Building Construction Glossary

A -

Above Grade - The portion of a building that is above ground level.

Acre - 43,500 square feet.

A/C Circuit - (Alternating Current) The flow of current through a conductor first in one direction then in reverse. It is used exclusively in residential and commercial wiring because it provides greater flexibility in voltage selection and simplicity of equipment design.

Accelerator - Any material added to stucco, plaster or mortar which speeds up the natural set.

Adhesion - The property of a coating or sealant to bond to the surface to which it is applied.

Adhesive Failure - Loss of bond of a coating or sealant from the surface to which it is applied.

Aggregate - Crushed stone, slag or water-worn gravel that comes in a wide range of sizes that is used to surface built-up roofs.

Air-Dried Lumber - Lumber that has been piled in yards or sheds for any length of time. For the United States as a whole, the minimum moisture content of thoroughly air dried lumber is 12 to 15 percent and the average is somewhat higher. In the South, air dried lumber may be no lower than 19 percent.

Air Duct - Ducts, usually made of sheet metal, that carry cooled air to all rooms.

Air Filters - Adhesive filters made of metal or various fibers that are coated with adhesive liquid to which the particles of lint and dust adhere. These filters will remove as much as 90% of the dirt if they do not become clogged. The more common filters are of the throwaway or disposable type.

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

Airway - A space between roof insulation and roof boards for movement of air.

Alligatoring - A condition of paint or aged asphalt brought about by the loss of volatile oils and the oxidation caused by solar radiation. Coarse checking pattern characterized by a slipping of the new paint coating over the old coating to the extent that the old coating can be seen through the fissures. “Alligatoring” produces a pattern of cracks resembling an alligator hide and is ultimately the result of the limited tolerance of paint or asphalt to thermal expansion or contraction.

Aluminum Wire - Conductors made of aluminum for carrying electricity. Aluminum generally is limited to the larger wire sizes. Due to its lower conductivity, aluminum wire smaller than No. 12 is not made. Aluminum is lighter and less expensive than copper but not as good a conductor. It also breaks easily.

AMPS (Amperes) - The rate at which electricity flows through a conductor.
Ammeter - Device to measure the current flowing in a circuit

Anchor Bolts - In residential construction, Bolts to secure a wooden sill plate to concrete, or masonry floor or wall. In commercial construction, Bolts which fasten columns, girders or other members to concrete or masonry such as bolts used to anchor sills to masonry foundation.

Angle Iron - A piece of iron that forms a right angle and is used to span openings and support masonry at the openings. In brick veneer, they are used to secure the veneer to the foundation. Also known as shelf angle.

Annealing - In the manufacturing of float glass, it is the process of controlled cooling done in a lehr to prevent residual stresses in the glass. Re-annealing is the process of removing objectionable stresses in glass by re-heating to a suitable temperature followed by controlled cooling.

Anti-Walk Blocks - Elastomeric blocks that limit lateral glass movement in the glazing channel which may result from thermal, seismic, wind load effects, building movement, and other forces that may apply.

Approach - The area between the sidewalk and the street that leads to a driveway or the transition from the street as you approach a driveway.

Apron - The flat member of the inside trim of a window placed against the wall immediately beneath the stool.

Architect - A tradesman who designs and produces plans for buildings, often overseeing the building process.

Architects Rule - Three sided ruler with different scales on each side. Also referred to as a "scale."

Areaway - An open subsurface space adjacent to a building used to admit light or air or as a means of access to a basement.

Asphalt - A dark brown to black, highly viscous, hydrocarbon produced from the residue left after the distillation of petroleum. Asphalt is used on roofs and highways as a waterproofing agent. Most native asphalt is a residue from evaporated petroleum. It is insoluble in water but soluble in gaveline when heated. Used widely in building for waterproofing roof coverings of many types, exterior wall coverings, flooring tile, and the like.

Astragal - A molding, attached to one of a pair of swinging doors, against which the other door strikes.

Attic Ventilators - In houses, screened opening) provided to ventilate an attic space. They are located in the soffit area as inlet ventilators and in the gable end or along the ridge as outlet ventilators. They can also consist of power-driven fans used as an exhaust system. (See also Louver.)

Auger - In carpentry, a wood-boring tool used by a carpenter to bore holes
**Backer Rod** - In glazing, a polyethylene or polyurethane foam material installed under compression and used to control sealant joint depth, provide a surface for sealant tooling, serve as a bond breaker to prevent three-sided adhesion, and provide an hour-glass contour of the finished bead.

**Backfill** - (1) filling in any previously excavated area, i.e., The replacement of excavated earth into a trench around and against a basement foundation. (2) in carpentry, the process of fastening together two pieces of board by gluing blocks of wood in the interior angle.

**Backflow** - The flow of liquids through irrigation into the pipes of a potable or drinking water supply from any source which is opposite to the intended direction of flow.

**Backflow Preventer** - A device or means to prevent backflow into the potable water supply.

**Backhand** - A simple molding sometimes used around the outer edge of plain rectangular casing as a decorative feature.

**Backhoe** - Self-powered excavation equipment that digs by pulling a boom mounted bucket towards itself. It is used to dig basements and/or footings and to install drainage or sewer systems.

**Back Nailing** - The practice of nailing roofing felts to the deck under the overlap, in addition to hot mopping, to prevent slippage of felts.

**Balloon Framing** - In carpentry, the lightest and most economical form of construction, in which the studding and corner plates are set up in continuous lengths from the first floor line or sill to the roof plate to which all floor joists are fastened.

**Balusters** - Usually small vertical members in a railing used between a top rail and the stair treads or a bottom rail.

**Balustrade** - A railing made up of balusters, top rail, and sometimes bottom rail, used on the edge of stairs, teal conies, and porches.

**Barge Board** - A decorative board covering the projecting rafter (fly rafter) of the gable end. At the cornice, this member is a facie board.

**Base (or Baseboard)** - A board placed against the wall around a room next to the floor to finish properly between floor and plaster.

**Barometer** - Instrument for measuring atmospheric pressure.

**Barrel Roof** - A roof design, which in cross section is arched.

**Base Flashing** - The upturned edge of the watertight membrane formed at a roof termination point by the extension of the felts vertically over the cant strip and up the wall for a varying distance where they are secured with mechanical fasteners.

**Base Molding** - Molding used to trim the upper edge of interior baseboard.
**Base Ply** - An asphalt-saturated and/or coated felt installed as the first ply with 4 inch laps in a built-up roof system under the following felts which can be installed in a shingle-like fashion.

**Base Shoe** - Molding used next to the floor on interior base board. Sometimes called a carpet strip.

**Batten** - Narrow strips of wood used to cover joints or as decorative vertical members over plywood or wide boards.

**Batten Plate** - A formed piece of metal designed to cover the joint between two lengths of metal edge.

**Batter Board** - One of a pair of horizontal boards nailed to posts set at the corners of an excavation, used to indicate the desired level, also as a fastening for stretched strings to indicate outlines of foundation walls.

**Batt Insulation** - Strips of insulation, usually fiberglass that fit between studs or other framing.

**Bay Window** - Any window space projecting outward from the walls of a building, either square or polygonal in plan.

**Bead** - In glazing, an applied sealant in a joint irrespective of the method of application, such as caulking bead, glazing bead, etc. Also a molding or stop used to hold glass or panels in position.

**Beam** - Structural support member (steel, concrete, lumber) transversely supporting a load that transfers weight from one location to another.

**Bearing Partition** - A partition that supports any vertical load in addition to its own weight.

**Bearing Wall** - A wall that supports any vertical load in addition to its own weight.

**Bed or Bedding** - In glazing, the bead compound or sealant applied between a light of glass or panel and the stationary stop or sight bar of the sash or frame. It is usually the first bead of compound or sealant to be applied when setting glass or panels.

**Bed Molding** - A molding in an angle, as between the over hanging cornice, or eaves, of a building and the side walls.

**Bell Reducer** - In plumbing, a fitting shaped like a bell which has one opening of a smaller diameter used to reduce the size of the pipe in the line, and the opposite opening of larger diameter.

**Below Grade** - The portion of a building that is below ground level.

**Bent Glass** - Flat glass that has been shaped while hot into curved shapes.

**Bevel** - The angle of the front edge of a door usually from 1/8" to 2".

**Bevel Siding (or Lap Siding)** - Wedge-shaped boards used as horizontal siding in a lapped pattern. This siding varies in butt thickness from ½ to ¾ inch and in widths up to 12 inches. Normally used over some type of sheathing.
**Bid Bond** - Security posted by a bidder to ensure performance in accordance with a bid.

**Bidding** - Getting prices from various contractors and/or subcontractors.

**Bid Documents** - Drawings, details, and specifications for a particular project.

**Bite** - The dimension by which the framing system overlaps the edge of the glazing infill.

**Bitumen** - Any of various mixtures of hydrocarbons occurring naturally or obtained through the distillation of coal or petroleum. (See Coat Tar Pitch and Asphalt)

**Bleeding** - A migration of a liquid to the surface of a component or into/onto an adjacent material.

**Blind Nailing** - Nailing in such a way that the nail heads are not visible on the face of the work—usually at the tongue of matched boards.

**Blind Stop** - A rectangular molding, usually ¾ by 1-3/8 inches or more in width, used in the assembly of a window frame. Serves as a stop for storm and screen or combination windows and to resist air infiltration.

**Blister** - An enclosed raised spot evident on the surface of a building. They are mainly caused by the expansion of trapped air, water vapor, moisture or other gases.

**Blocking** - In carpentry, the process of fastening together two pieces of board by gluing blocks of wood in the interior angle.

**Blue Prints** - Architectural plans for a building or construction project, which are likely to include floor plans, footing and foundation plans, elevations, plot plans, and various schedules and or details.

**Blue Stain** - A bluish or grayish discoloration of the sapwood caused the growth of certain mold like fungi on the surface and in the interior of a piece, made possible by the same conditions that favor the growth of other fungi.

**Board Foot** - In carpentry, the equivalent of a board 1 foot square and 1 inch thick.

**Boards** - Yard lumber less than 2 inches thick and 2 or more inches wide.

**Bodied Linseed Oil** - Linseed oil that has been thickened in viscosity by suitable processing with heat or chemicals. Bodied oils are obtainable in a great range in viscosity from a little greater than that of raw oil to just short of a jellied condition.

**Boiled Linseed Oil** - Linseed oil in which enough lead, manganese or cobalt salts have been incorporated to make the oil harden more rapidly when spread in thin coatings.

**Bolster** - A short horizontal timber or steel beam on top of a column to support and decrease the span of beams or girders.

**Bond Breaker** - A substance or a tape applied between two adjoining materials to prevent adhesion between them.
**Bond Plaster** - In addition to gypsum, bond plaster contains 2-5% lime by weight and chemical additives which improve the bond with dense non-porous surfaces such as concrete. It is used as a base coat.

**Boston Ridge** - A method of applying asphalt or wood shingles at the ridge or at the hips of a roof as a finish.

**Bow** - A curve, bend, warping or other deviation from flatness in glass or wood.

**Brace** - An inclined piece of framing lumber applied to wall or floor to stiffen the structure. Often used on walls as temporary bracing until framing has been completed.

**Bracing** - Ties and rods used for supporting and strengthening various parts of a building used for lateral stability for columns and beams.

**Brake Metal** - Sheet metal that has been bent to the desired configuration.

**Brick Veneer** - A facing of brick laid against and fastened to sheathing of a frame wall or tile wall construction.

**Bridging** - Small wood or metal members that are inserted in a diagonal position between the floor joists at midspan to act both as tension and compression members for the purpose of bracing the joists a spreading the action of loads.

**Browncoat** - The coat of plaster directly beneath the finish coat. In three-coat work, the brown is the second coat.

**BTU** - British Thermal Unit - The amount of heat energy required to raise the temperature of one pound of water through a change of one degree F.

**Bubbling** - In glazing, open or closed pockets in a sealant caused by release, production or expansion of gasses.

**Buck** - Often used in reference to rough frame opening members. Door bucks used in reference to metal door frame.

**Building Brick** - Brick for building purposes not especially treated for texture or color, formerly called "common brick." It is stronger than face brick.

**Building Paper** - A general term for papers, felts, and similar sheet materials used in buildings without reference to their properties or uses.

**Building Permit** - Written authorization from the city, county or other governing regulatory body giving permission to construct or renovate a building. A building permit is specific to the building project described in the application.

