

## GLOSSARY

© Green item.

**ABUTMENT.** A foundation structure designed to withstand thrust, such as the end supports of an arch.

**ACCESS FLOOR.** See computer floor.

**ACOUSTICAL CEILING.** In general terms, a ceiling designed to lessen sound reverberation through absorption, blocking or muffling. In construction, the most common materials are acoustical tile and acoustical plaster.

**ACOUSTICAL TILE OR PANELS.** A sound-absorbing ceiling finish system composed of various materials (listed below). It can be applied (glued, stapled or clipped) directly, furred or hung in a suspended ceiling grid system. Metal panels can be smooth or perforated, generally in a linear pattern. Mineral fiber is porous or covered, faced fiberglass or mineral fiber decorative tiles or panels and may be an integrated and fire-rated assembly. Organic fiber is wood or cane fiber tiles.

**AMERICANS WITH DISABILITIES ACT (ADA).** Federal legislation requiring employers and business owners to make “reasonable accommodations” to facilitate employment of disabled persons.

© **ADAPTIVE PLANTS.** Non-native plants that reliably grow well in given habitat with minimal winter protection, pest control, fertilization or irrigation once the root systems are established.

© **ADVANCED FRAMING.** A house-framing strategy/technique in which lumber use is optimized to save material and improve the energy performance of the building.

**ADOBE.** Solid masonry wall made from adobe block, which is unburnt, sundried block molded from adobe soil found in arid regions, generally rough in shape and texture. The wall may be grouted and reinforced or of a post-and-girder type of construction. Modern adobe can have an asphalt or chemical binder.

© **AERATOR.** A device installed on sink faucets to reduce water use and the energy needed to heat water. Faucet aerators, coupled with low-flow shower heads, can reduce a home's water use by 50 percent. The aerator has its rated flow imprinted on the side, which should read 2.75 gpm (gallons per minute) or lower in order to be considered as a Green building material.

**A-FRAME.** Structural support framework in the shape of the letter A. Also a building system having sloping side members which act as both walls and roof, forming a steep gable that generally extends to the ground.

**AGGREGATE.** All the materials used in the manufacture of concrete or plaster except water and the bonding agents (cement, lime, plaster). May include sand, gravel, cinders, rock, slag, etc.

**AGGREGATE SIDING PANELS.** This nonbearing wall is a combination of exposed stone aggregate faced siding and glass panels. The panel system comprises aggregates of various sizes embedded in epoxy, bonded to a wood board backing that is attached to studs and to a supporting frame.

**AIR CURTAIN.** A device to protect an opening against heat loss or passage of insects by blowing a high-velocity flow of air across the opening.

**AIR INFILTRATION WRAP.** A high-density polyethylene fibrous exterior air barrier generally applied to residential stud construction. **AIR-SUPPORTED STRUCTURE.** A tent-like curved structure held up by air pressure, with an airtight seal around its base perimeter.

© **AIR-SOURCE HEAT PUMP.** Heat pump that relies on outside air as the heat source and heat sink. Not as effective in cold climates as ground-source heat pumps.

**AIR-SUPPORTED STRUCTURE.** A tent-like curved structure held up by air pressure, with an airtight seal around its base perimeter.

© **AIRTIGHT DRYWALL.** Use of drywall with carefully sealed edges and joints that serves as an interior air barrier in building assemblies.

**AMENITIES.** Tangible and intangible features that enhance or add to a property's desirability and perceived value.

**ANODIZED ALUMINUM.** Aluminum which has had a hard, corrosion-resistant, oxide film applied to it by an electrochemical process. A color anodizing process may be used to produce a number of colored finishes.

## GLOSSARY

**APPLIANCE ALLOWANCE.** The cost included for residential appliances commonly found at different quality levels. Typically, ranges and ovens, garbage disposers, dishwashers and range hoods are included. The better qualities (higher cost ranks) have additional feature considerations for trash compactors, microwaves, built-in mixer units, etc.

**APRON.** A term usually applied to a surfaced area adjoining roads, driveways, buildings, airstrips, docks, etc.

**ARCHITECTURAL CONCRETE.** Concrete which is cast in a form to produce figures, designs, or textures so as to create an ornamental building surface. Often used to replace stone masonry.

**AREA.** The extent of surface of a building or site, in one plane, measured in square units such as square feet, yards or meters.

**ARMORED CABLE.** Electrical cable consisting of a flexible metal covering enclosing two or more wires, often referred to as BX cable.

**ASBESTOS.** A nonflammable natural mineral fiber which was once widely used in insulation materials and fire and flame barriers.

**ASBESTOS CEMENT.** A mixture of Portland cement and asbestos fibers which was commonly used for roofing shingles, building siding and pipe. Has been replaced with fiber cement products using cellulose fibers in place of asbestos.

**ASHLAR STONE VENEER.** A type of veneer stone, usually a cut limestone, attached to a concrete block or stud back-up wall using metal wall ties. The stones are irregular in shape. They may be finished with a split face and backed with sawed surfaces for top and bottom bed joints.

**ASPHALT SHINGLES.** A type of shingle made of felt saturated with asphalt or tar pitch and surfaced with mineral granules or inorganic fiberglass saturated with asphalt and surfaced with ceramic granules. There are many different patterns, some individual and others in strips, which are included under the heading of Composition Shingles.

**ASPHALT TILE.** A resilient floor covering laid in mastic, available in several colors. Standard size is 9" x 9", also comes in several other sizes. Asphalt is normally used only in the darker colors, the lighter colors having a resin base.

**ASPHALTIC CONCRETE.** Asphalt binder and stone or other aggregate, used as a hard surface for streets, air strips and other paved areas.

**ATRIUM.** An interior courtyard usually with a glass roof to provide a greenhouse-like effect inside.

**ATRIUM FRAME AND GLAZING.** Metal frame and glazing for major skylight atrium areas, excluding any space frame structure.

**ATTIC.** A room built within the sloping roof of a dwelling. May be finished or unfinished.

**AWNING.** A lightweight and often adjustable, exterior, roof-like sun shade over an opening, attached to the building wall.

**BACKFILL.** Material used in refilling an excavation, such as for a foundation or subterranean pipe.

**BACKUP.** The lower-cost material in a masonry wall which is covered by a facing of more expensive and ornamental material such as face brick, stone, marble, metal panels, etc.

© **BAKE OUT.** A process used to remove volatile organic compounds from a building by increasing temperature in a fully furnished and ventilated buildings and single-family homes prior to human occupancy.

**BALCONY.** A railed platform projecting from the face of a building above the ground level with an entrance from the building interior. In a theater or auditorium, a partial upper stepped floor for seating.

**BALLOON FRAME.** A framing system in a two-story building in which studs and corner posts extend from foundation sill to roof-top plate, and upper-story floor joists are carried on ledgers or girts let into or nailed directly to the studs. With conventional platform framing, by contrast, the second floor wall framing is laid on top of the finished floor.

**BALUSTER.** The closely spaced vertical members in a stairway or balcony, balustrade or railing.

**BASEBOARD.** A finish board around the bottom of interior walls.

**BASEBOARD HEATING.** Heating in which the heating element, usually an electric resistance unit or forced hot water, is located at the base of the wall.

**BASEMENT.** Any room or rooms built partially or wholly below ground level.

## GLOSSARY

- BASIC BUILDING CODE.** A performance-type building code prepared by Building Officials and Code Administrators International (BOCA) and adopted for use by a number of midwestern counties and cities.
- Ⓒ **BATCH SOLAR WATER HEATER.** Solar water heater in which potable water is heated where it is stored. Also referred to as integral collector storage (ICS) solar water heater.
- BATT INSULATION.** A type of blanket insulating material, usually composed of mineral fibers and made in relatively narrow widths for convenience in handling and applying between framing members.
- BATTEN.** A narrow strip of wood used to cover a joint between boards, or to simulate a covered joint for architectural purposes.
- BAY.** The area within four columns or between two bents in a building.
- BAY WINDOW.** A window structure which projects from a wall. Technically, it has its own foundation. If cantilevered, it would be an oriel window; however, in common usage, the terms are often used interchangeably.
- BEAM.** A horizontal load-bearing structural member, transmitting superimposed vertical loads to walls, columns or heavier horizontal members.
- BEAMED CEILING.** A ceiling with beams exposed. A false beamed ceiling has ornamental boards or timbers which are not load bearing.
- BEARING PLATE.** A steel slab placed under the end of a beam, girder, truss or column to distribute the load over a wider surface.
- BEARING WALL.** A wall which supports upper floor or roof loads.
- BENT.** A rigid framing unit of a building, consisting of two columns and a horizontal truss, beam or girder.
- BEVEL.** A surface cut at other than a right angle.
- BIDET.** A toilet-like bathroom fixture used for hygienic washing of the lower private parts of the body.
- BI-LEVEL.** A two story residence with a split-foyer entrance. The lower level, partially above grade, is partially finished. Typically the finish includes plumbing and electrical rough-ins, with some partition wall framing for a recreation room, bedroom, laundry area and bathroom. Other common terms for this type of construction are Raised Ranch, Hi-Ranch or Colonial, and Split-Entry.
- Ⓒ **BIO-BASED MATERIAL.** Material made from living matter, such as agricultural crops. Bio-based materials are usually biodegradable.
- Ⓒ **BIODEGRADABLE.** (Complementing Bio-based materials) Capable of decomposing under natural conditions.
- Ⓒ **BIOSWALES.** Gently sloped, vegetated ditches that slow the flow of rainwater runoff into the sewer system. \*\*The names grassy swale, vegetative filter, vegetative infiltration basin represent different types of bioswales. \*\*
- BLACK TOP.** A general term to describe asphalt or asphaltic concrete paving.
- BLANKET INSULATION.** A flexible type of lightweight blanket for insulating purposes, supplied in rolls, strips, or panels, sometimes fastened to heavy paper of an asphalt-treated or vapor-barrier type. Blankets may be composed of various processed materials, as mineral wool, wood or glass fibers.
- BOND.** The adherence of one construction element to another. In masonry construction, the arrangement of bricks or concrete blocks, especially the arrangement of vertical joints.
- BOND BEAM.** A continuous beam, usually of reinforced concrete, but sometimes of reinforced brick or concrete block placed in masonry walls to tie them together and add lateral stability. It also distributes concentrated vertical loads along the wall.
- BOX GIRDER.** A girder having a hollow rectangular cross-section.
- BRACE.** Any minor member designed to steady or stiffen a major member of a structure.
- BREEZEWAY.** A covered passage, open at each end, which passes between two structures.

