

Contractor Dictionary

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

abstract of title A written summary of all transactions that could affect the ownership of a piece of real estate, including deeds, leases, liens and wills.

abutment A structure designed to receive a thrust, such as the supporting structure at either end of an arch or bridge.

accelerator In masonry, any ingredient that is added to mortar to speed drying and solidifying. Compare retarding agent.

acceptance Indication that a party assents or agrees to a contract or approves of the work done under a contract.

access panel A removable or swinging panel that is usually flush with adjoining surfaces to provide access to concealed equipment or system components for inspection and maintenance.

ACM see asbestos-containing material.

activity A scheduling term for the smallest work unit within a project: the basic building block of a project.

adaptive reuse Adapting an old or historical building for a new purpose.

addendum (plural: addenda) Written information adding to, clarifying, or modifying the bid package. An addendum is generally issued by the owner to the contractor during the bidding process and is intended to become part of the contract.

additive alternate An alternate bid that, if accepted, adds to the contract sum.

aggregate A coarse material, such as gravel, broken stone or sand, with which cement and water are mixed to form concrete. Crushed stone is usually designated as coarse aggregate and sand as fine aggregate.

air rights The right to use the space above a piece of real estate.

air space A cavity or space in walls, windows or other enclosed parts of a building between various structural members.

alabaster A compact, translucent, usually white form of gypsum that is often carved into lamps, vases and ornaments.

alligatoring A condition of paint or aged asphalt brought about by the loss of volatile oils and the oxidation caused by solar radiation. This 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.

allowance In the contract documents, an amount noted by the architect to be included in the contract sum for a specific item (e.g., a stipulated sum for carpeting or hardware that will be selected at a later date).

alteration Partial construction work performed within an existing structure; remodeling without a building addition.

alternate bid The amount to be added to or deducted from the base bid amount if alternate materials and/or methods of construction are required.

amenity area An area within the boundaries of a project that is intended for recreational purposes, such as a landscaped site area, a patio, a common area, a communal lounge, or a swimming pool.

anchorage An attachment for resistance to movement, such as overturning, sliding or uplift. The most common anchorage for these movements are tie-downs (hold-downs) for overturning and uplift, and anchor bolts for sliding.

aquifer An underground formation of sands, gravel, or fractured or porous rock that is saturated with water, and that supplies water for wells and springs.

arcade A row of arches supported by columns, which may be either attached to a building or freestanding.

arch A curved structural member, usually made of stone or brick and usually spanning an opening, that, supported by piers, abutments or walls, carries weight and resists pressure.

architect An individual who has completed a course of study in building and design, and is licensed by the state to practice architecture. The architect designs a building and often supervises its construction.

architect's basic services A recognized series of phases performed by an architect: 1) schematic design phase; 2) design development phase; 3) construction documents phase; 4) bidding or negotiation phase; and 5) construction phase.

architectural drawing A line drawing showing plan and/or elevation views of a proposed building in order to indicate its overall appearance.

architrave Moldings around openings and certain other locations to conceal joints or for decorative purposes. In a classical entablature, the horizontal element above the columns and below the frieze.

artificial stone A mixture of stone chips or fragments embedded in a matrix of cement or plaster with the surface ground, polished, molded or otherwise treated to simulate stone. Includes materials variously called art marble, artificial marble, cast stone, terrazzo, patent stone and reconstructed stone. Compare natural stone.

asbestos A group of natural, fibrous, impure silicate materials, formerly used for its noncombustible properties; no longer used because it causes the disease asbestosis.

asbestos-containing material (ACM) Any material that contains more than one percent asbestos. Miscellaneous ACM is interior asbestos-containing building material on structural components, such as floor and ceiling tiles; it does not include surfacing material or thermal system insulation.

as-built drawings or as-builts see record drawings.

ashlar Masonry composed of rectangular units of burned clay or shale, or stone, generally larger in size than brick, and properly bonded, having sawed, dressed or squared beds, and joints laid in mortar. In random ashlar, the unit size varies to provide an alternating pattern.

asphalt A brown to black bituminous pitch that occurs naturally or is made from a residue of petroleum refining; used for pavements, roofing, and as a waterproofing cement. See bitumen.

assignment Transfer of the rights and duties under a contract from one party to another.

awarding authority The owner or the agent of the owner who awards an original building or construction contract, also known as the prime contract. This term is generally used with governmental contracts.

axial In a direction parallel to the long axis of a structural member. An axial force causes tension or compression stress over the cross section of a member.

axonometric projection A drafting projection in which objects on the drawing appear inclined with three sides showing and with horizontal and vertical distances drawn to scale but the diagonal and curved lines distorted.

backcharge Billings for work performed or costs incurred by one party that, under the contract, should have been performed or incurred by the party to whom billed. Owners bill backcharges to general contractors, and general contractors bill backcharges to subcontractors. Backcharges include bills for cleanup work and damage repair.

backfilling Filling in any previously excavated area.

backout Work the framing contractor does after the mechanical subcontractors (heating, plumbing, and electrical) finish their phase of work at the rough stage (i.e., before insulation) to get a house or other building ready for a municipal frame inspection. In general, the framing contractor repairs anything disturbed by others and completes all framing necessary to pass the inspection.

balloon framing In carpentry, the lightest and most economical form of construction, in which the studs extend in one piece from the foundation sill plate to the top plate supporting the roof. Compare platform framing.

basalt A hard, dense, dark, volcanic rock used extensively as a paving stone and occasionally as a building stone.

base bid An agreed construction sum based on the contract documents.

basis for acceptance The method of determining whether construction material is acceptable under given or accepted specifications.

batt Insulation in the form of a blanket, rather than loose or blown filling.

batten Narrow strips of wood used to cover joints or as decorative vertical members over plywood or other wide boards.

batter To recess or slope masonry back in successive courses; the opposite of corbeling.

batter board A temporary framework used to assist in locating the corners when laying a foundation; also used to maintain the proper elevations of structures, excavations, and trenches in any kind of below-ground construction.

bead A narrow line of weld metal or sealant, or a strip of metal or wood used to hold a sheet of glass in place. Also a feature with a narrow, convex molding profile.

beam A horizontal structural member, usually of wood, steel or concrete, that is supported at two or more points but not throughout its length. Sometimes called a girder.

bearing The part of a joist, rafter, truss or beam that actually rests on its support and the area of the support on which it rests.

bearing wall A wall that supports any vertical load in addition to its own weight. A bearing partition also supports a vertical load.

bed The horizontal surface on which the bricks of a wall lie in courses; also the mortar on which the brick rests.

bedrock A subsurface layer of earth that is suitable to support a structure.

bell That portion of a pipe which, for a short distance, is sufficiently enlarged to receive the end of another pipe of the same diameter for the purpose of making a joint.

below-grade The portion of a building that is below ground level.

bevel The sloping surface formed when two surfaces meet at an angle that is not a right angle.

bid A formal offer by a contractor, in accordance with the specifications for a project, to do all or a phase of the work at a certain price in accordance with the terms and conditions stated in the offer. Also known as a proposal.

bid bond A bond issued by a bonding company on behalf of a contractor that provides assurance to the recipient of the contractor's bid that, if the bid is accepted, the contractor will sign the contract and provide a performance bond. The bonding company is obliged to pay the recipient of the bid the difference between the contractor's bid and the bid of the next lowest responsible bidder if the bid is accepted and the contractor fails to sign the contract or to provide a performance bond. See bid security.

bid date/time The due date and time set by the owner, architect or engineer for receiving bids.

bid form A standard written form furnished to all bidders for the purpose of obtaining the requested information and required signatures from the authorized bidding representatives.

bid opening The actual process of opening and tabulating bids submitted within the prescribed bid date/time and conforming with the bid procedures. A bid opening can be open (when the bidders are permitted to attend) or closed (when the bidders are not permitted to attend).

bid package The group of documents issued to general contractors who are bidding on a construction project, consisting of the published advertisement or written invitation to bid, the instructions to bidders, the bid form, the bidding requirements, and the contract documents, including any addenda issued before the receipt of bids. Also known as the bidding documents.

bid price The total amount stated in a bidder's bid.

bid rigging A fraudulent practice involving collusion (i.e., secret agreements) between or among competing contractors or owners' agents to control the outcome of a bidding procedure—usually ensuring that a chosen contractor submits the lowest bid.

bid security Funds or a bid bond submitted with a bid as a guarantee to the recipient of the bid that the contractor, if awarded the contract, will sign and perform the contract.

bid shopping An unethical practice by which a contractor, both before and after his or her bid is submitted, attempts to obtain prices from potential subcontractors and material suppliers that are lower than the contractor's original estimates that formed the basis of his or her bid, or after a contract is awarded, seeks to induce subcontractors to reduce the subcontract price included in the bid. Bid shopping often involves playing one proposed subcontractor or supplier against the other.

bid tabulation A summary sheet listing all bid prices for the purpose of analyzing the bid results. Bid tabulations include the items required in the invitation to bid and usually include bid price, completion time, addenda, contract exclusions, and bonding rate.

bid time see bid date/time.

bidder A prime contract who submits a bid directly to an owner.

bidding documents see bid package.

bidding or negotiation phase The fourth phase of the architect's basic services, in which the various bids from contractors are evaluated and negotiation on such matters as price and specifications takes place.

bidding period The period during which contractors can prepare their bid proposals, lasting from the issuing of the bidding requirements to the bid date/time.

bidding requirements The procedures and conditions for the submission of bids. Contractors must understand these and abide by them. They include the bid package (i.e., advertisement or invitation to bid and instructions to

bidders), any supplementary instructions to bidders, the bid form, and other sample bidding and contract forms. The owner usually reserves the right to reject bids that are not submitted according to the bidding requirements.

biological contaminants Agents that are derived from or are living organisms (e.g., viruses, bacteria, fungi, and mammal and bird antigens) and that can be inhaled and can cause many types of health effects, including allergic reactions, respiratory disorders, hypersensitivity diseases, and infectious diseases. Also known as microbiologicals or microbials.

bitumen Any of various mixtures of hydrocarbons occurring naturally or obtained through the distillation of coal or petroleum. Adjective: bituminous. See asphalt; coal tar pitch.

bleeding The migration of a liquid to the surface of a component or into/onto an adjacent material. For example, the upward movement of asphalt in an asphalt pavement resulting in the formation of a film of asphalt on the surface, or in painting, the penetration of color from the underlying surface, spoiling the appearance of the top coat. The term is also used in referring to the process of drawing air from water pipes, as in bleeding a radiator.

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

block out To install a box or barrier within a foundation wall to prevent concrete from entering an area. For example, foundation walls are sometimes “blocked” in order to pass mechanical pipes through the wall, to install a crawl space door, or to depress the concrete at a garage door location.

blocking In carpentry, the process of fastening together two pieces of board by gluing blocks of wood in the interior angle. In masonry, a system of tying together two brick walls that were not built at the same time; the two adjoining or intersecting walls are tied together by offset or toothing.

bloom A clouded appearance on a painted or varnished surface, usually caused by reactive materials in the paint coming into contact with dust, oil, deposits from gases in the air or soluble matter in rain.

blue stake A procedure involving a utility company (e.g., telephone, gas, electric, cable TV, sewer and water) sending a representative to a job site who locates and spray paints the ground and/or installs little flags to show where the company’s service is located underground.

blueprints Architectural plans for a building or construction project, which are likely to include floor plans, footings and foundation plans, elevations, plot plans, and various schedules. Blueprints are used for design and planning, for securing permits, and for the actual construction.

boilerplate Standardized, formulaic or hackneyed language in a contract.

bond In masonry, the patterns in which and the methods by which brick, concrete blocks and stone are installed. In contracting, an amount of money (usually \$5,000 to \$10,000) that must be on deposit with a governmental agency to secure a contractor’s license. The bond may be used to pay for the unpaid bills or disputed work of the contractor. For contracting uses, see also bid bond; bonding company; completion bond; labor and materials bond; payment bond; performance bond; surety bond).

bondability The ease or difficulty in bonding a material with adhesive. Also the ease or difficulty of a contractor in obtaining a surety bond.

bonding company A licensed firm or corporation willing to execute a surety bond, payable to the owner, securing a contractor’s performance on a contract either in whole or in part, or securing payment for labor and materials. Also known as a surety.

bow A curve, bend or other deviation from flatness in glass.

brace A diagonal framing member fastened to major horizontal and vertical members to provide a triangle and thereby stiffen the framing.

breach of contract A material failure to perform an act required by a contract.

brick A solid masonry unit of clay or shale, usually formed into a rectangular prism while plastic and burned or fired in a kiln. Brick grades are designations for durability: SW for severe weathering (used when high resistance to freezing is needed); MW for moderate weathering; NW for negligible weathering (used for interior masonry). Brick veneer is a facing of brick tied to a wood frame or masonry wall that serves as a wall covering only and carries no structural load.

bridging architect An owner's architect who designs the project and then is replaced by the design/build company's architect who prepares for and oversees the construction.

British Thermal Unit (BTU) The heat required to increase the temperature of one pound of water by one degree Fahrenheit.

brown coat The coat of plaster directly beneath the finish coat. In two-coat work, the brown coat is the base coat plaster applied over the lath; in three-coat work, the brown coat is the second coat applied over a scratch coat. Brown coats have a fairly rough surface, in order to receive the finish coat.

brownfield site A building site that has been built on previously and may be polluted with toxic chemicals. Compare greenfield site.

