



HEADING: A: AAMA through Awning

AAMA - American Architectural Manufacturers Association. A national trade association that establishes voluntary standards for the window, door, storefront, curtain wall and skylight industries.

Absorptance - The ratio of radiant energy absorbed to total incident radiant energy in a glazing system.

Absorption - Transformation of radiant energy to a different form of energy by interaction with matter.

Aesthetics - The science and philosophy of beauty.

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

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

Air-Leakage Rating - A measure of the rate of air-leakage around a window, door or skylight in the presence of a specific pressure difference. It is expressed in units of cubic feet per minute per square foot of frame area (cfm/sq ft.). Formerly expressed as cubic feet per minute per foot of window perimeter length (cfm/ft) but not now in use. The lower a window's Air-Leakage Rating, the better its air tightness.

All-Glass Door - See Glass Door

Anchor or Anchorage (curtainwall) - Structural parts used as attachment between window systems and building structure. This attachment can restrict movement laterally and vertically (see Dead Load Anchor) or only laterally (see Wind Load Anchor).

Anchor or Anchorage (stone) - The system consisting of stone, anchor and primary structure, secondary structure or back-up preventing lateral movement of the stone.

Anodic Coating - The surface finish resulting from anodizing. Coatings may be produced by clear, integral color or electrolytically deposited color process. See Anodize.

Anodize - To give an aluminum oxide coating by electrolytic action.

Annealed Glass - Standard sheet of float glass which has not been heat-treated.

Annealing - Heating above the critical or recrystallization temperature, then controlled cooling of metal, glass, or other materials to eliminate the effects of cold-working, relieve internal stresses, or improve strength, ductility or other properties.

ANSI - American National Standards Institute. Clearing house for all types of standards and specifications.

Anti-Buckling Clips - Mullion clips used to provide lateral support for interlocking mullion systems.

Apparent Thermal Conductivity - A thermal conductivity assigned to a material that exhibits thermal transmission by several modes of heat transfer resulting in property variation with specimen thickness or surface emittance.

Apparent Thermal Resistivity - Thermal resistivity assigned to a material that exhibits thermal transmission by several modes of heat transfer resulting in property variation with specimen thickness, or surface emittance.

Argon - An inert, non-toxic gas used in insulating glass units to reduce heat transfer.

ASHRAE - American Society of Heating, Refrigerating and Air Conditioning Engineers.

ASTM - American Society for Testing and Materials. Organization that sets standards for testing of materials.

Automatic Operator - Power-operated door activating devices and control, actuated by approaching traffic or remote switch.

Awning - Window similar to a casement except the sash is hinged at the top and always swings out.

HEADING B: Baffle through Butt Joint

Baffle - A spacer used to allow air flow from the soffit to the roof ridge.

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

Batt - Blanket insulation manufactured to dimensions as required by a specific application.

Bay Window - An arrangement of three or more individual window units, attached so as to project from the building at various angles. In a three-unit bay, the center section is normally fixed, with the end panels operable as single-hung or casement windows.

Bead - A wood strip against which a swinging sash closes, as in a casement window. Also, a finishing trim at the sides and top of the frame to hold the sash, as in a fixed sash or a double-hung window. Also referred to as bead stop.

Beam - A horizontal, weight-supporting member of a structural frame.

Bite - See Edge Cover

Bituminous - Describing cement, mastic, or roofing, indicating a product in which asphalt is a major ingredient.

Block Insulation - Rigid insulation preformed into rectangular units.

HEADING B: Baffle through Butt Joint (cont'd)

Blocking - Internal members of wall furring, or the like, to afford fastening rigidity for the outside shell.

BOCA - Building Officials and Code Administrators.

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

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

Brick Molding - A standard milled wood trim piece that covers the gap between the window frame and masonry.

Btu (B.T.U) - An abbreviation for British Thermal Unit, the heat required to increase the temperature of one pound of water one degree Fahrenheit.

Building Stone - Natural rock of adequate quality to be quarried and cut as dimension stone as it exists in nature, as used in the construction industry.

Bulkhead - The member of an entrance frame which forms a base for a sidelight.

Bull-Nose - Convex rounding of a member, such as a radius face plate.

Butt Joint - A meeting of two members squarely end to end.

HEADING C: Camber through Cut Stone

Camber - A slight rising from a plane or gain an actual or apparent effect of arching.

Casement - A window sash that swings open on side hinge: in-swinging are French in origin; and out-swinging are from England.

Caulk or Calk - To fill cracks and crevices, chiefly along the intersection of wood or metal with masonry, using a non-hardening putty-like compound often applied from a pressure gun.

Caulking - A mastic compound for filling joints and sealing cracks to prevent leakage of water and air commonly made of silicone, bituminous, acrylic, or rubber-based material.

Cellular Elastomeric - Insulation composed principally of natural or synthetic elastomers, or both, processed to form a flexible, semirigid, or rigid foam which has predominantly closed-cell structure.

Center-Pivot - Swing hardware having its pivot axis on the thickness centerline of the door and normally located about 2-3/4" from the hinge jamb.

CFM - Cubic Feet per Minute.