**Built-Up Roof** - A roofing composed of three to five layers of asphalt felt laminated with coal tar, pitch, or asphalt. The top is finished with crushed slag or gravel. Generally used on flat or low-pitched roofs.
**Bullfloat** - A tool used to finish and flatten a slab. After screeding, the first stage in the final finish of concrete, smoothes and levels hills and voids left after screeding. Sometimes substituted for darbying. A large flat or tool usually of wood, aluminum or magnesium with a handle.

**Butt Joint** - The junction where the ends of two timbers or other members meet in a square-cut joint.

**Butt Joint** - In glazing, application of sealant or compound to the flat surface of some member before placing the member in position, such as the buttering of a removable stop before fastening the stop in place.

**Butt Glazing** - The installation of glass products where the vertical glass edges are without structural supporting mullions.

**Butyl** - Type of non-curing and non-skinning sealant made from butylene. Usually used for internal applications.

**BX - Armored Cable** - A factory assembly of insulated conductors inside a flexible metallic covering. It can be run except where exposed to excessive moisture and should not be run below grade. It must always be grounded and uses its armor as an equipment ground. It is difficult to pull out old wires or insert new ones.
Calcium Chloride - A chemical used to speed up curing of concrete during damp conditions.

Canopy - An overhanging roof.

Cantilever - A projecting beam or other structure supported only at one end.

Cant Strip - A beveled support used at the junction of a flat surface and a vertical surface to prevent bends and/or cracking of the roofing membrane at the intersection of the roof deck and wall. Used with a base flashing to minimize breaking of the roofing felts.

Cap - The upper member of a column, pilaster, door cornice, molding, and the like.

Cap Sheets - In roofing, one to four plies of felt bonded and top coated with bitumen that is laid over an existing roof as a treatment for defective roofs.

Cape Chisel - Tool used to clean out mortar joints on brick.

Carbide Bit - Tool used to drill holes in brick or block.

Casement Frames and Sash - Frames of wood or metal enclosing part or all of the sash, which may be opened by means of hinges affixed to the vertical edges.

Casing - Molding of various widths and thicknesses used to trim door and window openings at the jambs.

Caulk - (v) The application of sealant to a joint, crack or crevice. (n) A compound used for sealing that has minimum joint movement capability; sometimes called low performance sealant.

C/D Circuit - A circuit where electricity flows in one direction only, at a constant rate.

Cellulose Insulation - Ground up newspaper that is treated with a fire retardant.

Cement Mixtures - Rich - 1 part cement, 2 parts sand, 3 parts coarse aggregate. Used for concrete roads and waterproof structures. Standard - 1 part cement, 2 parts sand, 4 parts coarse aggregate. Used for reinforced work floors, roofs, columns, arches, tanks, sewers, conduits, etc. Medium - 1 part cement, 2 1/2 parts sand, 5 parts coarse aggregate. Used for foundations, walls, abutments, piers, etc. Lean - 1 part cement, 3 parts sand, 6 parts coarse aggregate. Used for all mass concrete work, large foundations, backing for stone masonry, etc. Mixtures are always listed Cement to Sand to Aggregate

Cement Types - Type I Normal - is a general purpose cement suitable for practically all uses in residential construction but should not be used where it will be in contact with high sulfate soils or be subject to excessive temperatures during curing. Type II Moderate is used where precaution against moderate sulfate attack is important, as in drainage structures where sulfate concentrations in groundwater's are higher than normal. Type III High Early Strength is used when high strengths are desired at very early periods, usually a week or less. It is used when it is desirable to remove forms as soon as possible or to put the concrete into service quickly. Type IV Low Heat is a special cement for use where the amount and rate of heat generated during curing
must be kept to a minimum. The development of strength is slow and is intended in large masses of concrete such as dams. Type V Sulfate Resisting is a special cement intended for use only in construction exposed to severe sulfate action, such as western states having soils of high alkali content.

**Certificate of Occupancy** - A document stating that a building is approved for occupancy. The building authority issues the Certificate of Occupancy.

**CFM (Cubic Feet per Minute)** - The measure of volume of air. When testing systems, find the CFM by multiplying the face velocity times the free area in square feet. The face velocity is the amount of air passing through the face of an outlet or return. Free area is the total area of the openings in the outlet or inlet through which air can pass.

**Chair Rail** - A molding that runs horizontally along the wall at about 3 feet from the ground. In storefront, window wall, or curtain wall systems, a chair rail is an aluminum extrusion applied horizontally to the inside of the system 3 feet from the floor to create a barrier in floor-to-ceiling glazing applications.

**Channel Glazing** - The installation of glass products into U-shaped glazing channels. The channels may have fixed stops; however, at least one glazing stop on one edge must be removable.

**Checking** - Fissures that appear with age in many exterior paint coatings, at first superficial, but which in time may penetrate entirely through the coating. It produces a pattern of surface cracks running in irregular lines. When found in the top pour of an asphalt built-up roof, checking is the preliminary stage of alligatoring.

**Checkrails** - Meeting rails sufficiently thicker than a window to fill the opening between the top and bottom sash made by the parting stop in the frame of double-hung windows. They are usually beveled.

**Chemical Injection Grouting** – Leak repair technique usually used below grade in cracks and joints in concrete walls and floors that involves injection of sealant (usually urethane) that reacts with water to form a seal.

**Circuit Breaker** - Simple switch-like device which automatically opens a circuit when the rated current is exceeded as in the case of a short circuit.

**Cleat** - A wedge-shaped piece (usually of metal) which serves as a support or check. A strip fastened across something to give strength or hold something in position.

**Coal Tar Pitch** - A bituminous material, which is a by-product from the coking of coal. It is used as the waterproofing material for tar and gravel built-up roofing.

**Coating** - A layer of any liquid product spread over a surface for protection.

**Cohesive Failure** - Internal splitting of a compound resulting from over-stressing of the compound.

**Cold Applied** - Products that can be applied without heating. These are in contrast to products which need to be heated to be applied.

**Cold Patch** - In roofing, a roof repair done with cold-applied material.
**Collar** - In roofing, a conical metal cap flashing used in conjunction with vent pipes or stacks usually located several inches above the plane of the roof, for the purpose of shedding water away from the base of the vent.

**Collar Beam** - In carpentry, a tie that keeps the roof from spreading. They serve to stiffen the roof structure. Connects similar rafters on opposite sides of roof.

**Column** - In architecture: A perpendicular supporting member, circular or rectangular in section, usually consisting of a base, shaft, and capital. In engineering: A vertical structural compression member which supports loads acting in the direction of its longitudinal axis.

**Combination Doors or Windows** - Combination doors or windows used over regular openings. They provide winter insulation and summer protection and often have self storing or removable glass and screen inserts. This eliminates the need for handling a different unit each season.

**Compatible** - Two or more substances, which can be mixed or blended without separating, reacting, or affecting either material adversely.

**Component** - Any one part of an assembly associated with construction.

**Composite Board** - An insulation board, which has two different insulation types laminated together in 2 or 3 layers.

**Compound** - A chemical formulation of ingredients used to produce a caulking, elastomeric joint sealant, etc.

**Compression Gasket** - A gasket designed to function under compression.

**Compression Set** - The permanent deformation of a material after removal of the compressive stress.

**Concrete Plain** - Concrete either without reinforcement, or reinforced only for shrinkage or temperature changes.

**Condensation** - The appearance of moisture (water vapor) on the surface of an object caused by warm moist air coming into contact with a colder object. In a building: Beads or drops of water (and frequently frost in extremely cold weather) that accumulate on the inside of the exterior covering of a building when warm, moisture-laden air from the interior reaches a point where the temperature no longer permits the air to sustain the moisture it holds. Use of louvers or attic ventilators will reduce moisture condensation in attics. A vapor barrier under the gypsum lath or dry wall on exposed walls will reduce condensation in them.

**Conductor** - (1) In roofing, a pipe for conveying rainwater from the roof gutter to a drain, or from a roof drain to the storm drain; also called a leader, downspout, or downpipe. (2) In electrical contracting, a wire through which a current of electricity flows, better known as an electric wire.

**Conduction** - The flow of heat from one part of a substance to another part. A piece of iron with one end placed in a fire will soon become warm from end to end, from the transfer of heat by the actual collision of the air molecules.

**Conduit** - A pipe, usually metal, for protecting and routing electrical wiring.
**Construction, frame** - A type of construction in which the structural parts are wood or depend upon a wood frame for support. In codes, if masonry veneer is applied to the exterior walls, the classification of this type of construction is usually unchanged.

**Construction Loan** - A loan provided by a lending institution specifically to construct or renovate a building.

**Control Joint** - A control joint controls or accommodates movement in the surface component of a roof.

**Convection** - A method of transferring heat by the actual movement of heated molecules, usually by a freestanding unit such as a furnace.

**Cooling Tower** - A large device mounted on roofs, consisting of many baffles over which water is pumped in order to reduce its temperature.

**Coped Joint** See *Scribing*.

**Coping** - A construction unit placed at the top of the parapet wall to serve as a cover for the wall.

**Copper Pipe Types** - Type K has the heaviest or thickest wall and is generally used underground. It has a green stripe. Type L has a medium wall thickness and is most commonly used for water service and for general interior water piping. It has a blue stripe. Type M has a thin wall and many codes permit its use in general water piping installation. It has a red stripe.

**Corbel Out** - To build out one or more courses of brick or stone from the face of a wall, to form a support for timbers.

**Core** - A small section cut from any material to show internal composition.

**Corner Bead** - A strip of formed sheet metal, sometimes combined with a strip of metal lath, placed on corners before plastering to reinforce them. Also, a strip of wood finish three-quarters-round or angular placed over a plastered corner for protection.

**Corner Boards** - Used as trim for the external corners of a house or other frame structure against which the ends of the siding are finished.

**Corner Braces** - Diagonal braces at the corners of frame structure to stiffen and strengthen the wall.

**Cornerite** - Metal-mesh lath cut into strips and bent to a right angle. Used in interior corners of walls and ceilings on lath to prevent cracks in plastering.

**Cornice** - A horizontal projecting course on the exterior of a building, usually at the base of the parapet. In residential construction, the overhang of a pitched roof at the cave line, usually consisting of a facie board, a soffit for a closed cornice, and appropriate moldings.

**Cornice Return** - That portion of the cornice that returns on the gable end of a house.

**Corrosion** - The deterioration of metal by chemical or electrochemical reaction resulting from exposure to weathering, moisture, chemicals or other agents or media.
**Corrugated** - Folded or shaped into parallel ridges or furrows so as to form a symmetrically wavy surface.

**Cost Breakdown** - A breakdown of all the anticipated costs on a construction or renovation project.

**Counter Flashing** - The formed metal secured to a wall, curb, or roof top unit to cover and protect the upper edge of a base flashing and its associated fasteners. This type of flashing is usually used in residential construction on chimneys at the roofline to cover shingle flashing and to prevent moisture entry.

**Coupling** - In plumbing, a short collar with only inside threads at each end, for receiving the ends of two pipes which are to be fitted and joined together. A right/left coupling is one used to join 2 gas pipes in limited space.

**Course** - A single layer of brick or stone or other building material.

**Cove Molding** - A molding with a concave face used as trim or to finish interior corners.

**Covenants** - Rules usually developed by a builder or developer regarding the physical appearance of buildings in a particular geographic area. Typical covenants address building height, appropriate fencing and landscaping, and the type of exterior material (stucco, brick, stone, siding, etc) that may be used.

**Crawl Space** - A shallow open area between the floor of a building and the ground, normally enclosed by the foundation wall.

**Crazing** - A series of hairline cracks in the surface of weathered materials, having a web-like appearance. Also, hairline cracks in pre-finished metals caused by bending or forming. (see brake metal)

**Cricket** - A small drainage-diverting roof structure of single or double slope placed at the junction of larger surfaces that meet at an angle, such as above a chimney.

**Cross-Bridging** - Diagonal bracing between adjacent floor joists, placed near the center of the joist span to prevent joists from twisting.

**Crown Molding** - A molding used on cornice or wherever an interior angle is to be covered.

**Cupola** - A small monitor or dome at the peak of a pitched roof.

**Curb** - A short wall or masonry built above the level of the roof that provides a means of flashing the deck equipment.

**Curing** - In concrete application, the process in which mortar and concrete harden. The length of time is dependent upon the type of cement, mix proportion, required strength, size and shape of the concrete section, weather and future exposure conditions. The period may be 3 weeks or longer for lean concrete mixtures used in structures such as dams or it may be only a few days for richer mixes. Favorable curing temperatures range from 50 to 70 degrees F. Design strength is achieved in 28 days.