BTU see British Thermal Unit.

buckling The collapse or structural failure, in the form of a sudden sideways movement, of a slender element subjected to compression.

builder's risk insurance Insurance coverage on a construction project during construction, including extended coverage that may be added to the contract for the customer's protection.

building code The legal minimum requirements established or adopted by a government agency for the design and construction of buildings. The purpose of these rules is to protect the public health and safety.

building envelope The outer structure of a building. Also known as building shell.

building inspector A qualified government representative authorized to inspect construction for compliance with applicable building codes, regulations and ordinances. Courts have ruled that building inspections are exempt from errors and omissions liabilities.

building insurance Insurance covering the structure of a building.

building paper General term for papers, felts and similar sheet materials widely used in buildings. Building paper comes in long rolls, and is usually applied underneath or behind exterior finish material in wood-frame construction.

building permit A document issued by the appropriate governmental authority permitting construction to begin on a project in accordance with the drawings and specifications that have been approved by the authority.

bullnose Any material with a rounded edge, such as a concrete block, ceramic tile, brick, window sill, partition or bottom step (see step return).

burlap A coarse fabric of jute, hemp, or less commonly, flax, for use as a water-retaining covering in curing concrete surfaces; also called Hessian.

bushing A removable cylindrical lining used to limit the size of an opening, resist abrasion, or serve as a guide. Also a pipe fitting with both male and female threads used to connect pipes of different sizes.

butt join To place materials end-to-end or end-to-edge without overlapping.

buttering In glazing, the application of sealant or compound to the flat surface of some member before placing the member in position. In masonry, placing mortar on a masonry unit with a trowel before laying the unit.

buttress A projecting structure of masonry or wood to support or give stability to a wall or building and to react against horizontal outward forces.

caisson A foundation pier, either circular or rectilinear in plan, usually sunk to the bedrock by means of gravity or compressed air, or by the open-well method. A caisson often penetrates through unsatisfactory soil to rest on an underlying stratum of rock or satisfactory soil.

caliber The internal diameter of a tube.

calibrate To verify the graduations of an instrument and adjust them if necessary.

cant strip A strip of material, usually made of treated wood or fiber, with a sloping face, that is used to ease the transition from a horizontal to a vertical surface at the edge of a flat roof or at the junction of a flat deck and a wall. It prevents the roofing material from abruptly stopping at the parapet wall and also helps prevent leakage at that juncture. May be used under shingles at gable ends.

cantilever An overhang: a structural shape, beam, truss or slab that extends beyond its last point of support.

casement window A window with hinges on one of the vertical sides allowing it to swing open like a door.

cast iron Iron with a high carbon content; because of this, it is not classified as steel. It is cast in a mold.

caulk To seal and waterproof cracks and joints, especially around window and exterior door frames. Caulking is the flexible material used as the sealant.

cavity wall A masonry wall that includes a continuous air space between its outermost wythe and the remainder of the wall.

CC&Rs see covenants, conditions and restrictions.

cement The gray powder that is the "glue" in concrete. It comes in mixtures ranging from Rich (consisting of one part cement, two parts sand, and three parts coarse aggregate), used for concrete roads and waterproof structures, to Lean (consisting of one part cement, three parts sand, and six parts coarse aggregate), used for all mass concrete work, large foundations, backing for stone masonry, etc. See portland cement.

centering Temporary formwork for the support of masonry arches or lintels during construction. Also known as center(s).

ceramic A substance made of clay and permanently hardened by heat.

certificate for payment A document forwarded to the general contractor by the architect, engineer or owner approving payment for work completed.

certificate of insurance A document provided by the general contractor verifying that she or he has obtained the required insurance for the project. The certificate is issued by the insurance company or its agent and confirms the existence of the insurance, the coverage and its expiration date.

certificate of occupancy (CO) A document issued by the local municipality that is required before anyone can occupy or live in a building or house. It is issued only after the municipality has made all the necessary inspections and the required fees have been paid.

certificate of substantial completion A document sent to the general contractor by the architect, engineer or owner indicating that the project is sufficiently complete to initiate the period for the final payment to the contractor. See substantial completion.

cesspool A subterranean container for the temporary storage of septic tank effluent while it soaks into the adjoining soil.

chamfer A bevel on the corner or edge of a piece of wood or masonry. Chamfered rustication is stonework in which the stones are so deeply beveled that they join at an internal right angle.

change order A document that modifies the plans, specifications, contract sum and/or contract time. The document must be signed by both the owner and the contractor authorizing the change, although a change order may be signed by the architect or engineer, provided she or he has written authority from the owner to do this and that a copy of such written authority is given to the contractor upon request. A change order usually authorizes additional compensation or time; one that authorizes less compensation or time is known as a deduction. A change order proposal is the document before it has been approved by the contractor and owner, and can be issued by either party.

channels In ceiling construction, carrying channels are the heaviest integral supporting member in a suspended ceiling; also known as main runners, they are supported by hangers attached to the building structure and in turn support various grid systems and the furring channels or rods to which lath is fastened. Furring channels are the smaller horizontal members of a suspended ceiling that are applied at right angles to the underside of carrying channels and to which lath is attached.

chase A groove made in a masonry wall or through a floor to accommodate pipes or ducts.

checking The fissures that appear with age in many exterior paint coatings (and in siding or lumber). These are superficial at first, but in time may penetrate entirely through the coating. Also the pattern of irregular surface cracks on the top pour of an asphalt roof (see alligating).

chipboard A manufactured wood panel made out of wood chips and glue. Often used as a substitute for plywood in exterior wall and roof sheathing. Also known as oriented strand board (OSB) or waferboard.

circuit breaker A switch that stops the flow of current by opening the circuit automatically when more electricity flows through the circuit than the circuit is capable of carrying; resetting may be either automatic or manual. See fuse.

cistern A tank to catch and store rainwater.

cladding Exterior building surfacing panels made of metal.

cleavage The natural tendency of certain materials, especially stone and crystal, to fracture or split in definite directions determined by the molecular or physical structure of the material.

closed bid An arrangement by which only invited bidders or estimators are given access to the project request for proposal (RFP). This option is for owners seeking bids or estimates from a prequalified and selected list of contractors. Compare open bid.

cloud A marking on a drawing consisting of a billowing line surrounding portions of the drawing involved in a change, usually identified with a numbered delta symbol.

CO see certificate of occupancy.

coal-tar pitch (tar) A bituminous material that is a by-product from the coking (distillation) of coal. It is used as the waterproofing material for tar and gravel built-up roofing.

cobwebbing Premature drying of a liquid surface causing a spiderweb effect.

coffer A recessed panel in a ceiling or dome.

collar beam In carpentry, a tie that keeps the roof from spreading by connecting similar rafters on opposite sides of the roof.

collusion A secret agreement or conspiracy between two or more individuals having a fraudulent or deceitful purpose. Bid rigging is a form of collusion.

column A vertical freestanding load-carrying member (primarily for roofs and ceilings), usually with a height at least three times its diameter. It may be square, rectangular or cylindrical and is usually composed of a base, shaft and capital.

columniation The arrangement of columns in a building.

commissioning Start-up of a building that includes testing and adjusting heating, ventilation and air conditioning (HVAC), electrical, plumbing, and other systems to assure proper functioning and adherence to design criteria; also includes the instruction of building representatives in the use of the building systems.

competitive bidding The process of two or more contractors submitting proposals for the same work at the same time. See bid.

completion bond A bond guaranteeing to a lender that the project will be completed free of liens.

completion date The date stipulated in the construction contract for substantial completion.

compressor A mechanical device that pressurizes a gas in order to turn it into a liquid, thereby allowing heat to be removed or added. A compressor is the main component of conventional heat pumps and air conditioners.

concave Curved or rounded inward like the inside of a bowl. Compare convex.

concrete A mixture of portland cement, sand, gravel and water. Used to make garage and basement floors, sidewalks, patios, foundation walls, etc., concrete is commonly reinforced with steel rods (rebar) or wire screening (mesh).

concrete block A hollow masonry unit made from portland cement, sand, crushed stone and other aggregates.

condensation Beads or drops of water (and frost in very cold weather) that accumulate on the inside of the exterior covering of a building. Louvers or attic ventilators reduce moisture condensation in attics, and a vapor barrier under the gypsum, lath or drywall on exposed walls also reduces condensation.

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.

construction change directive A document that directs a change in the work of the project, prepared by the architect and signed by the owner and architect. This change can adjust the contract sum and/or contract time. This document may be used in the absence of the contractor's agreement on the terms of a change order.

construction costs The direct contractor costs for labor, materials, equipment and services, and the contractor's overhead and profit. Construction costs do not include the fees paid to architects, engineers and consultants, the cost of the land and rights-of-way, or other costs that are defined in the contract documents as being the responsibility of the owner. Also known as hard costs. See soft costs.

construction documents All drawings, specifications and addenda associated with a construction project.

construction documents phase The third phase of the architect's basic services in which the architect prepares working drawings, specifications and bidding information. Depending on the architect's scope of services, he or she may assist the owner in the preparation of bid forms, the conditions of the contract, and the form of agreement between the owner and contractor.

construction inspector see project representative.

construction management Organizing and directing personnel, materials and equipment to accomplish the purpose of the architect or designer. These activities are over and above normal architectural and engineering services, and contribute to the control of time and cost.

construction management contract A written agreement giving the responsibility for the coordination and accomplishment of the overall project planning, design and construction to a construction management firm. The building team generally consists of the owner, contractor and designer or architect.

construction manager An individual or entity who provides construction management services, either as an advisor or as a contractor.

construction phase The fifth and final phase of the architect's basic services, which includes the architect's general administration of the construction contract.

construction schedule A timetable setting out the times for starting and completing each of the operations required by a project.

consultant An individual hired by the owner or client to give professional advice.

contract An agreement or covenant between two or more individuals or entities in which each is bound to do or refrain from doing some act and each acquires a right to what the other promises. In law, most contracts involve an offer and its acceptance for a consideration (i.e., a benefit: for the owner, having a job done; for the contractor, being paid for doing the job). The consideration involves the actual performance of the contract, which is what most bond issues are concerned with. A contract may be either oral or written, but construction contracts should always be written. A good contract should include the contractor's name, business address, and license number; a statement regarding where to file a complaint; information about arbitration procedures; a statement concerning building permits, inspections and tests; the contract time (schedule); a detailed description of the work to be done, including plans and specifications; a statement regarding change orders; the contract sum and a schedule of progress payments with actual amounts listed; a statement by the contractor regarding lien releases upon satisfactory payment for work performed; a statement that the owner has the right to require performance bond and payment bond from the contractor; and a statement of the owner's right to cancel.

contract award An owner's notice to a contractor that a bid has been accepted and a contract will be entered into.

contract bond see payment bond; performance bond.

contract date see date of agreement.

contract documents The documents that comprise a construction contract, consisting of the agreement between owner and contractor, the conditions of the contract (general conditions and special conditions), drawings, plans, specifications, and addenda issued before the contract is signed; also included are modifications issued after the contract has been signed.

contract overrun or underrun The difference between the original contract sum and the final completed cost, including all adjustments by approved change orders.

contract period The elapsed number of working days or calendar days from the specified date of commencing work to the specified date of completion, as stated in the contract.

contract sum The amount stated in the contract for the owner to pay to the contractor for doing the work of the contract. The contract sum can be altered only through a change order.

contract time The period established in the contract for completing the project, usually stated in working days or calendar days. The contract time can be adjusted only through a change order.

contraction joint see expansion joint/contraction joint.

contractor An individual or company that is licensed to perform certain types of construction activities and enters into contracts to perform these activities. Some of the specialty contractor licenses involve extensive training, testing and/or insurance requirements. There are various types of contractors: A general contractor is responsible for the execution, supervision, and overall coordination of a project and may also perform some of the individual construction tasks. Most general contractors are not licensed to perform all specialty trades and must hire specialty contractors for such tasks (e.g., masonry, electrical, plumbing). A remodeling contractor is a general contractor who specializes in remodeling work. A specialty contractor is licensed to perform a specialized task or trade. A subcontractor is a general or specialty contractor who works for another general contractor. On a project, the prime contractor is the general contractor who has signed the contract with the owner and who employs other contractors to perform some or all of the work.

contractor's option A written provision in the contract documents giving the contractor the option of selecting certain specified materials, methods or systems without changing the contract sum.

contractor's qualification statement A written statement of the contractor's experience and qualifications that is submitted to the owner during the contractor selection process. The American Institute of Architects publishes a standard form for this purpose.

contractual liability The liability assumed by a party under a contract.

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

convex A protruding rounded surface that is curved like the exterior of a bowl or sphere. Compare concave.

coping The material or masonry units that form a cap or finish on top of a wall, pier, pilaster or chimney. Coping protects the masonry below from the penetration of water from above.

corbel A shelf or ledge that is formed by projecting successive courses of masonry out from the face of the wall. Compare batter.

cornice The exterior detail at the meeting of a wall and a roof overhang, usually at the base of the parapet. Also, a decorative molding at the intersection of a wall and a ceiling. In a classical entablature, the element above the frieze.

cost breakdown A detailed summary of all the anticipated costs on a construction or renovation project. See schedule of values.

cost code A numbering system given to specific kinds of work for the purpose of organizing the cost control process of a project.

cost estimate A preliminary statement of approximate cost, determined by one of the following methods. Area and volume method: cost per square foot or cubic foot of the building. Unit cost method: cost of one unit (e.g., a fully equipped office workstation) multiplied by the number of units in the project. In-place unit method: cost in place of a unit (e.g., doors, cubic yards of concrete, squares of roofing).

cost-plus-fee agreement A written agreement under which the contractor is reimbursed for his or her direct and indirect costs and, in addition, is paid a fee for his or her services. The fee is usually stated as a stipulated sum or as a percentage of the total cost. Also known as cost plus.

countersink A funnel-shaped enlargement of a drilled hole that allows a screw head to be flush with the surface of the drilled material.

course A single horizontal layer of brick, stone or other building material. Compare wythe.

cove molding Concave-shaped molding used to cover an interior angle, such as that between the ceiling and a wall.

covenants Rules governing the physical appearance of buildings in a particular geographic area. Typical covenants deal with building height, appropriate fencing and landscaping, and the type of exterior material (e.g., stucco, brick, stone, siding) that may be used.

covenants, conditions and restrictions (CC&Rs) The basic rules establishing the rights and obligations of owners of real estate within a subdivision in relation to other owners within the same tract and in relation to any residents' association. These are usually concerned with the use and appearance of properties.

crazing Minute interlacing cracks on the surface of a finish (e.g., ceramic); also, hairline cracks in paint film.

creosote A brownish oily liquid that is obtained by the distillation of coal tar and used as a wood preservative.

critical path The set of activities that must be completed on time for a project completion date to be met. Activities on the critical path have no slack time. The Critical Path Method (CPM) is a scheduling and control diagram showing the respective tasks and activities involved in a project.

curing The process of concrete or mortar hardening, rubber vulcanizing, adhesive achieving its maximum strength, or paint film hardening. With concrete, the length of time required for curing is dependent on the type of cement, mix proportion, required strength, size and shape of the concrete section, and weather. The period may be three weeks or longer for lean concrete mixtures used in structures such as dams or only a few days for richer mixes.