Channel - A rolled form of structural steel in varying sizes, each having a straight web with equal right-angled flanges on both edges on the same side of the web.

Chase - A rough channel formed in the inner face of a wall to receive piping, wiring, or duct-work and keep it behind the finished surfaces.

Check Rail - The bottom horizontal member of the upper sash and the top horizontal member of the lower sash which meet at the middle of a double-hung window.

Chicken Head - Commonly used slang term for the upturned leg and gaskets on the stack horizontal on a unit wall system.

Cladding - Nonload-bearing material such as glass, panels, brick or stone used as the facing material in wall construction that contains other materials.

Clerestory - A window in the upper part of a lofty room that admits light to the center of the room.

Closer - See Door Closer

Coating - A liquid or similliquid that dries or cures to form a protective finish, suitable for application to thermal insulation or other surfaces in thickness of 30 mils (0.76 mm) or less, per coat.

Coefficient of Expansion - A value denoting the rate at which a material expands with rising temperature.

Column - A supporting pillar.

Compatible Materials - Materials and substrates that can be placed in direct contact with each other and maintain their required physical, chemical and visual qualities with the absence of detrimental, deleterious or degradative effects caused by chemical interactions.

Composite Frame - A frame consisting of two or more materials, for example an interior wood element and an exterior fiberglass element.

Condensation - The deposit of water vapor from the air on any cold surface whose temperature is below the dew point, such as a cold window glass or frame that is exposed to humid indoor air.

Conductance, Thermal - The time rate of steady state heat flow through a unit area of a material or construction induced by a unit temperature difference between the body surfaces.

Conduction - Heat transfer through a solid material by contact of one molecule to the next. Heat flows from a higher-temperature area to a lower-temperature area.

Conductivity, Thermal - The time rate of steady state heat flow through a unit area of a homogeneous material induced by a unit temperature gradient in a direction perpendicular to that unit area.

Convection - A heat transfer process involving motion in a fluid (such as air) caused by the difference in density of the fluid and the action of gravity. Convection affects heat transfer from the glass surface to room air and between two panes of glass.

HEADING C: Camber through Cut Stone

Coordinator - A mechanism which controls the order of closing of a pair of swing doors, used with doors equipped with overlapping astragals and certain panic hardware which requires one door to close ahead of the other.

Cope - To join two molded strips at an angle by fitting one over the other, instead of mitering.

Coping - Metal or stone used as the capping member of a wall, often sloped to shed water.

Corner Bracket - A bracket which is connected to a door frame jamb and head at the upper hinge corner to support an exposed overhead door closer. Used only on out-swinging door.

Corner Post - A glass-holding mullion which connects two plates of glass at an angle, forming a corner.

Cover Plate - A finished plate used to cover the exposed face of a floor closer not covered by the threshold; also, a plate used to cover the exposed face of a closer mounted in the head of a door frame or a section of threshold over a floor closer.

Coverage - The area to be covered per unit volume of coating to obtain specified dry thickness and desired performance.

CRF - Condensation Resistance Factor. An indication of a window's ability to resist condensation. The higher the CRF, the less likely condensation is to occur. This is based on AAMA standard.

Curtain Wall - A curtain wall system is an outer covering of a building in which the outer walls are non-structural, but keep the weather elements out, and the occupants in. A more technical definition might include: A nonbearing exterior wall secured to and supported by the structural members of the building.

Cut Stone - Stone fabricated to specific dimensions.

HEADING D: Daylight Opening through Durability

Daylight Opening (DLO) - The visible area of a window; the dimension of a window or door frame, from mullion to mullion, across one lite of glass.

Dead Load - The constant, design-weight (of the roof) and any permanent fixtures attached above or below.

Dead Load Anchor - An anchor with a fixed connection that does not allow for movement relative to the structure to which it is attached.

Degree Day - A unit that represents a one-degree Fahrenheit deviation from some fixed reference point (usually 65 degrees Fahrenheit) in the mean, daily outdoor temperature. See also Heating Degree Day.

Desiccant - An extremely porous crystalline substance used to absorb moisture from within the sealed air space of an insulating glass unit.

Dewpoint - The temperature at which water vapor in air will condense at a given state of humidity and pressure.

Dewpoint Temperature - The temperature at which condensation of water vapor in a space begins for a given state of humidity and pressure as the vapor temperature is reduced; the temperature corresponding to saturation (100% relative humidity) for a given absolute humidity at constant pressure.

Diffusivity, Thermal - The ratio of thermal conductivity of a substance to the product of its density and specific heat.

Dimension Stone - Natural stone that has been selected and fabricated to specific sizes or shapes.

Divided Light - A window with a number of smaller panes of glass separated and held in place by muntins.

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

Double Glazing - In general, two thicknesses of glass separated by an airspace 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-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.

Drip - A projecting fin or a groove at the outer edge of a sill, soffit, or other projecting member in a wall designed to interrupt the flow of water downward over the wall or inward across the soffit.

Dry Glazing - A method of securing glass in a frame by use of a dry, preformed resilient gasket, without the use of a compound.

Durability - The measure of the ability of dimension stone to endure and to maintain its essential and distinctive characteristics of strength, resistance to decay, and appearance. Durability is based on the length of time that a stone can maintain its innate characteristics in use. This time will vary depending on the environment, the use, and the finish of the stone in question (for example, outdoor versus indoor use).

