

Commercial



Construction Glossary

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COMMERCIAL CONSTRUCTION GLOSSARY

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About the Author

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A

Acoustics	The size, shape, and absorption materials that affect the noise transmission and sound level of a room.
Addendum	A supplemental document, which is issued after the bid documents have been distributed to potential bidders, but before the final bids are received to provide further information, clarification, or correction to previous specifications issued.
Allowance	A sum of money which is identified in the contract documents, held by the general contractor for a specific item such as carpeting. The final cost will be set by bidding or negotiation within the maximum set by the allowance. An allowance is part of the larger contract amount and is based on an estimated range of final cost rather than a bid price.
Architect	Licensed design professional responsible for the production of all necessary design documents and other documentation, including specifications. During construction phase, the architect is responsible for certifying payment, reviewing shop drawings, product data, samples and submittals, and approving any substitutions.
As-Built Drawings (“As-Builts”)	The final construction documents, or working drawings, with contractor’s modifications and detailing, which will provide precise locations and dimensions (e.g., of conduit and ducts) for the owner’s future use. Incorporates all modifications and construction details.

B

Balancing	The final adjustments of HVAC air ducts and mechanical control systems to test and provide uniform or specified air flow, temperature, and humidity in a finished building. Also known as “Testing and Balancing.”
Base Bid	The dollar amount of the General Contractor’s scope of work in a construction bid. Certain items may be excluded.
Bid	See Base Bid.
Bid Alternate	A specific item, such as an enhancement or higher quality material, to be added to or deducted from the base bid if the owner chooses to add or delete the work covered by the alternate. An example of this might be a higher quality of finish material, window treatment, or other item, which may affect the finished building qualitatively, but not functionally.
Bid Bond	A legal financial and legal obligation serving to guarantee the contractor’s ability to submit a bid and finance a construction project.
Bid Document	A bidding package that includes an invitation to bid, the process and requirements to submit a bid, a bid form, specifications and plans, and any addenda issued prior to the release of the bid package.

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Blueprints	Architectural site plans, floor plans, reflected ceiling plans, elevations, and sections.
Bubble Diagram	Library areas depicted as rough circles sized to illustrate the floor area required and two-dimensional relationships within the building.
Building Code	Rules and regulations adopted by authorities to control the design and construction of buildings, renovation, use and occupancy conditions, materials, and construction methods. These codes cover all buildings within the jurisdiction with regard to structure, access, mechanical and architectural standards, public health, sanitation, lighting, and ventilation. The California Building Standards Code, Title 24, California Code of Regulations. (Title 24)
Built-in	Furniture or cabinetry, frequently of a custom nature, which is attached to the structure and is often included in the construction contract. Also known as Casework.

C

California Environmental Quality Act (CEQA)	California code that applies to new projects requiring approval by State and local government agencies. Its goal is to develop and maintain a high-quality environment while aiming to identify, avoid or mitigate significant environmental effects of a proposed project.
Case goods	See Built-In.
Casework	See Built-in.
Cast in place	Concrete, which is poured into forms to set in its permanent location. See also pre-cast.
CCD	See Construction Change Directive
Change Order	A description of a proposed change, together with a price for the change order, prepared for transmission from the contractor to the project architect or similar official representing the owner. (Title 24)
Charrette	From the French. Used in English among designers to mean “an intense period of time during which a great amount of creative energy is dedicated to solving a specific design problem or problems.” In architectural planning usually occurs during the schematic design phase.
Completion, Substantial	A specific date, or percentage of work, which has been agreed upon by the architect as representing substantially complete so that the Owner may take possession or occupy the building.
Conceptual Design	Preliminary design phase indicating rough layout of the areas of a building, site orientation and footprint.

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Construction Change Directive	Also known as a "Field Order." The CCD is a written authorization for the contractor to proceed with work that may impact the schedule or the cost of a project. The CCD allows work to proceed without lengthy contract negotiations which will result in a project delay.
Construction Documents Phase	Project phase, which entails the preparation of the final architectural and engineering building plan documents (working drawings) that will be used for bidding and constructing the facility. Final drawings, specifications, and bidding documents.
Contingency	A percentage of the construction cost allocated to cover unforeseen expenses. Frequently both a design contingency and a construction contingency will be allocated.
Critical Path Method	A graphic flow chart of multiple interdependent tasks to show the shortest time possible to complete construction and occupy a building. Chart identified which actions are required for succeeding activities to commence. For example, the completion of carpeting is typically on the "critical path" to precede shelving installation. Used by the General Contractor to determine which operations require the most time for fabrication and/or shipping and have potential to cause project delays.
Curtain Wall	A thin non-load bearing exterior wall system that creates an envelope around a structure.