**Curing Agent** - One part of a multi-part sealant which, when added to the base, will cause the base to change its physical state by chemical reaction between the two parts.
**Curtain Wall** - A thin wall, supported by the structural steel or concrete frame of the building independent of the wall below. Also a metal (most often aluminum) framing system on the face of a building containing vision glass panels and spandrel panels made of glass, aluminum, or other material.

**Cutback** - In roofing, basic asphalt or tar which has been "cut back" with solvents and oils so that the material become fluid.

**Cut-in Brace** - Nominal 2-inch-thick members, usually 2 by 4’s, cut in between each stud diagonally.

**Cut Off** - A piece of roofing membrane consisting of one or more narrow plies of felt usually moped in hot to seal the edge of insulation at the end of a day’s work.
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d. See Penny.

**Dado** - A rectangular groove across the width of a board or plank. In interior decoration, a special type of wall treatment.

**Damper** - Valve for controlling airflow. When ordering registers, make sure each supply outlet has a damper so the air flow can be adjusted and turned off. Dampers may be either manually or automatically operated. Automatic dampers are required for exhaust air ducts.

**Dampproofing** - A process used on concrete, masonry or stone surfaces to repel water, the main purpose of which is to prevent the coated surface from absorbing rain water while still permitting moisture vapor to escape from the structure. (Moisture vapor readily penetrates coatings of this type.) "Dampproofing" generally applies to surfaces above grade; “waterproofing” generally applies to surfaces below grade.

**Darby** - A flat tool used to smooth concrete flatwork immediately after screeding. See Bullfloating

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

**Decay** - Disintegration of wood or other substance through the action of fungi,

**Deck** - An elevated platform. "Deck" is also commonly used to refer to the above-ground floors in multi-level parking garage.

**Deck Paint** - An enamel with a high degree of resistance to mechanical wear, designed for use on such surfaces as porch floors.

**Deflect** - To bend or deform under weight.

**Deflection** - The amount of bending movement of any part of a structural member perpendicular to the axis of the member under an applied load.

**Density** - The mass of substance in a unit volume. When expressed in the metric system, it is numerically equal to the specific gravity of the same substance.

**Design Pressure** - Specified pressure a product is designed to withstand.

**Dew Point** - Temperature at which vapor condenses from the atmosphere and forms water.

**Dimension Lumber** - Yard lumber from 2 inches to, but not including, 5 inches thick and 2 or more inches wide. Includes joists, rafters, studs, plank, and small timbers.

**Direct Nailing** - To nail perpendicular to the initial surface or to the junction of the pieces joined. Also termed face nailing.
**Distortion** - Alteration of viewed images caused by variations in glass flatness or inhomogeneous portions within the glass. An inherent characteristic of heat-treated glass.

**Dolly Varden Siding** - Beveled wood siding which is rabbeted on the bottom edge.

**Doorjamb (interior)** - The surrounding case into which and out of which a door closes and opens. It consists of two upright pieces, called side jambs, and a horizontal head jamb.

**Dormer** - An opening in a sloping roof, the framing of which projects out to form a vertical wall suitable for windows or other openings.

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

**Double Plate** - when two layers of 2 x 4’s are placed on top of studs in framing a wall.

**Double Strength** - In float glass, approximately 1/8" (3 mm.) thick.

**Double Tree** - Refers usually to a precast roof deck panel poured with two fins in its underside to impart flexural rigidity.

**Downspout** - The metal pipe used to drain water from a roof.

**Drawing Outline** - A top view drawing of a building or roof showing only the perimeter drawn to scale.

**Drawing Detail** - A top view drawing of a building or roof showing the roof perimeter and indicating the projections and roof mounted equipment, drawn to scale.

**Dressed and Matched (Tongued & Grooved)** - Boards or planks machined in such a matter that there is a groove on one edge and a corresponding tongue on the other.

**Dressed Size Lumber** - The dimension of lumber after shrinking from green dimension and after machining to size or pattern.

**Drier Paint** - Usually oil-soluble soaps of such metals as lead manganese, or cobalt, which, in small proportions, hasten the oxidation and hardening (drying) of the drying oils in paints.

**Drip** - (a) A member of a cornice or other horizontal exterior finish course that has a projection beyond the other parts for throwing off water. (b) A groove in the under side of a sill or drip cap to cause water to drop off on the outer edge instead of drawing back and running down the face of the building.

**Drip Cap** - A molding placed on the exterior top side of a door or window frame to cause water to drip beyond the outside of the frame.

**Drip Edge** - A device designed to prevent water from running back or under an overhang.

**Drippage** - Bitumen material that drips through roof deck joints, or over the edge of a roof deck.
“Dropping” a Stringer – In carpentry, means cutting short on the bottom of a stairs, to allow for thickness of the first tread.

Drop Siding - Usually ¾ inch thick and 6 and 8 inches wide with tongued-and-grooved or shiplap edges. Often used as siding without sheathing in secondary buildings.

Dry Glazing - Also called compression glazing, a term used to describe various means of sealing monolithic and insulating glass in the supporting framing system with synthetic rubber and other elastomeric gasket materials.

Dry-In - To make a building waterproof.

Dry Seal - Accomplishment of weather seal between glass and sash by use of strips or gaskets of Neoprene, EPDM, silicone or other flexible material. A dry seal may not be completely watertight.

Dry Sheet - A ply mechanically attached to wood or gypsum decks to prevent asphalt or pitch from penetrating the deck and leaking into the building below.

Drywall - Sheetrock (gypsum board) that covers the framing and taping, coating, and finishing to make the interior walls and ceilings of a building. Drywall is also used as a verb to refer to installation process.

Dry-Wall Construction - A type of construction in which the interior wall finish is applied in a dry condition, generally in the form of sheet materials or wood paneling as contrasted to plaster.

Drywall Hammer - A special hammer used for nailing up gypsum board. It is also known as an ax or hatchet. Edges should be smooth and the corners rounded off. The head has a convex round & checkered head.

Drywall Nail - Nails used for hanging regular drywall that is to be taped and finished later must have adequate holding power and a head design that does not cut the face paper. They must also be of the proper depth to provide exactly 1 inch penetration into the framing member. Nails commonly used are chemically-etched and are designed with a cupped head.

Duct - A cylindrical or rectangular "tube" used to move air either from exhaust or intake, and for distributing warm air from the heating plant to rooms, or air from a conditioning device or as cold air returns. The installation is referred to as “duct work”.

Dumbwaiter - An elevator with a maximum footage of not more than 9 sq. ft. floor area; not more than 4“ headroom and a maximum capacity of 500 lbs. used for carrying materials only.

Durometer - The measurement of hardness of a material. A gauge to measure the hardness of an elastomeric material.
Eave - The part of a roof which projects out from the side wall, or the lower edge of the part of a roof that overhangs a wall.

Edge Clearance - Nominal spacing between the edge of the glass product and the bottom of the glazing pocket (channel).

Edge Grain (vertical) - Edge-grain lumber has been sawed parallel to the pith of the log and approximately at right angles to the growth rings; i.e., the rings form an angle of 45° or more with the surface of the piece.

Edge Metal - A term relating to brake or extruded metal around the perimeter of a roof.

EER - Energy Efficiency Ratio; is figured by dividing BTU hours by watts.

Efflorescence - The process by which water leeches soluble salts out of concrete or mortar and deposits them on the surface. Also used as the name for these deposits.

EIFS - Exterior Insulating and Finish System; exterior wall cladding system consisting primarily of polystyrene foam board with a textured acrylic finish that resembles plaster or stucco.

Elastomer - An elastic rubber-like substance, such as natural or synthetic rubber.

Elastomeric - Of or pertaining to any of the numerous flexible membranes that contain rubber or plastic.

Electrolytic Coupling - A fitting required to join copper to galvanized pipe and gasketed to prevent galvanic action. Connecting pipes of different materials may result in electrolysis.

Elevation - A side of a building.

Emissivity - the measure of a surface’s ability to emit long-wave infrared radiation.

EMT - Electrical Metallic Tubing- This electrical pipe, also called thin-wall conduit, may be used for both concealed and exposed areas. It is the most common type of raceway used in single family and low rise residential and commercial buildings.

Emulsion - In roofing, a coating consisting of asphalt and fillers suspended in water.

End Dams - Internal flashing (dam) that prevents water from moving laterally within a curtain wall or window wall system.

End Lap - The amount or location of overlap at the end of a roll of roofing felts in the application.

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.
**Excavate** - Dig the basement and or all areas that will need footings/foundations below ground.

**Expansion Coefficient** - The amount that a specific material will vary in any one dimension with a change of temperature.

**Expansion Joint** - A device used to permit a structure to expand or contract without breakage. In residential construction, a bituminous fiber strip used to separate blocks or units of concrete to prevent cracking due to expansion as a result of temperature changes. Also used on concrete slabs.

**Exterior Glazed** - Glazing infills set from the exterior of the building.

**Exterior Stop** - The molding or bead that holds the light or panel in place when it is on the exterior side of the lite or panel.

**Extrusion** - An item formed by forcing a base metal (frequently aluminum) or plastic, at a malleable temperature, through a die to achieve a desired shape.

**Eyebrow** - A flat, normally concrete, projection which protrudes horizontally from a building wall; Eyebrows are generally located above windows.
Facade - The front of a building. Frequently, in architectural terms an artificial or decorative effort.

Face Brick - Brick made especially for exterior use with special consideration of color, texture and size, and used as a facing on a building.

Face Glazing - A system having a triangular bead of compound applied with a putty knife, after bedding, setting, and clipping the glazing infill in place on a rabbed sash.

Factory Mutual (FM) - Insurance agency that has established stringent guidelines for maximum construction integrity as it relates to fire and environmental hazards. Their specifications have become industry standards.

Fascia - In residential construction, a flat board, band, or face, used sometimes by itself but usually in combination with moldings, often located at the outer face of the cornice. Any cover board or framed metal assembly at the edge or eaves of a flat, sloping, or overhanging roof, which is placed in a vertical position to protect the edge of the roof assembly.

Fasteners - A general term covering a wide variety of screws and nails, which may be used for mechanically securing various components of a building.

Felt - A very general term used to describe composition of roofing ply sheets, consisting of a mat of organic or inorganic fibers unsaturated, impregnated with asphalt or coal tar pitch, or impregnated and coated with asphalt.

Fenestration - Any glass panel, window, door, curtain wall or skylight unit on the exterior of a building.

Ferrous - Refers to objects made of or partially made of iron, such as ferrous pipe.

Fillet Bead - Caulking or sealant placed in such a manner that it forms an angle between the materials being caulked.

Finish - In hardware, metal fastenings on cabinets which are usually exposed such as hinges and locks.

Finish Carpentry - The hanging of all interior doors, installation of door molding, base molding, chair rail, built in shelves, etc.

Finish Coat - The last coat applied in plastering intended as a base for further decorating or as a final decorative surface. Finish coat usually consists of calcified gypsum, lime and sometimes an aggregate. Some may require the addition of lime or sand on the job. The three basic methods of applying it are (1) trowel (2) flat and (3) spray.

Finish Grade - Any surface which has been cut to or built to the elevation indicated for that point. Surface elevation of lawn, driveway or other improved surfaces after completion of grading operations.

Fire Rated - Descriptive of materials that has been tested for use in fire walls.
Fire-Resistive - In the absence of a specific ruling by the authority having jurisdiction, applies to materials for construction not combustible in the temperatures of ordinary fires and that will withstand such fires without serious impairment of their usefulness for at least 1 hour.

Fire Retardant Chemical - A chemical or preparation of chemicals used to reduce flammability or to retard spread of flame.

Fire Stop - A solid, tight closure of a concealed space, placed to prevent the spread of fire and smoke through such a space. In a frame wall, this will usually consist of 2 by 4 cross blocking between studs.

Fire Wall - Any wall built for the purpose of restricting or preventing the spread of fire in a building. Such walls of solid masonry or concrete generally sub-divide a building from the foundations to two or more feet above the plane of the roof.

Fishplate - A wood or plywood piece used to fasten the ends of two members together at a butt joint with nails or bolts. Sometimes used at the junction of opposite rafters near the ridge line.

Fish Tape (Fish Wire) – Material used to advance wire through a conduit.