## GLOSSARY

- BRICK, BLOCK BACKUP.** Brick on the exterior surface applied over a concrete block wall. This is a solid masonry wall. The thickness varies depending on the thickness of the block used, with 4", 8" and 12" block being the most commonly applied with this type of wall.
- BRICK CAVITY WALL.** A wall in which a space is left between inner and outer tiers or wythes of brick. The space may be filled with insulation, grout and/or reinforcing.
- BRICK VENEER.** A nonloadbearing single tier of brick applied to a wall of other materials.
- BRICK VENEER WALL.** Usually used to describe a wall made up of brick veneer applied over wood framing.
- BRIDGING.** Diagonal or cross bracing between joists to resist twisting.
- © **BROWNFIELD.** (Complementing Infill sites) previously used or developed land which may have been contaminated with hazardous materials and/or pollution and later remediated to be reused.
- BROWNSTONE.** A term usually referring to houses built, until about 1900, with a brown-colored, quarried, thick-cut solid sandstone which was laid up in mortar.
- B.T.U.** British thermal unit. A measurement of heat, i.e., the amount of heat required to raise one pound of water one degree Fahrenheit.
- BUILDING ENVELOPE.** The walls, roof and floors which enclose a heated or cooled space.
- BUILDING PAPER.** A paper usually applied over the sheathing of exterior frame walls. Also used between flooring and subflooring and over roof decks.
- BUILDING PERMIT.** A certificate which must be obtained from the municipal government by the property owner or contractor before a building can be erected or repaired and which must be kept posted in a conspicuous place until the job is completed and passed by the building inspector.
- © **BUILT ENVIRONMENT.** Refers to anything humanly constructed, such as a structure. A built environment is not naturally occurring.
- BUILT-IN APPLIANCES.** Those appliances which are permanent fixtures generally found in a residence. They are not included in the base costs and should be added separately.
- BUILT-UP COMPOSITION.** A roof covering consisting of successive layers of ply, felt and hot asphalt, topped by a mineral surfaced layer (cap sheet) or by embedded rock or gravel.
- BULB TEE.** A rolled steel shape with a cross section resembling a bulbous T, often used as a purlin.
- BULKHEAD.** A retaining wall. Also the wall beneath a store display window.
- BUTTRESS.** An abutting pier or brace which strengthens or supports a wall at a right angle by opposing the horizontal forces.
- CAISSONS.** Poured-in-place reinforced concrete pilings. For further explanation on pilings, see page G32.
- CAMPANILE.** A tall bell tower, usually detached from the building.
- CANOPY.** A roof, not covering a building, but extending over an exterior area such as a loading area, building entrance or window to protect against sun or rain.
- CANTILEVER.** A beam or slab supported at one end only, or which projects beyond its support.
- CAPITAL.** The top portion of a column enlarged to provide a larger bearing surface, or for ornamentation.
- © **CARBON DIOXIDE CONCENTRATIONS.** An indicator of ventilation effectiveness inside buildings, CO2 concentrations greater than 530 parts per million (ppm) above outdoor conditions generally indicate inadequate ventilation. A concentration of greater than 800-1,000 ppm generally stands for poor air quality for breathing.
- © **CARBON FOOTPRINT.** A measure of an individual's, family's, community's, company's, industry's, product's or service's overall contribution of carbon dioxide and other Greenhouse gases into the atmosphere. A carbon footprint takes into account energy use, transportation methods and other means of emitting carbon. A number of carbon calculators have been created to estimate carbon footprints, including one from the U.S. Environmental Protection Agency.

## GLOSSARY

- © **CARBON NEUTRAL.** Achieving an overall neutral (zero) total carbon release, brought about by balancing the amount of carbon released with the amount sequestered. Typically achieved by reducing energy use and obtaining energy from renewable sources combined with offsetting remaining emissions through such means as carbon offsets.
- © **CARBON-NEUTRAL HOUSE.** House that, on an annual basis, does not result in a net release of carbon dioxide into the atmosphere. Carbon dioxide is a Greenhouse gas that is known to contribute to global warming.
- © **CARBON OFFSET.** The act of mitigating one's carbon emissions. Carbon offsets are often purchased through a carbon offset provider that uses the money for carbon-sequestering activities including tree planting, renewable energy, energy conservation and methane capture. .
- CARPORT.** An open automobile shelter. May be only a roof and supports or may be enclosed on three sides with one completely open side.
- CASEMENT WINDOW.** A window hinged vertically, swinging open horizontally like a door.
- CASING.** A pipe inserted in wells to prevent the sides from collapsing. It may also function to exclude undesirable elements, or prevent the escape of the contents.
- CAST STONE.** Precast decorative concrete panels and cast symmetrical shapes, giving a massive stone appearance applied on older monumental buildings as a special feature of an entrance or front elevation.
- CATCH BASIN.** A small underground structure for surface drainage, in which sediment may settle before water reaches the drain lines.
- CAULKING.** Material used to seal cracks, fill joints and prevent seepage. Includes mastic compounds with silicone, asphalt or rubber bases.
- CEILING, DROPPED.** A ceiling built below the normal ceiling height such as over a store vestibule or window display.
- CEILING JOISTS.** The structural members to which the ceiling is fastened.
- CEILING, SUSPENDED.** A ceiling which is hung from the floor or roof structure above.
- CELLULAR STEEL DECK.** A structural floor system, consisting of two layers of sheet metal shaped to form cells and welded together. Cells serve as raceways for electrical conduit or other utilities.
- CEMENT FIBER (ASBESTOS) SHINGLES.** A covering, consisting largely of portland cement and asbestos fiber, made into the form of shingles.
- CEMENT FIBER SIDING.** Siding composed of asbestos-free fiber and Portland cement combined under pressure. Typically, the natural siding or shingle is light gray. Board or shingle siding may be applied over sheathing or a building paper attached to either wood or steel stud framing. Sheet siding can be found with two basic profiles, either ribbed or corrugated or as a sandwich panel attached to a structural frame.
- CENTER TO CENTER.** The measurement between centers of two adjoining parallel structural members. Also spoken of as "on center".
- © **CERTIFIED LUMBER.** Lumber that has been certified "sustainable harvest" by an independent certification authority. .
- CESSPOOL.** A pit which serves for storage of liquid sewage which is disposed of through seepage into the surrounding soil.
- CHIMNEY STACK.** A vertical vent designed to dispose of waste gases and heat and to create a draft for furnaces or boilers.
- CINDER BLOCK.** A lightweight concrete block using cinders as the coarse aggregate to minimize weight. Sometimes used as a generic term for all lightweight block.
- CLAPBOARD.** An exterior wood siding having one edge thicker than the other and laid so that the thick butt overlaps the thin edge of the board below.
- CLEAN ROOM.** A room built to prevent the entrance of dust or lint, usually it will also have closely controlled humidity and temperature.
- CLEAR SPAN.** A term used to designate a building or an area within a building, free of columns.
- CLERESTORY WINDOW.** A series or band of vertical windows set above the primary roof line.
- © **CLOSED-LOOP SOLAR WATER HEATER.** Solar water heater in which an electric pump circulates a freeze-protected heat-transfer fluid through the collector and heat exchanger within a storage tank.

## GLOSSARY

**COLONNADE.** A series of columns.

**COLUMN.** A vertical structural member; a pillar. False columns are designed for architectural ornamentation rather than load-bearing qualities.

**COMMON BRICK.** A solid masonry unit of clay for general building purposes not especially treated for texture or uniformity.

**COMMON WALL.** A single wall used jointly by two buildings, also called a party wall.

Ⓢ **COMPACT FLUORESCENT LAMP (CFL).** Fluorescent light bulb in which the tube is folded or twisted into a spiral to concentrate the light output. CFLs are typically three to four times as efficient as incandescent light bulbs and last eight to ten times as long. They should be recycled because they contain mercury element.

Ⓢ **COMPOSITE LUMBER.** Lumber made from plastic (often high-density polyethylene) and wood fiber or other agricultural byproducts. Composite lumber often contains recycled content.

**COMPOSITE STONE PANELS.** A stone wall and glass panel system comprising embedded and exposed aggregates or homogeneous crushed stone in a reconstituted stone-like composite panel. Epoxy embedded aggregates, bonded to a cement board backing attached to steel studs is one of the least expensive stone curtain walls.

**COMPOSITE WOOD.** A product consisting of wood or plant particles or fibers bonded together by a synthetic resin or binder. Examples include plywood, particle-board, OSB, MDF, composite door cores.

**COMPOSITION SHINGLE.** A roofing shingle made of either felt saturated with asphalt and surfaced with mineral granules or inorganic fiberglass saturated with asphalt and surfaced with ceramic granules.

**COMPOSITION WOOD SHINGLES.** A roofing shingle panel composed of hardboard.

**COMPUTER FLOOR.** A prefabricated floor system installed over pedestal grid supports to provide a raised or access floor.

**CONCRETE BLOCK.** A solid masonry wall typically built with one or two rows of concrete block and mortar. The amount of reinforcing varies due to the structural requirements of the wall. Reinforcing is laid horizontally with various courses and vertically in the hollow core of the concrete block.

**CONCRETE BRICK.** A concrete masonry unit, sized and often colored and textured to simulate clay brick.

**CONCRETE AND GLASS PANELS.** A combination of concrete panels (precast or poured-in-place) and glass attached to the concrete panels with the use of a metal frame. Generally these walls carry no load other than their own weight. Some perimeter or shear wall load-bearing units can be found in some low- to mid-rise structures.