D

Dead Load	The weight of all fixed items in a building including the structure, lighting, building materials, partitions, and permanently fixed elements such as installed equipment.
Demountable	A non-load bearing partition assembled from prefabricated dry components (drywall or gypsum board), which can be installed, removed, and then reinstalled at a different location.
Design Development Phase	Project phase, which consists of extensive detailing of the schematic documents including location of power and data receptacles, finish materials, fenestration, doors, windows, access and egress, security, and mechanical and structural systems.
Design Documents	Plans, specifications, and all other documents appropriate for the design phase of a project. (Title 24)
Design Intent Drawings	Drawings that show conceptual information and general details intended to suggest the final criteria. Usually, these drawings rely on the next level of information, such as "shop drawings" or "prototypes" to define and confirm specific details. Drawings show general size, profile and basic relationship of parts, but no specific details of material or construction.
Detail	A small section of an architectural drawing. A drawing, at a larger scale, of a part of another drawing, indicating in detail the composition, location, and design of the elements and materials shown.

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E

Easement	Right or privilege of a person or entity, other than the landowner or tenant, to use a piece of property; e.g. underground or overhead utility easements, pedestrians, or vehicular right-of-way.
Elevation	Drawing of the vertical, straight-on view of a building.

F

F & E	Furniture and Equipment. Generally indicates moveable furniture and equipment; i.e., which is not fixed to the building. FF&E generally indicates furniture, fixtures, and equipment, and would include fixtures that are physically attached to the building in some way.
Fabrication	Work done at the factory before a structure arrives at the building site.
Fenestration	The arrangement, proportioning, and design of exterior and interior windows, clerestories, skylights, window walls, and doors in a building.
FF & E	See F & E
Field Order	See Construction Change Directive
Finish	A broad term describing the specific material treatment for a furniture item or a facility interior includes work surfaces, walls, floors, ceiling, glazing, etc. Finish materials include paint, tile, plaster, natural stone, cork, wood, laminate, synthetic materials, acoustical materials, cloth, vinyl, and glass.
Floor Box	An electrical, telecommunications or shared box built into the floor that contains terminations for power and data.
Floor Plan	Accurately detailed drawings showing walls, doors, windows, and includes furniture and equipment and square footage for each space.
Foot-candle	The foot-candle (abbreviated ft-c.) is a measure of illumination falling on a surface. One foot-candle is the amount of illumination provided by one lumen of light energy incident on a one-square-foot surface. If the same energy from a particular source is spread out over a larger area, such as four square feet, the illumination created by the source on this larger surface is reduced by a factor of four. Used as a standard reference to determine appropriate light levels for specific areas or tasks.
Footings	Foundation or underlying support for a structure that serves to transmit the structure's load to the earth. Commonly used as in "pouring footings."
Footprint of Building	The outline or perimeter of a building at grade level.
Foundations	The supporting structure for a building at the ground level or its

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underpinning if it is supported by columns. Footings at the bottom of each column or pier are its foundations. The type of foundation required depends on the structural system, the ground, and the climate. Soft soils may require piles to be driven down 100 feet or more. On rock much less will be necessary to anchor the building. For a building that has no basement but is erected directly on a concrete slab, that is the foundation. If a building has bearing walls supporting the roof, the foundations are the lowest divisions of these walls.

G

- General Conditions** That part of the construction contract documents outlining the rights, responsibilities, and relationships of the parties involved.
- General Contractor** The licensed prime contractor who holds the general contract with the Owner. The General Contractor is responsible for coordination of all contracted work at the construction site, including that performed by the subcontractors.
- Grade** Lowest point of elevation of the surface of the ground, paving or sidewalk between the building and the property line or, between the building and a line 5 feet from the building, whichever is closer.
- Grade slope has an incline or pitch described as so many degrees, or as, for example, rising one foot over a horizontal distance of five feet. To grade a site is to shape the topography of the site to meet the design criteria usually by removing or bringing in soil or fill.
- Guaranteed Maximum Price** The *GMP* for a specific construction project; i.e., a not to exceed figure that is negotiated between the Owner and the Contractor. Any possible savings are frequently shared.

H

- Hardwire** Electrical device wired directly to the electrical circuit as compared to a device that plugs into an electrical receptacle.
- HVAC** Common abbreviation for heating, ventilation, and air conditioning.