HEADING E: Edge Blocks through Eyebrow Window

Edge Blocks - Continuous or short lengths of elastomeric materials located at both jambs of the frame for centering the glass in the framed opening and for preventing lateral “walking.” They also protect the glass edges from being nicked during installation.

Edge Clearance - The dimensions between the edge of glass or panel and its surrounding frame, measured normal to the edge in the plane of the glass or panel.

Edge Cover - The dimensions by which the inner edge of the frame or stop overlaps the edge of the glass or panel.

Edge Effects - Two-dimensional heat transfer at the edge of a glazing unit due to the thermal properties of spacers and sealants.

Electromagnetic Spectrum - Radiant energy over a broad range of wavelengths.

Embed - Curtain wall anchors cast directly into concrete.

Emissance - The ratio of the radiant flux emitted by a specimen to that emitted by a blackbody at the same temperature and under the same conditions.

Emissance, Spectral - An emissance based on the radiant energy emitted per unit wavelength interval (monochromatic radiant energy).

Emissance, Total - An emissance that is an integrated average over all wavelengths of radiant energy emitted.

Enclosure Wall - The curved wall components of a revolving door.

Engineering - Using scientific knowledge to solve practical problems.

Entrance - The doorway, vestibule or lobby through which one enters a building.

EPDM - Ethylene Propylene Diene Monomer. A single ply membrane consisting of synthetic rubber; usually 45 or 60 mils. Application can be ballasted, fully adhered or mechanically attached.

Evacuated Glazing - Insulating glazing composed of two glass layers, hermetically sealed at the edges, with a vacuum between to eliminate convection and conduction. A spacer system is needed to keep the panes from touching.

Extension Bolt - See Flush Bolt

Extrusion - The process of producing vinyl or aluminum shapes by forcing heated material through an orifice in a die. Also, any item made by this process.

Eyebrow Windows - Low, inward-opening windows with a button-hinged sash. These attic windows built into the top molding of the house are sometimes called “lie-on-your-stomach” or “slave” windows. Often found on Greek Revival and Italianate houses.

HEADING F: Facade through Free Standing

Facade - A face of a building, usually the front.

Face Clearance - The dimension between the face of a light of glass or panel and the nearest face of its retaining frame or stop, measured normal to the plane of the glass or panel.

Facing - A protective or decorative (or both) surface applied as the outermost layers of an insulation system.

Fabrication - When applied to dimension stone, any of the processes involved in changing a raw stone piece to its final end use form. This includes, but is not limited to cutting, splitting, grinding, drilling, or face-finishing.

Fenestration - The placement of window openings in a building wall, one of the important elements in controlling the exterior appearance of a building. Also, a window, door or skylight and its associated interior or exterior elements, such as shades or blinds.

Finished Stone - Dimension stone with one or more mechanically exposed surfaces.

Fixed Light - A pane of glass installed directly into non-operating framing members. Also, the opening or space for a pane of glass in a non-operating frame.

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

Fixed Window - A window with no operating sashes.

Flashing - Sheet metal or other material applied to seal and protect the joints formed by different materials or surfaces.

Float Glass - Glass formed by a process of floating the material on a bed of molten metal. It produces a high-optical-quality glass with parallel surfaces without polishing and grinding.

Floor Anchor - A metal device attached to the back of a door frame jamb at its base

Flush Bolt - A rod or bolt which is mounted flush with the edge or the face of the inactive door of a pair, to lock the door to the frame at head and/or sill. When mounted in the edge, operation is by means of a recessed lever. (See Surface Bolt)

Flush Glazing - A method of setting glass whereby glazing beads are recessed within and flush with the edge of the frame.

Fogging - A deposit of contamination left on the inside surface of a sealed insulating glass unit due to extremes of temperatures or failed seals.

Fracture - A complete break in the stone.

Frame - The fixed frame of a window which holds the sash or casement as well as hardware.

Free Standing - Structurally independent of an adjacent wall or other background, as a free-standing column.

HEADING G: Gas Fill through Guard Rail

Gas Fill - A gas other than air, usually argon or krypton, placed between window or skylight glazing panes to reduce the U-factor by suppressing conduction and convection.

Gaskets - silicon, EPDM ... materials used as a dry seal.

Glass - An inorganic, transparent material composed of silica (sand), soda (sodium carbonate) and lime (calcium carbonate) with small quantities of alumina, boric, or magnesia oxides.

Glass Door - A door with no stiles in which glass forms the structure. Provision is made for mounting on hinges or pivots.

Glass Stop - A glazing bead which is either applied to, or is an integral part of the frame.

Glazing - The glass or plastic panes in a window, door or skylight.

Glazing Bead - A molding or stop around the inside of a window frame to hold the glass in place.

Glazing Compound - A soft, dough-like material used for filling and sealing the spaces between a light of glass and its surrounding frame and/or stops.

Glazing Gasket - A preformed elastomeric or plastic material applied between the face of the glass or panel and the framing to provide resilient support between the glass or panel and the framing and to prevent the passage of air and water. Gaskets are normally used alone but in some installations may be used in conjunction with a supplemental application of sealant.

