

A

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

Acrylic: Thermoplastic glazing material in sheets and sealants.

Aerogel: A micro-porous, transparent silicate foam currently under development for potential use as a glazing cavity fill material, offering very high thermal performance.

Air infiltration: The amount of air leaking in and out of a building through cracks in walls, windows, and doors.

Airspacer: Component fitted around the perimeter of an insulating glass unit to separate the two lites of glass.

ANSI: American National Standards Institute, a clearinghouse organization for all types of standards and product specifications.

Annealed glass: Standard float glass.

Arch-top: One of several terms used for a variety of window units with one or more curved frame members, often used over another window or door opening. Also referred to as eyebrows.

Argon: An inert, nontoxic gas used in insulating glass to reduce heat transfer.

Astragal: Center post between two swinging doors.

ASTM: International: Formerly, the American Society for Testing and Materials, a trade association that establishes material standards (including glass) and test methods. It has also produced a window installation standard. Awning: Window with sash swinging outward from bottom.

B

Backbedding: Sealant used to bond the glass to a window sash.

Balance: Mechanical device (normally spring loaded) used in single- and double-hung windows as a means of counterbalancing the weight of the sash during opening and closing. Popular designs include coil spring or constant force, block and tackle, and spiral balancers.

Bay Window: A combination of three window units, which projects to the exterior. Usually features a large center unit with two flanking units at 30% or 45% angles to the wall.

Bottom rail: The bottom horizontal member of a window sash or door panel.

Bow Window: A combination window, which projects to the exterior. Usually features four or more window units in a radial or bow formation.

Box bay: A combination of three window units, which projects to the exterior. Usually features a large center unit with two flanking units at 90% angles to the wall.

Breather Tube or Capillary Tube: A tube placed through airspacer and seal of insulating glass that allows sealed unit to "breathe," accommodating differentials in pressure between elevation of manufacture and elevation of installation. Breather tubes are designed to be crimped and sealed upon installation at final elevation. Capillary tubes are designed to permit restricted diffusion without required crimping, and are therefore more popular with residential window producers. Neither tube should be used with argon gas. Usually used to accommodate changes in altitude between plant and job site.

Brick mould: A type of external casing for windows and doors.

C

Caming: The metal, typically lead or zinc, used in the construction of decorative glass panels, it is also tape-applied to single glass lites to create a decorative glass look.

Casement: Window with sash cranking outward to right or left.

Casing: Exposed moulding or profile around a window or door, on either the inside or outside, to cover the space between the window frame or doorjamb and the wall.

Caulking: A compound, commonly 100% silicone, for filling joints and sealing cracks to prevent leakage of water and air.

Cellular PVC: A composite of materials featuring polyvinyl chloride material used in window and door components and trim that features a cell-structure. It can be nailed, sawed, and fabricated like wood.

Cellulosic composite: Generally, a material combining an organic material, such as wood fiber, extruded with plastic.

Check rail: The bottom rail on the upper sash and the upper rail of the lower sash of a double-hung window unit, where the lock is mounted. Also referred to as a meeting rail.

Circle-top: One of several terms used for a variety of window units with one or more curved frame members, often used over another window or door opening. Also referred to as circle-heads and round-tops.

Cladding: Material placed on the exterior of wood frame and sash components to provide ease of maintenance. Common cladding materials include vinyl and extruded or roll-formed aluminum.

Clerestory: A window in the upper

part of a high-ceilinged room that admits light to the center of the room.

Combination door: A screen or storm door that features a combination of screen and glass panels.

Composite: A term used for window or door components, which consist of two or more materials, such as wood and plastic. The term also is loosely used for windows and doors which combine two or more materials in the frame or sash construction, such as a product with a wood interior and a vinyl or aluminum exterior.

Condensation: Water vapor from the air deposited on any cold surface, which has a temperature below the dew point. Sometimes seen on cold (and poorly insulated) window glass or framing that is exposed to humid indoor air.

Corner cleaner: Machine, which removes the bead of excess material, formed in welding vinyl window corners.

Cottage double-hung: A double-hung window in which the top sash is shorter than the bottom sash. CRF: Condensation Resistance Factor. A rating of a window's ability to resist condensation. The higher the CRF, the less likely condensation is to occur.

D

Desiccant: A zeolite material used to adsorb (spelled correctly) moisture vapor from within the sealed airspace of an insulating glass unit. Commonly used in silica gel bags found packed with shoes, cameras, and other dry goods.

Design pressure (DP): A measurement of the structural performance of a window or door. Usually specified as one-and-half times greater than necessary based on expected building wind and weather conditions.