I

- Inspector** Professional employed by the Owner to inspect construction to insure compliance with building codes and contract documents. During the construction phase, the Inspector will maintain a file of all job orders, interpretations and instructions, and outline all work that has taken place on the job during each reporting period.

J

- J-Box** Junction Box. A box, usually metal, used to house the connection point

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of wires or cables, frequently located in the ceiling for power or data receptacles.

Job Meeting Weekly meeting scheduled and conducted by the Project Manager during the construction process. Attendees include the General Contractor, Project Architect, other Owner's representatives, and representatives of various trades or engineering specialties as invited. Purpose of meeting is to provide project update and status report, report on outstanding requests for information (RFI), outstanding submittals; Owner generated issues, including change orders, and reviews the schedule. Project Manager provides agenda and minutes of job meetings, which serve as an official record of the progress of the project. Also known as Project Meeting.

L

Life Safety Signs Used for police, fire, security, accessibility, evacuation and other life safety information. Also known as Fire and Life Safety Signage, typically included in the General Contract. Does not include directional or information, ceremonial, or other additional signage.

Live Load Any weight within a building for items which are not fixed and potentially shifting, such as the movement of people, books, materials, and equipment, and vehicles. See also Dead Load.

Load Bearing Used in reference to a wall which is engineered to support and withstand all weight of all parts of the building that rest on it. Cannot be removed without compromising the structural integrity of a building.

Low Voltage Low voltage system. Typically 50 volts or less. Data, security, intercom and telecom wires are usually low voltage.

M

Maquette A miniature or scaled study or presentation model; often used by artists to demonstrate sculpture or construction detailing before fabrication.

Millwork See Built-in.

Mock-Up A full size model used to test scale, color, appearance, legibility and/or aesthetic aspects. Usually made of materials that simulate final construction materials and finishes. Also see maquette.

N

Negotiated Bid A means of reaching a contract agreement with a construction firm where the cost and terms of construction are developed collaboratively.

NIC Acronym for "not in contract". Used on drawings to indicate those

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items that are excluded from the job under contract.

- Notice to Bidders** Notice contained in the bidding requirements informing prospective bidders of the opportunity to submit a bid on a project, and outlining procedures.
- Notice to Proceed** Written authorization issued by the Owner to the contractor providing approval to proceed with the work and establishing the start date of the work.

O

- O.S.H.A.** Occupational Safety and Health Administration Abbreviation, an agency of the U.S. Department of Labor, which since 1970 has authority for setting minimum building conditions affecting health and safety for staff.
- Occupancy Permit** Approval of the completed construction project by the appropriate governmental agencies, including the fire and departments, authorizing the occupancy of the building. When all work is not completed, the Owner may be provided with a TOC, or temporary occupancy permit, allowing the staff to move in equipment and furniture, but the public is not yet permitted to occupy the facility.
- Orientation** Position of a building on the site in relation to the sun, wind, view and noise. Noted as a North/South or East/West orientation.
- Outline Specifications** See Specifications.

P

- Paint Finishes** In descending order of reflectivity: gloss, semi-gloss, 20% gloss, satin, eggshell, matte.
- Performance Bond** Legal and financial obligation guaranteeing to the Owner that the General Contractor's work will be performed in accordance with the contract documents. May be combined with the labor and material bond.
- Plans** The architectural and engineering drawings associated with a project including vicinity maps, site plans, foundation plans, reflected ceiling plans, roof plans, cross sections, interior elevations, exterior elevations and details.
- Plenum** The contained space between the ceiling tiles and the underside of the structural ceiling that frequently serves as a large open duct space housing HVAC ducts, cabling for data and telecommunications, and electrical wiring.

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Post Occupancy Evaluation	The process of evaluating a finished building usually one year after opening. Quantifiable data is gathered from the Owner and Users concerning technical performance, functionality, durability and other evaluation criteria.
Pre-Cast Concrete	Concrete, or glass fiber reinforced concrete, cast in a mold and later placed into position in the structure vs. "cast in place."
Profile floor	Also known as raised floor, computer floor, and access floor. A floor that sits on piers providing an area below the floor and the sub-floor. Low profile floor will accommodate distribution of power and data sources; high profile floor will accommodate power and data sources as well as serve as a plenum for the HVAC system.
Programming Phase	Beginning phase of a building project which involves providing a description of the physical requirements for a facility including functional statements, space names, locations, adjacencies, rough square footage allocations, and other functional requirements that will be used by the design professionals.
Project Manager	The Project Manager is hired as the Owner's representative on a construction project for the purposes of project coordination and inspection beyond the scope of the architect's services. Responsible for reviewing all change orders, responses to RFI (requests for information), signing progress payment requests, and reviewing all documentation received from the General Contractor.
Punch List	A list of incomplete items or items needing correction given to the Contractor by the Owner or his/her representative during the final stages of construction. Usually compiled when the project is substantially complete.