**CONDOMINIUM.** Type of ownership of a multi-unit property in which the owner holds title to an individual unit and a percentage of common areas.

**CONDUIT.** A pipe or channel carrying electric wiring, water or other fluids. May be rigid or flexible.

Ⓢ **CONTROLLABILITY OF SYSTEMS.** Assessment which measures the percentage of occupants who have direct control over the temperature, airflow, and lighting in their space.

**CONVECTOR.** A radiator for either hot water or steam heat with many radiation surfaces, such as fins, to increase contact with air moved either by natural or forced convection.

**COOLING TOWER.** A water tower designed to cool water by evaporation.

**COPING.** The capping of masonry or other material applied to the top of a wall as a watershed and to give a finished appearance.

**CORBEL.** A beam or bracket projecting from a wall to support some other object or structural part of the building; also may be an embellishment rather than a structural element.

**CORNICE.** A projecting horizontal moulding at the top of a wall or building.

**COST.** Purchase price to a buyer.

**COURSE.** Continuous horizontal layer of materials, i.e., masonry or shingles.

**COVED CEILING.** A ceiling which curves down at the edges where it meets the wall, providing a smooth transition from ceiling to walls instead of a sharp angle of intersection.

Ⓢ **CRADLE TO GRAVE.** Term used to describe the environmental impact a product has from creation to destruction.

**CRAWL SPACE.** A space of limited height sufficient to permit access to underfloor piping or wiring.

## GLOSSARY

- CUPOLA.** A small square or rectangular structure located along the roof ridge used for ventilation and/or ornamentation.
- CURTAIN WALL.** A nonbearing exterior wall supported by the structural frame of a building. These walls carry no load other than their own weight.
- DEAD LOAD.** The constant weight of a building or structure including all built-in equipment; does not include variable live loads such as furniture, merchandise, people or business and industrial machines.
- DECKING.** The surfacing material applied to the rafters, or floor joists to which the material is applied. Also called roof or floor sheathing.
- © **DEMAND WATER HEATER.** Water heater that heats water only as needed; there is no storage tank and thus no standby heat loss. This is also known as a tankless water heater.
- DEMISING WALL.** An area separation wall between tenants or space uses.
- DIATOMITE.** Lightweight concrete made with diatomaceous earth aggregate generally troweled over wood or concrete exterior steps and balconies; has a light marshmallow appearance.
- DISTRIBUTION PANEL.** A panelboard containing fuses or circuit breakers and which receives and distributes high-capacity electricity to various circuits of lower capacities.
- DOCK.** An elevated platform at the proper height to facilitate loading or unloading of trucks, ships or boats.
- DORMER.** A projection from a sloping roof to provide more headroom under the roof and allow the installation of dormer windows.
- DOUBLE GLAZING.** A double-glass pane in a door or window, with an air space between the two panes, which may be sealed hermetically to provide insulation.
- DOUBLE-HUNG WINDOW.** A window with an upper and lower sash, each balanced by springs or weights to be capable of moving vertically in its own grooves.
- © **DOUBLE WALL.** Construction system in which two layers of studs are used to provide a thicker-than-normal wall system to accommodate extra insulation. The two walls are often separated by several inches to reduce thermal bridging through the studs and to provide additional space for insulation.
- DOWEL.** A pin tying two structural pieces together.
- DOWNSPOUT.** A vertical drain.
- © **DRAIN BACK SOLAR WATER HEATER.** Solar water heater in which water or another heat-transfer fluid is pumped through the collector and drains back to a tank in the house when the pump turns off.
- DRAIN TILE.** Short lengths of clay or concrete pipe laid underground with loose joints to drain away excess water.
- DRAINAGE SYSTEM.** All piping provided for carrying waste water, sewage or other drainage, from a building to a street sewer or place of disposal.
- © **DRY POND.** Excavated areas that detain storm water and slow runoffs, but eventually dry between storms. Complementing a water source such as rain water collective systems, this system can reduce storm water runoffs and ultimately reduce water pollution.
- DRYWALL.** Any finish material applied to an interior wall in a dry state as opposed to plaster. It may be plywood or fiberboard, but is generally referred to as gypsum board or sheet rock.
- © **DUAL-FLUSH TOILET.** Toilet that provides two flush levels: a full-volume flush for use with solid wastes and a reduced-volume flush (often half the volume) when only liquid waste and paper need to be flushed.
- DUCTS.** Enclosures, usually round or rectangular in shape, for distributing warm or cool air from the central unit to the various rooms. Duct costs are included with the appropriate heating or cooling system.
- DUMB WAITER.** A small utility elevator, used to convey articles, and not people, between floors.
- EAVES.** The portion of a roof projecting beyond wall line.
- EIFS.** Exterior insulation and finish system; see synthetic plaster on rigid insulation.

## GLOSSARY

- ELASTOMERIC ROOFING.** Single sheet (ply) of rubber-like, layered membrane consisting of several combinations of plastics and synthetic rubber stretched into place as a roof cover. It may be loosely laid, ballasted, mechanically fastened or fully adhered. Also used to describe a single component liquid or spray applied to the roof surface to yield elastomeric films (Hypalon-Neoprene, Silicone) for high-strength waterproof membranes.
- ELECTRIC BASEBOARD HEAT.** Refers to an electric heater installed as a baseboard along a wall.
- ELECTRIC CABLE HEATING.** A heating system consisting of electrical coils installed beneath the surface of ceilings, walls or floors. It is commonly found installed in ceilings of multifamily residences having a sprayed-on ceiling.
- Ⓢ **ELECTRIC-RESISTANCE HEAT.** Heat provided by electricity in which high-resistance wires convert electric current directly into heat. See heat pump.
- ELECTRIC WALL HEATERS.** Individual electric unit in the wall capable of heating only small areas. When used as supplemental heating to the main heating plant, such as in a bathroom, it might be considered as a built-in appliance. For electric radiant, see Radiant Heat.
- ELEVATED SLAB.** A horizontal reinforced concrete structure which is formed and poured in place above ground level, requiring shoring.
- ELEVATION.** A scale drawing of the front, rear or side of a building.
- Ⓢ **ENERGY OR GREENHOUSE GAS EMISSIONS PER CAPITA.** Community's total greenhouse gas emissions divided by the total number of residents.
- Ⓢ **ENERGY EFFICIENT.** Maximizing, or at least increasing, the ratio between productive output and energy use.
- Ⓢ **ENERGY EFFICIENCY RATING (EER).** Operating efficiency of a room air-conditioner, measured in BTU's of cooling output, divided by the power consumption in watt hours; the higher the number, the greater the efficiency.
- Ⓢ **ENERGY FACTOR.** Efficiency measure for rating the energy performance of dishwashers, clothes washers, water heaters, and certain other appliances. The higher the number, the greater the efficiency. A "modified energy factor" accounts for certain adjustments according to accepted test procedures.
- Ⓢ **ENERGY STAR.** System sponsored by the U.S. Environmental Protection Agency and the U.S. Department of Energy for labeling the most energy efficient products on the market. The ratings apply to a wide range of products, from computers and office equipment to refrigerators and air-conditioners.
- Ⓢ **ENERGY GUIDE.** Label from the Federal Trade Commission that lists the expected energy consumption of an appliance, heating system, or cooling system and compares consumption with other products in that category.
- Ⓢ **ENERGY-RECOVERY VENTILATOR (ERV).** Type of heat-recovery ventilator (HRV) that captures water vapor as well as heat from the outgoing airstream in a balanced ventilation system. In winter months, this can reduce the drying that occurs when outdoor air is brought indoors and warmed.
- Ⓢ **ENGINEERED LUMBER.** Lumber made by gluing together veneers or strands of wood to create very strong framing members. Stronger and less prone to warping than standard framing lumber, it can be made from smaller-diameter trees, saving old-growth forests.
- Ⓢ **EPEAT.** Electronic Product Environmental Assessment Tool, EPEAT is a tool that allows consumers to evaluate and compare computer components by a number of environmental performance criteria and make a decision on which components to purchase based upon those criteria. To receive the Bronze EPEAT seal, a component must conform to 23 required criteria. To receive the Silver EPEAT seal, a component must conform to all 23 required criteria plus at least 50% of 28 optional criteria. To receive the Gold EPEAT seal, a component must conform to all 23 required criteria plus at least 75% of 28 optional criteria.
- EIFS.** Exterior insulation and finish system; see synthetic plaster on rigid insulation.
- Ⓢ **EXPANDED POLYSTYRENE (EPS).** Type of rigid foam insulation. Unlike extruded polystyrene (XPS), EPS does not contain ozone-depleting hydrochlorofluorocarbons (HCFCs).
- EVAPORATIVE COOLER.** An air conditioner which cools the air by the effect of water evaporation. Outdoor air is drawn through a moistened filter pad in a cabinet, and the cooled air is then circulated throughout the building. It is used in regions with low humidity.



