



**D
L
G
E**
ENGINEERING, INC.

GLAZING CONSULTANTS

DLGE GLOSSARY

Active Leaf - Usually the first operating leaf in a door having a pair of leaves; the leaf to which the latching or locking mechanism is attached.

ADA Threshold - A wheelchair-accessible door threshold. This type of threshold is not to exceed 3/4" in height for exterior sliding doors or 1/2" for other types of doors.

Air Infiltration - The amount doors (the lower, the better) of air leaking in and out of a building through cracks in walls, windows.

Alloy - A composition of two or more metals to obtain a desired property.

Annealed Glass - Glass that has not been heat-treated and is essentially strain free; often referred to as "float glass."

Anodize - A process that provides a hard durable oxide film on the surface of aluminum. This coating can produce coloring and finishing that both protects and beautifies the aluminum.

Arch Window - Half-circle picture window.

Astragal - The center member of a double door, which is attached to the fixed or inactive door panel.

Awning Window - A type of window with a top-hinged sash that swings out at the bottom.

Back Bedding - The process of adhering and sealing glass to a frame or sash.

Backer Rod - A round, compressible material, either open or closed cell, that's placed into voids between materials to insulate and allow a backing for the application of sealant.

Baffle - A material used in windows and doors to impede the flow of water or air into the framing system through weep slots.

Balance - A mechanical device (normally spring-loaded) used in single- and double-hung windows as a means of counterbalancing the weight of the sash during operation.

Bay Window - A composite of three windows, usually made up of a large center unit and two flanking units at 30- or 45-degree angles to the wall. A bay projects from the wall of the structure.

Bead - A molding or stop placed around a window frame to hold the glass in place by pressure.

Bite - Distance by which the inner edge of the aluminum frame glazing pocket or stop overlaps the glass. Also termed purchase, edge cover or engagement.

Bituminous Paint - A low-cost paint containing asphalt or coal tar used to isolate aluminum from mortar, concrete or masonry.

Bottom Rail - The bottom horizontal member of a window sash.

Brake Metal Shape - Aluminum sheet stock bent or "broken" to desired shape, as required by specific job conditions, on a power or manual press brake. This shape is often used to cover conditions which cannot be covered by a stock extruded aluminum shape.

Butt Hinge - A hinge designed for application to the edge of a door consisting of two rectangular metal plates joined together with a pin.

Cantilever - A beam, girder or truss overhanging one or more supports.

Casement Window - The whole sash swings in or out from the jamb of the window and it either uses a crank-out system or a friction system of operation. It's the best window choice for catching breezes and providing cross-ventilation.

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

Caulking - Sealants used to seal fixed and movable construction joints to prevent infiltration.

Cladding - An exterior covering or skin applied to framing or a structure for aesthetic or protective purposes.

Countersink - To form a depression to fit the conic head of a screw or the thickness of a plate so that the face will be level with the surface.

Curtain Wall (Aluminum) - An exterior building wall which carries no roof or floor loads and consists of a combination of aluminum, glass and other surfacing materials supported by the aluminum framework.

Daylight Transmittance - The percentage of visible light that glazing transmits through a window – a standard clear dual pane without considering whether a window frame has a daylight transmittance of 82%.

Deflection - The measure of movement of a member from its static position when subjected to loads.

Design Load - The project wind load to be determined by the architect and expressed in psf. Windows ratings are determined using AAMA 101/I.S.2/A440-05.

Door Closer - A device or mechanism to control a door during its opening and closing cycle; may be overhead or floor mounted and either exposed or concealed.

Door Frame - An assembly of members, consisting of jambs and a header, into which a door or doors fit when closed. The door frame may also include transom lights and adjacent sidelights. Also see Threshold.

Door Handing - Determined by placing your back to the hinge jamb. If the door swings to your left it is a left-handed door.

Door Jamb - One of two vertical members of a door frame. The hinge jamb is the jamb to which the hinges or pivots are mounted; the lock jamb is the jamb at the leading edge of the door where a lock bolt may be engaged.

Door Opening - The opening dimension of a doorway is measured from inside of jambs and from floor line to underside of frame header. The opening size is usually the nominal door size and is equal to the actual door size plus clearances and threshold height.

Door Size (Actual) - The actual width and height of the swing door leaf.

Door Size (Nominal) - See Door Opening.

Door Stop - a) A molding or projecting element on a door frame which overlaps the edge of a door, causing it to stop in its closed position. b) A bumper mounted on the floor or wall to limit the extent of the door opening. c) An accessory feature of a door holder.

Double Glazing - In general, two thicknesses of glass separated by an air space within an opening to improve insulation against heat transfer and/or sound transmission. In factory-made double-glazing units, the air between the glass sheets is thoroughly dried and the space is sealed airtight, eliminating possible condensation and providing superior insulating properties.

Double-Acting Door - A door equipped with hardware that permits it to swing in both directions from the plane of its frame.