Divided lites: Separately framed pieces or panes of glass. A double-hung window, for instance, often has several lites divided by muntins in each sash. These designs are often referred to as six-over-six, eight-over-one, etc., to indicate the number of lites in each sash. Designs

simulating the appearance of separately framed panes of glass are often referred to as SDL's or simulated divided lites. Designs using actual separate pieces of glass are sometimes referred to as TDL's or true divided lites.

Dormer: An area, which protrudes from the roof of a house, generally featuring one or more windows.

Double glazing: Use of two panes of glass in a window to increase energy efficiency and provide other performance benefits. May or may not refer to an insulating glass unit.

Double-hung window: Window featuring two operable sash which move vertically in the frame.

Double-strength glass: "DSB" referring to double strength billet, this is glass between 0.115 and 0.133 inches thick. DSB glass at 1/8" is thicker than "SSB" (single strength billet) glass, which is about 3/32".

Drip cap: Moulding placed on top of the header brick mould or casing of a window frame.

E

Edge effect: Heat transfer at the edge of an insulating glass unit due to the thermal properties of spacers and sealants.

Egress window: Window designed to be large enough for a firefighter to climb in or a person to climb out in an emergency. U.S. building codes require each bedroom of a home to have an emergency exit window, with minimum sizes specified.

Electro chromic glazing: Glass or other glazing material that can be switched from clear to opaque electronically.

Energy Star: A program sponsored by the U.S. Department of Energy, which establishes minimum performance standards for windows to be recognized as energy efficient. Three different sets of standards for U-value and solar heat gain have been established for three different

climate zones in the U.S.

Extension jamb: A trim component, which extends from the interior of the window frame to the interior wall.

Extrusion: The process, in which a heated material is forced through a die, used to produce aluminum, vinyl (PVC), and other profiles or components used in the production of windows and doors. Term also is used to refer to the profiles or lineal manufactured by this process and used to make window and door components.

Eyebrows: A curved head on a single hung or fixed lite window, sometimes referred to as an archtop. Common rise is 2 inches per foot of width.

F

Fanlight: A half-circle window over a door or window with radiating bars.

Fogging: A deposit or film left on an interior surface of a sealed insulating glass unit due to extreme conditions or failed seals. Contrasted to condensation, fogging refers to moisture between the panes.

Fenestration: Originally, an architectural term for the arrangement of windows, doors, and other glazed areas in a wall. Has evolved to become a standard industry term for windows, doors, skylights, and other glazed building openings. From the Latin word, "fenestra," meaning window.

Finger-joint: A toothed joint used to combine two pieces of wood end-to-end.

Fixed lite: Non-venting or non-operable window. Also called picture window.

Fixed panel: Non-operable door usually combined with operable door unit.

Flashing: A thin strip of metal or other material that diverts water away from a window, door, or skylight.

Float glass: Glass produced by a process in which the liquid-state glass

ribbon is floated across a bath of molten tin. The vast majority of flat glass is now produced using this method. The terms "plate" glass and "sheet" glass refer to older manufacturing methods still in limited use.

Flush door: Door produced using two skins or faces separated by a stile-and-rail frame construction at the perimeter. Flush doors may be produced with hollow core or solid core.

French door: Generally refers to a pair of hinged doors, which open from the middle. Also incorporates wider stile and rail components around the glass than typical glazed doors.

Fusion-weld: A term used for a type of corner construction, used with vinyl and other types of windows and doors, in which a small amount of material on the ends of two pieces are melted or softened, then pushed together to form a single piece. This also is referred to simply as a welded corner.

G

Glazing: Glass (and other materials) in a window or door. Also, the act or process of fitting a unit with glass, such as with backbedding.

Glazing stop: A component of the sash or door panel, which holds the glass in place.

Glider: A window with a movable sash that slides horizontally. Also referred to as a horizontal sliding window or slider.

Grille: A term referring to window pane dividers or muntins. It may be a type of assembly fitted to the interior of the window or door unit, which can be detached for cleaning. Also can be fitted inside the sealed insulating glass unit, when it also is referred to as a grid, internal grids, or GBG (grids between the glass).

H

Hard-coat low-e: Also known as a pyrolytic low-e coating, this type of low-e is "burned into" the glass in its liquid form

and offers a surface that is generally as durable as an ordinary glass surface, and therefore requires no special handling and does not need to be protected in an insulating glass unit. The other type of glass coating is sputter-coat, which is applied in a secondary process. Sometimes referred to as a soft-coat, or MSVD (magnetic sputter vacuum deposition), these types of coatings generally require some additional care in handling and fabrication and must be protected within an insulating glass unit.