## GLOSSARY

- FACADE.** The exterior face of a building, usually applying to the face with the principal entrance, but often applied to any important face.
- FACE BRICK.** A clay brick made especially for exterior use with special consideration of color, texture and uniformity.
- FASCIA.** A horizontal band of material applied at the top of the wall or the end of the eaves as ornamentation and/or to cover the rafter ends.
- FENESTRATION.** The arrangement of windows in the walls of a building.
- FIBER-CEMENT SIDING.** Siding material made from wood fiber and Portland cement that is highly durable, moisture resistant, and fire proof. Developed in New Zealand, the material is becoming a common siding material in North America.
- FIBERBOARD.** A general term applied to sheets of material made from wood or other vegetable fibers, having some insulating qualities and usually used as roof or wall sheathing.
- FINISH HARDWARE.** All of the exposed hardware in a structure, such as door knobs, door hinges, locks and clothes hooks, etc.
- FIRE DOORS AND WALLS.** Doors and walls constructed of fire-resistive materials designed to prevent the spread of fires. A true fire wall will extend from the foundation or concrete floor to above the roof, completely separating parts of the building.
- FLASHING.** Strips of metal sheet or other materials, used to weatherproof construction joints.
- FLEXIBLE CONDUIT.** A circular spiral-wound raceway through which wires and cables may be pulled after the conduit is in place.
- FLOOR AREA.** An area on any floor, enclosed by exterior walls and/or partitions. Measurement for total floor area should include the thickness of the exterior walls.
- FOAMED CONCRETE.** Concrete in which bubbles of air are entrained, either by chemical or mechanical means, producing a concrete of low unit weight used as a subfloor covering.
- © **FOOT CANDLE.** Measure of the amount of illumination falling on a surface. A footcandle is equal to one lumen per square foot.
- FOOTING.** The projecting base of a foundation, which transmits the building load to the ground.
- FORCED-AIR HEATING.** A warm air heating system in which circulation of air is effected by a motor-driven fan. Such a system includes air-cleaning devices and the ductwork. Costs include simple single-zoned and multi-zoned ducted systems.
- © **FOREST STEWARDSHIP COUNCIL (FSC).** Nonprofit organization that promotes forestry practices that are sustainable from environmental, economic and social standpoints. FSC certification on a wood product is an indicator that the wood came from a well-managed forest and is eligible for LEED certification points.
- FORMED CONCRETE WALLS.** Generally constructed of poured-in-place concrete. The reinforcing is usually a bar set in a grid pattern within the form for the concrete wall. Forms used for the wall are usually some type of a metal or wood panel. Thickness of these walls varies depending on the structural requirements of the building.
- FORMICA.** A trade name for a hard laminated plastic surfacing, often used as a generic name for all such finishes.
- FOUNDATION.** The part of the structure on which the superstructure rests. It includes all construction which transmits the loads of the superstructure to the earth.
- FRENCH DOORS OR WINDOWS.** A pair of hinged glazed doors, functioning as both doors and windows.
- FRESCO.** Watercolor painting on damp plaster.
- FURRING.** Strips of wood or metal fastened to structural members or surfaces to provide a place on which to nail or fasten another surface, or to separate the finish materials from the structure.
- GABLE.** The triangular upper portion of an exterior wall extending from the ceiling line to the underside of a gable roof.
- GABLE ROOF.** A roof forming an inverted V.
- 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 roof with two pitches.
- GALBESTOS.** A trade name for protected metal building panels consisting of textured waterproof outer coatings of a special hot-melt layered application of resin or asphalt giving the appearance of a stucco-like granular finish.

## GLOSSARY

- GAUGE.** A measurement of thickness in metal sheet or wire. The smaller the gauge, the heavier the material.
- © **GEOTHERMAL.** "Geothermal" literally means "earth heat." It is often used to describe two types of alternative energy sources. "True" geothermal energy is less commonly used. It draws on energy generated in the earth's core, about 4,000 miles below the surface, via steam and hot water produced inside the earth to heat buildings or generate electricity. More common are geothermal heating and cooling systems that capitalize on the relatively constant temperature of the ground to transfer heat. These systems do not use the geothermal energy generated deep within the earth; instead, they use a heat-transfer liquid to move heat from a few feet below ground into a house during cold months and from the house to the ground during hot months.
- GIRDER.** A horizontal structural member which supports loads from smaller beams and joists and transmits them to columns or foundations.
- GIRT.** A horizontal framing member to aid in providing rigidity to columns and act as support for siding or sheathing.
- GLASS BLOCK.** A hollow structural glass block laid as masonry for translucent effect in wall construction.
- GLASS FIBER REINFORCED CONCRETE.** A lightweight precast glass-fiber-reinforced concrete (GFRC) and glass panel wall system which is attached to a supporting frame. GFRC is a Portland cement-based composite reinforced with randomly dispersed glass fibers to form a variety of shaped and textured panels, many of which are integrated with a steel stud support system.
- GLASS PANEL WALL.** An all-glass-paneled curtain wall attached to a structural frame typically found in modern residences.
- GLAZED ATRIUM.** A structural, frameless area where the glass walls are either self supporting, or supported from behind by glass fin mullions or thin wall trusses.
- GLAZED FACING TILE.** A hollow clay tile having one or two faces finished with a glazed surface.
- © **GLOBAL WARMING POTENTIAL.** Measure of how a given mass of Greenhouse gas is estimated to contribute to global warming compared against carbon dioxide, which is given a value of 1.0.
- GLULAM.** A trade name often used to describe all glued, laminated wood structural members.
- GRADE BEAM.** A beam placed at or near ground level performing some of the functions of a foundation, and may be resting on piers or pilings.
- © **GRAVITY-FLUSH TOILET.** Toilet whose flush is powered solely by the force of falling water. See also pressure-assist toilet.
- GRAVITY HEATING.** A warm air system usually located in a basement, which operates on the principle of warm air rising through ducts to the upper levels. Since it does not contain a fan, as does the conventional forced-air furnace, a large burner surface as well as larger ducts are used.
- © **GREEN BUILDING.** Design and construction of buildings that minimizes impact on the environment while helping keep occupants healthy.
- © **GREEN BUILDING COUNCIL INSTITUTE (GBCI).** Established in 2008, providing third party project certification and professional credentials recognizing excellence in green building performance and practice.
- © **GREEN ELECTRICITY.** Electricity generated from renewable energy sources, such as photovoltaics (solar power), wind power, biomass, and small-scale hydropower. Large, conventional hydropower sources usually are not included in definitions of Green electricity.
- © **GREENGUARD.** Product certification program for low emitting interior building materials, furnishings, and finish systems. All GREENGUARD Certified Products have been tested for their chemical emissions performance.
- © **GREENHOUSE GAS.** A gas in the atmosphere that traps some of the sun's heat, preventing it from escaping into space. Greenhouse gases are vital for making the Earth habitable, but increasing Greenhouse gases contribute to climate change. Greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
- © **GREY WATER.** (complimenting waste water systems) system which collects all domestic wastewater except toilets and garbage disposals.

## GLOSSARY

- © **GRID-CONNECTED POWER SYSTEM.** Electricity generation system, usually relying on photovoltaics or wind power, that is hooked up to the utility company's electric grid through a net-metering arrangement so that electricity can be obtained when the locally generated power is not sufficient.
- © **GROUND-SOURCE HEAT PUMP.** Heat pump that relies on the relatively constant temperatures underground as the heat source and heat sink. The energy performance of ground-source heat pumps is usually better than that of air-source heat pumps.
- GROUT.** A thin concrete mixture used to fill various voids in masonry work or in other work which requires a very fluid mixture.
- GUNITE.** Pneumatically placed concrete, sometimes refers to pneumatically placed plaster. Also called shotcrete.
- GUTTER.** A horizontal or slightly sloping, open collector and drain, i.e., roof gutters, street gutters.
- GYPSUM.** Usually used generically to designate all products made of plaster of Paris, such as gypsum board, gypsum lath, gypsum tile, etc.
- GYPSUM BLOCK.** A plaster of Paris building block, not suitable for load-bearing walls because of its friable nature.
- HALF-TIMBER CONSTRUCTION.** Heavy timber construction of vertical, diagonal and horizontal exposed members, with the open spaces filled with brick and plaster. This is often simulated by nailing boards to a wood frame and stuccoing the spaces between them.
- HANGER.** A wire, strap or rod attached to an overhead structure to support conduit, pipe, suspended ceilings, etc. Also a U-shaped stirrup to support the end of a joist.
- HARDBOARD.** A highly compressed wood fiberboard with many uses as exterior siding, interior wall covering and formboard. Exterior panels may be a lap or sheet siding.
- HARDENER AND SEALER.** Treatments applied to a concrete slab floor structure. Hardeners generally fall into two categories: 1) integral, when the chemical treatment is mixed with the cement and becomes actually part of the topping mix and, 2) surface, when it is applied as the floors are being finished and have become hard enough for traffic. A sealer is also a chemical mixture which is composed of a pigment and a reducer. It is designed to minimize stains, seal in moisture and assist in curing the topping.
- HEADER.** In brick masonry construction, a course of brick in which the masonry units are laid perpendicular to the face of the wall to tie two wythes of brick together. In carpentry, a beam carrying a load over an opening, a lintel.
- © **HEAT ISLAND EFFECT.** Absorption of heat by hardscapes such as dark, non-reflective pavement and buildings, and its radiation to surrounding areas.
- HEATING AND COOLING.** A combined heating and cooling system which is broken into three general categories of descending cost ranges as described below.
- Hot and chilled water:** A zoned heating and cooling system that uses hot or chilled water. The water is generated from a central location and piped to various sections of a building. Each section of the building has fin coils or convectors with fans. These are used to produce warm or cooled air which is then circulated throughout that portion of the building. This system is normally found in Class A and B high-rise buildings where fire barriers must be penetrated from floor to floor.
- Warm and cool air:** Similar to hot and chilled water except that the warm and cooled air is generated at the main plant and distributed to numerous zoned areas throughout the building by a long, complex duct system.
- Package heating and cooling:** Basically the same as central air (warm and cool air) except for the capacity and amount of ductwork involved. Typically, a package system contains one short duct and thermostat per unit, and it is not uncommon to find a number of individual units servicing one building. A split system is a type of package which has gas-fired, forced-air heating with either gas or electric refrigerated cooling. These are complete, individual, roof-mounted units or ground units each having its own individual compressor and furnace.

## GLOSSARY

**HEAT PUMP.** This is a self-contained, reverse cycle, heating and cooling unit. On its cooling cycle it works like an air conditioner, collecting heat from inside and pumping to an outside coil where it is dissipated. On the heating cycle, heat is collected by the outside coil and pumped inside.

Ⓢ **HIGH-EFFICIENCY TOILET (HET).** Toilet that provides at least 20% water savings over the federal standard of 1.6 gallons per flush and still meets the most rigorous standards for flush performance.