Granite - A visibly granular, igneous rock generally ranging in color from pink to light or dark gray and consisting mostly of quartz and feldspars accompanied by one or more dark minerals.

Greenhouse Window - A three-dimensional window that projects from the exterior wall and usually has glazing on all sides except the bottom, which serves as a shelf.

Guard Rail - A safety railing of minimum height as specified in the building code in order to keep persons or objects from falling over an edge (distinctly different definition from "hand rail").

HEADING H: Hair-Line Joint through Humidity, Relative

Hair-Line Joint - The fine line of contact between abutting members, with a maximum joint width of 1/64".

Hand Rail - A railing for the purpose for aiding in balance along a stepped or sloping walking surface (distinctly different definition from "guard rail").

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

Head Track - The track provided at the head of a sliding glass door. Also, the head member incorporating the track.

Header - The upper horizontal member of a window frame. It is also called head.

Heat-Absorbing Glass - Window glass containing chemicals (with gray, bronze or blue-green tint) which absorb light and heat radiation, and reduce glare and brightness. See also Tinted Glass.

Heat Flow Rate - The quantity of heat transferred to or from a system in unit time.

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.

Heat-Strengthened Glass - Glass that is reheated, after forming, to just below melting point and then cooled, forming a compressed surface that increases its strength beyond that of typical annealed glass.

Heating Degree Day - Term used by heating and cooling engineers to relate the typical climate conditions of different areas to the amount of energy needed to heat and cool a building. The base temperature is 65 degrees Fahrenheit. A heating degree day is counted for each degree below 65 degrees reached by the average daily outside temperatures in the winter. For example if on a given winter day, the daily average temperature outdoors is 30 degrees, then there are 35 degrees below the base temperature of 65 degrees. Thus, there are 35 heating degree days for that day.

Hinged Windows - Windows (casement, awning and hopper) with an operating sash that has hinges on one side. See also Projected Window

Horizontal Slider - A window with a movable panel that slides horizontally.

Humidity, Relative - The ratio of the mol fraction of water vapor present in the air to the mol fraction of water vapor present in saturated air at the same temperature and barometric pressure. Approximately, it equals the ratio of the partial pressure or density of the water vapor in the air to the saturation pressure or density, respectively, at the same temperature.

HEADING I: ICC through Insulation

ICC - International Code Council. A national organization that publishes model codes for adoption by states and other agencies. Code include the International Building Code (IBC) and the International Energy Conservation Code (IECC).

IECC - International Energy Conservation Code published by the ICC. The successor to the Model Energy Code, which is cited in the 1992 U.S. Energy Policy Act (EPAct) as the baseline for residential Energy Codes in the United States.



HEADING I: ICC through Insulation (cont'd)

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

Infill - Various material glazed into a framing system.

Infiltration - Air or water leakage.

Infrared Radiation - Invisible, electromagnetic radiation beyond red light on the spectrum, with wavelengths greater than .07 microns.

Insert - Curtain wall anchors cast directly into concrete.

Inside Radius - The distance from the center of the unit to the inside of the revolving door drum.

Insulating Glass - Two or more pieces of glass spaced apart and hermitically sealed to form a single glazed unit with one or more air spaces in between. Also called double-glazing.

Insulating Value - Also known as 'U-Factor'.

Insulation - Construction materials used for protection from noise, heat, cold or fire.

HEADING J: Jamb through Jamb Anchor

Jamb - A vertical member at the side of a window frame, or the horizontal member at the top of the window frame, as in head jamb.

Jamb Anchor - A metal device inserted in the back of a metal frame to anchor the frame to the wall. A masonry anchor is used in masonry wall, a stud anchor in a wall built with wood or metal studs.

HEADING K: Kicker

Kicker - An additional structural member attached to a member in a building frame or curtainwall to make the structure more stable.

HEADING L: Laminated Glass through Low Emittance Coating

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

Leaf - An individual door, used either singly or in multiples.

Lift - Handle for raising the lower sash in a double-hung window. Also called sash lift.

Light - A window; a pane of glass within a window. Double-hung windows are designated by the number of lights in upper and lower sash, as in six-over-six. Also spelled informally lite.

Light-to-Solar-Grain-Ratio - A measure of the ability of a glazing to provide light without excessive solar heat gain. It is the ratio between the visible transmittance of a glazing and its solar heat gain coefficient. Abbreviated LSG.

Limestone - A rock of sedimentary origin composed principally of calcium carbonate (the mineral calcite), or the double carbonate of calcium and magnesium (the mineral dolomite), or some combination of these two minerals.

Limestone Marble - Compact, dense limestone that will take a polish is classified as marble in trade practice.

Lintel - A horizontal member above a window or door opening that supports the structure above.

Live Load - Loads produced by use and occupancy of the building or other structure and do not include construction or environmental loads such as wind load, snow load, ice load, rain load, seismic load, or dead load.

Loose Fill Insulation - Insulation in granular, nodular, fibrous, powdery, or similar form designed to be installed by pouring, blowing, or hand placement.