curtain wall An exterior wall that is not load-bearing, is supported by the structural steel or concrete frame of a building, and is independent of the wall below. Also, a metal (usually aluminum) framing system on the face of a building containing vision glass panels and spandrel panels made of glass, aluminum or other material.

dado (plural: dados) The lower part of an interior wall when differently surfaced from the upper part (see wainscot). Also, a groove cut into a board or panel intended to receive the edge of a connecting board or panel.

daily construction report A record that provides information to off-site personnel who need to know important details of events as they occur daily and hourly. Such reports offer historical documentation that might later have a legal bearing in the event of a dispute. Each report should be numbered to

correspond with the working days established on the progress schedule. In the event of no-work days, a daily report should still be made, noting why no work was done (e.g., rain, strike). Reports should include a description of the weather; a record of the total number of employees on-site; subcontractors listed by name; work started and completed; equipment on-site; job progress; names and titles of visitors; accidents and safety meetings; and a remarks column.

dampproofing The process of coating the outside of a foundation wall with a special preparation to resist the passage of moisture through the wall. Dampproof material is also used to resist the passage of moisture through concrete floor slabs and from masonry to wood. A dampproof course is material placed just above the ground level in a brick or stone wall to prevent ground moisture from seeping up through the structure.

date of agreement Usually the date on the front page of an agreement or in the first clause; otherwise, it may be the date opposite the signatures indicating when the agreement was actually signed. Sometimes refers to the date of the contract award.

date of commencement of the work The date established in the notice to proceed from the owner to the contractor.

date of substantial completion see substantial completion.

dead air space A confined space of air that tends to reduce both conduction and convection of heat. It is used in virtually all insulation materials and systems. Also known as still air space.

deck The structural skin of a roof, installed over the supporting framing members. The deck is the substrate; that is, the surface to be covered with roofing materials.

decking A material used to span across beams or joists to create a floor or roof surface.

deductive alternate An alternate bid that, if accepted, reduces the contract price.

default A material failure in the performance of a contract.

deflection The displacement or bending of a structural member by the application of external force.

degree day A measure of the severity of a heating period, usually an entire season, based on climatic conditions. It is found by determining from weather records for each day the difference between 65 degrees Fahrenheit and the mean temperature for that day. It is often used in estimating fuel requirements and the heating load of a building.

delta The fourth letter in the Greek alphabet; the capital delta is shaped like an equilateral triangle. A numbered delta symbol is used on contract drawings to identify changes. See cloud.

design A graphical representation consisting of plan views, interior and exterior elevations, sections, and other drawings and details that depict the goal or purpose of a building.

design-build construction When the prime contractor bids or negotiates to provide both design and construction services for an entire project.

design concept An architectural idea that is depicted in drawings and specifications with the expectation that it will be faithfully executed by the contractor.

design development phase The second phase of the architect's basic services in which the architect prepares drawings and other presentation documents to establish and describe the size and character of the entire

project in terms of architectural, structural, mechanical, and electrical systems, materials, and other essentials. The architect also prepares a statement of probable construction costs.

design professional An individual who is educated and skilled in the field of building design or related structural and environmental systems.

detail A large-scale drawing of construction parts or items, showing materials, composition and dimensions.

diagnostic architecture The science and practice of analyzing building failures to determine the causes and to devise repair methods or corrective measures.

direct costs see construction costs.

direct job overhead A firm's overhead expense that is directly attributable to particular projects and that would not be incurred if no projects were under way.

direct labor The actual cost of the labor payroll for all jobs worked on during the period covered by an income statement.

direct-labor burden A term that refers to all payroll taxes, insurance and employees' benefits associated with the labor payroll.

doorjamb The surrounding case into and out of which a door closes and opens. It consists of two upright pieces, called side jambs, and a horizontal head jamb.

dormer A framed window unit projecting through the sloping plane of a roof.

double-glazing Two parallel sheets of glass with dead air space between them that improves insulation against heat transfer and/or sound transmission. The air between the glass sheets is thoroughly dried and the space is sealed, eliminating possible condensation and providing superior insulating properties.

double-hung window A window with two vertically sliding sashes, both of which can move up and down.

dowel A short cylindrical headless rod of wood or steel inserted into adjoining members to keep them in alignment and hold them together.

down time The time during which equipment is out of service for essential maintenance or emergency repairs.

draw The amount of progress payments on a contract that is currently available to a contractor under a contract with a fixed payment schedule.

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

drawing outline A top-view drawing of a building or roof showing only the perimeter, drawn to scale.

drawings In the contract documents, the graphic illustrations of the design, location and dimensions of the components of a project.

dressed and matched (D&M) see tongue and groove.

drip A groove or slot cut beneath and slightly behind the forward edge of a projecting stone or wood member, such as a sill, lintel or coping, to cause rainwater to drip clear of the side of the building below it and prevent it from penetrating any walls.

dry masonry Masonry work laid without mortar.

dry rot A fungus that decays wood in the presence of moisture and warm conditions and in the absence of light. The result is dry and crumbly wood, but all fungi require considerable moisture for growth.

drywall Wall materials, such as gypsum wallboard or wood paneling, that do not involve the use of plaster. Drywall construction involves the interior wall finish being applied in a dry condition. Greenboard drywall has a greater resistance to moisture than regular (white) plasterboard and is used in bathrooms and other wet areas. A drywall finish is an interior wall and ceiling finish other than plaster (e.g., gypsum board, plywood, fiberboard panels). As a verb, drywall refers to the installation process. See Sheetrock; waterboard.

duct A pipe, tube or channel carrying air, gas, liquid or wires. In general, a heating system: usually round or rectangular metal pipes installed for distributing warm (or cold) air from the furnace to rooms in a building. The installation process is called duct work.

dump fee The amount charged for dumping job-site debris in a landfill or dump site.

Dutch bond see English bond.

E&O insurance see errors and omissions insurance.

eased edges The slight rounding of the corners of a piece of finish lumber, or the tapered, slightly rounded factory edge of gypsum board.

easement A formal contract that allows one party to use another's property for a specific purpose. For example, a sewer easement might allow one party to run a sewer line through a neighbor's property.

eaves The lower part of a roof that projects beyond or overhangs the face of the walls. An eaves soffit is the under surface of the eaves.

effluent Treated sewage from a septic tank or sewage treatment plant.

electrical rough Work performed by the electrical contractor after the plumber and heating contractor have completed their phase of work. Normally during this phase, all electrical wires, and outlet, switch, and fixture boxes are installed, before insulation.

electrical trim Work performed by the electrical contractor when the house is nearing completion, to get it ready for and to pass the municipal electrical final inspection. This involves installing all plugs, switches, light fixtures, smoke detectors, and ventilation fans, wiring the furnace, and making up the electric house panel.

elevated floor A floor system not supported by a subgrade.

elevated slab A roof slab or floor supported by structural members.

elevation An exterior side of a building. An interior elevation is a architectural drawing showing the projection on a vertical plane of an interior surface of a building.

elevation sheets The pages on the blueprints that depict a house or room as if a vertical plane were passed through the structure.

emulsion A water-thinned paint containing a nonvolatile substance as its binding medium. In roofing, a coating consisting of asphalt and fillers suspended in water.

end dams Internal flashing (i.e., a dam) that prevents water from moving laterally within a curtain wall or window wall system.

English bond Brickwork laid with alternating courses, each consisting entirely of headers or stretchers. Also known as Old English bond or Dutch bond.

entablature In classical architecture, the horizontal parts just above the columns, divided into architrave (below), frieze, and cornice (above).

environmental impact report A report that examines and considers all likely effects on the environment caused by a proposed development of land, and recommends measures for avoiding, reducing or offsetting any significant adverse effects.

equitable lien A lien that is given to an improver of a property to prevent the unjust enrichment of a property owner or a construction lender.

ergonomics An applied science that investigates the effect of people's physical environment on their health and comfort. An instance would be determining the proper chair height for computer operators.

errors and omissions insurance (E&O insurance) Insurance carried by architects and engineers to indemnify their clients against losses caused by the professional negligence of the architect or engineer. Also known as professional indemnity insurance or malpractice insurance.

estimate The amount of labor, materials and other costs that a contractor anticipates for a project, as summarized in the bid.

exculpatory clause A provision in a contract that relieves a party of liability.

expansion joint/contraction joint A joint or space that allows for movement arising from temperature or seismic changes and/or changes in material conditions.

extras Additional work requested of a contractor that is not included in the original plan and will be billed separately. Extras do not alter the original contract sum but do increase the cost of building the project. Compare change order.

extrusion The process of squeezing a material through a shaped orifice to produce an element, such as a molding, with the desired cross section. Also, an element produced by this process.

facade The front of a building, frequently with decorative features.

facilities planning Analyzing the long-term use of a building, which may include evaluating furnishings, equipment, operations, maintenance, renovation, expansion and life-cycle planning.

faience tile Glazed or unglazed tile with variations on the face, edges and glaze that give it a handcrafted decorative effect.

fascia A flat horizontal band that appears as a vertical face. May include boards attached at the end of eaves or along gables, or the board on cornices to which gutters are attached.

fast track Compression of a construction schedule by overlapping some activities that otherwise would be performed sequentially. May also refer to a prime contractor starting construction work before the final plans and specifications are complete.

fatigue A structural failure that occurs as the result of a load being applied and removed, or reversed, repeatedly either over a long period or through a large number of cycles.

feather edge A tapered edge. Feathering is the sanding or rubbing down of a surface to such an edge. The coating material gradually becomes thinner around the edge until it finally disappears.

felt A very general term used for ply sheets (usually for roofing), consisting of a mat of organic or inorganic fibers coated with asphalt or coal tar pitch. Felting is the process of pressing or matting together various types of hair or fibers to form felt.

female Any part, such as a nut or fitting, into which another (i.e., male) part can be inserted. Internal threads in a pipe or fitting are female.

fenestration The area and arrangement of windows.

feng shui A Chinese cultural system for siting, arranging and shaping buildings.

ferroconcrete Reinforced concrete.

ferrous metal Metal alloy containing iron. Ferrous pipes include wrought iron, wrought steel, rolled steel and cast iron.

FF&E see furniture, fixtures and equipment.

fiberboard A prefabricated sheet of compressed wood or plant fibers used for building; bonding agents and other materials may be added to increase strength and resistance to moisture, fire or decay. Also known as insulation board.

fiberglass Glass in fibrous form that is used in making textiles and thermal and acoustical insulation, and for reinforcing plastics.

field The construction site, as opposed to offices, factories and workshops. In brick masonry, the expanse or area of wall between openings and corners, composed for the most part of stretcher units.

field engineer An engineer who works primarily at the job site as opposed to the home office. A field engineer usually represents the owner or agency and is often authorized to make small engineering changes at the site to facilitate construction.

field measure To take measurements (for items such as cabinets, countertops, stairs, shower doors, etc.) in the house or project itself instead of using blueprints.

field order A written order effecting a minor change or clarification in the work that does not involve an adjustment to the contract sum or an extension of the contract time.

field work order A written request to a subcontractor or vendor, usually from the general contractor, for on-site services or materials.

filament A conducting wire with a high melting point in an electric bulb, made incandescent by an electric current.

fill As a verb, to raise the level of land by adding earth moved in from another place or obtained by cutting. As a noun, sand, gravel or other loose earth used to raise the ground level around a structure.

final acceptance The action of the owner accepting that the contractor has completed the project in accordance with the contract requirements. Final acceptance is confirmed by the owner when making the final payment.

final inspection A final site review of the project by the contractor, owner or owner's authorized representative before the final certificate for payment is issued.

final payment The last payment from the owner to the contractor of the entire unpaid balance of the contract sum, as adjusted by any approved change orders.

finial An architectural ornament finishing off the top of a roof, gable, tower, canopy or cupola.

finish Wood products to be used in joinery, such as doors and stairs, and other fine work required to complete a building, especially the interior.

finish carpentry The hanging of all interior doors, and the installation of door moldings, base moldings, chair rails, built-in shelves, etc.

finish coat In plastering, the last coat applied; it may be intended as a base for further decorating or as a final decorative surface.

finish date The date that an activity or project is completed.

finish materials see interior finish; trim.

fire blocking Intermittent solid cross-framing used to retard the spread of flame within the framing cavity.

fire brick Brick that has been tested for fire-resistance and then graded for specific construction uses.

fire door A door that has been manufactured with specific materials and rated for its ability to help hold back the spread of fire.

fire-resistance rating The time, in hours or parts of an hour, that a material or assembly will resist fire and hold back the spread of heat or flames.

fire-stop Material or member that seals open construction to inhibit the spread of fire. In more specific terms, a projection of brickwork from a wall and between joists to prevent fire from traveling between the plaster and the brick wall.

firecut A sloping end cut on a wood beam or joist where it enters a masonry wall, to allow the wood member to rotate out of the wall without prying the wall apart, if the floor or roof structure should burn through in a fire.

fixed-price contract A contract with a set price for the work, which should include labor, materials, equipment and services, as well as the contractor's overhead and profit. Compare time and materials contract.

flagstone A flat stone, thin in relation to its surface area, that may be used as a stepping stone for a terrace or patio, or for floor paving. Usually either naturally thin or split from rock that cleaves readily. Flagging is the process of setting flagstones.

flakeboard A type of particleboard that is composed of flakes bonded together with a synthetic resin or other suitable binder.

flame-spread rating A measure of the rapidity with which fire will spread across the surface of a material.

flashing Weatherproof material, such as sheet metal, used in roof and wall construction to shed water and to protect a building from water seepage. Counterflashing is usually used on chimneys at the roofline to cover shingle

flashing and prevent the entry of moisture. Thru-wall flashing is extended completely through a masonry wall. It is designed and applied in combination with counterflashing to prevent water that may enter the wall above from moving downward in the wall or into the roof deck or roofing system.

flatwork A general term for concrete floors, driveways, basements and sidewalks.

