

GLOSSARY OF TERMINOLOGY



GENERAL & TECH INFO

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ALIGNER	Lumber or metal members used to align vertical formwork. (plumbing strut or alignment device)	CAPITAL	The tapered upper section of a column under the drop head. Conical shaped with round columns, pyramidal shaped with square columns.
ANCHOR BRACKET	A projecting member designed in combination with a specified anchor to attach to a previous concrete pour so as to support the dead weight of the subsequent formwork and live loads specified.	CAULK	To use a putty-type material to seal form joints from grout leakage.
ANCHORS	Devices used to secure formwork, braces or accessories to previously placed concrete, either embedded during placement or set in holes drilled in hardened concrete. There are two basic parts: the embedded anchor device and the external fastener which is removed after use.	CHAMFER	A beveled external corner. It is usually formed in the concrete work by use of a chamfer strip placed in the form at the outside corner to provide a rounded or beveled corner.
BATTER WALL	Wall with one or both faces slanting from the vertical, usually creating a wall thicker at its base than at its top.	CHASE	An elongated void or opening formed into a concrete surface.
BEAM FORM	The entire formwork to form the bottom and both sides of a beam.	CLEANOUT	An opening in the forms for removal of refuse, closed before the concrete is placed.
BEAM POCKET	Opening left in a vertical member in which a beam is to rest; also an opening in a column or girder form where forms for intersecting beams will be framed.	CLEAT	Small board used to connect two or more pieces of formwork lumber together.
BEAM SIDE	Vertical side panels or parts of a beam form.	CLIMBING FORM	A form which is raised vertically for succeeding lifts of concrete in a given structure, usually supported on anchor bolts or rods embedded in the top of the previous lift. The form is moved only after an entire lift is placed and (partially) hardened; this should not be confused with a slip form which moves during placement of the concrete.
BOX-OUT	An opening or pocket formed in concrete positioning a box-like form within the wall forms.	COIL BOLT	The hex-head outer unit of a three-piece wall tie with external contoured threads to engage the helical threads of a coil tie inner unit.
BRACE	Any external structural member used to resist horizontal forces exerted on the forms such as wind loads.	COIL TIE	The non-reusable inner unit or center part of a three-piece wall form tie. Ties are made with two or more straight wire struts with helix coils welded at each end forming female threads.
BRACKET	Projecting member from a structure to support weight beyond its face.	COLUMN CLAMP	Any of the various types of stiffening or fastening units to hold a column form sides together
BREAK-BACK	The distance from the face of concrete to the end of the remaining imbedded portion of a tie (snapped off wire-tie, or the face of concrete clearance of a three-piece tie inner unit) (also referred to as Cut-Back).	CONSTRUCTION JOINT	The surface where two adjacent placements of concrete meet, frequently with a keyway or reinforcement across the joint.
BRICK LEDGE (BRICK SEAT)	Ledge on wall or footing to support a course of masonry.	CONTROL JOINT	Formed, saw cut, or tooled groove in a concrete surface to regulate the location of shrinkage cracks.
BUCK	Framing to void an opening in a wall, such as a door buck, which forms the opening for a door.	CORBEL	The projection from the face of a concrete wall which is used to support a beam or elevated slab.
BUG HOLE	Void on the surface of formed concrete caused by an adhering air or water bubble not displaced during consolidation.	CROSSMEMBER	Intermediate stiffening member of a form panel connected at both ends of the perimeter frame.
BULKHEAD	A partition in the forms blocking fresh concrete from a section of the forms or closing the end of a form, such as at the construction joint.	CRUSH PLATE	An expendable strip of wood used as a pad to protect either the form or concrete surface from damage during prying action to strip forms.
CAMBER	An inward curvature of a wall or an upward curvature of an elevated slab or beam form to improve appearance or to compensate for anticipated load deflection.	DADO	Rectangular groove in the perimeter frame of a form which allows for the passage of ties without leaving a gap between forms.
CANTILEVER FORM	A special forming technique in which the lateral concrete pressure is resisted by a cantilevered vertical member.	DEAD LOAD	The load of forms, stringers, joists, reinforcing rods, and the actual concrete to be placed.
		DEADMAN	A steel beam, block of concrete or other heavy item used to provide anchorage for a guy line or form brace.