Low-Conductance Spacers - An assembly of materials designed to reduce heat transfer at the edge of an insulating window. Spacers are placed between the panes of glass in a double or-triple-glazed window.

Low-Emittance (Low-E) Coating - Microscopically thin, virtually invisible, metal or metallic oxide layers deposited on a window or skylight glazing surface primarily to reduce the U-factor by suppressing radiative heat flow. A typical type of Low-E coating is transparent to the solar spectrum (visible light and short-wave infrared radiation) and reflective of long-wave infrared radiation.

HEADING M: Marble - Muntin Grilles

Marble - Carbonate rock that has acquired a distinctive crystalline texture by recrystallization, most commonly by heat and pressure during metamorphism, and is composed principally of the carbonate minerals calcite and dolomite, singly or in combination.

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 which meet when a pair of doors is closed.

Metal-Clad Windows - Exterior wood parts covered with extruded aluminum or other metal with a factory-applied finish to deter the elements.

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HEADING M: Marble - Muntin Grilles (cont'd)

Mineral Fiber - Insulation composed principally of fibers manufactured from rock, slag, or glass, with or without binders.

Mineral Wool - A synthetic vitreous fiber insulation made by melting predominantly igneous rock, and or furnace slag, and other inorganic materials, and then physically forming the melt into fibers.

Model Energy Code (MEC) - The Model Energy Code is cited in the 1992 U.S. Energy Policy Act (EPA) as the baseline for residential Energy Codes in the United States. It has been succeeded by the International Energy Conservation Code (IECC) published by the International Code Council (ICC).

Monumental Stone - Rock of adequate quality to be quarried and cut as dimension stone as it exists in nature, as used in the monument and memorial industry.

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

Muntin - A secondary framing member (horizontal, vertical or diagonal) to hold the window panes in the sash. This term is often confused with mullion.

Muntin grilles - Wood, plastic, or metal grids designed for a single-light sash to give the appearance of muntins in a multilight sash, but removable for ease in cleaning the window

HEADING N: NFRC

NFRC - National Fenestration Rating Council.

HEADING P: Panel through Projected Window

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.

Panning - In replacement window work this is the outside aluminum trim that can extend around the perimeter of the window opening; used to cover up the old window material. Panning can be installed in the opening before the window, or can be attached directly to the window before installation.

Plastic Film - A thin plastic substrate, sometimes used as the inner layers in a triple- or quadruple-glazed window.

Plate Glass - A rolled, ground, and polished product with true flat parallel plane surfaces affording excellent vision. It has been replaced by float glass.

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

Pressure Glazed - The process of attaching the glass to the curtainwall framing system using mechanically attached pressure plates, resulting in a noticeable sight line at the glass joint.

Processing - The work involved in transforming quarry blocks into dimension stone, including sawing, drilling, grinding, honing, polishing, carving, and all other operations necessary for installation.

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

HEADING R: R-Value through Rough Opening

R-Value - A measure of the resistance of a glazing material or fenestration assembly to heat flow. It is the inverse of the U-factor ($R = 1/U$) and is expressed in units of hr-sq ft - F (degrees) / BTU.

Radiance - The rate of radiant emission per unit solid angle and per unit projected area of a source in a stated angular direction from the surface (usually the normal).

Radiant Flux Density - The rate of radiant energy emitted from unit area of a surface in all radial directions of the overspreading hemisphere.

Radiation - The transfer of heat in the form of electromagnetic waves from one separate surface to another. Energy from the sun reaches the earth by radiation, and a person's body can lose heat to a cold window or skylight surface in a similar way.

Rail - Horizontal member of a window sash.

Reflectance - The ratio of reflected radiant energy to incident radiant energy.

Reflective Glass - Window glass coated to reflect radiation striking the surface of the glass.

Reflective Insulation - Insulation depending on its performance upon reduction of radiant heat transfer across air spaces by use of one or more surfaces of high reflectance and low emittance.

Refraction - The deflection of a light ray from a straight path when it passes at an oblique angle from one medium (such as air) to another (such as glass).

Reinforcing - A reinforcing member, which serves to limit the deflection and/or strengthen the member to which it is attached. (see also stiffener).

Relative Humidity - The percentage of moisture in the air in relationship to the amount of moisture the air could hold at that given temperature. At 100 percent relative humidity, moisture condenses and falls as rain.

Removable Mullion - A mullion separating door openings, design to permit its temporary removal.

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HEADING R: R-Value through Rough Opening (cont'd)

Resistance, Freeze-Thaw - Resistance to cycles of freezing and thawing that could affect application, appearance, or performance.

Resistance, Impact (Toughness) - Ability to withstand mechanical blows or shock without damage seriously affecting the effectiveness of the material or system.

Resistance, Thermal - The quantity determined by the temperature difference, at steady state, between two defined surfaces of a material or construction that induces a unit heat flow rate through a unit area.

Resistivity, Thermal - The quantity determined by the temperature difference, at steady state, between two defined parallel surfaces of a homogeneous material of unit thickness, that induces a unit heat flow rate through a unit area.

Retrofitting - Adding or replacing items on existing buildings. Typical retrofit products are replacement doors and windows, insulation, storm windows, caulking, weather-stripping, vents, landscaping.