Flemish bond A brick bond consisting of headers and stretchers alternating in every course, so laid as always to break joints, each header being placed in the middle of the stretchers in courses above and below.

floating In swimming pool construction, the rising of a pool out of the ground, caused by water pressure under the pool; this occurs only when the pool is not filled with water.

flock finish A finish obtained by spraying or sifting flock (i.e., short fibers of wool, silk, or rayon) onto a surface to which the fibers will adhere.

floor plan The basic layout of a building or part thereof, which indicates dimensions and includes the placement of walls, windows and doors.

floor plate A steel or aluminum plate with a nonskid design on one side for use on industrial floors, platforms, landings and stairs.

flue A passage for the ascent or escape of smoke and combustion products from a furnace, stove, water heater or fireplace. In specific terms, the passage in a chimney through which smoke passes.

flush The condition of adjacent surfaces being even or in the same plane.

fluting Vertical decoration on a column, consisting of semicircular channeled shafts.

FOB see free on board.

footing see footings.

footing drain A drain around the perimeter of a building, at the footings, to drain groundwater or rainwater away from the building.

footing form A wooden or steel structure, placed around the footings, that will hold concrete to the desired shape and size as it cures. Also known as footing formwork.

footings Rectangular masonry sections, part of a foundation and usually made of reinforced concrete, that are wider than the bottom of the foundation walls or piers they support.

footprint The outline of a building on the ground, used in site planning and in judging compliance with planning and zoning laws.

forced air Air blown by a fan from a furnace or air conditioner.

forged Formed by heating and hammering.

Formica Brand name and trademark for any of the various laminated plastic products that are usually used for surface finish on cabinets or millwork.

foundation The supporting portion of a structure below the first-floor construction (or below-grade) that includes the footings and transfers the weight of, and the loads of, the structure to the ground.

frame inspection The inspection of a house's structural integrity and its compliance with local building codes.

framer The carpenter contractor who installs the lumber and erects the framing, flooring system, interior walls, backing, trusses, rafters and decking, as well as installs all the beams, stairs, soffits and other work related to the wood structure of a building. The framer builds according to the project blueprints and must comply with local building codes and regulations.

framing The skeleton of a building: its rough structure, including the interior and exterior walls, floors, roof, and ceilings. See balloon framing; platform framing; structural system.

free-body diagram A diagram or drawing in which an element is isolated from its surroundings, which are shown only as forces. See vector.

free on board (FOB) Without charge for delivery to a specified point. FOB job site means that the cost of materials includes the cost of delivery to the job site.

freestone Fine-grained sedimentary rock that has no planes of cleavage or sedimentation along which it is likely to split.

fretsaw A fine-toothed saw with a narrow blade held under tension; it is used for sawing curves.

fretwork In woodwork, ornamental openwork designs, usually cut by a fretsaw. In masonry, any ornamental openwork or work in relief.

frieze A horizontal, often decorative, member of a cornice, set flat against a wall. In a classical entablature, the frieze separates the architrave from the cornice. More broadly, a frieze refers to any sculpted or ornamental band on a house, in a room, or on furniture.

front-end loading The fraudulent practice by which a contractor distorts the schedule of values so that work done early in the contract will have a higher value than work done later, for the purpose of obtaining payment before it is earned. Also known as unbalancing the schedule of values.

frost line The greatest depth to which ground may be expected to freeze. This depth varies in different parts of the country. Footings should be placed below this depth to prevent movement.

fuller's earth A clay mineral that lacks plasticity and is used as an adsorbent and as a filter.

functional obsolescence The loss in value of a property because of outmoded features or poor design.

funny papers A disparaging term used on the job site in reference to the construction drawings and specifications.

furniture, fixtures and equipment (FF&E) Items legally classified as personal property rather than real property. The abbreviation FF&E is generally associated with domestic interior design and the planning of retail stores or office facilities.

furring The strips of wood or metal that are applied to a wall or other surface to even it, and normally to serve as a fastening base for finish material. In masonry, furring provides space for insulation and helps prevent the transmission of moisture, in addition to providing a level surface for finishing.

fuse A short plug in an electric panel box that opens (i.e., breaks) an electrical circuit when it becomes overloaded. See circuit breaker.

gable The upper triangular-shaped portion of the end wall of a house above the eaves line of a double-sloped roof. The gable end is the entire end wall of a house having a gable roof.

galvanize To coat a metal by dipping it in molten zinc after cleaning.

gambrel roof A type of roof that has its slope broken by an obtuse angle, so that the lower slope is steeper than the upper slope. In more general terms, a double-sloped roof that has two pitches.

Gantt chart The schedule of activities for a project, showing start and finish dates, critical and noncritical activities, slack time, and predecessor relationships. Originally a horizontal bar chart developed in 1917 by Henry L. Gantt, an American engineer and social scientist, as a production control tool.

gasket A preformed shape, such as a strip or grommet, of rubber or rubber-like composition, that is used to fill and seal a joint or opening either alone or in conjunction with an applied sealant.

general conditions The portions of a contract that set forth the contractor's minimum acceptable performance requirements, including the rights, responsibilities and relationships of the parties to the contract. General conditions supplement the specifications and usually define areas of the project other than those relating to specific building activities.

general contractor A properly licensed individual or company that has primary (i.e., prime) responsibility for a project, although the general contractor may enter into subcontracts with others for the performance of specific parts or phases of the project. In traditional general contracting, the prime contractor bids for the project after the final design, plans and specifications have been approved by the owner. Compare design-build construction; fast track.

general drawing A drawing showing the elevations, plans and cross sections of a structure and its main dimensions.

gesso A plaster surface that is composed of gypsum plaster, whiting and glue, and is used as a base for decorative painting.

gild To apply a thin covering of gold or metal leaf.

girder A main beam, usually made of steel or wood, that is used to support concentrated loads (e.g., floor joists) at isolated points along its length.

girt A beam that supports wall cladding between columns.

glazing The process of installing glass or, as a noun, the glass material itself. A glazing bead is a strip surrounding the edge of the glass in a window or door that holds the glass in place. A glazing channel is a three-sided, U-shaped sash detail into which glass is installed and held in place.

gloss A paint or enamel that contains a relatively low proportion of pigment and dries to a shiny, lustrous finish that reflects light.

GMP see guaranteed maximum price.

grade Ground level, or the ground elevation at any given point. A grade line is a predetermined line indicating the proposed elevation of the ground surface around a building's foundation wall. Grade is also the classification of lumber in terms of strength and utility.

grain The direction, size, arrangement, appearance or quality of the fibers in wood. Graining is simulating the grain of wood using paint.

granite In technical geologic terms, igneous rock with crystals or grains of visible size that consists mainly of quartz and the sodium or potassium feldspars. In building stone, crystalline silicate rock with visible grains. Commercial granite includes gneiss (a metamorphic rock) and igneous rocks that are not granite in the strict sense.

greenfield site A building site that has never before been built on. Compare brownfield site.

greenstone Metamorphic rock altered from basic (i.e., low-silica) igneous rock. The green color is caused by iron-bearing silicate minerals. It is used as a structural and decorative stone.

grid The completed assembly of main and cross members in a suspended ceiling system before the ceiling panels are installed. Also, the decorative slats (muntins) installed between glass panels.

grog Crushed brick that is blended with clay to form new brick.

grommet A plastic, metal or rubber doughnut-shaped protector that lines holes where wires or tubing pass through wiring boxes or panels.

ground An electrical connection with the earth or some conducting body that serves in place of the earth. Also, a nailing strip placed in or on masonry walls as a means of attaching trim or furring.

ground fault An ultrasensitive plug designed to shut off all electric current. Used in bathrooms, kitchens, exterior waterproof outlets, garage outlets and wet areas. It has a small reset button on the plug. Also known as a ground fault circuit interrupter (GFCI) or a ground fault interrupter (GFI). See circuit breaker.

groundscraper A wide-spreading building of offices or apartments; a usage based on "skyscraper."

grout or grouting A cement mortar mixture commonly used to fill the joints and cavities of masonry or tiles.

guaranteed maximum price (GMP) An amount stipulated in a construction contract as the maximum sum payable by the owner to the contractor for the work specified.

gusset A flat wood or plywood member used to provide a connection at the intersection of other wood members, usually at the joints of wood trusses. Gussets are fastened by nails, screws, bolts or adhesives.

gutta-percha A tough plastic substance obtained from the latex of various Malaysian trees. It resembles rubber but contains more resin, and is often used as insulation.

gutter A shallow channel or conduit of metal, plastic or wood that is set below and along the eaves of a house to catch and carry off rainwater from the roof. Gutter straps are the metal bands used to support the gutter.

guy wire or guy cable A strong steel wire or cable that is strung from an anchor on the roof and intended to provide support to any tall slender projection.

gypsum A common, naturally occurring mineral composed of hydrous calcium sulfate. Gypsum is the main component of sheetrock or drywall. When heated, it forms plaster of paris.

gypsum board see drywall; Sheetrock.

H-beam A steel beam that, in cross section, resembles the letter H; commonly used in earthwork as a retaining structure or piling.

hand hole An access hole used for repair and cleaning. In more specific terms, an enclosure that is installed in the earth or ground floor of a building and used as a junction box for underground electrical or communication conductors. The enclosure is provided with a removable cover and designed so that the conductors can be pulled, spliced or otherwise handled without anyone having to enter the enclosure.

hard costs see construction costs.

hardscape The nonorganic elements of a landscape development, such as walls, paving, fences and lighting standards.

hardware All the metal fittings that go into a house or other building when it is near completion, such as doorknobs, towel bars, handrail brackets, toilet roll holders, closet rods, house numbers, door closers, etc. The interior trim carpenter installs the hardware.

hazard insurance Insurance for a building while it is under construction.

header In carpentry, a lintel or other structural support or framing member over an opening. Also, a joist that supports other joists. In masonry, a brick that is laid on its flat surface across a wall and shows only its end on the surface or face of the wall. A header course is a continuous bonding course of header brick. Also, a masonry unit that overlaps two or more adjacent wythes of masonry to tie them together (also called a bonder). In plumbing, a

length of pipe to which two or more pipelines are joined to carry fluid from a common source to various points of use; a manifold.

heat gain An increase in the amount of heat contained in a space, resulting from direct solar radiation and the heat given off by people, lights, equipment, machinery and other sources.

heat loss A decrease in the amount of heat contained in a space, resulting from heat flow through walls, windows, roof and other building envelope components.

heat rough Work performed by the heating contractor after the stairs and interior walls are built. This includes all duct work and installing flue pipes. Sometimes, the furnace and fireplaces are installed at this stage of construction.

heat trim Work done by the heating contractor to prepare a house or other building for the municipal final heat inspection. This includes venting the hot water heater, installing all vent grills and air-conditioning services, turning on the furnace, installing thermostats, venting ranges and hoods, and performing all other heat-related work.

heating, forms of air-conditioning The process of bringing air to a required state of temperature and humidity, and removing dust, pollen and other foreign matter. Baseboard heating: This uses a radiator shaped like a decorative baseboard that has openings at the top and bottom through which air circulates. Central heating: A heating system in which a number of rooms or spaces are heated from a central source. Convector: A heating device in which the air enters through an opening near the floor, is heated as it passes through the heating element, and enters the room through an upper opening. Hot-water heating: The circulation of hot water through a system of pipes and radiators either by gravity or by a circulating pump. Panel heating: Coils or

ducts installed in wall, floor or ceiling panels to provide a large surface supply of low-intensity heat. Radiant heating: A heating system in which only the heat radiated from panels is effective in providing the heating requirements. Warm air heating: A warm-air heating plant consisting of a fuel-burning furnace enclosed in a casing, from which the heated air is distributed to various rooms of the building through ducts.

heating load The amount of heating required to keep a building at a specified temperature during the winter, usually 65 degrees Fahrenheit, regardless of the outside temperature. See degree day.

hectare A unit of land area equaling 10,000 square meters or 2.471 acres.

hermetic seal An airtight seal.

herringbone work A pattern of setting brick or paving stones in which the units are laid aslant, instead of flat, with the direction of incline reversing in alternate courses, forming a zigzag effect. In floors or paving, the units are set at approximately a 45-degree angle.

high tension High voltage.

high voltage Electrical power of more than 600 volts. See voltage.

hinge A piece of door hardware that permits the opening and closing of the door by joining it to the jamb with a flexible device.

hip A roof with four sloping sides. Also, the external angle formed by the meeting of two sloping sides of a roof.

holiday In roofing, an area skipped during mopping, the application of liquid sealant. In painting, the unintentional missing of an area that is supposed to be painted. Also known as misses, skips, vacations or voids.

hot wire The live wire (normally black), which carries electric current to a receptacle or other device—in contrast to a neutral wire, which carries electricity away again (see ground). Also, the resistance wire in an electrical relay, which expands when heated and contracts when cooled.

hub In plumbing, the enlarged end of a pipe that 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 through the discharge of water vapor. It may consist of an individual room-size unit or a larger unit attached to the heating plant to condition the entire house.

humidity The amount of water vapor in a given volume of air.

HVAC Heating, ventilation and air-conditioning.

hydraulic A mechanism that is operated, moved or effected by use of water pressure.

hydraulics The branch of physics having to do with the mechanical properties of water and other liquids in motion. In contracting, the methods of conveying liquids through pipes.