Head: Main horizontal frame member at the top of a window or door. Header: Horizontal framing member placed over the rough opening of a window or door to prevent the weight of wall or roof from resting on the frame. Also known as lintel.

Heat gain: The transfer of heat from outside to inside by means of conduction, convection, and radiation through all surfaces of a house.

Heat loss: The transfer of heat from inside to outside by means of conduction, convection, and radiation through all surfaces of a house.

Hollow-core door: Flush door constructed with two skins or door faces separated by stiles and rails at the perimeter. Generally, a honeycomb type support is used inside the door between the two faces.

Hopper: Window with sash that swings inward from the top, typical in basements.

Horizontal slider: A window with a movable sash that slides horizontally. Also referred to as a gliding window or slider.

I

Insulating glass (IG): Two or more lites of glass separated and sealed to form a hermetic airspace. The sealed space may contain air or be filled with an inert and denser gas, such as argon, to deepen the effect of dead air space.

IRC: International Residential Code. Published by the International Code Council, the IRC primarily covers low-rise residential construction.

J

Jalousie: Window made up of horizontally mounted glass louvers or slats that abut each other tightly when closed and rotate outward when cranked open.

Jamb: Main vertical members forming the sides of a window or door frame; contrasted to sash stiles, or the sides of a sash.

Jamb depth: Width of a window or door from the interior to the exterior of the frame.

Jambliner: The track installed inside the jambs of a double-hung window, on which the window sash slide.

J-Channel: Installed or built-in to the side of a window or door, this channel is designed to accommodate the ends of siding pieces to provide a finished appearance.

K

KD (Knocked Down): Unassembled window or door.

L

Laminated glass: Two or more sheets of glass compressed against an inner sheet of transparent plastic to which the glass adheres if broken. Used for enhanced safety and security, as well as sound reduction.

Lineal: A standard length profile or shape, typically of vinyl or thermally broken aluminum, which is cut and processed to make window and door components.

Lintel: A structural component or beam above a window or door opening that supports the wall above. Also referred to as a header.

Lite: A pane of glass. In windows and doors, refers to separately framed panes of glass (as well as designs simulating the look of separately framed pieces of glass). Sometimes spelled "light".

Low-emissivity (Low-E) glass: A coated glass product, which reflects heat.

M

Masonry opening: Area in a masonry wall left open for windows or door.

MDF: Medium-density fiberboard. A wood-fiber composite used in a variety of window, door, and millwork applications.

Mechanical window: A term for a product, usually vinyl, in which the corners are assembled using screws or other fastening mechanisms, as opposed to a welded corner construction. Also referred to as a mechanically fastened window.

Mullion: A component used to structurally join two window or door units.

Multipoint lock: A locking system, operated with one handle, which secures a window or door at two or more locking points.

Muntin: Profile or moulding, either vertical or horizontal, used to separate glass in a sash into multiple lites. Generally refers to components used to construct divided lite grids or grilles simulating a divided lite look.

N

Nailing fin: An accessory component or integral extension of a window or patio door frame which generally laps over the conventional stud construction and through which nails are driven to secure the frame in place.

NFRC: National Fenestration Rating Council. A group that has established specific methods for rating and certifying the energy performance of windows.

NWWDA: National Wood Window and Door Association. Trade organization, which has established many standards, related to wood window and door products. It is now the Window and Door Manufacturers Association (WDMA).

O

One-step distributor: An industry term for a wholesale company, which buys building products from a manufacturer and sells them to builders, contractors, and homeowners is referred to as a one-step distributor. A wholesaler, which buys building products from the manufacturer and sells them to lumberyards and home centers, which in turn sell to builders, contractors, and homeowners is referred to as a two-step distributor.

Oriel: Window style in which the upper sash is larger than the lower sash.

P

Palladian: A large, arch-top window flanked by smaller windows on each side.

Panel: Component, usually wood, mounted within stile and rail members of doors. Also used to refer to the entire door.

Panning: In replacement window work, the outside aluminum trim that can extend around the perimeter of the window opening.

Parting stop: A narrow moulding, either integral or applied, that holds a sash or panel in position in a wood window frame.

Picture window: Large, non-operating window. It is usually longer than it is wide to provide a panoramic view.

Pivot window: A unit with a sash that swings open or shut by revolving on pivots at either side of the sash or at top and bottom.

Polycarbonate: A plastic material used for glazing.

Polyvinyl Butyral (PVB): Plastic material used as the interlayer in the construction of some types of laminated glass.