Ribbon Wall - AKA Strip Window. (See **Strip Window** below)

Rift - A consistent direction or trend in a rock body along which the rock is most easily split or broken.

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

HEADING S: Safety Glass through Switchable Glazings

Safety Glass - A strengthened or reinforced glass that is less subject to breakage or splintering.

Sandstone - Sedimentary rock composed mostly of mineral and rock fragments within the sand size range, one 0.06 to 2.0 mm, and having a minimum of 60% free silica, cemented or bonded to a greater or lesser degree by materials including silica and various carbonates, with iron oxides or clay sometimes present, and which has a compressive strength over 28 MPa (4,000 psi).

Sash - The portion of a window that includes the glass and the framing sections directly attached to the glass, not to be confused with the complete frame into which the sash sections are fitted.

Screw Splines - Part of mullion cross section that allows it to be attached perpendicularly to the side of another mullion using screws.

Sealant - A compressible plastic material used to seal any opening or junction of two parts, such as between the glass and a metal sash, commonly made of silicone, butyl tape or polysulfide.

Seam - A naturally filled or bonded crack which does not adversely affect the strength of a stone.

Section Properties - Characteristics of the cross section of a structural member that determine its behavior and must be known for calculations to be made (i.e. Moment of Inertia).

Setting Blocks - Small pieces of neoprene, lead or other materials which are used to support a sheet of glass within a frame.

Shading Coefficient (SC) - A measure of the ability of a window or skylight to transmit solar heat, relative to that ability or 1/8-inch clear, double-strength, single glass. It is being phased out in favor of the solar heat gain coefficient, and is approximately equal to the SHGC multiplied by 1.15. It is expressed as a number without units between 0 and 1. The lower a window's solar heat gain coefficient or shading coefficient, the less solar heat it transmits and the greater is its shading ability.

Shaped Stone - Dimension stone processed by carving, grinding, sawing, or other means into specific nonplanar configurations.

Shear Blocks - Blocks fastened to a surface to support a beam or prevent movement parallel to the surface to which it is attached. Typically attached to the side of vertical mullions to support horizontals.

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

Shop Drawings - A drawing prepared by the fabricator based on a working drawing and for use in a shop or on a site for assembly.

Side Lite - A fixed light of glass located along side a door.

Sill - The lowest horizontal member in a door, window or sash frame.

Sill Track - The rack provided at the sill of a sliding glass door. Also, the sill member incorporating such a track.

Simulated Divided Lites - A window that has the appearance of a number of smaller panes of glass separated by muntins, but actually is a larger glazing unit with the muntins placed between or on the surfaces of the glass layers.

Single Glazing - Single thickness of a glass in a window or door.

Single-Hung Window - A window consisting of two sashes of glass, the top one stationary and the bottom one is moveable.

Single-Strength Glass - Glass with thickness between 0.085" and 0.100" (2.16 2.57 mm).

Skylight (operable or pivot) - A roof window that gives light and ventilation.

Slab - A piece of stone produced by shaving or splitting in the first milling or quarrying operation. A slab has two parallel surfaces.

Sliding Glass Door - A door fitted with one or more panels that move horizontally on a track and/or in grooves. Moving action is usually a rolling type (rather than sliding type). Also called gliding door, rolling glass door and patio sliding door.

Sliding Window - A window fitted with one or more sashes opening by sliding horizontally or vertically in grooves provided by frame members. Vertical sliders may be single or double-hung.

Smart Window - Generic term for windows with switchable coatings to control solar gain.

HEADING S: Safety Glass through Switchable Glazings

Soffit Bracket - A bracket for mounting an exposed overhead door closer to the underside of a door frame head or transom bar; used for outswinging doors only.

Solar Control Coatings - Thin film coatings on glass or plastic that absorb or reflect solar energy thereby reducing solar gain.

Solar Heat Gain Coefficient (SHGC) - The fraction of solar radiation admitted through a window or skylight, both directly transmitted, and absorbed and subsequently released inward. The Solar Heat Gain Coefficient has replaced the shading coefficient as the standard indicator of a window's shading ability. It is expressed as a number between 0 and 1. The lower a window's Solar Heat Gain Coefficient, the less solar heat it transmits, and the greater its shading ability. SHGC can be expressed in terms of the glass alone or can refer to the entire window assembly.

Solar Radiation - The total radiant energy from the sun, including ultraviolet and infrared wave lengths as well as visible light.

Solar Screen - A sun shading device, such as screens, panels, louvers, or blinds, installed to intercept solar radiation.

Solar Spectrum - The intensity variation of sunlight across its spectral range.

Sound Transmission Class (STC) - The sound transmission loss rating of a material over a selected range of sound frequencies. The higher the number, the less sound transmitted.

Spacers - Continuous or short lengths of elastomeric material placed around the periphery of one or both sides of the glass at the edges, between the glass and its frame, to hold the glass in the proper plane.

Spandrel Glass - Opaque glazing material, often used for non-visionary areas between floors of a building.

Spectrally Selective Coating - A coated or tinted glazing with optical properties that are transparent to some wavelengths of energy and reflective to others. Typical Spectrally Selective Coatings are transparent to visible light and reflect short-wave and long-wave infrared radiation.