R

Receptacle	An electrical outlet, usually but not always 120 Volts, that contains one (simplex) or two (duplex) outlets.
Rendering	An illustration that shows a building, a portion of the site area in detail, and other details in a format suitable for presentation or publication to convey the merits of the design. Techniques can include pencil, ink, watercolor, colored markers, tempera or a combination of techniques utilizing shadows, texture, plants, automobiles and people.
RFI	Request for Information. Usually transmitted from the General Contractor to the Architect requesting clarification of a detail in a construction document. Architect will review all RFI's with any necessary consultants and issue a written response. It is the architect's responsibility to provide sufficient detail beyond what is contained in the construction documents or the specifications for the contractor to complete the project.

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RFP	Request for Proposal. An invitation sent out to selected firms, or generally advertised, requesting firms to submit their qualifications for and interest in a specific project. In addition to qualifications, respondents will be asked include a scope of work, schedule, and fee proposal.
RFQ	Request for Qualifications. An invitation sent out to selected firms or generally advertised requesting firms to submit their qualifications for and interest in a specific project. Respondents will include qualifications, key sub-consultants, resumes for project team members, and profiles of similar projects, team availability, and references, but typically not a fee proposal.
Reflected Ceiling Plan	A set of drawings included in the Construction Documents which includes ceiling treatment, materials, lighting fixtures, sprinklers, speakers, J-Boxes, or other overhead details required for construction of a space.
Rough-In	During construction, the preliminary stage to install cables, risers, conduit, and connection boxes while the walls of a building are still open.

S

Scale	The dimensional relationship in linear feet for a specific architectural drawing. Most commonly 1/8 scale is used, which represents 1" on the plan equaling an actual dimension of 8 feet. Other scales include 1/16 (one inch equals 16 feet) and 3/16 (3 inches equals 16 feet). "Drawing to scale," means that all parts are drawn to the same precise reduced proportion.
Scale Drawing	Also known as "To Scale." Signifying that all elements on the drawing represent real measurements and the relationship between all parts on the drawing represents true dimensions.
Schematic Design	Early project phase when building spaces are sized, adjacencies determined, and floor levels and circulation are organized into a building footprint. Plan is not necessarily to scale.
Section (architectural)	An illustration representing a theoretical cutting along a predetermined line, with a view through the building or a portion of it.
Shop Drawings	Drawings, diagrams, illustrations, charts, or other data prepared by specific trades to describe the quantity, shape, size and materials and other details to be manufactured, built or constructed. The essential reason for shop drawings is to be sure the original design concept is accurately fabricated in the construction process.
Sign-off	The formal process by which the Owner, or representative, provides their signature of approval. Sign-offs by the library representative may be required for each phase of the design process as well as at the

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completion of construction.

Site Plan	A two-dimensional drawing, which shows the entire site to scale with topographic information, building footprint, hardscape, parking, and site orientation.
Specifications	Written documents in which the architect details the scope of work, installation and execution method, quality of the materials to be used and the level of the workmanship required. Specifications may name products by specific brand name or may allow the General Contractor flexibility by specifying “or equal.” Should meet architectural construction format per CSI (Construction Specifications Institute) standards.
Standard	Also known as “industry standard.” Quality level of a specific item and compatibility with other products as generally accepted by the manufacturers and consumers for all items of that type.
Subcontractor	A tradesperson or vendor who is employed by the General Contractor to perform a portion of the construction work.
Submittal	A sample of a specific material or product description or response to a request for information (RFI); e.g., carpet sample, product literature.
Sustainability	A method of using a resource so that the resource is not depleted or permanently damaged. Sustainable architecture aims to utilize materials and methods that preserve natural resources.

T

Testing & Balancing	See Balancing.
Topographic Map	Map that presents the vertical position of features in a measurable form, as well as their horizontal positions.

W

Walk through	An inspection of the physical conditions for the purpose of preparing a bid for a specific scope of work. An inspection of completed work.
Working Drawings	Drawings for use by the General Contractor, subcontractor or fabricator, which form part of the contract documents for a building project. They contain the necessary information to fabricate or erect an object or structure.