Flagstone (Flagging or Flags) - Flat stones, from 1 to 4 inches thick, used for rustic walks, steps, floors, and the like.

Flake - A scale-like particle. To lose bond from a surface in small thin pieces. Sometimes a paint film “flakes”.

Flash Point - The critical temperature at which a material will ignite.

Flashing - Weatherproof material installed between roof sheathing (or wall sheathing) and the finish materials to help keep moisture away from the sheathing. Typically, sheet metal or a similar material is used in roof and wall construction to protect a building from water seepage.

Flat Glass - A general term that describes float glass, sheet, glass, plate glass, and rolled glass.

Flat Grain - Flat-grain lumber has been sawed parallel to the pith of the log and approximately tangent to the growth rings, i.e., the rings form an angle of less than 45° with the surface of the piece.

Flat Paint - An interior paint that contains a high proportion of pigment and dries to a flat or lusterless finish.

Flat Seam - A seam at the junction of sheet metal roof components that has been bent at the plane of the roof.

Fleet Averaging - By using a point system, builders can show compliance with energy building requirements by using average figures for all air conditioning units in the same sub division.

Flexible Metal Conduit – Conduit similar to armored cable in appearance but does not have the pre-inserted conductors.

Float Glass - Glass formed on a bath of molten tin. The surface in contact with the tin is known as the tin surface or tin side. The top surface is known as the atmosphere surface or air side.
Floor Plan - The basic layout of building or addition, which includes placement of walls, windows and doors as well as dimensions.

Floor Plate - See Floor Plan.

Flue - The space or passage in a chimney through which smoke, gas, or fumes ascend. Each passage is called a flue, which together with any others and the surrounding masonry make up the chimney.

Flue Lining - Fire clay or terra-cotta pipe, round or square, usually made in all ordinary flue sizes and in 2-foot lengths, used for the inner lining of chimneys with the brick or masonry work around the outside. Flue lining in chimneys runs from about a foot below the flue connection to the top of the chimney.

Flush Glazing - (Pocket Glazing) The setting of a light of glass or panel into a four-sided sash or frame opening containing a recessed "U" shaped channel without removable stops on three sides of the sash or frame and one channel with a removable stop along the fourth side.

Fly Rafters - End rafters of the gable overhang supported by roof sheathing and lookouts.

Folded Seam - In sheet metal work, a joint between sheets of metal wherein the edges of the sheets are crimped together and folded flat.

Footings - Wide pours of cement reinforced with re-bar (reinforcing bar) that support foundation walls, pillars, or posts. Footings are part of the foundation and are often poured before the foundation walls.

Foot Print - See Floor Plan.

Foundation - The supporting portion of a structure below the first floor construction, or below grade, including the footings.

Frieze - In house construction a horizontal member connecting the top of the siding with the soffit of the cornice.

Frostline - The depth of frost penetration in soil. This depth varies in different parts of the country. Footings should be placed below this depth to prevent movement.

Fully-Adhered - A completely attached (adhered) roof membrane.

Fully Tempered Glass - Flat or bent glass that has been heat-treated to a high surface and/or edge compression to meet the requirements of ASTM C 1048, kind FT. Fully tempered glass, if broken, will fracture into many small pieces (dice) which are more or less cubical. Fully tempered glass is approximately four times stronger than annealed glass of the same thickness when exposed to uniform static pressure loads.

Fungi (wood) - Microscopic plants that live in damp wood and cause mold, stain, and decay.

Fungicide - A chemical that is poisonous to fungi.

Furnace: A heating system that uses the principle of thermal convection. When air is heated, it rises and as the air cools it settles. Ducts are installed to carry the hot air from the top of the
furnace to the rooms. Other ducts, called cold air returns, return the cooler air back to the furnace.

**Furring** - Strips of wood or metal applied to a wall or other surface to even it and normally to serve as a fastening base for finish material.
- G -

**Gable** - The end of a building as distinguished from the front or rear side. The triangular end of an exterior wall from the level of the eaves to the ridge of a double-sloped roof. In house construction, the portion of the roof above the eave line of a double-sloped roof.

**Gable End** - An end wall having a gable.

**Gambrel Roof** - A type of roof which has its slope broken by an obtuse angle, so that the lower slope is steeper than the upper slope. A double sloped roof having two pitches.

**Galvanize** - To coat a metal with zinc by dipping it in molten zinc after cleaning.

**Gaskets** - pre-formed shapes, such as strips, grommets, etc., of rubber or rubber-like composition, used to fill and seal a joint or opening either alone or in conjunction with a supplemental application of a sealant.

**Gauge** - The thickness of sheet metal and wire, etc.

**Gauge Board** - (Spot Board) Board used to carry grout needed to patch small jobs.

**General Contractor** - (or Prime Contractor) A contractor responsible for all facets of construction of a building or renovation.

**GFI or GFCI** - Ground Fault Circuit Interrupters - Special devices capable of opening a circuit when even a small amount of current is flowing through the grounding system.

**GFRC** - Glass Fiber Reinforced Concrete; Material used in wall systems that resembles but generally does not perform as well as concrete. Usually a thin cementitious material laminated to plywood or other lightweight backing.

**Gloss Enamel** - A finishing material made of varnish and sufficient pigments to provide opacity and color, but little or no pigment of low opacity. Such an enamel forms a hard coating with maximum smoothness of surface and a high degree of gloss

**Gloss (paint or enamel)** - A paint or enamel that contains a relatively low proportion of pigment and dries to a sheen or luster.

**Girder** - A main beam upon which floor joists rest used to support concentrated loads at isolated points along its length, usually made of steel or wood.

**Glass** - A hard, brittle substance, usually transparent, made by fusing silicates under high temperatures with soda, lime, etc.

**Glaze Coat** - In roofing, a light, uniform mopping of bitumen on exposed felts to protect them from the weather, pending completion of the job.

**Glazing** – (n) A generic term used to describe an infill material such as glass, panels, etc. (v) the process of installing an infill material into a prepared opening in windows, door panels, partitions, etc.
**Glazing Bead** - In glazing, a strip surrounding the edge of the glass in a window or door which holds the glass in place.

**Glazing Channel** - In glazing, a three-sided, U-shaped sash detail into which a glass product is installed and retained.

**Grade MW** - Moderate Weather grade of brick for moderate resistance to freezing used, for example, in planters.

**Grade NW** - No Weather brick intended for use as a back-up or interior masonry.

**Grade SW** - Severe Weather grade of brick intended for use where high resistance to freezing is desired.

**Grain** - The direction, size, arrangement, appearance, or quality of the fibers in wood.

**Granules** - The mineral particles of a graded size which are embedded in the asphalt coating of shingles and roofing.

**Gravel** - Loose fragments of rock used for surfacing built-up roofs, in sizes varying from 1/8" to 1 3/4".

**Grounds** - Guides used around openings and at the floorline to strike off plaster. They can consist of narrow strips of wood or of wide sub-jambs at interior doorways. They provide a level plaster line for installation of casing and other trim.

**Ground System** - The connection of current-carrying neutral wire to the grounding terminal in the main switch which in turn is connected to a water pipe. The neutral wire is called the ground wire.

**Grounding Rod** - Rod used to ground an electrical panel.

**Grout or Grouting** - A cement mortar mixture made of such consistency (by adding water) that it will just flow into joints and cavities of masonry work to fill them solid.

**Gun Consistency** - Sealant formulated in a degree of viscosity suitable for application through the nozzle of a caulking gun.

**Gunite** - A construction material composed of cement, sand or crushed slag and water mixed together and forced through a cement gun by pneumatic pressure, used in the construction of swimming pools.

**Gutter** - Metal or wood trough at the eaves of a roof to carry rain water from the roof to the downspout.

**Gutter Strap** - Metal bands used to support the gutter.

**Gusset** - A flat wood, plywood, or similar type member used to provide a connection at intersection of wood members. Most commonly used at joints of wood trusses. They are fastened by nails, screws, bolts, or adhesives.

**Guy Wire** - A strong steel wire or cable strung from an anchor on the roof to any tall slender projection for the purpose of support.
**Gypsum Plaster** - Gypsum formulated to be used with the addition of sand and water for basecoat plaster.

**Gypsum Board** - See Drywall

**Gypsum Keene Cement** - Material used to obtain a smooth finish coat of plaster, for use over gypsum plastic base coats only and in areas not subject to moisture. It is the hardest plaster.
**Hardware** - Metal accessories such as door knobs, towel bars, toilet paper holders, etc.

**Hatch** - An opening in a deck; floor or roof. The usual purpose is to provide access from inside the building.

**Hawk** - A flat wood or metal tool 10 inches to 14 inches square with a handle used by plasterers to carry plaster mortar or mud.

**Hazard Insurance** - Insurance for a building while it is under construction.

**Header** - Framing members over windows, doors, or other openings. (a) A beam placed perpendicular to joists and to which joists are nailed in framing for chimney, stairway, or other opening. (b) A wood lintel.

**Hearth** - The inner or outer floor of a fireplace, usually made of brick, tile, or stone.

**Heartwood** - The wood extending from the pith to the sapwood, the cells of which no longer participate in the life processes of the tree.

**Heat Strengthened Glass** - Flat or bent glass that has been heat-treated to a specific surface and/or edge compression range to meet the requirements of ASTM C 1048, kind HS. Heat-strengthened glass is approximately two times as strong as annealed glass of the same thickness when exposed to uniform static pressure loads. Heat-strengthened glass is not considered safety glass and will not completely dice as will fully tempered glass.

**Heel Bead** - Sealant applied at the base of a channel, after setting the light or panel and before the removable stop is installed, one of its purposes being to prevent leakage past the stop.

**Hermetic Seal** - Vacuum seal (between panes of a double-paned window i.e. insulated glass unit or IGU). Failure of a hermetic seal causes permanent fogging between the panels of the IGU.

**High-Early Cement** - A portland cement sold as Type III sets up to its full strength faster than other types.

**Hip** - The external angle formed by the meeting of two sloping sides of a roof.

**Hip Rafter** - A rafter that forms the intersection of an external roof angle.

**Hip Roof** - A roof that rises by inclined planes from all four sides of a building.

**Hoistway** - A shaftway for the travel of one or more elevators.

**Honeycomb** - (1) Areas in a foundation wall where the aggregate (gravel) is visible. Honeycombs can be usually be remedied by applying a thin layer of grout or other cement product over the affected area. (2) Method by which concrete is poured and not puddled or vibrated, allowing the edges to have voids or holes after the forms are removed.
**Hub** - In plumbing, the enlarged end of a pipe which is made to provide a connection into which the end of the joining pipe will fit.

**Humidifier** - A device designed to increase the humidity within a room or a house by means of the discharge of water vapor. They may consist of individual room size units or larger units attached to the heating plant to condition the entire house.

**HVAC** - Heating Ventilation and Air Conditioning.

**Hydroelectric Elevator** - An elevator where liquid is pumped under pressure directly into the cylinder by a pump driven by an electric motor without an accumulator between the pump and cylinder.
I-Beam - A steel beam with a cross section resembling the letter I. It is used for long spans as basement beams or over wide wall openings, such as a double garage door, when wall and roof loads are imposed on the opening.

IIC - A new system utilized in the Federal Housing Administration recommended criteria for impact sound insulation.

Incompatibility - Descriptive of two or more materials which are not suitable to be used together.

Indemnification Clause – Provision in a contract in which one party agrees to be financially responsible for specified types of damages, claims, or losses.

Infiltration - The process by which air leaks into a building. In either case, heat loss results. To find the infiltration heating load factor (HLF), the formula to account for the extra BTU’s needed to heat the infiltrated air is:

- \[ \text{BTU/HR} = \text{building volume} \times \text{air changes} \times \text{BTU/cu.ft/hr} \times \text{TD} \]  
  (TD is temperature difference)

INR - (Impact Noise Rating). A single figure rating which provides an estimate of the impact sound insulating performance of a floor-ceiling assembly.

Inside Drain - In roofing, a drain positioned on a roof at some location other than the perimeter. It drains surface water inside the building through closed pipes to a drainage system.

Insulation Board - A rigid structural building board made of coarse wood or cane fiber in ½- and 25/32-inch thickness. It can be obtained in various size sheets, in various densities, and with several treatments.

Insulating Glass Unit – Two or more lights of glass spaced apart and hermetically sealed to form a single-glazed unit with an air space between each light. (Commonly called IG units.)