Plate glass: Flat glass produced by grinding and polishing to create parallel plane surfaces affording excellent vision. Although the term is still used commonly,

most window glass is now produced using the float process. See float glass.

Pre-hanger: A company, which buys doors, framing, hardware, glass lites, and other components, and prepares (or pre-hangs) the unit for installation.

Prime window: A primary window, as opposed to a storm or combination unit added on.

Projected window: A window in which the sash opens on hinges or pivots. Refers to casements, awnings, and hoppers.

Pultrusion: The process used to produce fiberglass composite profiles or components used for the production of windows and doors. Term also is used generally to refer to the composite profiles or lineals cut and processed to make window and door components.

PVC: Polyvinylchloride. An extruded material used for window and door framing.

Pyrolytic glass: A glass product that is coated, usually to provide low-emissivity or solar control benefits, during manufacturing process at the molten glass stage. Commonly referred to as a hard coat, this type of coating offers a surface that is generally as durable as an ordinary glass surface, and therefore requires no special handling and does not need to be used in an insulating glass unit. The other type of glass coating is a sputter-coat, which is applied in a secondary process. Sometimes referred to as a soft-coat, these types of coatings generally require some additional care in handling and fabrication and must be used within an insulating glass unit.

R

Radiation: The transfer of heat in the form of electromagnetic waves from one separated surface to another. Low-E glass is designed to reduce this type of heat transfer by reflecting electromagnetic waves.

Rail: Horizontal member of the framework of a window sash or door. Reflective glass: Window glass

coated to reflect visible light and solar radiation striking the surface of the glass.

Roof window: An operable unit similar to a skylight placed in the sloping surface of a roof.

Rough opening: Framed opening in a wall into which a window or door is to be installed.

Round-top: One of several terms used for a variety of window units with one or more curved frame members, often used over another window or door opening. Also referred to as circle-tops and circle-heads.

R-value: Resistance to thermal transfer or heat flow. Higher R-value numbers indicate greater insulating value. R-value is frequently used by the insulation industry and is the reciprocal of U-value, a value more generally used in the window industry.

S

Safety glass: A strengthened or reinforced glass that is less subject to breakage or splintering and less likely to cause injury if broken. Law requires glass in doors to be some type of safety glazing product, such as tempered or laminated glass.

Sash: An assembly of stiles and rails (vertical and horizontal members) made into a frame for holding glass.

Sash cord: Rope or chain in double-hung windows, which attaches the sash to the counter balance.

Sash lift: Protruding or recessed handle on the inside bottom rail of the lower sash on a double or single-hung window.

Sash weights: Concealed cast-iron weights used to counterbalance the sash of older double-hung windows.

Self-cleaning glass: Glass that features a coating that uses the sun's UV rays to break down organic dirt through what is called a photo catalytic effect. The coating also provides a hydrophilic effect, which reduces the surface tension of water to cause it to sheet down the

surface easily and wash away dirt. There are several types of similar coated glass products that perform similarly.

Shading coefficient (SC): A measure of a window's ability to transmit solar heat, relative to that ability for 1/8-inch clear glass. The lower a unit's shading coefficient, the less solar heat it transmits, and the greater its shading ability. It is being phased out in favor of the solar heat gain coefficient (SHGC).

Sheet glass: A transparent, flat glass found in older windows, now largely replaced by float glass.

Sidelites: Narrow fixed units mullied or joined to operating door units to give a more open appearance.

Sill: The horizontal member forming the bottom of the frame of a window or door.

Simulated divided lites (SDL's): A type of grille or grid design that creates the appearance of a number of smaller panes of glass separated by muntins, but actually uses larger lites of glass with the muntins placed between and/or on the surfaces of the glass layers.

Single-glazing: Use of single lite of glass in a window. Generally not as energy efficient as insulating glass or other forms of double-glazing.

Single-hung: A window resembling a double-hung, or vertically sliding window, with a fixed top sash.

Single-strength glass: Glass with thickness between 0.085 and 0.100 inches.

Skin: A single piece of material used as the face of a door.

Slab: A term for a complete door panel that has not been prepared for installation into a frame.

Smart window: Generic term sometimes used for windows offering high-energy efficiency or windows featuring switchable glass to control solar heat gain.

Solar control glass: Glass produced

with a coating or tint that absorbs or reflects solar energy, thereby reducing solar heat gain.