Double-Hung Window - A window consisting of two sashes operating in a rectangular frame, in which both the upper and lower halves can be slid up and down. A counterbalance mechanism usually holds the sash in place.

Double-Strength Glass - Sheet glass between 0.115" and 0.133" (33.38 mm) thick.

Dry Glazing - A method of securing glass in a frame that uses pre-formed resilient gaskets instead of a wet sealant or glazing compound.

Egress Window - A window meeting certain size requirements for egress. The size is determined by national or local building codes. Typically, the rule is 5.7 sq. ft. of clear opening, 20" minimum clear width and 24" minimum clear height.

Electrolysis - Chemical decomposition of a metal surface by the action of dissimilar metals and moisture.

End Dam - Used to close the ends of a subsill, so water will not leak out of the ends. It makes the subsill a complete water trough allowing it to collect excess water and drain it to the exterior.

Exterior Glazing - A method in which glass is secured in an opening from the exterior of the building.

Extruded Aluminum Shapes - There are two basic types of extruded shapes: Solid Extrusion - Any extruded shape other than a hollow or semi-hollow shape. Semi-Hollow Extrusion - An extruded shape where any part of the cross section partially encloses a void. The area of the void bears a fixed ratio to the square of the gap as shown in published tables developed by the Aluminum Association.

Facade - The exterior face of a building, especially the principal face.

Fenestration - The arrangement and proportion of window and door openings in a building.

Finish Hardware - Exposed hardware such as hinges, pivots, locks, etc. that has a finished appearance as well as a function used with doors and windows.

Fixed Panel - An inoperable panel of a sliding glass door or slider window.

Fixed Window - Fixed windows are not intended to open for ventilation or egress. There are no moving parts, hinges or latches. They consist of a glazed frame or a fixed sash and frame. Fixed windows are usually more air tight than windows that open. Also called Picture Window.

Flange Frame - A window frame with the head, jamb, and sill exterior perimeter leg longer than the interior perimeter leg. Also called Flush Fin.

Flashing - Sheet Material that bridges and protects the joint (gap) between the window or door frame members and the adjacent construction for the purpose of preventing water penetration by draining water away from the window or door.

Flush Bolt - A pair of rods or bolts that are mounted flush with the edge or the face of the inactive door to lock the door to the frame at head and/or sill. A flush bolt mounted in the edge is operated by means of a recessed lever.

Flush Glazing - Glazing in which glass is set in a recess in the aluminum frame; stops are also recessed; the glazing is flush with the frame surface. These systems are also called Pocket Glazed and Center Glazed.

Framing - An assembly of structural aluminum extrusions consisting of a jamb, vertical mullion, intermediate horizontal, header and sill which are fitted together to form a structure into which glass or other infill material is installed.

Fully Tempered Glass - Glass that has been heated and quenched in a controlled operation to provide a high level of surface compression. ASTM Standard C 1048-85 specifies that the surface compression be a minimum of 10000 psi. Generally considered to have four times the strength of annealed glass and two times the strength of heat-strengthened glass.

Glass Stop - A glazing bead that is either applied to or is an integral part of the framing system. **Glazing** - The act of furnishing or fitting with glass.

Glazing Bead - A light member applied to a frame or door stile or rail to hold glass or infill in a fixed position.

Head or Header - The horizontal frame member which forms the top of a frame.

Heat-Strengthened Glass - Glass that has been heated and quenched in a controlled operation to provide a degree of surface compression. ASTM Standard C 1048-85 specifies that the surface compression be between 3500 and 10000 psi. Generally considered to have two times the strength of annealed glass.

Horizontal Slider - HS have two or more sash (panels) within a frame. They may have one moving and one fixed sash (XO or OX), two moving sash on either side of a fixed sash (XOX), or two adjacent sash may slide by each other (XX). Most have rollers to ease operation.

Inactive Door or Leaf - The last door of a pair of doors to be released when unlocking, usually the one not equipped with a primary lock.

Insulating Glass Unit (IG) - An integral glass unit made up of two or three individual lights of glass separated by an air space.

Integral Mullion - A frame member trapped within the master frame to separate vents or fixed glass.

Interior Glazing - A method in which glass is secured in an opening from the interior of the building.

Interlock - An upright frame member of a panel in a sliding window or sliding glass door which engages with a corresponding member in an adjacent panel when the window or door is closed. Also called Interlocking Stile.

Jamb - The end vertical member of an aluminum framing system which terminates at the intersection of a wall. It is often referred to as a wall jamb.

Laminated glass - Two or more sheets of glass with an inner layer of transparent plastic to which the glass adheres if broken. Used for safety glazing and sound reduction.

Leaf - An individual door used either in a single or multiples (leaves).

Light or Lite - A separately framed piece of glass in a window or door. Sometimes spelled "Lite." A single (monolithic) glass pane or piece.