Insulation - (1) Generally, any material which slows down or retards the flow or transfer of heat. Building insulation types are classified according to form as loose fill, flexible, rigid, reflective, and foamed-in-place. All types are rated according to their ability to resist heat flow (R-Value). (2) In electrical contracting, rubber, thermoplastic, or asbestos wire covering. The thickness of insulation varies with wire size and type of material, application or other code limitations.

Insulation Fasteners - Any of several specialized mechanical fasteners designed to hold insulation down to a steel or a nailable deck.

Interior Finish - Material used to cover the interior framed areas, or materials of walls and ceilings.

Interior Glazed - Glazing infills set from the interior of the building.

Interlayer - In glazing, any material used to bond two lights of glass and/or plastic together to form a laminate.
**Interply** - Between two layers of roofing felts that have been laminated together.

**IRMA** - Insulated (or Inverted) Roof Membrane Assembly. In this system the roof membrane is laid directly on the roof deck, covered with extruded foam insulation and ballasted with stone, minimum of 1000 lbs. per square.
- J -

**Jack Rafter.** - A rafter that spans the distance from the wall plate to a hip, or from a valley to a ridge. - A rafter that spans the distance from the wall plate to a hip, or from a valley to a ridge.

**Jamb** - The side and head lining of a doorway, window, or other opening.

**Joint** - The space between the adjacent surfaces of two members or components joined and held together by nails, glue, cement, mortar, or other means.

**Joint Cement** - A powder that is usually mixed with water and used for joint treatment in gypsum-wallboard finish. Often called "spackle."

**Joist** - One of a series of parallel beams, usually 2 inches in thickness, used to support floor and ceiling loads, and supported in turn by larger beams, girders, or bearing walls.
**Keene's Cement** - A white finish plaster that produces an extremely durable wall. Because of its density, it excels for use in bathrooms and kitchens and is also used extensively for the finish coat in auditoriums, public buildings, and other places where walls may be subjected to unusually hard wear or abuse.

**Kelvin** - Thermometer scale on which a unit of measurement equals the Celsius degree.

**Kick Hole** - A defect frequently found in perimeter flashings arising from being stepped on or kicked. A small fracture of the base flashing in the area of the cant.

**Kiln Dried Lumber** - Lumber that has been kiln dried often to a moisture content of 6 to 12 percent. Common varieties of softwood lumber, such as framing lumber are dried to a somewhat higher moisture content.

**Knife Consistency** - Compound formulated in a degree of firmness suitable for application with a putty knife such as used for face glazing and other sealant applications.

**Knot** - In lumber, the portion of a branch or limb of a tree that appears on the edge or face of the piece.

**Kraft** - A heavy, water resistant paper.

**Kynar Coating** - Architectural coating that is UV stable and suitable for exterior use on aluminum and other metal surfaces.
- L -

**Ladder, Fixed** - A ladder which is permanently attached to a building.

**Laminated Glass** - Two or more lights of glass permanently bonded together with one or more inter-layers.

**Landing** - A platform between flights of stairs or at the termination of a flight of stairs.

**Lap** - To extend one material partially over another; the distance so extended.

**Lath** - A building material of wood, metal, gypsum, or insulating board that is fastened to the frame of a building to act as a plaster base.

**Lattice** - A framework of crossed wood or metal strips.

**Lead** - A malleable metal once extensively used for flashings.

**Leader** - See Downspout.

**Lean-To Roof** - the sloping roof of a building addition having its rafters or supports pitched against and supported by the adjoining wall of a building.

**Ledger Strip** - A strip of lumber nailed along the bottom of the side of a girder on which joists rest.

**Let-in Brace** - Nominal 1 inch-thick boards applied into notched studs diagonally.

**Leveling Rod** - A rod with graduated marks for measuring heights or vertical distances between given points and the line of sight of a leveling instrument. They are longer than a yardstick and are held by a surveyor in a vertical position.

**Light** - Space in a window sash for a single pane of glass. Also, a pane of glass.

**Lintel** - A horizontal structural member that supports the load over an opening such as a door or window.

**Liquid-Applied Membrane** - Generally applied to cast-in-place concrete surfaces in one or more coats to provide fully-adhered waterproof membranes which conform to all contours.

**Liquated Damages** - A monetary amount agreed upon by two parties to a contract prior to performance under the contract that specifies what a either party owes the other if that party defaults under the contract.

**Lite** - (not the beer!) Another term for a pane of glass. Also spelled "light" in industry literature.

**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.
**Lookout** - A short wood bracket or cantilever to support an overhang portion of a roof or the like, usually concealed from view.

**Lot** - A parcel of ground with boundaries determined by the county.

**Loose Laid** - In roofing, a membrane "laid loosely", i.e., not adhered, over a roof deck or Burm.

**Louver** - An opening with a series of horizontal slats so an ranged as to permit ventilation but to exclude rain, sun, light, or vision. See also Attic ventilators.

**Lumber** - The product of the sawmill and planing mill not further manufactured other than by sawing, resawing, and passing lengthwise through a standard planing machine, crosscutting to length, and matching.
- M -

**Mansard Roof** - A roof which rises by inclined planes from all four sides of a building. The sloping roofs on all four sides have two pitches, the lower pitch usually very steep and the upper pitch less steep.

**Mantel** - The shelf above a fireplace. Also used in referring to the decorative trim around a fireplace opening.

**Mason's Hammer** - (or Bricklayer's Hammer) Tool shaped like a chisel to trim brick or stone.

**Mastic** - Heavy-consistency compound that may remain adhesive and pliable with age. Is typically a waterproof compound applied to exterior walls and roof surfaces.

**Masonry** - Stone, brick, concrete, hollow-tile, concrete block, gypsum block, or other similar building units or materials or a combination of the same, bonded together with mortar to form a wall, pier, buttress, or similar mass.

**Mastic** - A pasty material used as a cement (as for setting tile) or a protective coating (as for thermal insulation or waterproofing).

**Matched Lumber** - Lumber that is dressed and shaped on one edge in a grooved pattern and on the other in a tongued pattern.

**Maximum Occupancy Load** - The maximum number of people permitted in a room and is measured per foot for each width of exit door. The maximum is 50 per foot of exit.

**Melt Point** - The temperature at which the solid asphalt becomes a liquid.

**Membrane** - A generic term relating to a variety of sheet goods used for certain built-up roofing repairs and application.

**Metal Edge** - Brake metal or metal extrusions which are secured at the perimeter of the roof to form a weather-tight seal.

**Metal Lath** - Sheets of metal that are slit and drawn out to form openings. Used as a plaster base for walls and ceilings and as reinforcing over other forms of plaster base.

**Migration** - Spreading or creeping of a constituent of a compound onto/into adjacent surfaces. See bleeding.

**Mil Thickness** - Measurement used to determine thickness of a coating. 1 mil = .001 inch (1/1000).

**Millwork** - Generally all building materials made of finished wood and manufactured in millwork plants and planing mills are included under the term "millwork." It includes such items as inside and outside doors, window and doorframes, blinds, porchwork, mantels, panelwork, stairways, moldings, and interior trim. It normally does not include flooring, ceiling, or siding.

**Mineral Spirits** - A by-product of petroleum, clear in color, a solvent for asphalt coatings.
Miter Joint - The joint of two pieces at an angle that bisects the joining angle. For example, the miter joint at the side and head casing at a door opening is made at a 45° angle.

Mock-Up Testing - Controlled air, water and structural performance testing of existing or new glazing systems.

Modulus - Stress at a given strain. Also tensile strength at a given elongation.

Moisture Content of Wood - Weight of the water contained in the wood, usually expressed as a percentage of the weight of the ovendry wood.

Molding - A wood strip having a coned or projecting surface used for decorative purposes, e.g., door and window trim.

Monitor - A large structure rising above the surrounding roof planes, designed to give light and/or ventilation to the building interior.

Mopping - In roofing, a layer of hot bitumen mopped between plies of roofing felt. Full mopping is the application of bitumen by mopping in such a manner that the surface being mopped is entirely coated with a reasonably uniform coating. Spot Mopping is the procedure of applying hot bitumen in a random fashion of small daubs, as compared to full mopping. Sprinkle mopping is a special application of installing insulation to the decks. It is done by dipping a roof mop into hot bitumen and sprinkling the material onto the deck. Strip Mopping is the application of bitumen in parallel bands.

Mortar Types - Type M is suitable for general use and is recommended specifically for masonry below grade and in contact with earth, such as foundations, retaining walls and walks. Type M is the strongest type. Type S is suitable for general use and is recommended where high resistance to lateral forces is required. Type N is suitable for general use in exposed masonry above grade and is recommended specifically for exterior walls subject to severe exposures. Type 0 is recommended for load-bearing walls of solid units where the compressive stresses do not exceed 100 lbs. per square inch and the masonry wall not be subjected to freezing and thawing in the presence of excessive moisture.

Mortise - A slot cut into a board, plank, or timber, usually edgewise, to receive tenon of another board, plank, or timber to form a joint.

Mud Cracks - Cracks developing from the normal shrinkage of an emulsion coating when applied too heavily.

Mullion - A vertical bar or divider in the frame between windows, doors, or other openings that supports and holds such items as panels, glass, sash, or sections of a curtain wall.

Muntins - Horizontal or vertical bars that divide the sash frame into smaller lights of glass. Muntins are smaller in dimensions and weight than mullions.
Nailer - A piece of lumber secured to non-nailable decks and walls by bolts or other means, which provides a suitable backing onto which roof components may be mechanically fastened.

Natural Finish - A transparent finish which does not seriously alter the original color or grain of the natural wood. Natural finishes are usually provided by sealers, oils, varnishes, water-repellent preservatives, and other similar materials.

Neat Plaster - A base coat plaster which does not contain aggregates and is used where the addition of aggregates on the job is desired.

Neoprene - A synthetic rubber having physical properties closely resembling those of natural rubber. It is made by polymerizing chloroprenes, and the latter is produced from acetylene and hydrogen chloride.

Newel - A post to which the end of a stair railing or balustrade is fastened. Also, any post to which a railing or balustrade is fastened.

NM - A type of Romex cable (nonmetallic sheathed cable that contains several conductors). The cable, which is flame-retardant, is limited to use in dry locations only and can not be exposed to excessive moisture.

NMC (Non Metallic Conduit) – A type of Romex cable (nonmetallic sheathed cable that contains several conductors). NMC may be used in damp or corrosive locations as well as dry areas.

Nonbearing Wall - A wall supporting no load other than its own weight.

Non-Destructive - A phrase describing a method of examining the interior of a component whereby no damage is done to the component itself.

Non-Drying (Non-Curing) – A sealant that does not set up or cure. See Butyl.

Non-Sag - A sealant formulation having a consistency that will permit application in vertical joints without appreciable sagging or slumping. A performance characteristic which allows the sealant to be installed in a sloped or vertical joint application without appreciable sagging or slumping.

Non-Skinning - Descriptive of a product that does not form a surface skin.

Non-Staining - Characteristic of a compound that will not stain a surface.

Nosing - The projecting edge of a molding or drip. Usually applied to the projecting molding on the edge of a stair tread.

Notch - A crosswise rabbet at the end of a board.

Nozzle - The tubular tip of a caulking gun through which the compound is extruded.

Nuclear Meter - A device used to detect moisture by measuring slowed, deflected neutrons.
- O -

**O.C.** - "On Center". A measurement term meaning a certain distance between like materials. Studs rafters, joists, and the like in a building placed at 16 inches O.C. will be laid out so that there is 16 inches from the center of one stud to the center of the next.

**O. G. (or ogee)** - A molding with a profile in the form of a letter S; having the outline of a reversed curve.

**Ohmmeter** - In electrical contracting, a device to measure the resistance across a load. They are never used on a live circuit. It is used to track down broken wires.

**Ohm's Law** - States that, in a given electrical circuit, the amount at current in amps is equal to the pressure in volts divided by the resistance in ohms. The formula is: \( I = \frac{V}{R} \)  resistance or \( R = \frac{V}{I} \)

**Oil-Canning** - The term describing distortion of thin-gauge metal panels which are fastened in a manner restricting normal thermal movement.

**Organic** - A term designating any chemical compound which contains carbon and hydrogen.

**Outrigger** - An extension of a rafter beyond the wall line. Usually a smaller member nailed to a larger rafter to form a cornice or roof overhang.

**Overhang** - That part of the roof structure which extends horizontally beyond the vertical plane of the exterior walls of a building.