Ⓢ **HIGH-PERFORMANCE BUILDING.** Another term for Green building.

**HIGH-RISE BUILDING.** A building which is considerably higher than either plan dimension. Generally over five stories or 75 feet in height. For differentiation in our pricing system, high-rise apartments are three stories and above, while low-rise garden apartments of light residential-type construction are referred to as multiple residences up to three stories.

**HIP.** The inclined ridge formed by the intersection of two sloping roof surfaces whose eave lines are not parallel.

**HIPPED ROOF.** A pitched roof having sloping ends rather than gable ends.

**HOLLOW CLAY BLOCK.** A solid masonry wall typically built with one row of hollow clay textured block and mortar. Reinforcing is laid horizontally with various courses and vertically in the hollow core of the clay block.

**HOME PERFORMANCE AUDIT.** An energy audit that also includes inspections and testing assessing moisture flow, combustion safety, thermal comfort, indoor air quality, and durability.

**HOPPER.** An elevated bin whose bottom is in the shape of a V or inverted cone which, due to its sloping sides, will empty its stored material when a gate at the bottom is opened.

**HORSEPOWER.** A measure of work output equivalent, for practical purposes, to 750 watts of electricity or 33,500 B.T.U.

**HOT WATER HEATING.** The circulation of hot water from a boiler through a system of pipes and radiators or convectors, by either gravity or a circulating pump, allowing the heat to radiate into the room. For hot water radiant, see Radiant Heat.

**HVAC.** An abbreviation for heating, ventilating, and air conditioning.

Ⓢ **IMPERVIOUSNESS.** Resistance of a material to penetration by a liquid. Impervious surfaces such as paving prevent rainwater from going into the ground, thereby increasing runoff, reducing groundwater recharge and degrading surface water quality.\*\*Home owner as well as commercial building owners would want to minimize impervious areas \*\*

Ⓢ **INDOOR AIR QUALITY (IAQ).** Healthfulness of an interior environment. IAQ is affected by such factors as moisture and mold, emissions of volatile organic compounds from paints and finishes, formaldehyde emissions from cabinets, and ventilation effectiveness.

Ⓢ **INFILL SITE.** A site that is largely located within an existing community. For the purposes of LEED for Homes credits, an infill site is defined as having at least 75 percent of its perimeter bordering land that has been previously developed.

Ⓢ **INSULATED CONCRETE FORM (ICF).** Hollow insulated forms, usually made from expanded polystyrene (EPS), used for building walls (foundation and above ground), that are stacked and stabilized and then filled with concrete, which provides the wall structure.

**INSULATION.** Any material used to obstruct the passage of sound, heat, vibration or electricity from one place to another.

Ⓢ **INTEGRAL COLLECTOR STORAGE.** Solar water heater in which potable water is heated in the same place it is stored.

Ⓢ **INTEGRATED DESIGN.** Building design in which different components of design, such as the building envelope, window placement and glazing, and mechanical systems, are considered together. High-performance buildings and renovations can be created cost effectively using integrated design, since higher costs in one place can often be paid for through savings elsewhere. For example, by improving the performance of the building envelope, the heating and cooling systems can be downsized or even eliminated.

**INTERIM MONEY, COST OF.** Interest on financing during a normal period of construction which is included in the handbook costs as well as an amount for servicing or handling of the loan. Bonuses (points) or discounts paid for securing the financing are not included in the costs.

**INTERIOR WALL LINER.** The additional cost for site-installed finished interior sheathing, wood, drywall or metal liner applied to single wall construction.

## GLOSSARY

- INTERSTITIAL SPACE.** The walk-on platform or sub-floor space between the finished structural ceiling and floor above for access to the overhead mechanical and electrical services for a building.
- JALOUSIE.** An adjustable glass louver. Also refers to doors or windows containing jalousies.
- JAMB.** The finished members of a door, window or similar opening.
- JOIST.** One of several parallel beams carrying a floor or ceiling, sometimes acting both as ceiling joist and rafter.
- JOIST HANGER.** A metal stirrup supporting the end of a joist and which is fastened to a supporting structural member.
- KEENE'S CEMENT.** A hard, water-resistant plaster.
- K FACTOR.** A measure of heat transmission, used to rate the insulating value of materials.
- KIOSK.** A small, free-standing structure used for the purpose of sales and display of merchandise, typically found in malls.
- KIP.** A unit of force equal to 1,000 pounds.
- LALLY COLUMN.** A concrete-filled steel pipe used as a column.
- LAMELLA ROOF STRUCTURE.** An arched roof-framing structure identified by the diamond-shaped arrangements of the pieces of plank or steel from which it is formed.
- LAMINATED FLOOR.** A floor deck made up by spiking 2 x 4's or planks together with the wide side vertical, a mill-type floor.
- LATH.** Any material used as a base for plaster including wood lath, gypsum lath, wire and metal lath.
- LEACH LINE.** In sewage disposal, a loose tile or perforated pipe line used to distribute sewage effluent through the soil.
- © **LEED FOR HOMES.** Rating system for Green homes developed by the U.S. Green Building Council. The acronym stands for Leadership in Energy and Environmental Design.
- © **LIFE CYCLE.** Entire life of a product or material, from raw material acquisition through disposal.
- © **LIFE-CYCLE ASSESSMENT (LCA).** Economic cost of a product or building over its expected life including both first cost (purchase cost) and operating costs.
- © **LIFE-CYCLE COST (LCC).** A building's security and protection services, e.g., the surveillance, communications and fire protection systems.
- LIFE-SUPPORT SYSTEM.** A building's security and protection services, e.g., the surveillance, communications and fire protection systems.
- LIFT SLAB.** A construction system in which the floor and roof slabs are cast one on top of the other at ground level and are then jacked into position and fastened to the columns.
- LIGHT WELL.** A vertical unroofed shaft within a building, designed to bring light and air to inside rooms.
- © **LIGHTNING POWER DENSITY.** an assessment used to install lightning power per unit area.
- LINTEL.** A horizontal framing member carrying a load over a wall opening, a header.
- LIVE LOAD.** The variable load imposed on a structure by people, furnishings, merchandise and equipment not inherent to the structure.
- LOCAL STONE WALL.** A solid cut-stone masonry block wall of local sandstone or brownstone. The thickness of the wall varies depending on the thickness of the block used.
- LOOSE FILL INSULATION.** This type of insulation is made from a variety of materials in the form of loose, fluffy pieces of fiber such as cellulose or rockwool or inorganic granular pellets of plastic or expanded mica.
- LOUVER.** Slats or fins over an opening, pitched so as to keep out rain, snow or sun, but allowing the movement of air. A finned sunshade on a building. A diffusion grill on a fluorescent light fixture.
- © **LOW-EMISSIVITY (LOW-E) COATING.** Very thin metallic coating on glass or plastic window glazing that reduces heat loss through the window. The coating emits less radiant energy (heat radiation), which makes it, in effect, reflective to that heat. The coating boosts a window's R-value and reduces its U-factor.
- MAGNESITE.** Flooring material made of calcined magnesium carbonate with asbestos, powdered wood and silica to which magnesium chloride is added to form a seamless floor covering.

## GLOSSARY

**MALL.** A wide public walkway between rows of shops or store buildings.

**MANLIFT.** A small elevator designed to lift one man. Often a continuous belt with attached platforms.

**MANSARD ROOF.** A roof with two slopes, the lower slope very steep, the upper slope almost flat.

**MASONRY CONSTRUCTION.** In building, a type of construction with concrete, concrete block, or brick load-bearing exterior walls.

**MARQUEE.** A roof-like structure over the entrance to a building and projecting from it. It is usually cantilevered out from the building.

**MASONRY WALLS.** Walls that are constructed entirely of masonry units (or concrete) which are bonded together with mortar or some other type of cementitious material.

**MASONRY AND GLASS PANEL.** An exterior curtain wall system, consisting of thin set or modular brick or tile panels or veneer on steel studs and glass panels, which is hung on a frame.

**MASTIC.** A heavy-bodied adhesive material used to cement two surfaces together; also an elastic caulking compound.

**MAT FOOTING.** A heavy concrete slab designed to spread the vertical forces from walls or columns over a wide area, after removing earth equal to the weight of superstructure. Often used to designate large spread footings.

**MEMBRANE.** A thin sheet or film of waterproof material used to prevent the movement of moisture through a floor, wall or roof.

© **MERV (MINIMUM EFFICIENCY REPORTING VALUE)** . Rating system used when installing efficient air filter systems, complementing Indoor Air Quality (IAQ). Rating represent the worst case performance, specifiers can used this system to assure performance in applications where a maximum particle count must be maintained over the filter's life cycle. (Rating 1-16, but MERV rating standards is from 8-16)

MERV values of 8 and higher indicate dust spot efficiencies of more than 30 percent

MERV values of 13 and higher indicate dust spot efficiencies of more than 80 percent

MERV values of 15 and higher indicate dust spot efficiencies of more than 95 percent

MERV values of 16 indicate dust spot efficiencies of 100 percent

**MESH.** Heavy steel wire welded together in a grid pattern used as a reinforcement for concrete work.

**METAL-CLAD BUILDING.** A building sheathed in metal.

**METHYL DIISOCYANATE (MDI) BINDER.** Non-formaldehyde binder used in some medium-density fiberboard and particleboard products, including straw-based particleboard.

**MEZZANINE.** A partial floor between two floors, occupying a lesser area than the full floors. For stepped seating structures, see Balcony.

© **MICRO-IRRIGATION.** Irrigation system with small sprinklers and micro-jets or drippers designed to apply small volumes of water. The sprinklers and micro-jets are installed within a few centimeters of the ground, while drippers are laid on or below grade.

**MILL CONSTRUCTION.** A type of building with heavy timber frame, masonry bearing walls and laminated floors.

**MILLWORK.** Wooden portions of a building which have been prebuilt and finished in a shop and brought to the site for installation, such as cabinets, door jambs, mouldings, trim, etc.