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 (e.g., a double garage door), when wall and roof loads bear down on the opening.

ice dam A condition formed at the lower roof edge by the thawing and refreezing of melted snow on an overhang; this can force water up and under shingles, causing leaks.

impervious Not letting water or moisture pass through or be absorbed. Impermeable has the same meaning.

indemnification A contractual obligation by which an individual or entity agrees to reimburse others for loss or damage arising from specified liabilities.

independent contractor An individual who, in performing services for another, is responsible only for the final result and is not subject to control as to the methods used to achieve that result. For tax and benefit purposes, an independent contractor is not an employee; the Internal Revenue Service is very careful in monitoring the genuine “independence” of independent contractors.

indirect costs see soft costs.

infiltration The process by which air leaks into or out of a building, resulting in heat loss.

inhibitor A substance that prevents a chemical reaction such as corrosion or oxidation.

injection molding A method of manufacturing plastic objects by injecting thermoplastics into molds. Compare extrusion.

inlay A decoration in which the design is set into the surface.

inside drain A roof drain positioned at some location other than the perimeter. It drains surface water inside the building through closed pipes to a drainage system.

inspection Examination of completed work or work in progress to determine its compliance with the contract requirements and building codes.

inspection for disbursement of funds An inspection that is performed to account for the use of construction funds and allow for progress payments to be made when work is approved. Job costs are reviewed before disbursements are made, to establish that the payments are within the schedule of values.

inspection list see punch list.

instructions to bidders Instructions contained in the bid package for preparing and submitting bids for a construction project.

insulation Any material that, when placed in the walls, ceiling or floors of a structure, is used to reduce the effects of heat, cold, moisture or sound transmission, to reduce fire hazard, or to prevent the transfer of electricity. Types of insulation that reduce the rate of heat flow include blown (low-density, loose insulation material that is mechanically installed); electrical (a nonconducting covering that is applied to wires or equipment to prevent short-circuiting); friction-fit batt (batt—fiber or wool—insulation that is held secure within framing members by friction); and rigid (dense insulation material that is structurally rigid: also known as board insulation).

insulation board see fiberboard.

intercepting drain A drain that diverts groundwater before it reaches the area to be protected. Also known as a curtain drain.

interior decorator An individual who selects, and sometimes purchases, furniture, floor coverings and fabrics, and who designs interior color schemes.

interior designer An individual who designs the interiors of buildings.

interior finish The visible elements and materials applied to a building's interior walls and ceilings, excluding furniture, fixtures and equipment.

interior trim A general term for all the molding, casing, baseboard and other trim items that are applied within the building by finish carpenters, particularly the woodwork that is designed to conceal joints.

invitation to bid A formal written invitation to submit a bid, usually placed in trade papers or newspapers, informing prospective bidders about a project; necessary for public and governmental work but not for private work.

invited bidders A closed list of bidders decided by the owner and architect as the only ones who may bid on a job. See closed bid; prequalification.

isometric projection Axonometric projection in which all three faces are equally inclined to the drawing surface.

jackhammer A pneumatic concrete breaker.

jamb The side and head lining of a doorway, window or other opening; includes studs as well as the frame and trim. See doorjamb.

job requirements A list of specific tasks essential to completing a project. Also known as general requirements.

job scheduling An itemization in chronological order, often in chart form, of the tasks involved in starting and completing a project. See Gantt chart.

job trailer A towed vehicle placed on a job site that acts as an office space.

job site The place where construction takes place.

joint The location where two or more members or surfaces meet or are to be joined. The components are held together by nails, glue, cement, mortar or other means.

jointing Smoothing and straightening the edge of a wood board or facing mortar joints.

joist A parallel beam used to support floor and ceiling loads, and supported in turn by larger beams, girders or bearing walls. After joists are in place, floor or ceiling sheathing is fastened.

journeyman A fully trained and qualified practitioner of a craft or trade, such as a carpenter, plumber, painter, plasterer or electrician, as distinguished from an apprentice or a laborer.

Keene's cement A hard, strong finishing plaster that is made from gypsum and maintains a high polish. Because of its density, it is excellent for use in bathrooms and kitchens, and is also widely used for the finish coat in auditoriums, public buildings and other places where walls may be subjected to unusually hard wear.

keystone The wedge-shaped stone at the center (i.e., top) of an arch or vault.

kiln A furnace, oven or heated enclosure used for processing a substance, particularly brick or other clay material, by burning, firing or drying.

labor and materials bond A written form of security from a bonding company provided to the owner, on behalf of a contractor, that guarantees payment to the owner in the event that the contractor fails to pay for all labor, materials, equipment or services in accordance with the project contract.

lamine To form a product by bonding together two or more layers of materials. Laminated glass is two or more lights of glass permanently bonded together with one or more interlayers.

landing A platform between flights of stairs or at the termination of a flight of stairs; often used when stairs change direction.

landscape To improve a site through modification of the terrain, the planting of trees, shrubs and groundcover, and the addition of hardscape.

landscape architect An individual who designs the arrangement of land for human use, including paths for pedestrians and vehicles and plantings of groundcover, plants and trees.

lap In roofing, the overlap of two roofing plies. In masonry, the amount of extension of one brick or any other masonry unit over another.

lateral support A means by which walls are braced either vertically or horizontally using columns, pilasters, cross walls, beams, floors or roofs.

lateral thrust The pressure that any load or force (e.g., that created by an arch, dome, vault or rigid frame) exerts sideways or through the ends of the members.

latex A water-based emulsion of a synthetic rubber or plastic that is obtained by polymerization and used commonly in coatings and adhesives.

lath A building material of narrow wood, metal, gypsum or insulating board that is fastened to the frame of a building to act as a base for plaster, shingles or tiles.

lattice An open framework of criss-crossed wood or metal strips that form regular, patterned spaces.

layout The measuring and setting out of work according to the design drawings.

leaching field A land area containing a series of subterranean perforated pipes that allow septic tank effluent to percolate into the soil. This is a method of treating or disposing of sewage in rural areas that do not have access to a municipal sewer system. Also known as a disposal field.

leaching pit An excavated hole in the ground that can hold solids but allows liquids to pass through and leach (i.e., percolate) into the ground.

leech see leaching.

lien An encumbrance that usually makes real or personal property the security for the payment of a debt or the discharge of an obligation. In more specific terms, the right of a contractor to take and hold or sell an owner's property to satisfy unpaid debts for labor, materials, equipment or services provided to improve the property. See mechanic's lien; preliminary lien notice.

lien release A document from the contractor to the owner that releases a lien after it has been satisfied.

lien waiver A document from a contractor, subcontractor, material supplier, or other construction professional who has lien rights against an owner's property that relinquishes all or part of those rights. Lien waivers are generally used for processing progress payments to contractors.

Life Safety Code A standard for the prevention of fire and other emergencies developed by the National Fire Protection Association.

light A space in a window sash for a single pane of glass; also the pane of glass itself. Sometimes spelled lite.

lime Various compounds of calcium oxide and magnesium oxide that are obtained by heating forms of calcium carbonate, such as shells or limestone, and are used in mortar and plaster. Also known as caustic lime and quicklime.

limestone A sedimentary carbonate rock that is composed chiefly of calcite but sometimes contains appreciable dolomite.

linoleum A long-wearing resilient floor covering, commonly in sheet form, consisting of a burlap back coated with a preparation of linseed oil, powdered cork and pigments.

lintel A horizontal structural member, usually made of stone, wood or metal, that supports the load over an opening. Also known as a header.

liquidated damages A monetary amount agreed upon in advance by the parties to a contract that specifies what the defaulting party owes the other in the event of a default on or breach of the contract.

listing agency An agency accepted by the relevant administrative authority that lists or labels selected products (e.g., equipment and material) on the basis of periodic inspections of their production. The inspection results are

made available in a published report stating that a product has been tested to approved standards and found to be safe for use in a specified manner. Approved products are said to be listed.

lite see light.

live load A load produced by the use and occupancy of a building, such as the weight of people, furnishings, machines and goods. The live load does not include construction or environmental loads such as wind load, snow load, ice load, rain load, seismic load or dead load.

live wire see hot wire.

L-mold A metal molding strip with an L-like section that is used to edge plaster or gypsum wallboard.

load-bearing wall Any wall that supports a superimposed weight or force. This includes all exterior walls and any interior wall that is aligned above a support beam or girder.

longitudinal Running lengthwise. In wood, running parallel to the direction of the wood fibers.

louver A vented opening, often in the attic, that has a series of horizontal slats and is arranged to permit ventilation but to exclude rain, snow, light, insects or vision.

lug A projection from, or extension of, a building unit that engages an adjacent unit; for example, that part of a sill that extends into an adjoining jamb or the spacers on the sides of ceramic tiles.

lumber Any wood that has been sawed and planed but not subjected to further manufacturing.

lump-sum bid A single amount, without any cost breakdown, that is projected to cover all labor, equipment, materials, services, overhead and profit for completing a project or part thereof.

lump-sum contract A contract in which the amount to be paid to the contractor is agreed in advance to be a stipulated sum.

main The chief pipe, duct or cable in any electrical, water, gas, sewer, vent or other utility system.

main breaker A switch in a main electrical service panel where the service wires attach and that is the main electrical service protective device.

main contractor see prime contractor.

male Any part, such as a bolt, that is designed to fit into another (i.e., female) part. External threads in a pipe or fitting are male.

manufactured wood A wood product such as a truss, beam or joist that is manufactured out of smaller wood pieces and glued or mechanically fastened to form a larger piece. Often used to create a stronger member that may use less wood.

manufacturer's bond A bonding company's guarantee that it will stand behind a manufacturer's liability to finance repairs for products, such as roofing materials, that are occasioned by ordinary wear within a specified period.

manufacturer's specifications The written installation and/or maintenance instructions that are provided by the manufacturer of a product and that may have to be followed to maintain the product warranty.

marble Limestone that is used in architecture and sculpture; it is crystallized by metamorphism, ranges from granular to compact in texture, and is capable of taking a high polish.

marezzo An imitation marble produced with Keene's cement to which color pigments have been added.

marquetry Decorative work in which elaborate patterns are formed by the insertion of pieces of material, such as wood, shell or ivory, into a wood veneer that is then applied to a surface, such as a piece of furniture.

mason A skilled worker who builds with brick or stone set in mortar.

Masonite A trademark for fiberboard building panels that are made from steam-exploded wood fiber and binders.

masonry A construction of brick, tile, stone, or concrete block, or a combination thereof, that normally is bonded together with mortar and laid up unit by unit.

masonry unit Natural or manufactured building units of brick, concrete block, stone, glass and gypsum.

master A fully qualified, proficient, skilled and experienced builder, plumber, electrician, plasterer, painter or other construction trade worker.

mastic A pasty material used as a cement (e.g., for setting tile) or a protective coating (e.g., for thermal insulation or waterproofing). Mastic may remain adhesive and pliable with age.

mat glaze A colorless or colored ceramic glaze that has low gloss. Also spelled matt and matte.

materials used The cost of all materials used on a job. This is usually the most expensive part of a project.

matrix In concrete, the material that fills the spaces between the fine and coarse aggregates; the cement paste.

mechanical engineer An engineer who designs plumbing, air-conditioning and other environmental systems for buildings.

mechanic's lien A charge against an owner's real estate for the value of work or materials, in favor of the contractor or supplier of the work or materials. In some jurisdictions, a mechanic's lien also exists for the value of professional services. An owner's clear title to the property cannot be obtained until the claim is settled. Timely filing of claims is essential to support the lien, and prescribed filing dates vary by jurisdiction.

membrane A sheet material that is impervious to water or water vapor; often a flexible or semiflexible roof covering.

metal building A building that is constructed of a structural steel frame covered by a metal roof and wall panels. The parts are usually prefabricated in a factory and assembled at the site.

metallurgy The science that is concerned with the production, purification and properties of metals and their application.

mezzanine A low-ceilinged story between two main stories of a building. Sometimes refers to an intermediate story that projects in the form of a balcony.

micron A micrometer, or one-millionth of a meter.

milar or **Mylar** Plastic, transparent copies of a blueprint.

millwork In general, all wood materials that are manufactured in millwork plants and planing mills, including such items as inside and outside doors, window and door frames, blinds, mantels, panelwork, stairways, moldings, and interior trim, but not flooring, ceiling, or siding.

mineral wool A material used for insulating buildings that is produced by sending a blast of steam through molten slag or rock; common types include rock wool, glass wool and slag wool.

minor changes in the work Changes ordered by the architect that are within the intent of the contract documents and do not involve a change in the contract sum or the contract time.

mnemonic Markings on fabricated parts that assist in their assembly or installation in the right place.

modification An agreed-upon change to the terms of a contract.

modulator A device or control that adjusts by increments (i.e., small changes) rather than by full-on or full-off operation.

molding A strip of finish wood, metal or plastic trim that is used to conceal joints or provide decoration. Also spelled moulding.

monitor A large structure on a roof that rises above the surrounding roof planes and is designed to give light and/or ventilation to the building interior.

monolithic construction Constructed as one piece.

mopping In roofing, a layer of hot bitumen swabbed between plies of roofing felt. Full mopping is the application of bitumen by mopping in such a manner that the surface is entirely coated with a reasonably uniform coating. Spot mopping is the application of hot bitumen in small daubs. Sprinkle mopping 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 A mixture of cement (or lime), sand and water. When used in masonry construction, the mixture may contain masonry cement, standard portland cement with lime, or other admixtures to produce greater plasticity and/or durability.

mortise A slot cut into a board, plank or timber, usually edgewise, to receive the tenon (or tongue) of another board, plank or timber to form a joint.

mortise-and-tenon A joint in which a tongue-like protrusion (tenon) on the end of one piece of board, plank or timber is tightly fitted into a rectangular slot (mortise) in the side of the other piece.

mosaic Small tiles or bits of tile, stone or glass used to form a surface design or an intricate pattern.

mottling Speckling; a nonuniform paint color.

mullion A vertical divider in the frame between windows, doors or other openings. See transom.

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

Mylar see milair.

nail inspection An inspection made by a municipal building inspector after the drywall material is hung with nails and screws, and before the joints are taped over or covered.

National Electrical Code (NEC) A set of rules governing safe wiring methods. Local codes—which are backed by law—may differ from the NEC in some ways.

natural finish A transparent finish, usually a drying oil, sealer or varnish, that is applied to wood for protection against soiling or weathering; such a finish does not significantly change the original color of the wood or obscure its grain pattern.

natural stone Any type of stone that is quarried and not manufactured. Compare artificial stone.

NEC see National Electrical Code.

negative float The condition in a Critical Path Method schedule when there is not enough time available to perform some operation.

negotiated contract A construction contract in which the price has been arrived at by negotiation between owner and contractor rather than by competitive bidding.

neutral wire A wire (usually white) that carries electricity from an outlet back to the service panel. Compare ground and hot wire.

New England Method see pick and dip.

