, especially for homes that feature vaulted ceilings. (see page 6)

**Argon:** a colorless, harmless gas used instead of air in sealed spaces between panes of glass in insulating glass units to increase insulation. Argon is less conductive to heat than air.

**Astragal:** a vertical member placed at the meeting edges of a double door to provide a weather seal and may be used to anchor the fixed door.

**Awning Window:** a type of window with a top-hinged sash that swings out at the bottom - lets in fresh air while keeping rain out. (see page 6)

**Balance:** a mechanical device mounted in the window frame used in vertically operating windows as a means of counter-balancing the weight of the sash during opening and closing. A minimum of two balances per sash is required for all types of balances.

**Bay Window:** a type of window consisting of a central picture window flanked by a pair of narrow casement windows set at an angle - provides a panoramic view. (see page 6)

**Bow Window:** a type of window very similar to a bay, except that the panels (3 or more) are equal sized. Panels can be fixed or operable or mixed in any combination. (see page 6)

Bottom Rail: the bottom horizontal member of a window sash or door panel.

**Brickmould:** a type of external casing for windows and doors.

**Butyl:** a synthetic rubber used as a sealant and architectural glazing type.

**Casement Window:** a type of window with a side-hinged sash that opens like a door - the best option for catching a breeze and cross-ventilation. Sashes are operated by a handle. (see page 6)

**Caulking:** a compound for filling joints and sealing cracks to prevent leakage of water and air.

**Condensation:** when water vapor, which is present in all but the driest air, comes into contact with a surface that is below what is called the "dew point temperature," the vapor becomes liquid and is called condensation. Moisture appears on the colder surface.

**Conduction:** process of heat transfer through a material from a warm surface to a cool surface.

**Design Pressure (DP):** the pressure a product is designed to withstand. Used in the context of regulating appropriate window strength for wind affected areas.



**Dew Point:** the temperature at which the condensation of water vapor in a space begins, at a given state of humidity and pressure, as the temperature is reduced.

**Dormer:** an area that protrudes from the roof of a house, generally featuring one or more windows.

**Double-Hung Window:** a type of window that has an upper (outside) sash that slides down, and a lower (inside) sash that slides up. (see page 6)

**Dual Pane:** two panes of glass with a single airspace, held together by an edge spacer - zthe most economical interglass unit.

**Egress Window:** a window providing egress (the ability to leave an enclosed space.) The minimum egress dimensions required by most building codes are 20" horizontally and 24" vertically.

**Exterior Stop:** the removable glazing bead that holds the glass or panel in place when it is on the exterior side of the lite or panel, as contrasted to an interior stop located on the interior side of the glass.

**Extrusion:** the process of producing aluminum shapes by forcing heated metal through an orifice in a die by means of a pressure ram. Also, any item made by this process.

**Fixed Window:** a stationary window or door that does not open - also referred to as a fixed sash.

**Flange:** a flange can be a front-mounted fin on a window or dorwal. This facilitates its use in installation of stucco and replacement installation.

Frame: the head, jambs, and sill that form an opening into which a sash or door panel fits.

**French Door:** hinged glass doors consist of one or more glazed panels contained within an overall frame designed so that one or more of the glazed panels are operable. The operable glazed panels swing either to the inside or to the outside.

**Garden Window:** units which consist of three-dimensional, five-sided structure, with provisions made for supporting plants and flowers in the enclosed space outside the plane of the wall. Operating sash are allowed but not required. (see page 6)

**Grids:** decorative inserts for windows or door glazing that add a traditional touch available in a variety of colors and styles.

**Hinge:** a device on which doors, windows, cabinets, etc. may turn or swing to open and close.

**Hopper Window:** similar to casement window except the sash is hinged at the bottom. Hopper windows are projected windows having one or more sash hinged or pivoted at the bottom edge and projecting inward from the plane of the window at the top. (see page 6)

**Horizontal Sliding Window:** a window where the movable panels slide horizontally. Horizontal sliding windows consist of one or more operable sash in a sealing (or weathering) frame. (See page 6)

**High Performance (HP):** products which have been tested to extra wind loads and water resistance test pressures enabling products to be used in installations which are subjected to environmental conditions which exceed the performance levels of a standard rated product.



**Infiltration (Air):** the movement of outdoor air into the interior of a building through cracks around windows and doors or in walls, roofs, and floors.

**Insulated Glass:** insulating glass refers to two or more pieces of glass spaced apart and hermetically sealed to form a single glazed unit with an air space between. Heat transmission through this type of glass may be as low as half that without such an air space.

**Insulated Glass Unit (IGU):** a combination of two or more panes of glass sealed air space(s) between panes. Also referred to as thermopanes or sealed units.

**Insulation:** construction materials used for the protection from sound, heat, cold, or fire. A material with high resistance (high R-value or low U-value) that is used to retard heat flow. Air, Argon, or Krypton gas spaces between panes of glass provide insulation in IGUs.

**Interlock:** a set of meeting rails or meeting stiles which contains a provision for each of rails or stiles to physically engage one another over their entire length.

**Jamb:** main vertical members forming the sides of a window or door frame.

Jamb Depth: width of a window or door from the interior to the exterior of the frame.

**"J" Channel:** usually an aluminum roll form channel used to trim off aluminum siding to the vertical potion of doors and windows, the "J" channel is fitted next to the window or door jamb and allows the aluminum siding material to finish off in the channel.