**MODIFIED BITUMEN.** A roof covering composed of composite sheets of a copolymer modified bitumen that self-adheres with a protective coating or is loosely laid and ballasted.

**MODULAR CONSTRUCTION.** Any building construction which is normally preassembled and shipped to the site in units.

**MODULE.** A standard measure, of any size, used in construction and design, adopted to allow representation in design and construction.

**MONITOR.** A narrow gable or shed-roofed structure built onto the roof of a building, with the function of providing light and ventilation through its sides. The narrow structure on top of grain tanks, housing conveyors and equipment.

**MONOLITHIC.** One piece. Monolithic concrete is poured in a continuous process so there are no separations.

## GLOSSARY

- MORTAR.** A pasty mixture of cement, lime, sand and water, used as a bonding agent for brick, stone or other masonry units.
- MORTISE.** A notch or hole cut in a piece of wood or other material designed to receive a projecting part, called the tenon, of another piece of material for the purpose of joining the two.
- MOSAIC.** A decoration in which small pieces of glass, stone or other material are laid in mortar or mastic to form a design.
- MOTIF.** The concept and treatment of the building decor.
- MUD SILL.** Timber or plank laid directly on the ground to form the building foundation.
- MULLION.** Vertical dividing member between a series of adjoining doors, windows or wall panels.
- © **NATIVE PLANTS.** Plants that have evolved within their own ecological habitats and are not invasive within their own native ranges. Native plants provide food and shelter to indigenous wildlife; stabilize shorelines and fields, etc., growing in balance with surrounding plant and animal species.
- © **NET METERING.** Arrangement through which a homeowner who produces electricity using photovoltaics or wind power can sell excess electricity back to the utility company, running the electricity meter backward. The utility effectively buys the power at the retail price, but the amount of electricity the utility company will "buy" in a given month is limited to the amount that the homeowner buys; any excess electricity is purchased at a much lower, wholesale price. See grid-connected power system.
- © **NET-ZERO ENERGY.** Producing as much energy on an annual basis as one consumes on site, usually with renewable energy sources, such as photovoltaics or small-scale wind turbines. Calculating net-zero energy can be difficult, particularly in grid-tied renewable energy systems, because of transmission losses in power lines and other considerations.
- NEWEL.** The post at the bottom of a stair or the end of a flight of stairs, to which the balustrade is anchored. The center pole of a spiral staircase.
- © **ON-DEMAND HOT WATER CIRCULATION.** System that quickly delivers hot water to a bathroom or kitchen when needed, (rather than wasting the water that sits in the hot-water pipes), which then circulates back to the water heater.
- © **ONGOING ENERGY PERFORMANCE.** The awareness that energy usage does not end with design and construction of an energy efficient building or neighborhood, meaning that occupancy sustains and improves over time.
- ON-SITE WASTEWATER SYSTEM.** Treatment and disposal of wastewater (sewage) from a house that is not connected to a municipal sewer system; most on-site systems include a septic tank and leach field.
- OPEN OFFICE.** An office area partitioning concept using shoulder-height free-standing manufactured partition units. They are interlocked to form cubicles called "work stations".
- OPEN SYSTEM FOR CORRUGATED METAL.** A roof system consisting of secondary members acting as a purlin support system. Light purlin supports will rest perpendicular to and directly on the pre-engineered steel or wood pole frame members to support a metal roof cover.
- OPEN WEB JOISTS.** Lightweight, prefabricated metal, parallel chord trusses.
- © **OPERATING COST.** Cost of operating a device or building; including energy, maintenance, and repairs.
- PANEL.** Any flat raised or recessed surface in a door, wall, ceiling, etc. Any flat sheet of material used as a construction component.
- PANEL, PREFABRICATED.** Any assemblage of construction components into relatively thin units which allows placement as a unit, i.e., wall panels, floor and roof panels, etc.
- PANELIZED ROOF.** A wood roof comprising pre-assembled plywood panels, generally one or a pair of 4' x 8' sheets, having attached longitudinal framing members, usually 2 x 4's, called "subpurlins", such that the panel is placed to span between purlins, attached to Glulam girders.
- PARAMETER.** Any characteristic of a statistical universe which is measurable. In construction square foot, cubic yard, board feet, etc., are cost parameters.
- PARAPET WALL.** The portion of a wall which projects above the roof line.
- PARGING.** A thin coating of mortar applied to masonry walls. Used on the exterior face of belowgrade walls as waterproofing or to smooth a rough masonry wall.

## GLOSSARY

**PARQUET FLOORING.** Wood blocks or strips laid in decorative patterns.

**PENTHOUSE.** In construction, a building constructed on the roof of another building and smaller in area than the roof. Sometimes used loosely to designate the top floor of a building.

**PERCOLATION.** The movement of water into soil. In sewage disposal, speed of effluent absorption.

**PERIMETER.** The total length of all the exterior walls of a building.

Ⓢ **PERVIOUSNESS.** Percentage of the surface area of a paving material that is open and allows moisture to pass through the materials and soak into the ground below.

Ⓢ **PHOTOVOLTAICS (PV).** Generation of electricity directly from sunlight. A photovoltaic (PV) cell has no moving parts; electrons are energized by sunlight and result in current flow.

**PIER.** A platform structure supported by pilings, extending from land into water. Also a short column which supports a superstructure.

**PILASTER.** A column, usually formed of the same material and integral with but projecting from, a wall.

**PILINGS.** Columns extending below the ground to bear the loads of a structure when the surface soil cannot. They may extend down to bearing soil or support the load by skin friction. Sheet piling is used to form bulkheads or retaining walls.

**PLAN.** A horizontal cross-section of a structure at any level, showing room arrangement, location of doors, windows, etc. Subdivisions of construction plans are floor plans, foundation plans, etc. A site plan will show boundaries of the site and location of structures.

**PLATE.** In carpentry, horizontal framing members which provide the anchorage and bearing for floor, ceiling and roof framing. Any flat construction component designed to distribute loads over a wider area, such as bearing plate, gusset plate, etc.

**PLATE GLASS.** A high-quality glass which has been ground and polished on both sides to decrease distortion.

**PLUMBING FIXTURES.** Receptacles which receive and discharge water, liquid or water-borne wastes into a drainage system with which they are connected. Fixture costs include an allowance of supply and waste piping.

**PLYWOOD.** A construction material formed by cementing several sheets of wood face to face, the grain running at right angles in alternate layers.

**POINTING.** The process of removing deteriorated mortar from masonry and replacing it with new mortar; also the final patching, filling or finishing of mortar joints in new masonry work.

**POLE BUILDINGS.** Buildings whose principal frame and foundation are treated posts or poles, sunk into the ground with prefabricated trusses and metal siding.

**PORCELAIN ENAMEL.** A highly vitrified glazed surface heat-bonded to a metal surface.

**PORCH.** A wood or concrete platform, often with a roof, found at a building entrance.

Ⓢ **POST CONSUMER RECYCLED MATERIAL.** Material recovered from a waste product that has been in use by a consumer before being discarded.

Ⓢ **POST INDUSTRIAL (PRE-CONSUMER) RECYCLED MATERIAL.** Material recovered from the waste stream of an industrial process that has not been placed in use.

**POST STRESSED CONCRETE.** Concrete in which tension is placed on the stressing cables after the concrete has set. Concrete may be precast or poured in place.

**PRECAST CONCRETE.** Concrete structural components which are not formed and poured in place in the structure, but are cast separately either at a separate location or on site. Panels may be flat, textured or with extended ribs called tees.

**PRE-ENGINEERED FRAME.** A light, open, steel-skeleton frame consisting of open web, post-and-beam and/or rigid bent configurations.



## GLOSSARY

- PRE-ENGINEERED WALLS.** These walls are prefabricated panels constructed with two sheets or “skins” (interior and exterior) bonded to a core material. The core material is some type of wood fiber, urethane, polystyrene, perlite, foam insulation or some other type of material which has a low density. The thickness and the panel size vary. The panels can be anchored to brackets or connected to the structural frame of a building.
- PRE-FABRICATED WALL PANELS.** These walls are preengineered, unitized single-wall sections for small pre-fabricated booths and buildings, such as service stations.
- PRESTRESSED CONCRETE.** Concrete in which tension is placed on the stressing cables before the concrete has set. The concrete then bonds to the cables.
- Ⓒ **PRESSURE-ASSIST TOILET.** Toilet that uses air pressure, generated as the toilet tank refills, to produce a more forceful flush; some high-efficiency toilets (HETs) rely on pressure-assist technology.
- Ⓒ **PRESSURE-TREATED WOOD.** Wood that has been chemically treated to extend its life, especially when outdoors or in ground contact.
- PRIME COAT.** The first coat of paint, an undercoat, to prepare the surface for finish coats.
- PUMICE BLOCK.** Lightweight concrete block made with crushed pumice aggregate. Similar to cinder block and called by both names.
- PURLIN.** A horizontal structural member supporting the roof deck and resting on the trusses, girders, beams or rafters.
- QUANTITY SURVEY.** A method of cost estimation which considers a detailed count of all materials going into a structure, together with the cost of labor to install each unit of material.
- QUARRY TILE.** A hard-burned, unglazed clay or shale-type ceramic tile generally used as floor pavers.
- QUONSET BUILDINGS.** A prefabricated metal building having a semicircular (culvert) roof that curves to the ground to form the sides.
- RADIANT HEATING.** A system in which a space is heated by the use of concealed hot water pipe coils or electric resistance wires, normally placed in the floor or ceiling, allowing the heat to radiate into the room.
- RADIANT GAS HEATING.** Gas-fired suspended radiant unit heaters which may be connected to a continuous pipe loop system with vacuum pumps and reflectors.
- RAFTERS.** Structural members supporting the roof deck and covering.
- Ⓒ **RAIN GARDEN.** Storm water management which consist of excavated depressions and vegetation that collects and filters runoff and reduce peak discharge rates.\*\* Depending on the size of the project, harvesting rain water can be tied into the plumbing system to provide water to flush toilets and support landscaping\*\*
- RATE OF RISE DETECTOR.** A fire detector that indicates the presence of fire based on a sudden temperature increase, generally exceeding 15 degrees.
- Ⓒ **RECYCLING.** Collection, reprocessing, marketing and use of materials that were diverted or recovered from the solid waste stream.
- Ⓒ **REFLECTIVE ROOFING.** Roofing material that reflects most of the sunlight striking it to help reduce cooling loads. The Energy Star Cool Roof program certifies roofing materials that meet specified standards for reflectivity.
- REFRACTORY.** A material used to withstand high temperatures, such as refractory brick and concrete.
- Ⓒ **REGIONAL MATERIALS.** Materials originated within 500 miles of the specified sited area.
- REINFORCED GROUTED MASONRY.** Reinforced masonry which is laid up in spaced wythes with horizontal reinforcing and with the cavity filled with concrete grouting and vertical reinforcing bars.
- REINFORCING.** Strengthening. Steel rods or mesh are embedded in concrete to increase the strength in tension. Frequently used reinforcements for plaster are asbestos, wood and glass fibers.
- REINFORCING STEEL.** Steel bars used in concrete construction to give added strength; such bars are of various sizes and shapes.
- Ⓒ **RENEWABLE ENERGY.** Thermal or electrical energy produced using solar, wind, hydropower, or biomass energy sources.
- Ⓒ **RENEWABLE MATERIALS.** Amount of building materials that agriculturally grows rapidly within 10 years and can be harvest in an environmentally friendly fashion. (Example: Bamboo)