**Oxidize** - To combine with oxygen in the air.
- P -

**Paint** - A combination of pigments with suitable thinners or oils to provide decorative and protective coatings.

**Panel** - In house construction, a thin flat piece of wood, ply. wood, or similar material, framed by stiles and rails as in a door or fitted into grooves of thicker material with molded edges for decorative wall treatment.

**Parapet Wall** - A low wall around the perimeter of a roof deck.

**Parge Coat** - A thin application of plaster for coating a wall.

**Parking Strip** - The area in front of a building between the sidewalk and the street usually landscaped with grass. The parking strip serves as a buffer between the road and pedestrians walking on the sidewalk.

**Parting Stop or Strip** - A small wood piece used in the side and head jambs of double-hung windows to separate upper and lower sash.

**Partition** - A wall that subdivides spaces within any story of a building.

**Patterned Glass** - On type of rolled glass having a pattern impressed on one or both sides. Used extensively for light control, bath enclosures and decorative glazing. Sometimes call "rolled," "figured," or "obscure" glass.

**Paver Stones** - Usually pre-cast concrete slabs used to create a traffic surface.

**Penny** - As applied to nails, it originally indicated the price per hundred. The term now series as a measure of nail length and is abbreviated by the letter d.

**Penthouse** - (not the magazine!) A relatively small structure built above the plane of the roof.

**Performance and Payment Bond** – Guaranty by a surety company that if a contractor fails to perform under a contract, the surety company will complete the work.

**Perlite** - An aggregate formed by heating and expanding siliceous volcanic glass.

**Perm** - A measure of water vapor movement through a material (grains per square foot per hour per inch of mercury difference in vapor pressure).

**Permanent Set** - The amount by which a material fails to return to its original dimensions after being deformed by an applied force or load.

**Photo-Oxidation** - Oxidation caused by rays of the sun.

**Pier** - A column of masonry, usually rectangular in horizontal cross section, used to support other structural members.
**Pigment** - A powdered solid in suitable degree of subdivision for use in paint or enamel.

**Pitch** - (a) The incline slope of a roof or the ratio of the total rise to the total width of a house, i.e., an 8-foot rise and 24-foot width is a one-third pitch roof. Roof slope is expressed in the inches of rise per foot of run. (b) A term frequently used to designate coal tar pitch.

**Pitch Pocket** - An opening extending parallel to the annual rings of growth, that usually contains, or has contained, either solid or liquid pitch

**Pith** - The small, soft core at the original center of a tree around which wood formation takes place.

**Plan Submittal** - Submission of construction plans to the city or county in order to obtain a Building Permit.

**Plans** - See Blue Prints.

**Plaster Grounds** - Strips of wood used as guides or strike off edges around window and door openings and at base of walls.

**Plat** - A map of a geographical area as recorded by the county.

**Plate** - Sill plate: a horizontal member anchored to a masonry wall. Sole plate: bottom horizontal member of a frame wall. Top plate: top horizontal member of a frame wall supporting ceiling joists, rafters, or other members.

**Plate Line** - The top horizontal line of a building wall upon which the roof rests.

**Platform Framing** - (or Platform Construction) A system of framing a building in which floor joists of each story rest on the top plates of the story below or on the foundation sill for the first story, and the bearing walls and partitions rest on the subfloor of each story. (Usually one story constitutes a platform.)

**Plenum** - (or Plenum Chamber) Chamber or container for moving air under a slight positive pressure to which one or more ducts are connected.

**Plot Plan** - A bird’s eye view showing how a building sits on the building lot, typically showing setbacks (how far the building must sit from the road), easements, rights of way, and drainage.

**Plough** - To cut a lengthwise groove in a board or plank.

**Plumb** - Exactly perpendicular; vertical.

**Ply** - A term to denote the number of thicknesses or layers of roofing felt, veneer in plywood, or layers in built-up materials, in any finished piece of such material.

**Plywood** - A piece of wood made of three or more layers of veneer joined with glue, and usually laid with the grain of adjoining plies at right angles. Almost always an odd number of plies are used to provide balanced construction.

**Pocket (Channel)** - A three-sided, U-shaped opening in a sash or frame to receive glazing infill. Contrasted to a rabbet, which is a two-sided, L-shaped sections as with face glazed window sash.
**Pointing** - The process where joints between masonry units, brick, etc., are filled with mortar.

**Polished Wired Glass** - Wired glass that has been ground and polished on both surfaces.

**Polymer** - A substance consisting of large molecules which have been formed from smaller molecules of similar make-up.

**Polysulfide Sealant** - Polysulfide liquid polymer sealant which is mercaptan terminated, long chain aliphatic polymers containing disulfide linkages. They can be converted to rubbers at room temperature without shrinkage upon addition of a curing agent.

**Polyurethane Sealant** - An organic compound formed by reaction of a glycol with and isocyanate.

**Polyvinyl Chloride (PVC)** - Polymer formed by polymerization of vinyl chloride monomer. Sometimes called vinyl.

**Ponding** - A condition where water stands on a roof for prolonged periods due to poor drainage and/or deflection of the deck.

**Pop-Out** - See stucco pop-out.

**Pop Rivets** - Fasteners used to join pieces of metal that are installed by either compressed-air-assisted or hand-operated guns. Unique in that they are installed from one side of the work.

**Pores** - Wood cells of comparatively large diameter that have open ends and are set one above the other to form continuous tubes. The openings of the vessels on the surface of a piece of wood are referred to as pores.

**Porosity** - The density of substance and its capacity to pass liquids.

**Portland Cement** - A mixture of certain minerals which when mixed with water form a gray colored paste and cure into a very hard mass.

**Post** - A vertical member of wood, steel, concrete or other material that transfers weight from the top of the post to whatever the post is resting on.

**Post & Beam Construction** - Most common type of wall framing, using posts which carry horizontal beams on which joists are supported. It allows for fewer bearing partitions, & less material.

**Pot-Life** - The time interval following the addition of an accelerator before chemically curing material will become too viscous to apply satisfactorily. See Shelf Life.

**Power** - The energy rate, usually measured in watts. Power equals voltage times amps. or \( W = E \times I \). The heavier the flow of amps at a given supply, the higher the rate at which energy is being supplied and used.

**Precast** - Concrete building components which are formed and cured at a factory and then transported to a work site for erection.
**Pre-Shimed Tape Sealant** – A sealant having a pre-formed shape containing solids or discrete particles that limit its deformation under compression.

**Pressure-Reducing Valve** – Valve installed in the water service line where it enters the building to reduce the pressure of water in the line to an acceptable pressure used in buildings (40-55 psi desired).

**Pressure-Relief Valve** – Valve to relieve excess pressure in water storage tanks.

**Pressure-Treated Lumber** - Lumber that is treated in such a way that the sealer is forced into the pores of the wood.

**Preservative** - Any substance that, for a reasonable length of time, will prevent the action of wood-destroying fungi, borers of various kinds, and similar destructive agents when the wood has been properly coated or impregnated with it.

**Primer** - (a) A material of relatively thin consistency applied to a surface for the purpose of creating a more secure bonding surface and to form a barrier to prevent migration of components, (b) The first coat of paint in a paint job that consists of two or more coats, (c) the paint used for such a first coat.

**Priming** - Sealing of a porous surface so that compounds will not stain, lose elasticity, shrink excessively, etc. because of loss of oil or vehicle into the surround.

**Projection** - In roofing, any object or equipment which pierces the roof membrane.

**Protection Board** - In roofing, heavy asphalt impregnated boards which are laid over bituminous coatings to protect against mechanical injury.

**Purlins** - A horizontal structural member spanning between beams or trusses to support a roof deck. In slope glazing, purlins are the horizontal framing members.

**Push Stick** - In hardware, a tool used when cutting a short board on a table saw.

**Putty** - A type of cement usually made of whiting and boiled linseed oil, beaten or kneaded to the consistency of dough, and used in sealing glass in sash, filling small holes and crevices in wood, and for similar purposes.

**PVDF** - Architectural coating. See Kynar Coating.
- Q -

**Quarter Round** - A small molding that has the cross section of a quarter circle.

**Quartersawn Grain** - Another term for edge grain.
Rabbet - A rectangular longitudinal groove cut in the corner edge of a board or plank.

Radial Saw - A circular saw which hangs from a horizontal arm or beam and slides back and forth. The arm pivots from side to side to allow for angle cuts and bevels. When sawing finish plywood, the good side should face up as the saw cuts on the down stroke.

Radiant Heating - A method of heating, usually consisting of a forced hot water system with pipes placed in the floor, wall, or ceiling; or with electrically heated panels.

Radiation - Any heated surface loses heat to cooler surrounding space or surfaces through radiation. The earth receives its heat from the sun by radiation. The heat rays are turned into heat as they strike an object which will absorb some or all of the heat transmitted.

Radiator - A heating unit which is supplied heat through a hot water system.

Rafter - A sloping roof member that supports the roof covering which extends from the ridge or the hip of the roof to the eaves. A common rafter is one which runs square with the plate and extends to the ridge. A hip rafter extends from the outside angle of the plate towards the apex of the roof. They are 2" deeper or wider than common rafters. A valley rafter extends from an inside angle of the plates toward the ridge of the house.

Raggle Block - A specially designed masonry block having a slot or opening into which the top edge of the roof flashing is inserted and anchored.

Rail - Cross members of panel doors or of a sash. Also the upper and lower members of a balustrade or staircase extending from one vertical support, such as a post, to another.

Rake - (a) Trim members that run parallel to the roof slope and form the finish between the wall and a gable roof extension. (b) The angle of slope of a roof rafter, or the inclined portion of a cornice.

Rankin - Thermometer scale on which unit of measurement equals the Fahrenheit degree.

Raw Linseed Oil - The crude product processed from flaxseed and usually without much subsequent treatment.

Rebar - Reinforcing bar used to increase the tensile strength of concrete.

Reflective Glass - Glass with a metallic coating to reduce solar heat gain.

Reflective Insulation - Sheet material with one or both sun faces of comparatively low heat emissivity, such as aluminum foil. When used in building construction the surfaces face air spaces, reducing the radiation across the air space.

Register - A fixture through which conditioned air flows. In a gravity heating system, it is located near the baseboard. In an air conditioning system, it is located close to the thermostat.
Reglet - A horizontal slot, formed or cut in a parapet or other masonry wall, into which the top edge of counter-flashing can be inserted and anchored. In glazing, a reglet is typically a pocket or keyway extruded into the framing for installing the glazing gaskets.

Reinforced Concrete - A combination of steel and concrete using the best properties of each. The steel consists of rebar or reinforcing bars varying from 3/8 " to 2 1/4 " in diameter and is placed before concrete is poured.

Reinforced Masonry - Masonry units, reinforcing steel, grout and/or mortar combined to act together to strengthen the masonry structure.

Reinforcing - Steel rods or metal fabric placed in concrete slabs, beams, or columns to increase their strength.

Relative Heat Gain - The amount of heat gain through a glass product taking into consideration the effects of solar heat gain (shading coefficient) and conductive heat gain (U-value).

Relative Humidity - The amount of water vapor in the atmosphere, expressed as a percentage of the maximum quantity that could be present at a given temperature. (The actual amount of water vapor that can be held in space increases with the temperature.)

Resistance - The internal structure of wires even in the best conductors opposes the flow of electric current and converts some current into heat. This internal friction-like effect is called resistance and is measured in ohms. Resistance equals Voltage divided by Amperage.

Resorcinol Glue - A glue that is high in both wet and dry strength and resistant to high temperatures. It is used for gluing lumber or assembly joints that must withstand severe service conditions.

Return - In heating and cooling systems, a vent that returns cold air to be warmed. In a hot air furnace system, it is located near an inside wall.

Ribbon (or Girt) - Normally a 1- by 4-inch board let into the studs horizontally to support ceiling or second-floor joists.

Ridge - The horizontal line at the junction of the top edges of two sloping roof surfaces.

Ridge Board - The board placed on edge at the ridge of the roof into which the upper ends of the rafters are fastened.

Rigid Metal Conduit - This conduit resembles plumbing pipe, protecting wires from damage.

Rise - In stairs, the vertical height of a step or flight of stairs.

Riser - Each of the vertical boards closing the spaces between the treads of stairways.

Roll Roofing - Roofing material, composed of fiber and satin rated with asphalt, that is supplied in 36-inch wide rolls with 108 square feet of material. Weights are generally 45 to 90 pounds per roll.