Solar heat gain coefficient (SHGC): A rating, which is now generally replacing shading coefficient, measuring a window's ability to transmit solar heat. It measures both the solar radiation, which is directly transmitted, as well as the solar radiation absorbed by the glass and subsequently transmitted. The lower a unit's solar heat gain coefficient, the less solar heat it transmits, and the greater is its shading ability. It is approximately equal to the shading coefficient divided by 1.15. It is expressed as a number without units between 0 and 1. Energy Star™ guidelines in most southern states require a SHGC of .40 or better, which eliminates all but sputter-coat low-e glass. Solid-core door: Flush door produced with a solid material placed within the door skins.

Soft-coat glass: See Sputter-coat low-e.

Sound transmission class (STC): A rating measuring a window's acoustic properties or its ability to reduce sound transmission. An STC rating is determined by measuring the sound transmission over a selected range of sound frequencies. The higher the number, the less sound transmitted.

Spectrally selective glass: A coated or tinted glazing with optical properties that are transparent to some wavelengths of energy and reflective to others. Typically, spectrally selective coatings are designed to allow high levels of visible light or daylight into a building and reflect short wave and long-wave infrared radiation.

Sputter-coat low-e: A secondary manufacturing process in which a thin layer of metals, usually designed to offer low-emissivity or solar control benefits, is applied to glass. Referred to as MSVD (magnetic sputter vacuum deposition), sputter-coatings are most commonly referred to as soft-coats, as they generally require some additional care in handling and fabrication and must be used within an insulating glass unit. By contrast, hard-coat or pyrolytic glass is burned into the glass during the manufacturing process at the molten glass stage. Pyrolytic low-e

glass offers a surface that is generally as durable as an ordinary glass surface, and therefore requires no special handling and does not need to be used in an insulating glass unit.

Stile: The main vertical frame members of a sash or door.

Stile-and-rail door: Traditional type of wood door constructed with vertical stiles and rails with openings filled with raised wood panels or glass.

Stool: Interior trim piece sometime used to extend a window sill and act as a narrow shelf.

Stop: A moulding used to hold, position, or separate window or door parts. Also, the moulding or component on the inside of a window frame against which the window sash rests or closes. Also called a bead, side stop, window stop, and parting stop.

Super window: A generic term for a window with a very low U-value. Typically, it incorporates multiple glazing, low-E coatings, gas fills, and an insulating spacer.

T

Tempered glass: Glass heat treated to withstand greater than normal forces on its surface. It is difficult to break and withstands heat better than untreated glass; when it breaks, it shatters into small pieces to reduce shard hazards.

Tenon: A rectangular projection cut out of a piece of wood for insertion into a mortise.

Thermal break aluminum: A thermally insulating and low-conductance polyurethane of extreme density poured and de-bridged to separate interior and exterior aluminum window and door components.

Tilt window: A single- or double-hung window whose operable sash can be tilted into a room to allow cleaning of the exterior surface on the inside.

Transom: Window used over the top of a door or window, primarily for additional

light and aesthetic value.

Triple glazing: Use of three panes of glass or plastic with two airspaces between. Generally refers to a sealed insulating unit.

True divided lites (TDL's): Traditional window construction incorporating smaller panes of glass actually separated by muntins, rather than simulating such an appearance with larger lites of glass and a muntin, grid, or grille placed between or on the surfaces of the glass layers.

U

U-factor: Rate of heat flow-value through a window, from room air to outside air. Also referred to as U-value. The lower the U-factor, the better the insulating value. U-factor, a rating more generally used in the window industry, is the reciprocal of R-value, a rating commonly used in the insulation industry. This means one divided by R-value equals U-factor and vice-versa. R factor is sometimes confused with R ratings regarding structural tests on windows that lead to Residential or Commercial ratings.

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

V

Vinyl: Generic term for polyvinyl chloride or PVC, an extruded material used for window and door framing.

W

Warm-edge: A type of insulating glass construction using an airspace offering lower thermal conductance than traditional aluminum spacer. Warm-edge IG units typically offer higher resistance to condensation and an incremental improvement in window energy performance. WDMA: Window and Door Manufacturers Association. Formerly the National Wood Window and Door

Association, this trade organization has established many standards related to wood window and door products.

Weather-stripping: A material or device used to seal the openings, gaps, or cracks of venting window and door units to prevent water and air infiltration.

Weep hole: A small opening in window or sill member through which water may drain to the building exterior.

Weld: A term used for a type of corner construction, used with vinyl and other types of windows and doors, in which a small amount of material at the two pieces are melted or softened, then pushed together to form a single piece. This also is referred to commonly as a fusion-weld.

Wild and urban interface: An area where buildings are bounded by wild or natural areas, which are a particular concern in regions where wild fires are a concern. Some fire and code officials are looking at the establishment of fire-resistance requirements for exterior building products in these "interface" areas.

Windload: Force exerted on a surface by moving air.