## GLOSSARY

**RIDGE.** The peak of a double-pitched roof.

**RIGID CONDUIT.** A rigid pipe used as a raceway and protective cover for electrical wiring.

**RESILIENT FLOOR COVERING.** Floor covering products characterized by having dense, nonabsorbent surfaces, available in sheet or tile form. Among the various types are vinyl composition (asbestos) tile, asphalt tile, vinyl tile and linoleum.

**RIGID FRAME.** A framing system in which columns and roof girders are joined rigidly at the knee.

**RIGID INSULATION.** Insulation made of foamed plastic or glass, cork or pulp (wood, cane, etc.) and assembled into lightweight boards.

**RISER.** The vertical face between two stair treads. Pipe for water, steam, or vent going vertically at least one story and servicing several fixtures.

**ROMEX.** A wiring trade name for nonmetallic sheathed electrical cable.

**ROUGH-IN.** Drain and water line hookups for laundry facilities or for future plumbing fixture installation.

**RUBBER FABRIC TILE.** A fibrous rubber, velvet-like floor covering made from recycled tires with a vulcanized backing, normally found in entryways.

**RUBBLE.** A local field stone. Masonry constructed from rough, unshaped stone without coursing or regularity laid as a veneer wall facing or as a solid wall.

**RUSTIC LOG WALL.** A solid wall using logs of various diameters. The logs are usually tongue and groove, spiked or doweled using weather sealant or caulking. Normally, the logs are pretreated with preservative.

**R VALUE.** The standard measurement of resistance to heat loss related to a given thickness of insulation required by climatic demands.

**SANDWICH PANEL.** Any wall or roof panel constructed in three layers. Examples include: two sheets of plywood with insulation between, metal one side, gypsum board on the other and insulation between, metal on both sides with insulation between, etc.

**SAWTOOTH ROOF.** A roof with serrated cross-section whose shorter, steep or vertical sides have fenestration for light and ventilation.

**SCR BRICK.** A patent brick with standard dimensions of 5-1/2" x 2-5/16" x 11-1/2". Holes through the brick provide a mechanical mortar bond designed for single-tier (course) walls.

**SCRATCH COAT.** The first coat of plaster, which is scratched or scored to provide a bond for second coat.

**SEALANT.** Any pliable or mastic material used to seal cracks, joints or other small openings to make them weathertight. Also liquids and tars used to seal the pores in concrete work.

**SEAMLESS PLASTIC.** A urethane or neoprene coating which is spray (thincoat) applied or troweled, generally with colored chips added, as a finished floor covering.

**SEPTIC TANK.** A watertight settling tank in which solid sewage is decomposed by natural bacterial action.

**SHAKE.** A shingle split (not sawed) from a bolt of wood and used for roofing and siding, or it can refer to a manufactured imitation.

**SHEAR WALL.** A bracing wall, either interior or exterior, designed to resist lateral forces, especially important in seismic and high wind-load design.

**SHORING.** Temporary structural columns, beams, and bracing, used to support loads during construction.

**SHUTTER.** A movable cover or screen to cover an opening.

**SIAMESE CONNECTION.** A Y-type plumbing inlet for fire hoses; usually found outside for a fire department connection.

**SILL.** The lowest horizontal framing member of a structure, resting on the ground or on a foundation. Also, the lowest horizontal member of a window or door casing.

**SINGLE-WALL CONSTRUCTION.** Each of the wall types listed under the single-wall construction category refers to a wall enclosure which is typically applied over an open skeleton of a metal or wood framed building. That frame characteristically has the same configuration for each cover.

**SKYLIGHT.** An opening in a roof, covered with plastic or glass, for light and ventilation.

**SLEEPERS.** A nonstructural timber, board, or metal strip laid on the ground or a basic floor to provide a component to which the finish floor may be fastened. It also may provide spacing for utility runs.

## GLOSSARY

- SLIP FORM CONSTRUCTION.** In concrete construction, forms that move continuously are jacked upward or forward supported by the concrete which was poured previously, shaping the new pour as it moves.
- SLOPE.** The ratio of rise to run to express the angle of a roof pitch.
- SLUMPED BLOCK.** Concrete blocks having a rough surface resembling adobe brick.
- © **SMART BUILDING.** Inclusion of integrated building services management technologies. A Smart building integrates hi-tech controls with building services so as to anticipate the needs of a building's occupants, providing improved comfort and greater energy efficiency. A Green building may incorporate smart building technologies, but not necessarily. However, most Smart buildings are probably Green as well.
- SMOKE DETECTOR.** A fire detector that indicates the presence of smoke based on a light-obscuring principle using photoelectric cells.
- SOFFIT.** The underside or lower horizontal face of any building component such as an overhang, stairs, arch, marquee, etc.
- © **SOLAR COLLECTOR.** Device for capturing solar energy and transferring heat to water or air that circulates through it.
- © **SOLAR REFLECTANCE INDEX (SRI).** Measurements on how well a material rejects heat from the sun, the index ranges from 0-100, which 0 is least reflectance and 100 being most reflectance, preventing the "Heat Island Effect" ( complementing the Reflective roofing).
- SPACE HEAT.** A complete individual suspended unit heater which uses a fan or blower system to move warm air. Typically found in large, open, shop areas.
- SPACE FRAME.** A three-dimensional roof structure. Architectural frames are decorative, usually used in atrium areas and may be chrome plated.
- SPAN.** The clear horizontal distance between two supports.
- SPANDREL BEAM.** The beam connecting two exterior columns and supporting the curtain wall.
- SPECIFICATION.** A written description of the materials, construction details, and quality of workmanship required to construct a building in accordance with a related set of plans.
- SPRINKLER SYSTEMS.** A fire-protective system of overhead pipes and outlet heads on a single main connection. There are two basic systems: a wet system, in which the pipes are always filled with water so that a head can be immediately discharged, and a dry system, in which the pipes are filled with air under pressure, with water flowing into the pipes with a drop in air pressure when the head is opened. The dry system can have a separate early alarm to counteract the time delay with closed heads, and this open head and independent detection is known as a preaction system. If a maximum of water is discharged from all the open heads, it is called a deluge system. The type of system, the spacing, the number and type of heads, and water pressure pipe sizing will depend on the hazard involved. There are three classifications: Extra Hazard (certain chemical/oil plants, paint shops, etc.); Ordinary Hazard (most industrial/warehouse facilities); and Light Hazard (almost all other occupancies).
- STACKED BOND.** Masonry units laid so that all joints are in line.
- STACKED PLUMBING.** In multistory buildings, placement of plumbing units one above the other.
- STAGGERED STUDS.** Wood framing in which the studs do not go completely through the wall. The lath or gypsum board wall finish on each side will be fastened to alternate studs. An insulation blanket may be woven between the studs to improve sound insulation.
- STANDPIPE.** An interior or exterior pipe to conduct water to upper floors for fighting fires. May be dry, with connection for pumper at street level, or wet, with water always at the upper floors. Also, a tall cylindrical water storage tank.
- STAY-IN-PLACE FORMING.** A wall constructed of poured-in-place concrete, where the forming material remains in place. The reinforcing is usually a bar set in a grid pattern within the form for the concrete wall. Forms used for the wall are usually some type of a rigid insulation board or metal panel and finish system. Thickness of these walls varies depending on the structural requirements of the building.

## GLOSSARY

**STEAM HEAT.** A heating system in which steam is generated using a boiler and piped to radiators throughout the building by its own pressure. Steam without a boiler is a radiator system receiving steam from an external source such as a central steam plant or adjoining building.

**STEEL FRAME CONSTRUCTION.** A framing system in which the weight of the superstructure is carried to the foundations by steel beams and columns.

**STORM DOOR.** An extra outside or additional door for protection against inclement weather. Such a door also serves the purpose of lessening the chill of the interior of a building, making it easier to heat, and helps to avoid the effects of wind and rain at the entrance doorway.

**STORM WINDOW.** A window placed outside an ordinary window for additional protection against severe winter weather. Also called a storm sash.

**STRESS.** The internal distributed force that resists the change in shape and size of a body subjected to external forces.

**STRESSED SKIN CONSTRUCTION.** A design in which frame and skin, or sheathing, are joined so that the skin may aid in resisting strains.