Lintel - A horizontal structural member that spans an opening at the head to carry the weight of construction above the opening.

Medium Stile - See Stile.

Meeting rail - The part of a sliding glass door, a sliding window, or a hung window where two panels meet and create a weather barrier.

Meeting Stile - The stiles of the active and inactive leaves which meet when a pair of doors is closed.

Mill Finish - The original finish of aluminum before finishing.

Mullion - A major structural vertical or horizontal member between window units or sliding glass doors.

Muntin - A secondary framing member used to hold panes within a window, window wall or glazed door.

Narrow Stile - See Stile.

Neoprene - A synthetic rubber having physical properties closely resembling those of natural rubber but not requiring sulphur for vulcanization. Extremely good weather resistance (both heat and cold) with ultraviolet stability. Commonly used for commercial glaze.

Obscure Glass - Any textured glass (frosted, etched, fluted, ground, etc.) used for privacy, light diffusion, or decorative effects.

Operable Window - Window that can be opened for ventilation.

Pane - One of the compartments of a door or window consisting of a single sheet of glass in a frame; Also, a Sheet of Glass.

Panel - A major component of a sliding glass door, consisting of a light of glass in a frame installed within the main (or outer) frame of the door. A panel may be sliding or fixed.

Patio Doors - Sliding glass doors, often used for access to a deck or terrace.

Picture Window - A large, fixed window framed so that it is usually, but not always, longer horizontally than vertically to provide a panoramic view.

Polyvinylchloride (PVC) - An extruded or molded plastic material used for window framing and as a thermal barrier for aluminum windows.

Projected Window - A window fitted with one or more sashes opening on pivoted arms or hinges. Refers to casements, awnings, and hoppers.

PSF (Pounds Per Square Foot) - A measurement of air pressure used in window testing, e.g., 1.56 psf (25 mph) or 6.24 psf (50 mph).

Rail - A horizontal member located at the top and bottom of a window or door.

Rough Opening - The opening in a wall into which a door or window is to be installed.

Soffit - The exposed undersurface of any overhead component of a building, such as an arch, balcony, beam, cornice, lintel, or vault.

Spandrel - Opaque glazing material most often used to conceal building elements between floors of a building, so they cannot be seen from the exterior.

Steel Reinforcing - A steel component placed within a vertical mullion to add stiffness and increase the windload capability of the system. Steel reinforcing may also be used to limit deadload deflection in intermediate horizontals.

Stiffener - A reinforcing member which serves to limit the deflection of the member to which it is attached.

Stile - A vertical member of a window or door, exclusive of applied glazing beads. Stiles are usually designated by function, such as lock stile, hinge stile or meeting stile.

Stop - The molding on the inside of a window frame against which the window sash closes; in the case of a double-hung window, the sash slides against the stop. Also used to describe a glazing bead.

Subsill - An aluminum extruded profile installed beneath the primary sill of a framing system specifically designed to function as a secondary defense for collecting infiltrated water which is then weeped to the exterior.

Sweep Strip or Door Sweep - A weatherstrip mounted at the top or bottom edge of a swing door.

Swing - The direction a swing door opens. Also see Hand of Door.

Temper (Aluminum) - Process used to bring a proper degree of hardness or elasticity by heat treatment. T5 - Artificially aged to improve mechanical properties and stability. T6 - Solution treated and artificially aged to improve the allowable stresses and consequently the capacity to resist greater movements.

Tempered Glass - Strong, break-resistant glass created in a secondary process via controlled air cooling of the heated glass. Tempered glass is four times stronger than annealed glass; a form of safety glazing. When shattered, it breaks into small pieces.

Tempering - Strengthening glass with heat and controlled air cooling.

Thermal Expansion and Contraction - An increase in the dimensions of a material in direct proportion to the rise in its temperature and conversely a dimensional shrinking as a result of a drop in temperature.

Threshold - The member that lies at the bottom of a sliding glass door or swinging door; the sill of a doorway.

Throw - The distance which a lock bolt or latch bolt projects when in the locked position.

Tinted glass - Glass colored by incorporation of a mineral admixture. Any tinting reduces both visual and radiant transmittance.

Transom Bar - The horizontal frame member (header) which separates the door opening from the transom.

Transom Window - The window sash located above a door. Also called transom light.

Vent - The operating portion of a window that slides, swings or projects in or out.

Vestibule - A small entrance hall or passage between the outer door and the interior of a building.

Vinyl - Polyvinyl chloride material, which can be both rigid or flexible, used for window frames.

Weatherstripping - 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.

Wedge Glazing - A flexible, continuous gasket that ensures a high-compression seal between the glass and glazing bead by applying pressure.

Weep Hole - A small opening in a wall or window sill member through which water may drain to the building exterior.

Windload - Force exerted on a surface by moving air.

Window - A glazed opening in an external wall of a building; an entire unit consisting of a frame sash and glazing, and any operable elements