NIC see not in contract.

nogging The filling of brick between the roof rafters from the wall plate to the roof boards to make the building wind-tight.

nominal dimension A commercial dimension that is greater than an actual masonry dimension, usually by the thickness of a mortar joint.

nominal size The rough size of a timber or lumber member before planing. This is the ordinary commercial size by which timber or lumber is known and sold on the market, but it may differ from the actual size.

nonbearing partition A partition that extends from floor to ceiling but that supports no load other than its own weight.

nonbearing wall A wall that carries no superimposed load; it could be removed without any structural effect on the remaining building.

not in contract (NIC) Something that is shown on contract drawings, usually for reference, but that is not to be included in the construction contract.

notice of cessation A written notice filed by the owner or owner's agent signifying that no labor has been performed on a project for a specific period (e.g., 60 days) and establishing the time remaining to exercise lien rights by all parties concerned.

notice of completion A written notice filed by the owner or owner's agent signifying the completion of a project and establishing the time remaining to exercise lien rights by all parties concerned.

notice of nonresponsibility A notice that, if properly recorded and posted on the premises, relieves the owner from the effects of mechanic's liens for work and materials not ordered by the owner.

notice to proceed (NTP) A written notice to a contractor to proceed with the work of the contract that also states the date of commencement of the work.

NTP see notice to proceed.

OC or O/C see on center.

offset block A concrete masonry unit that is not rectangular. It is usually used as a corner block to maintain the masonry pattern on the exposed face of a single-wythe wall, the thickness of which is less than half the length of the unit.

ogee A curved section of a molding, partly convex and partly concave.

on center (OC or O/C) The measurement of spacing for studs, rafters and joists from the center of one member to the center of the next.

open bid A bid that is open to any interested professional, without prequalification. Compare closed bid.

open-hole inspection An inspection by an engineer or municipal inspector of an open foundation excavation to examine the earth and determine the type of foundation (e.g., caisson, footings, wall-on-ground.) that should be installed.

original contractor In the law of mechanic's liens, a contractor who contracts directly with an owner.

orthographic projection The projection of a single view of an object on a drawing surface that is perpendicular to both the view and the lines of projection. Floor plans, elevations and sections of buildings are orthographic projections.

overcertification An architect or engineer certifying more than the proper amount to be paid to a contractor.

owner An individual or entity who contracts for construction. In more general terms, any individual or entity who has some title or interest in a parcel of real estate.

owner-builder An owner of property who undertakes to construct improvements without the services of a general contractor; in other words, an owner who acts as his own general contractor.

owner's overall budget A budget prepared by the owner of all the project costs, including land acquisition, construction, financing, professional fees and all other incidental costs.

owner's right to stop work The owner has the right to stop the work of a construction contract only if the contract so provides and only for the reasons stated therein.

OX, OXO, OXXO also **XO, XOO, XOOX** Designations of the arrangement of sliding and fixed panels in sliding glass doors and windows: X indicates a sliding panel; O indicates a fixed panel.

Ozalid Trade name of a system of drawing reproduction based on the ammonia vapor process. The prints usually consist of purple lines on a white background.

package deal An offering of design, construction, financing, and sometimes land for one all-inclusive price.

pallet A portable platform for storing, moving, and handling goods and materials, as in a warehouse.

palletized Material such as brick, block or stone that is stacked on wooden pallets or platforms to permit mechanized handling.

pane A sheet of glass for glazing a window. After installation, the pane is referred to as a light (lite) or window light.

paperboard The distinction between paper and paperboard is not sharp, but broadly speaking, the thicker (more than 0.012 inch), heavier and more rigid grades of paper are called paperboard.

parapet wall That portion of any exterior wall, party wall or fire wall that extends above the roofline. Also, a wall that serves as a guard at the edge of a balcony or roof.

parge To apply ornamental or waterproofing plaster.

parquetry A flat pattern that is assembled of closely fitted pieces, usually geometrical, and often consists of two or more colors or materials.

particleboard A plywood substitute made of coarse sawdust that is mixed with resin and pressed into sheets. Used for closet shelving, floor underlay, stair treads, etc.

partition A wall that subdivides spaces within any story of a building.

party wall Within a building, a special-purpose wall system used to divide compartments for different occupancies; may have requirements for fire and sound. Between buildings, a common brick or stone wall between two adjoining properties; each of the respective owners shares the rights and benefits of the common wall. Also known as a demising wall.

passive solar heating system A heating system in which the building structure itself collects and stores directly the sun's energy and distributes the resulting heat by natural means. See Trombe wall.

payment bond A written form of security from a bonding company to the owner, on behalf of a contractor, guaranteeing payment by the contractor of all persons who provide labor, materials, equipment or services in accordance with the project contract.

payment schedule A provision in a construction contract that specifies the times for, and amounts of, payments for construction services, based on the amount of work completed. Such a schedule may include a deposit before the start of work. There may also be a temporary retainage (five to 10 percent of the total cost of the job) at the end of the contract for correcting any small items that have not been completed or repaired.

pediment The triangular face of a gable, if separated by an entablature or molding from the lower wall and treated as a decorative unit. By extension, a triangular surface used ornamentally over doors or windows.

penalty-and-bonus clause A contract provision stating that the contractor will pay a penalty for late completion and receive a bonus for timely or early completion. Some contracts have a penalty clause only.

pendentive In dome architecture, a concave triangular segment that forms the transition from the supporting columns to a dome above.

per diem (Latin: by day) An allowance or payment for each day.

percolation test or **perc test** Tests that a soil engineer performs on earth to determine the feasibility of installing a leach field sewer system on a lot. Also, a test to determine whether the soil on a proposed building lot is capable of absorbing the liquid effluent from a septic system.

performance The fulfillment of a party's obligations as required by a contract. Specific performance of a contract may be demanded in a lawsuit.

performance bond A written form of security from a bonding company to the owner, on behalf of a prime contractor or subcontractor, guaranteeing payment to the owner in the event the contractor fails to perform in accordance with the contract. Bonding companies generally reserve the right to have the contractor remedy any claims before paying on the bond or hiring other contractors to finish the job. Also refers to the amount of money (usually 10 percent of the total price of a job) that a contractor must put on deposit with a bonding company as a guarantee of the contractor's proper and timely completion of a project.

performance code A building code that prescribes the objectives sought rather than the specific methods and materials that must be used. Compare specification code.

performance specification A building specification that prescribes the objectives sought rather than the specific methods and materials that must be used.

permit A governmental or municipal authorization to perform a building process. Building permit: authorization to build or modify a structure. Demolition permit: authorization to tear down and remove an existing structure. Electrical permit: a separate permit required for most electrical work. Grading permit: authorization to change the contour of the land. Plumbing

permit: a separate permit required for new plumbing and larger modifications of existing plumbing systems. Septic permit: a health department authorization to build or modify a septic system. Zoning/Use permit: authorization for a property to have a specific use, for example, as a garage, single family home, etc. (see zoning).

pick and dip A method of laying brick whereby the bricklayer simultaneously picks up a brick with one hand and, with the other, enough mortar on a trowel to lay the brick. Also known as the Eastern or New England method.

pier A detached column of masonry, usually rectangular in horizontal cross section, that is used to support other structural members. See caisson.

pilaster A projecting square buttress that forms part of a wall.

pile A long steel, wood or concrete member that penetrates deep into the soil to support foundation walls or piers.

pilot light A small, continuous flame (in a hot water heater, boiler, or furnace) that ignites gas or oil burners when needed.

pitch The inclined slope of a roof. Roof slope is expressed in the inches of vertical rise per foot of horizontal run. Also see coal tar pitch.

plain concrete Any unreinforced concrete.

plan A line drawing (by floor) representing a horizontal section of a building. The horizontal plane is an elevation (often eye-level) designed to show the relative positions of walls, partitions, windows, doors, chimneys, columns, pilasters, etc.

plan checker A building-department official who examines the building permit documents.

plan view Drawing of a structure with the view from overhead, looking down.

plans All the drawings, including sections, details and any supplemental drawings, needed for the execution of a project.

plaster A cementitious material, usually based on gypsum or portland cement, that is applied to lath or masonry in paste form, to harden into a finished surface on exterior or interior walls.

plaster of paris A fine white gypsum plaster used for casting and molding; pure calcined gypsum.

plasterboard A board that is used in large sheets as a backing or as a substitute for plaster in walls and consists of fiberboard, paper or felt that is bonded to a hardened gypsum plaster core.

plate A piece of wood that is placed on a wall surface as a fastening device. The bottom member of a wall is the sole plate and the top member is the rafter plate.

plate glass Glass of high optical quality that is produced by grinding and polishing both faces of a glass sheet.

platform framing A framing system in which the 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. Compare balloon framing.

plinth A square or rectangular base for a column, pilaster or door framing. Also, the base courses of a building collectively when they give the appearance of a platform.

plot plan An overhead-view plan that shows the location of a house or other building on a lot, indicating all existing physical features, easements, property lines, setbacks, rights of way, drainage and proposed improvements.

plumbing rough Work that is performed by the plumbing contractor after the heat rough work is done. This work includes installing all plastic drain and waste lines, copper water lines, bathtubs, shower pans, and gas piping to furnaces and fireplaces—all plumbing work that involves the walls or framing of a building.

plumbing stack A plumbing vent pipe that penetrates the roof.

plumbing trim Work that is performed by the plumbing contractor to prepare a house for a final plumbing inspection. This includes installing all toilets, hot water heaters, sinks, disposals, and dishwashers, as well as connecting all gas pipes.

ply A layer or thickness, as of building or roofing paper, or a layer of wood in plywood.

plywood A wood product made by bonding together layers of veneer or a combination of veneer layers and a lumber core. The layers are joined with an adhesive. Adjoining plies are usually laid with grains at right angles to each other, and almost always an odd number of plies is used.

pointing The process of inserting mortar into the joints of brickwork or any other masonry units to fill open pockets or voids left when the work was originally done. See tuck-pointing.

polymerization A chemical reaction in which two or more molecules combine to form larger molecules that contain repeating structural units.

ponding A condition where water stands on a roof for prolonged periods because of poor drainage and/or deflection of the deck.

porcelain A ceramic china-like coating that is applied to steel or cast iron surfaces; when used as a finish for metal fixtures, it is called vitreous enamel.

portland cement Cement that is made by heating clay and crushed limestone into a brick and then grinding it to a pulverized powder state; the most common type of cement used in construction.

portland cement concrete Concrete that is composed of coarse and fine aggregates, portland cement, water, and sometimes admixtures to impart special qualities to the concrete or to aid in its placement or curing.

post-and-beam construction The most common type of wall framing, using posts that carry horizontal beams on which joists are supported. It allows for fewer bearing partitions and uses less material. Compare stud framing.

pozzolan Hydraulic cement that is obtained by grinding a mixture of fused natural material, such as volcanic ash or trass, with hydrated lime. It can be used to replace certain amounts of portland cement in order to lower cost and, in some cases, to improve the concrete. Also spelled puzzolan.

precast Concrete building components that are formed and cured at a factory and then transported to a work site for erection.

preconstruction job-site conference A conference held on the job site, before the start of construction, that is attended by owners, architects, engineers, contractors and subcontractors for the purpose of coordination and cooperation.

predecessor An activity that must be completed before another activity (i.e., the successor) can begin.

prefabricated Constructed and assembled in a workshop and later brought to the job site for incorporation into the building.

preliminary drawings The drawings that precede the final approved drawings. These drawings usually are stamped or titled "preliminary," and that designation is removed when the drawings are reviewed and approved by the owner.

preliminary lien notice A written notice given to the owner of a project by the subcontractors and any individual or company furnishing services, equipment or materials to that project. The notice states that if the relevant bills are not paid in full, a mechanic's lien may be placed against the property even though the owner has paid the prime contractor in full. The notice explains how the owner can protect himself or herself against this consequence by requiring the prime to furnish a signed release from the individual or firm giving the notice before making payments to the prime contractor.

preliminary notice A notice sent to the owner, general contractor and any lender by subcontractors or suppliers within 20 days of first supplying labor, services or materials to a project that informs them of what is being supplied or performed and establishes lien or stop-notice rights.

prequalification A screening process of prospective bidders wherein the owner or her or his appointed representative gathers background information from a contractor or construction professional for selection purposes. Qualifying considerations include competence, integrity, dependability, responsiveness, bonding rate, bondability, work on hand and similar project experience.

prestressed concrete Concrete in which steel is stretched and anchored to compress the concrete.

prime contractor A general contractor who contracts directly with a property owner and, in turn, employs a subcontractor or subcontractors to perform some or all of the work.

prime professional Any professional (e.g., architect, engineer) who has a contract directly with the owner.

primer A material of relatively thin consistency that is applied to a surface for the purpose of creating a more secure bonding surface and forming a barrier to prevent the migration or bleeding of components. In painting, a tinted base coat of paint used to seal the surface and equalize suction differences.

principal Under a surety bond, the contractor.

privity A direct contractual relationship, such as between an owner and a prime contractor, or between a prime contractor and a subcontractor, but not between an owner and a subcontractor.

product data Illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by a contractor to illustrate materials or equipment for some portion of the work.

professional standard of care The duty of an architect, engineer or other professional to exercise such care, skill and diligence as other professionals in the same discipline would exercise in the same or similar circumstances.

progress payment A payment from the owner to the contractor that is determined by calculating the difference between the completed work (and any materials stored for future use) and the predetermined schedule of values or unit costs.

progress schedule A line diagram showing the proposed and actual starting and completion times of project activities.

project delivery system Any of the various methods by which owners can contract for construction, such as design-bid-build, design-build, turnkey, etc.

project manager A qualified individual or firm authorized by the owner to be responsible for coordinating time, equipment, money, tasks and people for all or specified portions of a project.

project manual The volume usually assembled for a job that may include the bidding requirements, sample forms, conditions of the contract and specifications.

project representative A qualified individual authorized by the owner to assist in the administration of a project.

proposal see bid.

proposal form see bid form.

punch list A list prepared by the owner or the owner's representative of work that requires correction or completion. A punch list can be drawn up as each succeeding phase of a project nears completion, and it also notes defective or incomplete work that remains to be done after substantial completion. Also known as an inspection list.

punch out To inspect and make a punch list of discrepancies.

purchase order A document from a buyer to a seller to purchase materials, services, equipment or supplies, with acceptable purchase terms indicated.

purlin A beam or strut that spans across a roof to support the roof framing system; it usually supports several rafters at one or more points.

putty A cement composed of whiting and raw linseed oil that is used for setting panes of glass and filling small holes and cracks.

quantity survey A detailed listing of all materials, equipment and services needed to complete a project.

quantity surveyor see take-off person.

quicklime see lime.

quoins Cornerstones that form the external angle of a building; usually bricks or masonry blocks that project out from the walls for ornamental effect.

radiation Energy that is transmitted from a heat source to the air around it. Radiators actually depend more on convection than on radiation.