**Krypton:** an inert, colorless gas used instead of air in sealed spaces between panes of glass in insulating glass units to increase insulation. Provides greater insulation than Argon.

**Lift Rail:** a rail in a vertical window provided with an operator to raise or lower the operable sash.

Lite: one piece of glazing, another term for a pane of glass used in a window.

**Lock:** the device on a window or door that secures it in a closed position.

**Louver:** a slatted opening for ventilation in which the slats are so placed to exclude rain, sunlight, or vision.

**Low E Glass:** low-emissivity glass with a transparent coating which acts as a thermal mirror used to increase a window's insulating value, block or increase heat flow, and reduce fading.

**Meeting Rail:** a rail which overlaps another rail. The part of a sliding glass door, a sliding window, or a hung window where two panels meet and create a weather barrier.

**Mullion:** an intermediate connecting member used as a means to "join" two or more fenestration products together in a single rough opening. A mullion may or may not give added strength for structural stability.

**NFRC:** National Fenestration Rating Council. A body that has established methods for rating and certifying the energy performance of windows, doors, skylights, and other fenestration products.

**Obscure Glass:** mainly used for decoration, diffusion, or privacy. The design is pressed into the glass during the rolling process.



**Operable:** describing a sash ventilator or panel to be opened and closed.

Pane: a framed sheet of glass.

Rail: a horizontal surrounding edge member of a sash, ventilator, or panel.

Rough Opening: the opening in a wall into which a door, window, or rough buck is to be installed.

**"R"-Value:** a measure of a product's energy efficiency, or how a material resists heat transfer or flow. R-Value is used to describe the insulative properties of construction materials - the higher the R-value, the better the insulating effect.

**Sagging:** sinking caused by compounds not capable of supporting own weight in a joint, or by application in joints larger than the compound is designed for, or by improper application.

**Sash:** the portion of a window which includes the glass and the framing sections which are directly attached to the glass. Normally, the moving section of a window, although sash are sometimes fixed.

**Screen:** a product used with a window or door, consisting of a four-sided frame surrounding mesh of wire or plastic material used to keep out insects. The screen can be fixed in place or it can be rolled side-to-side as on a sliding glass door or pass through window.

**Sealant:** a compound used to fill and seal a joint or opening. Also the material used to seal the edges of insulated glass.

**Sealed Insulated Glass:** an assembly of two or more lites of glazing separated by a dehydrated gaseous space, the entire assembly being sealed to prevent passage of water vapor or gas.

**Sidelight:** a narrow fixed unit joined to one or more doors, providing a more open appearance.

**Sill:** a bottom horizontal member of a window or sliding door frame.

**Single-Hung Window:** single-hung windows are vertically operating windows in which the sash weight is offset by a counterbalancing mechanism mounted in the window. The single-hung window features a stationary top and movable bottom half. (see page 6)

**Sliding Glass Door:** sliding glass doors consist of one or more lites of glass contained in panels which are contained within an overall frame designed so that one or more panels are movable in a horizontal direction. Panels shall be all sliding or some sliding and some fixed, and shall interlock with each other or contact a jamb member where the panel is capable of being securely locked. Also referred to as a patio door.

**Solar Heat Gain Coefficient:** indicated the percentage of normal incident solar heat energy that makes its way through the glazing under standard summer conditions. This includes both directly transmitted and indirectly transferred heat from energy initially absorbed by the glazing. The lower the number, the better the window is blocking heat gain.

**Spacers:** in glazing, small blocks of neoprene, nylon, or other material placed on both sides of the edges of glass to center it in the glazing channel to maintain uniform width of sealant beads and prevent excessive sealant distortion under lateral loading.

**Storm Door:** a secondary door, installed on the outside of an entrance door, to reduce air infiltration, thereby saving energy.



**Transom:** a window installed above another window or door.

**"U"-Value:** the rate of heat flow through material, U-value is used to measure heat loss or gain due to differences between indoor and outdoor air temperatures. The lower the U-value, the better the glazing resists heat transfer.

**Ultraviolet Light (UV):** invisible rays of solar radiation at the short-wavelength violet end of the spectrum. UV rays can cause fading of paint finishes, carpets and fabrics, as well as deterioration of some materials.

**Vinyl:** Polyvinylchloride (PVC) material that can be both rigid or flexible, used in glazing channels and weathering of both windows and doors.

**Vinyl Glazing:** holds glass in place with extruded vinyl channels or roll-in type application.

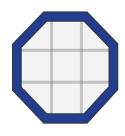
**Warm-Edge Spacers:** insulating spacers used to seal panes of glass in the manufacture of IGUs - edge conductivity is lessened for improved window energy performance and reduced condensation problems.

**Weatherstripping:** thin sections of material used to prevent air leakage around operable windows and doors - usually foam gasketing, metal strips, or vinyl.

**Weep Hole:** an opening at the sill of a window or door through which moisture may drain free to the building exterior.



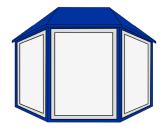
## **TYPES OF WINDOWS**



**Architectual Shape Window** 



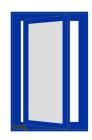
**Awning Window** 



Bay Window



**Bow Window** 



**Casement Window** 



Double-Hung Window



Garden Window



**Hopper Window** 



Horizontal Sliding Window



Single-Hung Window