**STRESSKIN SANDWICH PANEL.** The additional cost for a stressskin sandwich panel wall is the difference between the cost of a solid insulated panel and stud framing as part of a wall. This unfinished bearing panel is composed of two skins of board sheathing bonded to a rigid insulation core. The core thickness can vary.

**STRETCHER COURSE.** Any course of masonry in which the units are laid lengthwise.

**STRUCTURAL.** Describing an element designed to resist stress or wear as opposed to architectural or art elements which are designed for appearance only.

Ⓢ **STRUCTURAL INSULATED PANEL (SIP).** Building panel usually made of oriented-strand board (OSB) skins surrounding a core of expanded polystyrene (EPS) foam insulation. SIPs can be erected very quickly with a crane to create an energy-efficient, sturdy home.

**STRUCTURAL POLYCARBONATE.** A structural honeycombed plastic sandwich panel used for roofing and siding of greenhouses.

**STUCCO.** A coating for exterior walls in which cement is put on wet in layers and when dry becomes exceedingly hard and durable.

**STUD (POST).** A vertical framing member, either wood or steel, to which wall finishes are attached. Usually, only lumber of dimensions of 2" x 6" or less or its steel equivalent is considered as studs. Also, bolt-like components, either threaded or unthreaded, fixed to structural elements to which other elements may be fastened.

**STRUT.** A brace or other member which resists stresses in the direction of its own length.

**SUBFLOOR.** Any surface on which finish flooring is laid.

**SUMP PUMP.** A suction device, usually operated to remove water or waste which collects at the sump pit or tank.

**SUPER FLAT SLAB.** This component is used to adjust for the cost of additional concrete finishing used to create an extremely level and smooth surface on a concrete slab. This type of finish is generally used in industrial applications with low cost representing normal labor with special care, while the high cost range represents mechanical grinding and finishing.

Ⓢ **SUPER INSULATE.** To insulate extremely well. A house with very efficient windows and tight construction results in very low heating and cooling costs.

**SUSPENDED CEILING.** This is the grid (track, T-bar, etc.) suspension system that supports an acoustical panel or tile ceiling.

Ⓢ **SUSTAINABILITY.** Sustainable refers to products and techniques that are renewable or recyclable and therefore minimize the natural resources they use.

Ⓢ **SUSTAINABLE BUILDING.** Essentially the same as Green building. Sustainable design is a philosophy centered on ecological sustainability.

Ⓢ **SUSTAINABLE FORESTRY.** The practice of managing forest resources to meet the long-term forest product needs of humans while maintaining the biodiversity of forested landscapes. The primary goal is to restore, enhance and sustain a full range of forest values-economic, social and ecological.

Ⓢ **SUSTAINABLE FORESTRY INITIATIVE (SFI).** Organization that certifies wood is harvested from sustainable forests.

## GLOSSARY

- SYNTHETIC MASONRY VENEER.** A synthetic thin masonry veneer composed of light plaster cement or fiberglass panels to give the appearance of real brick or stone, attached to stud framing.
- SYNTHETIC PLASTER ON RIGID INSULATION.** An exterior wall insulation and finish system (EIFS) consisting of rigid insulation board, reinforcing mesh and a synthetic plaster or stucco coating. Some common trade names are: Dryvit, Insul-Crete, R-wall, Powerwall and Sure-wall to name a few.
- TENANT IMPROVEMENTS (TIs).** Improvements to land or buildings to meet the needs of the tenants; may be paid for by the landlord or the tenant or be shared between them. Generally, TI's include those items or upgrades beyond the standard workletter, or common elements supplied by the landlord.
- TENDONS.** A term applied in construction to the bars or cables used in prestressing or poststressing concrete.
- TERNE.** Steel sheet coated with lead/tin alloy, used primarily for roofing.
- TERRA COTTA.** Hard-burned unglazed or glazed clay, usually molded into shapes for ornamentation of structural surfaces.
- TERRAZZO.** A flooring surface of marble chips in concrete. After the concrete has hardened, the floor is ground and polished to expose the marble chips. In epoxy terrazzo, the concrete filler material is replaced with plastic.
- © **THERMOSIPHON SOLAR WATER HEATER.** Solar water heater that operates passively (through natural convection), circulating water through a solar collector and into an insulated storage tank situated above the collector. Pumps and controls are not required.
- THERMOSTAT.** An instrument, electrically operated, which automatically controls the operation of a heating or cooling device by responding to changes of temperature.
- THRU-WALL HEAT PUMP.** A small, self-contained heat pump that is designed to be installed in a window opening or wall. Typically there is no ductwork with this unit. Unlike the larger heat pump, it only services one room.
- TEXTURED FACE BLOCK.** Solid masonry wall typically built with one or two rows of exposed, textured split, fluted or ground-face hollow-core concrete block and mortar.
- TEXTURED PLYWOOD.** Plywood siding usually applied in sheets. Exposed surface has been treated or vinyl coated to give the plywood a solid wood-board, stucco or lap siding effect. Panels are found in various grades, thicknesses and species of wood, with redwood and cedar being the most expensive and fir Texture 1-11 the cheapest. Generally, thicker pieces are more expensive. Normal application requires some type of a blocking material to be used for nailing purposes.
- TIE.** Any structural member that acts in tension to hold separated structural components together.
- TILT-UP CONSTRUCTION.** A method of construction where concrete wall sections are cast horizontally and tilted or lifted into position. Normally cast on-site using the floor slab as the casting slab. Multiple buildings can offer economies of scales, and may require an adjustment.
- TONGUE AND GROOVE JOINT.** Abbreviated T & G. Any joint made by one member with a projecting tongue fitting into another member with a matching groove.
- TORQUE.** A force tending to produce rotation.
- TRANSITE.** A trade name commonly used as a general name for a very dense material made from Portland cement and asbestos fibers and used for roofing and siding. It is also used for pipe and electrical conduit.
- TRUSS.** A rigid, open-web structural member designed and engineered to carry roof or floor loads.
- © **TUBULAR SKYLIGHT.** Round skylight that transmits sunlight down through a tube with internally reflective walls, even through an attic space to deliver daylight through a ceiling light diffuser. Most tubular skylights are 12 to 16 inches in diameter and deliver daytime lighting comparable to several 100-watt incandescent light bulbs.

## GLOSSARY

**U FACTOR.** The heat transmission factor of a wall, roof or floor assembly measured in B.T.U. per square foot per degree Fahrenheit.

**UNIFORM BUILDING CODE.** A model code published by the International Conference of Building Officials. It is the largest and probably most influential of the building code groups.

© **U.S. GREEN BUILDING COUNCIL (USGBC).** Organization devoted to promoting and certifying Green buildings. USGBC created the LEED rating system.

**VAPOR BARRIER.** Material used to retard the passage of moisture through floors, roofs or exterior walls and thus prevent condensation within them; also called moisture barrier. See waterproofing below. The segregated floor component considers a sand or gravel fill base also.

**VENEER.** A layer of material applied to another surface for ornamental or protective purposes. Masonry veneer is brick or stone attached to wood or metal studs.

© **VENTILATION RATE.** The amount of air circulated through space, measured in air changes per hour, to calculate this you must find the quantity of infiltration air in cubic feet per minute divided by the volume of the room).

**VIERENDEEL TRUSS.** An open truss composed of upper and lower chords joined by vertical struts. Since there is no diagonal bracing, horizontal forces are resisted by using hollow tubing for all components which are welded together into a rigid structure.

**VINYL COMPOSITION (ASBESTOS) TILE.** A resilient floor covering laid in mastic which is available in many colors and textures. Standard size is 12" x 12".

**VITROLITE.** An opaque structural sheet of glass generally found as a storefront feature.

© **VOLATILE ORGANIC COMPOUND (VOC).** Organic compound that evaporates readily into the atmosphere. As defined by the U.S. Environmental Protection Agency, VOCs are organic compounds that volatilize and then contribute to photochemical smog production.

**WAFFLE SLAB.** A two-way concrete slab formed with metal or plastic pans making a waffle pattern.

**WAINSCOT.** The lower part of an interior wall, which is finished with a different material than the upper part, for protection or appearance.

© **WASTE DIVERSION.** The amount of waste disposed other than through incineration or in landfills, expressed in tons. Examples can include reuse and recycling.

© **WASTE MANAGEMENT PLAN.** Plan that addresses the collection and disposal of waste generated during construction or renovation, usually including the collection and storage of recyclable materials.

**WATER HEATER, TANKLESS.** A device that instantly heats water, as the water flows through it. Unlike conventional water heaters, no water is retained internally except for what is in the heat coil.

**WATERPROOFING.** Any material designed to stop the passage of moisture. Plastic sheets or treated papers and asphalt are used for membranes, while various chemical sealants and asphalt applications are used to seal pores and cracks.

© **WATERSENSE.** Program developed and administered by the U.S. Environmental Protection Agency to promote and label water-efficient plumbing fixtures.

**WEATHERSTRIPPING.** Strips of felt, rubber, metal or other suitable material fixed along the edges of a door or window to keep out drafts and reduce heat loss.

**WIRE GLASS.** Glass which is reinforced with wire mesh.

**WOOD AND GLASS PANEL.** An exterior curtain wall system, consisting of high-cost wood siding and glass panels, which is hung on a frame.

**WOOD-FRAME CONSTRUCTION.** In building, a type of construction in which the structural members are of wood or are dependent upon a wood frame support. Same as fram construction.

**WOOD STRESSKIN SANDWICH PANEL.** The additional cost for a stresskin sandwich panel wall is the difference between the cost of a solid insulated panel and stud framing as part of a wall. This unfinished bearing panel is composed of two skins of board sheathing bonded to a rigid insulation core. The core thickness can vary.

**WORKING DRAWING.** A scale drawing showing construction details for use by the contractor or fabricator, showing details for the erection or manufacturing of a particular structural element.

© **XERISCAPE.** Landscaping method that makes routine irrigation unnecessary by using drought-adaptable and low-water plants, as well as soil additive like compost and mulches to reduce evaporation.

## GLOSSARY

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