raft Footings or a foundation, usually a large, thick concrete mat.

rafter A framing member that runs up and down the slope of a pitched roof and is designed to support the roof load. Rafters slope from the ridge of the roof to the eaves and make up the main body of the roof framework. The rafters of a flat roof are called roof joists.

rake The angle of slope of a roof or the inclined portion of a cornice or other trim or molding extending in an oblique line.

rebar Steel reinforcing bar that is used to increase the tensile strength of concrete.

record drawings A set of drawings prepared by the general contractor, which includes any revisions in the working drawings and specifications made during construction, indicating how the project was actually constructed. Sometimes called as-built drawings or as-builts.

rehabilitation The remodeling of a building to render it suitable for modern uses.

reimbursable expenses Amounts expended for or on account of the project that, in accordance with the terms of the appropriate agreement, are to be reimbursed by the owner.

reinforced concrete A combination of steel and concrete that uses the best properties of each. The steel consists of rebars, or reinforcing bars, and is placed before the concrete is poured.

release of lien A document signed by an individual or firm supplying labor, materials or professional services on a project that releases the mechanic's lien against the project property.

relieving arch An arch, usually blind (i.e., filled in), that is built into a wall above a lintel or flat arch to carry the load to walls or other supporting members. Also known as a discharging arch.

rendering An architectural drawing, often in color and in perspective. Also, the application of plaster directly to a masonry wall.

repointing see tuck-pointing.

request for information (RFI) A written request from a contractor to the owner or architect for clarification or information about the contract documents after a contract award.

request for proposal (RFP) A written request, usually from the owner or prime contractor, to a contractor, design professional or subcontractor for an estimate or cost proposal. An RFP usually contains a detailed description of the proposed work.

rescission The annulment (by rescinding) of a contract either by agreement or by judicial order, which returns the parties to the relationship they had before the contract was made.

resident architect An architect permanently assigned to a job site who supervises the construction work for the purpose of protecting the owner's interests.

resin A sticky material that is obtained from the sap of certain trees and plants (natural resin) or made synthetically from coal-tar products and other organic substances (synthetic resin). Resins are widely used in making varnishes and paints.

retainage An amount (often five percent to 10 percent of the total cost of the job) that is withheld by the owner from progress payments until final and satisfactory project completion has been achieved. Also known as retention.

retaining wall A structure that holds back a slope and prevents erosion.

retarding agent A chemical additive in mortar that slows setting or hardening.

retention see retainage.

reveal That portion of a jamb or recess that is visible from the face of a wall.

RFI see request for information.

RFP see request for proposal.

ridge The uppermost horizontal external angle formed by the intersection of two sloping roof planes. The ridge board is the board against which the tips of the rafters are fastened, and is thus the top line of a roof.

rise In roofing, the vertical distance from the eaves to the ridge. In stairways, the vertical distance from stair tread to stair tread.

riser The vertical board that closes the space between the treads of a stairway.

roll out A loose term that is used to describe the rapid completion of similar projects over a given period.

roll roofing Asphalt roofing products manufactured in roll form.

roof joists The rafters of a flat roof.

rough see electrical rough; heat rough; plumbing rough; roughing-in.

rough lumber Lumber that has not been dressed (i.e., surfaced) but that has been sawed, edged and trimmed.

rough opening The clear dimensions of a framed opening that must be provided in a wall to accept a given door, window unit or other unit.

roughing-in The initial stages of plumbing, electrical, heating and carpentry work. In general, all work that must be performed before plastering and the application of other finish materials. See electrical rough; heat rough; plumbing rough.

run In roofing, the horizontal distance from the eaves to a point directly under the ridge.

rustication In building and masonry, the use of squared or hewn stone blocks with roughened surfaces and edges that are deeply beveled, chamfered or grooved to make the joints conspicuous.

safety report A report prepared after a regularly scheduled project safety inspection, as required by the Occupational Safety and Health Act of 1970.

safing Fire-resistant material that is inserted into a space between a curtain wall and a spandrel, beam or column to retard the passage of fire through the space.

sandwich glass see double-glazing.

sash The operating or movable part of a window. The sash is made of windowpanes, including muntins, and their framework.

scagliola An imitation marble made by the plasterer. It is composed of a combination of Keene's cement, glue, isinglass (mica) and coloring material, and it takes a high durable polish.

scale drawing A drawing in which the measurements represented are drawn to a predetermined scale, such as one-quarter inch equals one foot, so that all elements and dimensions in the drawing are proportional in length and width to the actual room, floor or building depicted.

schedule of values A statement furnished by the contractor to the architect or engineer that reflects the portions of the contract sum that are allocated for the various parts of the work and is used as the basis for reviewing the contractor's applications for progress payments. See front-end loading.

schematic A preliminary sketch or diagram representing the proposed intent of the designer.

schematic design phase The first phase of the architect's basic services, in which the architect consults with the owner to ascertain the requirements for the project and then prepares design studies illustrating the scale and relationship of the project components for the owner's approval.

scratch coat The first coat of plaster applied to a surface in three-coat work (followed by the brown coat and the finish coat). The term originates from the practice of cross-raking or scratching the surface of this coat with a comb-like tool to help it bond with the brown coat.

screed As a noun, a strip of wood, metal or plaster that establishes the level to which concrete or plaster will be placed. As a verb, to strike or plane off wet mortar or concrete that is above the desired plane or shape.

scribing Transferring the exact irregularities of a wall or other surface onto a piece of carpet, wood or paper, which is then cut to fit those irregularities.

section A drawing of a building in the vertical plane.

selvage The edge of a sheet material, such as carpet, wallpaper or roll roofing, that is finished differently and is intended to be covered in application or cut off. Also spelled selvedge.

separate contractor A prime contractor; any contractor who has a direct agreement with the owner.

septic tank A sewage settling tank in which part of the sewage is converted into gas and sludge before the remaining waste is discharged into a leaching bed underground.

setback The distance a building is located from the front property line.

severability clause A provision in a contract that preserves the remainder of the contract if a portion of it is invalidated by a court. Without such a clause, if a court found that one part of the contract was unenforceable, the entire document would be invalid.

shaft An unbroken vertical passage through a multistory building that is used for elevators, wiring, plumbing or ductwork.

shared-savings provision A provision in a contract stating that if the actual costs, including profit and overhead, are less than the guaranteed maximum price, the difference will be shared by contractor and owner on some stipulated percentage basis.

sheathing The rough covering applied to the outside of the roof, wall or floor framing of a structure.

sheet metal Flat rolled metal that is less than one-quarter inch in thickness.

Sheetrock A manufactured panel made of gypsum plaster and encased in a thin cardboard that is installed over framing to form interior walls and ceilings. Often called gypsum board.

shellac A transparent varnish coating made by dissolving lac in alcohol. Lac is a resinous secretion of the lac bug, an insect that thrives in tropical countries, especially India.

shingle A small thin piece of building material, often with one end thicker than the other, that is laid in overlapping rows as a covering for the roof or

sides of a building. Shingles may be made of asphalt, asbestos, wood, tile, slate or other material and are cut to stock lengths, widths and thicknesses.

shoe A formed metal section used in attaching metal studs to floor and ceiling tracks.

shop drawing A detailed fabrication or construction drawing of specific items needed on a project; this is usually provided by a subcontractor. A shop drawing stamp is a rubber imprinting stamp used by architects, engineers and contractors to indicate their approval, disapproval or other administrative action on shop drawings.

side sewer The portion of a sewer system that connects a building's interior wastewater lines to a locality's main sewer lines. The side sewer is usually buried in several feet of soil and runs from the building to the sewer line. It may be "owned" by the property owner or by the sewer utility company, but it usually must be maintained by the property owner—and may be serviced only by utility-approved contractors.

siding The finish covering of the outside wall of a frame building. It may be made of horizontal weatherboards, vertical boards with battens, shingles, or other material.

sill The lowest member of the frame of a structure, which rests on the foundation and supports the uprights of the frame, or, in masonry, acts as the base of an opening in a wall. A sill plate is anchored to the foundation wall on which studs and other framing members are attached, and is the bottom plate of exterior walls. A sill sealer is material placed between the top of the foundation wall and the sill plate. Usually a foam strip, the sill sealer helps to make a better fit and to eliminate water problems.

site The area of land to be used for a building location.

site development On-site and off-site work, including pathways, sidewalks, ramps, curbs, parking facilities, stairs, planting areas, pools, promenades, exterior gathering or assembly areas, raised or depressed paved areas and other features.

site plan A plan drawing showing the site and buildings.

size A solution of gelatin-type material, such as resin, glue or starch, that is used to fill or seal pores on a surface and prevent the absorption of finishing materials.

skip see holiday.

slack time The flexibility with noncritical jobs that allows their start dates to be adjusted without affecting their completion dates.

sleeper Usually, a wood member embedded in concrete that serves to support and to fasten the subfloor or flooring. Also, a timber laid on the ground to support a floor joist.

slip A suspension of ceramic material in liquid. Also, a long, thin strip of wood.

slope The inclined angle of a roof surface, given as a ratio of the rise (in inches) to the run (in feet). See pitch.

smart building A modern office building that is prewired with telecommunication services and computer links.

soffit The underside of a structural member, such as a beam, stairway, cornice, roof, arch or eaves.

soft costs Items in addition to the direct construction costs. These generally include architectural, engineering, permit, and legal fees, financing fees, interest and operating expenses, leasing and real estate commissions, advertising and promotion expenses, and supervision.

soil engineer A professional whose area of expertise is in soil analysis, foundation design, drainage, and the effects of other site conditions on the design of structures.

soil report A report by a geological engineer that provides information on subsurface soil conditions. See subsurface investigation.

soil stack A general term for the vertical main of a system of soil, waste or vent piping. Often refers to a plumbing vent pipe that penetrates the roof. See stack vent.

soldier A brick that is laid on its end, with its narrow face toward the outside of the wall.

spall A fragment, usually in the shape of a flake, that is detached from a larger mass by a blow, by the action of weather (e.g., freezing and thawing), by pressure, or by expansion within the larger mass.

span The horizontal distance between supporting structures such as beams, trusses or columns. In roofing, the horizontal distance from eaves to eaves.

spandrel The wall area between the head or lintel of a window on one story and the sill of a window on the floor above; the term usually refers to wall facing that is supported by a skeleton structure. Also, the area of a wall between adjacent arches.

special conditions A section of the conditions of the contract, other than the general conditions, that may be prepared for a particular project. This may include specific clauses that set forth requirements peculiar to the project under consideration and cover work or materials that are involved in the proposal and estimate but are not satisfactorily covered by the general conditions.

specialty contractor A contractor who follows a recognized trade, such as a plumber, carpenter, mason or electrician. California licenses 41 different types of specialty contractors, such as specialists in lathing and plastering, millwork, refrigeration and roofing.

specific performance see performance.

specification code A building code under which allowable and required materials and methods are specified in detail. Compare performance code.

specifications or specs A narrative list of materials, methods, model numbers, colors, allowances and other details that supplements the information contained in the blueprints and other working drawings. In more general terms, detailed written instructions that explain each phase of the work to be done. The Construction Specification Institute (CSI) provides a format for listing specifications.

splay An inclined or oblique surface, such as the slope or bevel at the sides of a door or window.

spline A thin strip of wood used to reinforce joints. Also known as a tongue.

springer The brick or stone from which an arch springs.

stack The vertical main pipe of a soil, waste or vent pipe system. A chimney stack is any structure or part thereof that contains a flue for the discharge of gases or smoke.

stack vent The extension of a soil stack above the highest horizontal drain connected to the stack.

stair rise see rise.

standard details A drawing or illustration that is sufficiently complete and detailed that it can be used on other projects with few or no changes.

standard dimension A measurement that is unique to a specific manufactured item.

standpipe A pipe that extends the full height of a building, has hose connections, and is used to provide water exclusively for fighting fires.

start date The date that an activity or project begins.

step return A bottom step, the nosing of which extends out considerably over the riser. It is frequently wider than the rest of the stairs and is usually curved at the ends. See bullnose.

still air space see dead air space.

stipulated-sum contract see lump-sum contract.

stop notice A charge against construction funds in the hands of a property owner or a construction lender for the value of work or materials in a project. This is a lien on funds to be paid, whereas a mechanic's lien is a lien on property. A stop notice is usually the only form of remedy available to a contractor who has done work for a government agency.

stop order A formal, written notification to a contractor to discontinue some or all work on a project for reasons such as safety violations, defective materials or workmanship, or cancellation of the contract.

story The space within a building between two adjacent floor levels or between a floor and a roof. Also spelled storey.

stretcher A brick that is laid on its flat side and shows its face on the surface of the wall.

structural bond The interlocking pattern of masonry units that is used to tie two or more wythes together in a wall.

structural design The design of the structural system. It is based on an analysis of the methods of supporting all the dead and live loads, and a calculation of the sizes and arrangement of all members.

structural system The load-bearing assembly of beams and columns on a foundation. The beams and columns are generally made off-site and assembled on-site. Other systems, such as non-load-bearing walls, floors, ceilings and roofs, are generally constructed within and on the structural system. See framing.

stucco A cement plaster that is used for coating exterior walls and other exterior surfaces, often in an ornamental or decorative way. Stucco may also be used in interior finish work.

stud A vertical wall-framing member, usually made of wood or steel, which may be load-bearing or non-load-bearing. Studs provide nailing surfaces for interior and exterior sheathing.

sub An abbreviation for subcontractor.

sub-bidder A subcontractor who submits a bid to a prime contractor.

subcontract An agreement between a prime contractor and another contractor or supplier for the satisfactory performance of services or delivery of materials as set forth in the plans and specifications of a project.

subcontractor A contractor who specializes in a particular trade, and whose contract is with the prime contractor and not the owner. In more general terms, an individual or entity who contracts to perform part or all of another's contract.

subcontractor list A list of the subcontractors that a general contractor contemplates using; sometimes this must be submitted for the owner's approval.

subfloor Boards or plywood that are laid on joists over which the finish floor is to be laid.

subgrade The soil prepared to support a structure or to act as the foundation for a pavement system. Also known as basement soil or foundation soil.

submittals Various documents submitted by the contractor to the owner or architect, such as shop drawings, material samples, the subcontractor list, and insurance certificates. A submittal schedule is prepared by a contractor showing when each of the specified submittals will be sent to the architect or owner.

substantial completion A certification by the architect that the work, or a designated portion of it, is sufficiently complete, in accordance with the contract, for the owner to use the building, or a designated part of it, for the purpose for which it is intended. This is often an indication that the contractor can bill for the final payment, though matters listed on the punch list may still be outstanding.

substitution A proposed replacement or alternate offered in lieu of and represented as being equivalent to a specified material or process.

substrate The lower level, base or support on which other materials are applied, such as paint, flooring, roofing, ceramic tiles or other finish-type installations.

substructure The supporting part of a structure; the foundation.

sub-subcontractor An individual or entity who contracts to perform part or all of a subcontractor's contract.

subsurface investigation The examination of soil conditions below the ground, which may involve soil borings and laboratory tests, for structural design purposes. See soil report.

successor A scheduled activity, the start date of which depends on the completion of one or more predecessors.

superstructure The part of a building that is above the foundation. In bridge construction, the concrete deck or traffic surface of the bridge.

supplier An individual or firm who supplies and/or makes materials or equipment for a specific portion of a construction project but does not perform any labor on the project. Compare vendor.

surety see bonding company.

surety bond A bond that guarantees the performance of a contract or an obligation. See completion bond; labor and materials bond; performance bond.

surveying A branch of applied mathematics, including geometry and trigonometry, that aids in determining and delineating the form, extent and position of land.

suspended ceiling A ceiling system that is supported by hanging it from an overhead structural framing.

swale A wide, shallow depression in the ground that acts as a channel for storm-water drainage.