Speed Control - The mechanism that controls the rate of speed at which a door will operate.

Steady State - In heat transfer, condition in which the temperature at any given point in a material or system is independent of time, to a given precision for a specified time period. It follows that the temperature gradient and heat flux at any given point are independent of time.

Steady State (Thermal) - A condition for which all relevant parameters in a region do not vary over two consecutive steady-state time periods by more than the steady-state tolerance, and no long-term monotonic drifts are present.

Stick Wall - A curtain wall system which is shipped to the field in individual pieces and assembled and erected piece by piece as opposed to unit wall methods.

Stiffener - A reinforcing member which serves to limit the deflection and/or strengthen the member to which it is attached (see also reinforcing).

Stile - The upright or vertical edges of a door, window or screen.

Stool - The shelf-like member of the interior part of the window sill, against which the bottom rail of the sash closes.

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 called bead, side stop, window stop, and parting stop.

Storm Windows - A second set of windows installed on the outside or inside of the primary windows to provide additional insulation and wind protection.

Strength, Transverse (or Flexural) - The breaking load applied normal to the neutral axis of a beam.

Strike - A opening or retaining device provided in the head, jamb or threshold of a door frame or in the edge of a stile of an inactive door to receive a lock or latch bolt. (Also referred to as a Keeper or Strike Plate). a) Box Strike: a strike consisting of a face plate with rectangular opening and a boxlike enclosure attached to the back of the plate and surrounding the opening. b) Dustproof Strike: a strike which is placed in the floor, sill or threshold of an opening, to receive a flush bolt, and is equipped with a spring-loaded follower to cover the recess and prevent its filling with dirt. c) Electric Strike: a strike used with a latch lock and designed to be actuated by a remotely controlled electromagnet, to permit the door to be opened without retracing the latch. d) Roller Strike: a strike for latch bolts, having a roller mounted in the lip to reduce friction.

Strip Window - A series of windows that forms a horizontal band across the face of a building.

Structural Gasket - A synthetic rubber gasket designed to engage the edge of glass or panel in a surrounding frame by forcing an interlocking filler strip into a grooved recess in the face of gasket. Such gaskets are structurally capable of transmitting wind and dead load from the glass or panel to the frame.

Structural Silicone Glazed (SSG) - The process of attaching the glass to the curtainwall framing system using structural silicone, resulting in a clean, all glass appearance.

Sub-Frame - A supporting structural frame installed prior to and concealed by a finished door frame.

Sun Control Film - A tinted or reflective film applied to the glazing surface to reduce visible, ultra-violet, or total transmission of solar radiation. Reduces solar heat gain in summer and glare. Some can be removed and reapplied with changing seasons.

Superwindow - A window with a very low U-factor, typically less than 0.15, achieved through the use of multiple glazings, low-E coatings and gas fills.

Surface Bolt - A rod or bolt mounted on the face of a door to lock it to the frame and/or still. It is operated manually.

Surface Coefficient - The ratio of the steady-state heat exchange rate (time rate of heat flow per unit area of a particular surface by the combined effects of radiation, conduction, and convection) between a surface and its external surroundings (air or other fluid and other visible surfaces) to the temperature difference between the surface and its surroundings.

Switchable Glazings - Glazings with optical properties that can be reversibly switched from clear to dark or reflective.

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HEADING T: Tempered Glass through Travertine

Tempered Glass - Treated glass that is strengthened by reheating it to just below the melting point and then suddenly cooling it. When shattered, it breaks into small pieces. Approximately four times stronger than standard annealed glass; it is required as safety glazing in patio doors, entrance doors, side lights and other hazardous locations. It cannot be recut after tempering.

Template (For Hardware) - A master pattern or scaled drawing showing all dimensions and hole spacing for hardware application.

Template Hardware - Hardware manufactured within template tolerances.

Thermal Break - An element of low conductance placed between elements of higher conductance to reduce the flow of heat. Often used in aluminum windows.

Thermal Capacity - The quantity of heat required to change the temperature of the body one degree.

Thermal Expansion - Change in dimension of a material as a result of temperature change.

Thermal Insulation - A material or assembly of materials used to provide resistance to heat flow.

Thermal Insulation System - Applied or installed thermal insulation complete with any accessories, vapor retarder, and facing required.

Thermal Mass - Mass in a building (furnishings or structure) that is used to absorb solar gain during the day and release the heat as the space cools in the evening.

HEADING T: Tempered Glass through Travertine (cont'd)

Thin Stone/Thin Veneer - A cladding under 2-in thick.

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

Tilt Window - A single or double-hung window whose operable sash can be tilted into the room for interior washability.

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

Transference, Thermal - The steady-state heat flow from (or to) a body through applied thermal insulation and to (or from) the external surroundings by conduction, convection, and radiation.

Transmission, Heat - The quantity of heat flowing through unit area due to all modes of heat transfer induced by the prevailing conditions.

Transmittance - The percentage of radiation that can pass through glazing. Transmittance can be defined for different types of light or energy, e.g., visible light transmittance, UV transmittance, or total solar energy transmittance.