Romex - A nonmetallic sheathed cable consisting of two or more insulated conductors having an outer sheath of moisture resistant, nonmetallic material. The conductor insulation is rubber,
neoprene, thermoplastic or a moisture resistant flame retardant fibrous material. There are two types: NM and NMC - described earlier.

**Roof Sheathing** - The boards or sheet material fastened to the roof rafters on which the shingle or other roof covering is laid.

**Roof System** - General term referring to the waterproof covering, roof insulation, vapor barrier, if used and roof deck as an entity.

**Rough** - In hardware, metal fastenings on cabinets which are usually concealed, like staples

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

**Rough Plumbing** - All plumbing that should be done before the finish trades (sheetrock, painting, etc), including all waste lines and supply water lines that are in the walls or framing of the building. See also: Plumbing, Sub Rough, and Finish Plumbing.

**RPM** - Revolutions per Minute.

**Rubber Emulsion Paint** - Paint, the vehicle of which consists of rubber or synthetic rubber dispersed in fine droplets in water.

**Rubber-Tired Roller** - A roller with rubber tires commonly used for compacting trimmed subgrade or aggregate base or clay type soils.

**Run** - (roofing) The horizontal distance between the eaves and the ridge of the roof, being half the span for a symmetrical gable roof. (stairs) The net width of a step or the horizontal distance covered by a flight of stairs.

**R-Value** - The thermal resistance of a glazing system. The R-value is the reciprocal of the U-value. The higher the R value, the less heat is transmitted throughout the glazing material.
Saber Saw - a saw that cuts on the upstroke, good side of wood faces down.

Saddle - Two sloping surfaces meeting in a horizontal ridge, used between the back side of a chimney, or other vertical surface, and a sloping roof.

Sand Float Finish - Lime mixed with sand, resulting in a textured finish.

Sapwood - The outer zone of wood, next to the bark. In the living tree it contains some living cells (the heartwood contains none), as well as dead and dying cells. In most species, it is lighter colored than the heartwood. In all species, it is lacking in decay resistance.

Sash - A single light frame containing one or more lights of glass.

Sash Balance - A device, usually operated by a spring or tensioned weatherstripping designed to counterbalance double-hung window sash.

Saturated Felt - A felt which is impregnated with tar or asphalt.

Scratch Coat - The first coat of plaster, which is scratched to form a bond for the second coat.

Screed or Screeding - The wood or metal straightedge used to strike off or level newly placed concrete when doing cement work. Screeds can be the leveling device used or the form work used to level or establish the level of the concrete. Screeds can be hand used or mechanical.

Scribing - Fitting woodwork to an irregular surface. In moldings, cutting the end of one piece to fit the molded face of the other at an interior angle to replace a miter joint.

Scupper - An outlet in the wall of a building or a parapet wall for drainage of water from a flat roof.

Scutch - A bricklayer’s cutting tool used for dressing and trimming brick to a special shape. It resembles a small pick

Sealant - An elastomeric material with adhesive qualities applied between components of a similar or dissimilar nature to provide an effective barrier against the passage of the elements.

Sealer - A finishing material, either clear or pigmented, that is usually applied directly over uncoated wood for the purpose of sealing the surface.

Seasoning - Removing moisture from green wood in order to improve its serviceability.

Self-Healing - A term used to describe to a material which melts with the heat from the sun’s rays, and seals over cracks that were earlier formed from other causes. Some waterproof membranes are self-healing.

Self-Leveling - A term used to describe a viscous material that is applied by pouring. In its uncured state, it spreads out evenly.
**Selvage** - The unsurfaced strip along a sheet of roll roofing which forms the under portion at the lap in the application of the roof covering.

**Semigloss (paint or enamel)** - A paint or enamel made with a slight insufficiency of nonvolatile vehicle so that its coating, when dry, has some luster but is not very glossy.

**Separation** - In concrete application, what happens to concrete when it is dropped directly with a flat chute causing the concrete to separate, usually occurring at a 1:2 slope.

**Service Conductor** - In electrical contracting, the supply conductors that extend from the street main or from the transformer to the service equipment.

**Service Drop** - In electrical contracting, the overhead service conductors from the last pole or other aerial support to and including the splices, if any, connecting to the service entrance conductors at the building.

**Setting Blocks** - Generally rectangular cured extrusions of neoprene, EPDM, silicone, rubber or other suitable material on which the glass product bottom edge is placed to effectively support the weight of the glass.

**Shading Coefficient** - The ratio of the solar heat gain through a specific glass product to the solar heat gain through a lite of 1/8” (3mm) clear glass. Glass of 1/8” (3mm) thickness is given a value of 1.0, therefore the shading coefficient of a glass product is calculated as follows:

Shake - A thick handsplit shingle, resawed to form two shakes; usually edge-grained.

Sheathing - The structural covering, usually wood boards, plywood, gypsum or wood fiber, used over studs or rafters of framed buildings as the first layer of outer wall covering nailed to the studs or rafters.

Sheathing Paper - A building material, generally paper or felt, used in wall and roof construction as a protection against the passage of air and sometimes moisture.

Shed Roof - A roof having only one slope or pitch, with only one set of rafters which fall from a higher to a lower wall.

Sheet Metal Work - All components of a house employing sheet metal, such as flashing, gutters, and downspouts.

Sheetrock - Panels made primarily from gypsum installed over the framing to form the interior walls and ceilings. Sheetrock is often called gypsum board.

Shelf-Life - Used in the glazing and sealant business to refer to the length of time a product may be stored before beginning to lose its effectiveness. Manufacturers usually state the shelf life and the necessary storage conditions on the package.

Shellac - A transparent coating made by dissolving lac, a resinous secretion of the lac bug (a scale insect that thrives in tropical countries, especially India), in alcohol.

Shingles - Roof covering of asphalt, wood, tile, slate, or other material cut to stock lengths, widths, and thicknesses, which are laid in a series of overlapping rows as a roof covering on pitched roofs.
**Shiplap Lumber** - Lumber that is edge-dressed to make a close rabbeted or lapped joint.

**Shoring** - A temporary support erected in a trench or other excavation to support the walls from caving in.

**Shore "A" Hardness** – Measure of firmness of a compound by means of a Durometer Hardness Gauge. (A hardness range of 20-25 is about the firmness of an art gum eraser. A hardness of about 90 is about the firmness of a rubber heel.)

**Shutter** - Usually lightweight louvered or flush wood or nonwood frames in the form of doors located at each side of a window. Some are made to close over the window for protection; others are fastened to the wall as a decorative device.

**Siding** - The finish covering of the outside wall of a frame building, whether made of horizontal weatherboards, vertical boards with battens, shingles, or other material.

**Sight Line** - The line along the perimeter of glazing infills corresponding to the top edge of stationary and removable stops. The line to which sealants contacting the glazing infill are sometimes finished off.

**Silicone Sealant** - A sealant having as its chemical compound a backbone consisting of alternating silicon-oxygen atoms.

**Sill** - The lowest member of the frame of a structure, resting on the foundation and supporting the floor joists or the uprights of the wall. The member forming the lower side of an opening, as a door sill, window sill, etc.

**Sill Plate** - The framing member anchored to the foundation wall upon which studs and other framing members will be attached. It is the bottom plate of your exterior walls.

**Sill Sealer** - A material placed between the top of the foundation wall and the sill plate. Usually a foam strip, the sill sealer helps make a better fit and eliminate water problems.

**Sill Step** - The first step coming directly off a building at the door openings.

**Single Family Dwelling (SFD)** - A house built for the purpose of a single family as opposed to multi families such as a duplex or apartment complex.

**Single Ply** - A descriptive term signifying a roof membrane composed of only one layer of material such as EPDM, Hypalon or PVC.

**Single Tee** - The name given to a type of precast concrete deck which has one stiffening rib integrally cast into slab.

**Sky Dome** - A type of skylight exhibiting a characteristic translucent plastic domed top.

**Skylight** - A structure on a roof that is designed to admit light and is somewhat above the plane of the roof surface.

**Slab on Grade** - A type of construction in which footings are needed but little or no foundation wall is poured.
Slag - A by-product of smelting ore such as iron, lead or copper. Also overburden/dropping from welding which may burn, melt, or discolor adjacent surfaces.

Slate - A dark gray stratified stone cut relatively thin and installed on pitched roofs in a shingle like fashion.

Sleeper - Usually, a wood member embedded in concrete, as in a floor, that serves to support and to fasten subfloor or flooring.

Slope - Incline or pitch of roof surface.

Slump-Test - Measures the consistency of a concrete mix or its stiffness. If the tests results are high, one likely cause would be too much water. Low slump—not enough water. The test is measured in inches.

Sloped Glazing - Any installation of glass that is at a slope of 15 degrees or more from vertical.

Soffit - The underside of a overhanging cornice of a building extending out from the plane of the building walls.

Softening Point - The temperature at which a substance changes from a hard material to a softer and more viscous material.

Soil Cover (or Ground Cover) - A light covering of plastic film, roll roofing, or similar material used over the soil in crawl spaces of buildings to minimize moisture permeation of the area.

Soil Stack - A general term for the vertical main of a system of soil, waste, or vent piping.

Sole Plate - Bottom horizontal member of a frame wall.

Solid Bridging - A solid member placed between adjacent floor joists near the center of the span to prevent joists from twisting.

Spacers (Shims) - Small blocks of neoprene, EPDM, silicone or other suitable material placed on each side of the glass product to provide glass centering, maintain uniform width of sealant bead and prevent excessive sealant distortion.

Spalling - The chipping or flaking of concrete, bricks, or other masonry where improper drainage or venting and freeze/thaw cycling exists.

Span - The horizontal distance between structural supports such as walls, columns, piers, beams, girders, and trusses.

Spandrel - The panels of a wall located between vision areas of windows, which conceal structural columns, floors, and shear walls.

Specification - Detailed written instructions which, when clear and concise, explain each phase of work to be done.

Splash Block - A small masonry block laid with the top close to the ground surface to receive roof drainage from downspouts and to carry it away from the building.
Splitting - The formation of long cracks completely through a membrane. Splits are frequently associated with lack of allowance for expansion stresses. They can also be a result of deck deflection or change in deck direction.

Spud - (not a potato!) The removal of gravel or heavy accumulations of bitumen from roof membranes by means of chipping or scraping.

Square - A unit of measure, e.g., 100 square feet, usually applied to roofing material. Sidewall coverings are sometimes packed to cover 100 square feet and are sold on that basis.

Stack - The vertical pipe of a system of soil, waste or vent piping

Stack Vent - Also called a waste vent or soil vent, it is the extension of a soil or waste stack above the highest horizontal drain connected to the stack.

Stain - A form of oil paint, very thin in consistency, intended for coloring wood with rough surfaces, such as shingles, without forming a coating of significant thickness or gloss.

Stair Carriage - Supporting member for stair treads. Usually a 2-inch plank notched to receive the treads; sometimes called a "rough horse."

Standing Seam - A type of joint often used on metal roofs.

Static Load - The total amount of permanent non moving weight that is applied to given surface areas.

STC (Sound Transmission Class) – A single number rating derived from individual transmission losses at specified test frequencies. It is used for interior walls, ceilings and floors.

Steel Trowel - Tool used for non-porous smooth finishes of concrete. It is a flat steel tool used to spread and smooth plaster, mortar or concrete. Pointing trowels are small enough to be used in places where larger trowels will not fit. The pointing trowel has a point. The common trowel has a rectangular blade attached to a handle. For smooth finish, use trowel when concrete begins to stiffen.

Step Flashing - Individual small pieces of metal flashing material used to flash around chimneys, dormers, and such projections along the slope of a roof. The individual pieces are overlapped and stepped up the vertical surface.

Stile - An upright framing member in a panel door.

STL (Sound Transmission Loss) – The reduction of the amount of sound energy passing through a wall, floor, roof, etc. It is related to the specific frequency at which it is measured and it is expressed in decibels. Also called "Transmission Loss."

Stile - The side frame members of a door or window (not the jamb).

Stool - A flat molding fitted over the window sill between jambs and contacting the bottom rail of the lower sash.
**Storm Door** - A panel or sash door placed on the outside of an existing door to provide additional protection from the elements.

**Storm Window** - A glazed panel or sash placed on the inside or outside of an existing sash or window as additional protection against the elements.

**Story** - That part of a building between any floor and the floor or roof next above.

**Strain** - The percentage of elongation or compression of a material or portion of a material caused by an applied force.

**Striking Off** - The operation of smoothing off excess compound or sealant at sight line when applying same around lites or panels.