T&G see tongue-and-groove.

T&M see time and materials.

take off The material necessary to complete a job.

take-off person An individual who measures and prices building work. She or he must be able to read blueprints and be familiar with the project specifications. The take-off person estimates the quantities of labor, materials, equipment and special items needed to complete the job. Formerly called take-off man; also known as quantity surveyor.

tar see coal-tar pitch.

tear-off A roofing repair job that involves the complete removal of the old roof and insulation down to the deck.

temper To moisten and mix clay, plaster or mortar to a proper consistency.

tempera A water-thinned or water-emulsion paint.

tempered Strengthened. Tempered glass will not shatter or create shards, but will "pelletize" like an automobile window. Such glass is required in tub and shower enclosures, in entry door glass and sidelight glass, and in a window when the windowsill is less than 16 inches from the floor.

template A gauge, pattern or mold that is used as a guide to the form of an item being made.

temporary closure Temporary construction used during the construction process to close openings in order to provide weather protection or to separate construction areas from occupied areas.

tender An offer or bid.

tenon A tongue-like protrusion on the end of a board, plank or timber that is tightly fitted into a rectangular slot (mortise) in the side of another other piece. See mortise-and-tenon.

tensile strength Resistance to elongation; the greatest longitudinal stress a substance can bear without rupturing or remaining permanently elongated. Tensile strength is measured in pounds per square inch.

termination for cause The right of an owner or contractor to end a construction contract if the other commits certain specified acts.

termination for owner's convenience The owner's right to end a construction contract for any reason to suit the owner's convenience.

terra-cotta A fired clay product, usually red or reddish-yellow in color, that is used for ornamental work on the exterior of buildings.

terrazzo A finish floor or wall material consisting of concrete with an aggregate of marble chips selected for size and color, which are ground and polished smooth after curing. Terrazzo may also be precast and prefinished.

threads Spiral ridges on a member, like a pipe, by which parts can be screwed together. External threads are male; internal threads are female.

thrust A lateral or inclined force resulting from the structural action of an arch, vault, dome, suspension structure or rigid frame.

tie A device for holding components together; often a structural device that acts in tension.

tile A ceramic surfacing unit, usually relatively thin in relation to facial area, that is made from clay or a mixture of clay and other ceramic materials, called the body of the tile, and has either a glazed or unglazed face.

time and materials (T&M) A method of paying a contractor for work, consisting of reimbursement for time expended and the cost of materials. A time-and-materials contract specifies a price for different elements of the work, such as cost per hour of labor, overhead, profit, etc.; this may not include a maximum price, or it may state a "price not to exceed."

time is of the essence A provision in a construction contract stating that punctual completion within the time limits or periods specified in the contract is a vital part of the contract performance, that failure to perform on time is a breach, and that the injured party is entitled to damages in the amount of loss sustained.

timely completion Completing the work of a contract before the date required.

tinner A heating contractor.

Title 24 A set of federal laws mandating that the construction industry conserve energy.

to the weather Any part of a structure that faces the elements (e.g., a shingled roof is to the weather, but the framing system is not).

tongue and groove (T&G) A type of lumber, metal or precast concrete that has matching or mated edges to provide a tight fit; the tongue is a projection that fits into a groove.

toothing In masonry, the system of constructing the end of a wall in which every other course projects one half of a brick length. This allows another wall to be tied into the staggered brick end.

topsoil Surface soil that is at and includes the average plow depth, and is used as a planting or growing medium.

total cost A method of computing damages sustained by a contractor because of a breach of contract that caused the contractor to operate in an inefficient or unproductive manner.

transom A horizontal crossbar in a window, over a door, or between a door and a window or a fanlight above it. Also, a window above a door or another window built on and commonly hinged to a transom.

trap A bend in a plumbing fixture waste line that is designed to hold enough water to act as a seal so that gases will not escape from the plumbing system into the building.

travel time Wages that are paid to workers under certain union contracts and under certain job conditions for the time spent in traveling from their home to and from the job.

tread The horizontal surface of a step in a stair.

treated lumber A wood product that has been impregnated with chemical pesticides such as chromated copper arsenate (CCA) to reduce damage from wood rot or insects. Often used for the portions of a structure that are likely to be in contact with soil and water. Wood may also be treated with a fire retardant.

trim The finish materials in a building, such as moldings applied around openings (e.g., window trim, door trim) or at the floors and ceilings of rooms (e.g., baseboard, cornice), and including handrails, stairway balustrades, mantels, light boxes, cabinets, countertops and shelves. Plumbing, heat and electrical trim is the work that the mechanical contractors perform to finish their respective aspects of a project, when the building is nearing completion and occupancy. Exterior trim is finish materials on the exterior of a building, such as moldings applied around doors, windows, and other openings, siding, windows, exterior doors, attic vents, crawl-space vents, shutters, etc. In building stone, trim is stone that is used as decorative members on a structure that is built or faced largely with other masonry material, such as brick, tile, block or terra-cotta. Stone trim items include sills, jambes, lintels, coping, cornices and quoins.

Trombe wall A passive solar heating concept consisting of a vertical building wall with glazing and a massive masonry wall behind it to absorb the incoming solar energy and transfer it to the building by natural circulation.

truss A structural framework of triangular units for supporting loads over long spans.

tuck-pointing Removing deteriorated mortar from the surface of an existing brick wall and inserting fresh mortar.

turnkey A project delivery system in which the owner pays an all-inclusive price for the land, financing, design and construction. Also used when a subcontractor provides all the materials (and labor) for a job.

UBC see uniform building code.

UL label see Underwriters Laboratories label.

unbalancing the schedule of values see front-end loading.

unconscionability The doctrine that courts will not enforce contractual provisions that put one party at the mercy of another, on the assumption that the disadvantaged party was acting from ignorance or compulsion.

underbid To bid less than a competing bidder.

undercapitalized Having too little capital for efficient operation.

underpinning The process of placing new foundations beneath an existing structure.

Underwriters Laboratories label (UL label) A label on a product or manufactured item indicating that the material is regularly tested by, and complies with the minimum standards of, the Underwriters Laboratories specification for safety and quality.

Uniform Building Code (UBC) A model building code written by the International Conference of Building Officials (ICBO) that has been adopted by many cities and counties as their official building code. The UBC is designed to be compatible with the codes and publications of other organizations with similar goals, such as the International Association of Plumbing and Mechanical Officials (IAPMO) and the National Fire Protection Association (NFPA).

unit-price contract A contract under which the owner agrees to pay the contractor a specified amount of money for each unit of work successfully completed.

unit prices A predetermined price for a measurement or quantity of work to be performed under a contract. The designated unit price would include all labor, materials, equipment or services associated with the measurement or quantity established. See cost estimate.

upset price see guaranteed maximum price.

utility easement The area of the earth that holds electric, gas or telephone lines. These areas may be owned by the homeowner, but the utility company has the legal right to enter the area as necessary to repair or service the lines. See easement.

valley A trough or internal angle formed by the intersection of two roof slopes.

value engineering The process of analyzing the cost versus the value of alternative materials, equipment and systems.

vapor barrier A building product that is installed on exterior walls, on ceilings under the drywall, and on the warm side of the insulation. It is used to retard the movement of water vapor into walls and prevent condensation within them. Normally, polyethylene plastic sheeting is used.

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

vector A quantity that has direction as well as magnitude; usually represented on a plan by a line in space with an arrowhead indicating direction and the scale of the line representing magnitude. See free-body diagram.

vendor An individual who sells materials or equipment that are not fabricated to a special design. Compare supplier.

veneer A nonstructural facing of wood, brick, concrete, stone, tile, metal, plastic or other similar material attached to a backing for ornamentation, protection or insulation.

vent A vertical pipe connected to a waste- or soil-distribution system that prevents a back-pressure or a vacuum that might siphon the water out of a trap; also, a pipe for the expulsion of water vapor and gases from gas-burning equipment to the outside air. A vent may also be a free opening to provide air intake, expulsion or circulation in such areas as underfloor crawl spaces and attics.

verbal quotation A subcontract or material-cost proposal that is provided in conversation or over the telephone before the subcontractor or supplier sends a written proposal via post, facsimile or electronic mail.

vinyl A plastic made by polymerization that is used in flooring, wall coverings, gaskets and other parts.

voidable A valid provision of a contract that can be made void by following some specified procedure.

voltage A measure of electrical potential. Most houses are wired with 110- and 220-volt lines. The 110-volt power is used for lighting and most of the other circuits. The 220-volt power is usually used for the kitchen range, hot-water heater, and dryer.

voussoir One of the wedge-shaped pieces of stone or brick that forms an arch.

vulcanizing Treating rubber with sulfur at a high temperature to harden and toughen it.

waferboard see chipboard.

wainscot The lower three or four feet of an interior wall when it is finished differently from the remainder of the wall. See dado.

walk-through A final inspection of a building to look for and document problems that need to be corrected.

wall plate A horizontal member that is anchored to a masonry wall and to which other structural elements may be attached. Also known as a head plate.

wallboard Large, rigid sheets of wood pulp, gypsum, pressed cellulose fibers, gypsum board, plywood or similar material that are used in place of plaster in interior surfaces.

warranty In construction, there are two general types of warranties. One is provided by the manufacturer of a product such as roofing material or an appliance. The second is a warranty for labor. For example, a roofing contract may include a 20-year material warranty and a five-year labor warranty. Many contractors building new houses provide a one-year warranty. Any major issue found during the first year should be communicated to the builder immediately.

wash A sloping upper surface of a building member, such as a coping or sill, that is designed to carry away water.

waste stack A vertical line of piping that extends one or more floors and receives the discharge of fixtures other than toilets and urinals.

water table The level below which the ground is saturated with water, and thus the level to which groundwater will fill an excavation. In masonry, the finish at the bottom of a house that carries water away from the foundation or a projection of lower masonry on the outside of a wall.

water tap The connection point where the home water line connects to the main municipal water system.

waterboard Water-resistant drywall (normally green or blue) that is used in tub and shower locations.

water-repellent coating A transparent coating or sealer that is applied to the surfaces of concrete and masonry to repel water. A water-repellent preservative is a liquid that is designed to penetrate into wood and give it a moderate preservative protection. It is used for millwork, such as sashes and frames, and is usually applied by dipping.

weatherization Work on a building exterior that is designed to reduce energy consumption for heating or cooling; it includes adding insulation, installing storm windows and doors, caulking cracks, and putting on weatherstrips.

weatherstrip A narrow section of thin metal or other material that is installed to prevent the infiltration of air and moisture around windows and doors.

weep hole A small opening made to allow the drainage of water that accumulates inside a building component, such as masonry or glazing structures.

weld A joint between two pieces of metal that is formed by fusing the pieces together, usually with the aid of additional metal melted from a rod or electrode. As a verb, to join two pieces of metal together by heating.

wet sprinkler system A sprinkler system that is filled with water at pressure, for immediate use upon activation.

winder A stair tread that is wider at one end than at the other, located at a turn in the stairway.

window frame The stationary part of a window unit; the window sash fits into the window frame.

window sash see sash.

with inspection Masonry that is designed to take higher stress. This requires the establishment of procedures (usually performed by an independent inspection service) at the job site to monitor and report on mortar, grout, rebar grouting, workmanship and quality.

withe see wythe.

without inspection Masonry that is designed to take reduced stress.

wood-frame construction A type of construction in which the structural parts are wood or depend on a wood frame for support. In building codes, if a masonry veneer is applied to the exterior walls, the classification of this type of construction is usually unchanged.

work order A written order that is signed by the owner or by his or her representative and has a contractual status, requiring performance by the contractor without negotiation.

work-product exclusion A provision in a liability insurance policy that withholds coverage for damages to work performed by or on behalf of the insured.

workers' compensation A system established by statute under which employers are responsible for the medical expenses and disabilities of workers who are injured while on the job. Compensation is payable even if the employer is not at fault and even if the carelessness of the worker contributed to the injury, but the employer is not necessarily liable for damages for pain and suffering.

working drawing A drawing that is sufficiently complete (with plan and section views, dimensions, details, and notes) so that whatever is shown can be constructed and/or replicated without further instructions, but subject to clarifications. Such drawings form part of the contract documents.

wrought iron A tough, malleable and relatively soft form of iron, with a low carbon content. It is suitable for forging or rolling (and thus can be worked or "wrought"), but not for casting in a mold.

wythe A single tier or vertical section of brick or stone in a wall that is one unit in thickness (compare course). Also, a masonry separation or partition between the flues in a chimney with more than one flue.

zoning Governmental regulations on the use of privately owned land. In specific terms, the official designation of parts of a municipality or other territory for certain specified uses, such as single-family use, high-rise residential use, industrial use, etc. See building code; permit.