Transmittance, Thermal - The heat transmission in unit time through unit area of a material or construction and the boundary air films, induced by unit temperature difference between the environments on each side.

Transom - A horizontal transverse beam or bar in a frame; a crosspiece separating a door or the like from a window or fanlight above it. Also, a window above a door or other window, built on and commonly hinged to a transom.

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

Transom Bracket - A bracket used to support an all-glass transom over an all-glass door when the latter has no metal top rail and no transom bar is used.

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

Travertine - A variety of crystalline or microcrystalline limestone distinguished by layered structure. Pores and cavities commonly are concentrated in some of the layers, giving rise to an open texture.

HEADING U: U-Factor through Unitized Curtain Wall

U-Factor (U-Value) - A measure of the rate of non-solar heat loss or gain through a material or assembly. It is expressed in unit of Btu/hr-sq ft - °F (W/sq m-°C). Values are normally given for NFRC/ASHRAE winter condition of 0°F (18 °C) outdoor temperature, 70 °F (21 °C) indoor temperature, 15 mph wind, and no solar load. The U-factor may be expressed for the glass alone or the entire window, which includes the effect of the frame and spacer materials. The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating value.

U-Value - See U-Factor.

UBC - Uniform Building Code.

Ultraviolet Light (UV) - The invisible rays of the spectrum that are outside of the visible spectrum at its short-wavelength violet end. Ultraviolet rays are found in everyday sunlight and can cause fading of paint finishes, carpets, and fabrics.

Unit Wall - A curtain wall system in which shop assembled and glazed units are shipped to the field and erected unit by unit.

Unitized Curtain Wall - Shop assembled curtain wall sections which are only installed, not constructed in the field.

HEADING V: Vapor Barrier through Visible Transmittance

Vapor Barrier - Material used to retard the movement of water vapor into walls and prevent condensation in them. Usually considered as having a perm value of less than 1.0. Applied separately over the warm side of exposed walls or as a part of batt or blanket insulation.

Vapor Retarder - A material that reduces the diffusion of water vapor across a building assembly.

HEADING V: Vapor Barrier through Visible Transmittance (cont'd)

Veneer - A nonload-bearing facing of stone attached to a backing for the purpose of ornamentation, protection, or insulation.

Vent - The movable framework or sash in a glazed window that is hinged or pivoted to swing open.

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

Visible Light - The portion of the electromagnetic spectrum that produces light that can be seen. Wavelengths range from 380 to 720 nanometers.

Visible Transmittance (VT) - The percentage or fraction of the visible spectrum (380 to 720 nanometers) weighted by the sensitivity of the eye, that is transmitted through the glazing.

HEADING W: Warm-Edge Technology - Window Wall

Warm-Edge Technology - The use of low conductance spacers to reduce heat transfer near the edge of insulated glazing. Any material with a conductance better than aluminum is considered warm-edge.

Water Vapor Diffusion - The process by which water vapor spreads or moves through permeable materials caused by a difference in water vapor pressure.

Water Vapor Permeability - The time rate of water vapor transmission through unit area of flat material of unit thickness induced by unit vapor pressure difference between two specific surfaces, under specified temperature and humidity conditions.

Water Vapor Permeance - The time rate of water vapor transmission through unit area of flat material or construction induced by unit vapor pressure difference between two specific surfaces, under specified temperature and humidity conditions.

Water Vapor Pressure - The pressure of water vapor at a given temperature; also the component of atmospheric pressure contributed by the presence of water vapor.

Water Vapor Resistance - The steady vapor pressure difference that induces unit time rate of vapor flow through unit area of a flat material (or construction that acts like a homogeneous body) for specific conditions of temperature and relative humidity at each surface.

Water Vapor Resistivity - The steady vapor pressure difference that induces unit time rate of vapor flow through unit area and unit thickness of a flat material (or construction that acts like a homogenous body), for specific conditions of temperature and relative humidity at each surface.

Water Vapor Retarder (Barrier) - A material or system that adequately impedes the transmission of water vapor under specified conditions.

Water Vapor Transmission Rate - The steady water vapor flow in unit time through unit area of a body, normal to specific parallel surfaces, under specific conditions of temperature and humidity at each surface.

Weather-Stripping - 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.

Weathering - Natural alteration by either chemical or mechanical processes due to the action of constituents of the atmosphere, surface water or ground water, or to temperature change.

Weep Baffle - A baffle permitting the egress of water.

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

Wet Glazing - The sealing of glass or other panel material in a frame by use of a glazing compound or sealant.

Wetting and Adhesion, Surface - The mutual affinity of and bonding between finish and the surface to which it is applied.

Wetting and Adhesion, Surface - The mutual affinity of and bonding between finish and the surface to which it is applied.

Wide Stile - See Stile.

Wind Load Anchor - A curtain wall anchor which only restricts movement in the horizontal direction but allows for vertical movement.

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.

Window Hardware - Various devices and mechanisms for the window including catches, fasteners and locks, hinges, pivots, lifts and pulls, pulleys and sash weights, sash balances and stays.

Window Wall - An exterior curtain wall using a frame containing windows, usually extending from top of slab on one floor to bottom of slab on the next floor.