**String Line** - A nylon line usually strung tightly between supports to indicate both direction and elevation, used in checking grades or deviations in slopes or rises. Used in landscaping to level the ground.

**Strip Flooring.** - Wood flooring consisting of narrow, matched strips.

**String (or Stringer)** - A timber or other support for cross members in floors or ceilings. In stairs, the support on which the stair treads rest; also stringboard.

**Structural Silicone Glazing** – The use of a silicone sealant for the structural transfer of loads from the glass to its perimeter support system and retention of the glass in the opening.

**Stucco** - A type of exterior finish. Most commonly refers to an outside plaster made with Portland cement as its base.

**Stud** - One of a series of wood or metal vertical structural members placed as supporting elements in walls and partitions.

**Subcontractor** - A contractor who specializes in a particular trade such as waterproofing.

**Subfloor** - Boards or plywood laid on joists over which a finish floor is to be laid.

**Sub-Rough** - That part of a building’s plumbing system that is done before the cement is poured.

**Substrate** - A part or substance which lies below and supports another.

**Suspended Ceiling** - A ceiling system supported by hanging it from the overhead structural framing.
Tail Beam - A relatively short beam or joist supported in a wall on one end and by a header at the other.

Taping - Applying joint tape over embedding compound in the process of joint treatment of drywall.

Tear-Off - In roofing, a term used to describe the complete removal of the built up roof membrane and insulation down to and exposing the roof deck.

Termites - Insects that superficially resemble ants in size, general appearance, and habit of living in colonies; hence, they are frequently called "white ants." Subterranean termites establish themselves in buildings not by being carried in with lumber, but by entering from ground nests after the building has been constructed. If unmolested, they eat out the woodwork, leaving a shell of sound wood to conceal their activities, and damage may proceed so far as to cause collapse of parts of a structure before discovery. There are about 56 species of termites known in the United States; but the two major ones, classified by the manner in which they attack wood, are ground inhabiting or subterranean termites (the most common) and dry wood termites, which are found almost exclusively along the extreme southern border and the Gulf of Mexico in the United States.

Termite Shield - A shield, usually of noncorrodible metal, placed in or on a foundation wall or other mass of masonry or around pipes to prevent passage of termites.

Terneplate - Sheet iron or steel coated with an alloy of lead and tin.

Texture Paint - One which may be manipulated by brush, trowel or other to give various patterns.

Thermal Insulation - Any material high in resistance to heat transmission that, when placed in the walls, ceiling, or floors of a structure, will reduce the rate of heat flow.

Thermal Movement - The measured amount of dimensional change that a material exhibits as it is warmed or cooled.

Thermal Shock - The stress built up by sudden and appreciable changes in temperature.

Thermoplastic Material - Solid material which is softened by increasing temperatures and hardened by decreasing temperatures.

Three-Phase - In electrical contracting, a wiring system consisting of 4 wires and used in industrial and commercial applications. This system is suitable for installations requiring large motors. It consists of three hot wires and one ground wire. The voltage in each hot wire is out of phase with the others by 1/3 of a cycle, as if produced by 3 different generators.

Threshold - A strip of wood or metal with beveled edges used over the finish floor and the sill of exterior doors.
**Thru-Wall Flashing** - Flashing extended completely through a masonry wall. Designed and applied in combination with counter-flashings, to prevent water which may enter the wall above from proceeding downward in the wall or into the roof deck or roofing system.

**THW** - Moisture and heat resistant thermoplastic conductor. It is flame retardant, moisture and heat resistant and can be used in dry or wet locations.

**Tie-In** - In roofing, a term used to describe the joining of a new roof with the old.

**Tilt-Up Wall** - Cast concrete units which are preformed which, when cured, are tilted to their vertical position and secured by mechanical fasteners to prior erected structural steel. May be pre-cast.

**Timbers** - Yard lumber 5 or more inches in least dimension. Includes beams, stringers, posts, caps, sills, girders, and purlins

**Tinted Glass** - Glass with colorants added to the basic glass batch that give the glass color as well as light and heat-reducing capabilities. The color extends throughout the thickness of the glass.

**Title-24** - A federal set of laws that mandates the construction industry to conserve energy.

**Toe Bead** – Sealant applied at the intersection of the outboard glazing stop and the bottom of the glazing channel; must be sized to also provide a seal to the edge of the glass.

**Toenailing** - To drive a nail at a slant with the initial surface in order to permit it to penetrate into a second member.

**Tongue & Groove** - A type of flooring where the tongue of one board is joined to the groove of another board

**Tooling** - The operation of pressing in and striking a sealant in a joint to press the sealant against the sides of a joint and secure good adhesion; the finishing off of the surface of a sealant in a joint so that it is flush with the surface.

**Top Mopping** - The finished mopping of hot bitumen on a built-up roof.

**Top Plate** - Top horizontal member of a frame wall.

**Torching** - Applying direct flame to a membrane for the purpose of melting, heating or adhering.

**Transit** - A surveyors instrument used by builders to establish points and elevations both vertically and horizontally. It can be used to line up stakes or to plumb walls or the angle of elevation from a horizontal plane can be measured.

**Tread** - The horizontal board in a stairway on which the foot is placed.

**Tremie** - A tube with removable sections and a funnel at the top used in concrete application. The bottom is kept beneath the surface of the concrete and raised as the form is filled and is used to pour concrete underwater.
**Trim** - The finish materials in a building, such as moldings applied around openings (window trim, door trim) or at the floor and ceiling of rooms (baseboard, cornice, and other moldings)

**Trimmer** - A beam or joist to which a header is nailed in framing for a chimney, stairway, or other opening.

**Truss** - A frame or jointed structure designed to act as a beam of long span, while each member is usually subjected to longitudinal stress only, either tension or compression.

**Tuck-Pointing** - The re-grouting of defective mortar joints in a masonry or brick wall.

**Turpentine** - A volatile oil used as a thinner in paints and as a solvent in varnishes. Chemically, it is a mixture of terpenes.

**TW** - Moisture-resistant thermoplastic conductor that can be used in dry or wet locations and has no outer covering and is not heat-resistant.

**Two-Part Sealant** - A product composed of a base and curing agent or accelerator, necessarily packages in two separate containers which are uniformly mixed just prior to use.
Ultraviolet - The invisible rays of the spectrum of light which are at its violet end. Sometimes abbreviated U.V.

Undercoat - A coating applied prior to the finishing or top coats of a paint job. It may be the first of two or the second of three coats. In some usage of the word it may, become synonymous with priming coat.

Underlayment - A material placed under finish coverings, such as flooring, or shingles, to provide a smooth, even surface for applying the finish.

Uprights - Vertical members supporting the sides of a trench.

U-Value - A measure of air-to-heat transmission (loss or gain) due to the thermal conductance and the difference in indoor and outdoor temperatures. As the U-value decreases, so does the amount of heat that is transferred through the glazing material. The lower the U-value, the more restrictive the fenestration product is to heat transfer. Reciprocal of R-value.
Valley - The internal angle formed by the junction of two sloping sides of a roof.

Valley Rafter - A rafter that forms the intersection of an internal roof angle. The valley rafter is normally made of double 2-inch-thick members.

Valve - A device to stop, start or regulate the flow of liquid or gas through or from piping.

Vapor - The gaseous form of any substance.

Vapor Barrier - A membrane which is placed between the insulation and the roof deck to retard water vapor in the building from entering the insulation and condensing into liquid water.

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.

Varnish - A thickened preparation of drying oil or drying oil and resin suitable for spreading on surfaces to form continuous, transparent coatings, or for mixing with pigments to make enamels.

Vehicle - The liquid portion of a finishing material; it consists of the binder (nonvolatile) and volatile thinners.

Veining - In roofing, the characteristic lines or "stretch marks" which develop during the aging process of soft bitumens.

Veneer - Thin sheets of wood made by rotary cutting or slicing of a log.

Vent - A pipe or duct which allows flow of air as an inlet or outlet.

Vent Pipe - A vertical pipe of relatively small dimensions which protrudes through a roof to provide for the ventilation of gasses.

Ventilator - Device installed on the roof for the purpose of ventilating the interior of the building.

Venting - The process of installing roof vents in a roof assembly to relieve vapo pressure; The process of water in the insulation course of the roof assembly evaporating and exiting via the roof vents.

Vent Stack - A vertical vent pipe installed for the purpose of providing circulation of air to and from any part of a drainage system.

Vent System - In plumbing, a system to provide a flow of air to or from a drainage system or to provide circulation of air within such system to protect traps seals from siphonage and back pressure.

Vermiculite - An aggregate somewhat similar to perlite that is used as an aggregate in lightweight roof decks and deck fills. It is formed from mica, a hydrous silicate with the ability of
expanding on heating to form lightweight material with insulation quality. Used as bulk insulation and also as aggregate in insulating and acoustical plaster and in insulating concrete.

**Viscosity** - The internal frictional resistance offered by a fluid to change of shape or to the relative motion or flow of its parts.

**Visible Light Transmittance** – The percentage of visible light (390 to 770 nanometers) within the solar spectrum that is transmitted through glass.

**Visual Mock-Up** - Small scale demonstration of a finished construction product.

**Volatile Thinner** - A liquid that evaporates readily and is used to thin or reduce the consistency of finishes without altering the relative volumes of pigment and nonvolatile vehicles

**Voltage** - The driving force behind the flow of electricity somewhat like pressure is in a water pipe.

**Voltmeter** - measures the voltage flowing through a circuit. The circuit must be closed to allow the voltage to flow.
- W -

Walkways - Designated areas for foot traffic.

Wane - Bark, or lack of wood from any cause, on edge or corner of a piece of wood.

Water-Cement Ratio - The strength of a concrete mixture depends on the water cement ratio. The water and cement form a paste. If the paste is made with more water, the concrete becomes weaker. Traditionally, concrete mixes have been identified in terms of the ratio of cement to fine aggregate to coarse aggregate. For example, the ratio 1:2:4 refers to a mix which consists of 1 cu. ft. of cement, 2 cu. ft. of sand and 4 cu. ft. of gravel. Cement and water are the two chemically active elements in concrete and when combined, form a paste or glue which coats and surrounds the particles of aggregate and upon hardening binds the entire mass together.

Waterproofing - Type of work done by Proofrock Waterproofing Systems; also the process where a building component is made totally resistant to the passage of water and/or water vapor.

Water Repellant Coating – Transparent coating or sealer applied to the surface of concrete and masonry surfaces to repel water.

Water Repellent Preservative - A liquid designed to penetrate into wood and impart water repellency and a moderate preservative protection. It is used for millwork, such as sash and frames, and is usually applied by dipping.

Water Vapor - Moisture existing as a gas in air.

Wattage - The electrical unit of power. KILOWATTS is 1000 watts and electric customers are billed on how many kilowatts of power they have used.

Weatherstrip - Narrower or jamb-width sections of thin metal or other material to prevent infiltration of air and moisture around windows and doors. Compression weather stripping prevents air infiltration, provides tension, and acts as a counter balance.

Weep Hole - A hole which allows for drainage of entrapped water from masonry or glazing structures.

Weep Screed - Tool used to drain moisture from concrete.

Weld - The joining of components together by fusing. In thermoplastics, refers to bonding together of the membrane using heat or solvents.

Wet Seal - Application of an elastomeric sealant between the glass and sash to form a weather tight seal.

Wind Uplift - The upward force exerted by wind traveling across a roof.

Wire Size - Conductors for building wiring are available in AWG (American Wire Gauge) sizes ranging from No. 14 to 4/0. The larger the number size, the smaller the diameter. For example #10 is smaller than #8. The larger the diameter of a wire, the lesser the resistance.
**Woodfiber Plaster** - Consists of calcified gypsum integrally mixed with selected coarse cellulose fibers which provide bulk and greater coverage. It is formulated to produce high-strength base coats for use in highly fire-resistant ceiling assemblies.

**Wood Filler** - A heavily pigmented preparation used for fining and leveling off the pores in open-pored woods.

**Wood Rays** - Strips of cells extending radially within a tree and varying in height from a few cells in some species to 4 inches or more in oak. The rays serve primarily to store food and to transport it horizontally in the tree.

**Work-Life** - The time during which a curing sealant remains suitable for use after being mixed with a catalyst.
- X -

(empty)
Yard Lumber - Lumber of those grades, sizes, and patterns which are generally intended for ordinary construction, such as framework and rough coverage of houses.
- Z -

(Empty)