M A S C O . N E T

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DESIGN PRESSURE	The predetermined load per square foot at form face predicated by pressure, temperature, rate of concrete placement and height of concrete above point considered.	GIRDER FORM	Self-supporting form system where the load is carried in bending by the side panels.
DIAPHRAGM	Cross walls positioned between long span, deep beams to provide lateral stability to the beams.	GRADE STRIP	A temporary wood strip secured to form face prior to concrete placement to denote finished grade elevation.
DOUGHNUT	A large washer of any shape to increase bearing area of bolts and form ties, also to act as a shim.	GUYS (GUY WIRE)	Cable anchor from ground to top of wall form to brace in one direction through tension.
DRAFT	The slight taper difference between opposite sides of a form so that it will readily strip out the concrete.	HAIRPIN	The wedge used to tighten some types of form ties, also a hairpinshaped anchor set in place while concrete is plastic.
DUTCHMAN	Usually a solid lumber thickness utilized to fill in under one side of (cribbing) equal height wall forms such as on a side slope footing, also to compensate for lineal dimension variation between opposing forms due to a slight angle corner or curved wall.	HANDSET FORM	A modular form erected and stripped by hand rather than a crane.
ELEVATION	A drawing showing a specific area projection of a structure on a vertical plane.	HAUNCH	A projection built on a wall or column used to support a load outside the wall or column.
EMBEDMENT	An insert, anchor bolt or other device attached at the form face so as to be encapsulated by the concrete for future attachments or structural performance.	HE-BOLT	The outer unit of a three-piece wall tie, of which the external threads of the outer units engage the internal threads of an inner unit such as a coil tie.
END-BARS	Perimeter frame members similar to end-rails but are usually perpendicular to crossmembers.	HEAD (LIQUID HEAD)	The vertical height measurement of liquid concrete in wall form.
END-RAILS	Perimeter frame members of prefab form panel which are perpendicular to side-rails.	HONEYCOMB	Undesirable voids left in the formed concrete surface revealing unbonded coarse aggregates.
EXPANSION JOINT	A thickness of flexible material between consecutive placements of concrete to absorb linear expansion of concrete.	INITIAL SET	An early state of the concrete curing process at transformation from a liquid to a solid.
FACTOR OF SAFETY	Ratio of ultimate load to allowable load.	INNER UNIT (INNER TIE)	The non-reusable center part of a three-piece she-bolt tie.
FALSEWORK (Shoring)	The temporary structure erected to support work in the process of construction, such as shoring or vertical post to support an elevated wall or spandrel beam.	INSERT	A female threaded connector embedded in a concrete to which a male anchor device can be connected.
FILLER	A non-standard width form panel used to take up odd dimensions.	INVERT	The lowest visible surface; the floor of a drain, sewer, tunnel, culvert, or channel.
FILLER STRIP	Piece of wood, metal or other material placed between large ganged slab form areas and vertical surfaces to permit easy stripping	JUMBO	Traveling support for forms, commonly used in gang-formed tunnel work.
FILLET	A beveled or rounded inside corner.	KERF	To make a series of cuts or notches in order to curve a wood member.
FORM COATING	Anti-bonding material applied to form face surface to induce easy stripping.	KEYWAY	A recess or groove created in an earlier pour of concrete which is filled with concrete of the next pour giving shear strength to the joint.
FORMWORK	The total system of support for freshly placed concrete including the mold or sheathing which contacts the concrete as well as all supporting members, hardware, and necessary bracing.	KICKER	A piece of wood (block or board) or metal attached to a formwork member to take the thrust of another member.
FULL LIQUID HEAD	Concrete pressure where the entire pour is still in a liquid state.	KNEE BRACE	A brace between horizontal and vertical members in a building frame or formwork to make the structure more stable.
GANG FORM	A large area of wall form with independent structural integrity. May also be a grouping of panels to be used as a unit for convenience in erecting, stripping and reusing.	LEDGER	A horizontal structural member secured to a concrete wall and used to support forms.
		LIFT BEAM	See Spreader Beam.
		LIFT BRACKET	Special brackets attached to top of ganged forms to facilitate fast, safe attachment of crane sling lines.
		LIFTER	A lifting device used to vertically elevate ganged forms to subsequent vertical reuses.

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LINER	Any sheet or layer of material attached directly to the inside face of the forms to improve surface quality, alter the texture, or to imprint specific architectural patterns on the finished concrete.	PILASTER	Column built with a wall, usually projecting beyond the wall face.
LIVE LOAD	The total weight of workers, equipment, buggies, vibrators and other loads that will exist and move about due to the method of placement, leveling and screeding of the concrete pour.	PLATE	A flat horizontal member such as a 2 x 4 placed on the footing for leveling and upon which the forms are set, sometimes referred to as a "shoe."
LOAD EQUALIZERS	A system of equalizing sheaves designed to distribute the load equally to each form lift point when multiple-leg slings are used to lift a form.	PLUMB	Vertical or the act of making vertical.
MODULAR FORMWORK	Prefabricated all-metal or metal-supported-plywood systems in standard sizes with an integral provision for tie and connecting hardware.	POST-TENSIONED CONCRETE	Reinforced concrete in which, after the concrete has set and sufficiently hardened, the desirable distribution of stress is achieved by post tensioning steel tendons, bars or wires.
MONOLITHIC	Concrete placement technique in which the slab, the beams, the columns, and the walls or any combination of the above elements are poured at the same time.	PRECAST CONCRETE	Concrete units (such as beams, joists, deck panels, or wall panels) cast elsewhere than its final position and then set in place.
MUDSILL	A plank, or concrete slab, on the ground, to provide a level surface and support to concrete forms.	PRESTRESSED CONCRETE	A system for utilizing the compressive strength of concrete by producing required compressive stresses with highly stressed tension rods, tendons or wires.
MULTI-LIFT	The vertical stacking of forms in tiers for any height wall. A wall requiring more than one row of forms is generally referred to as multilift.	REBAR	Abbreviation for "Reinforcing Bar."
NAILER	Strip of wood or other material attached to or set in concrete or attached to steel to facilitate making nailed connections.	RETAINING WALL	A wall, which is designed to resist horizontal loads such as those imposed by soil or water.
OFFSET	A displacement or abrupt change in line or the distance between two parallel lines; such as a change in wall thickness which will create a vertical offset.	RIBS	Parallel structural members backing sheathing in a prefabricated form. Same as crossmembers.
ONE-SIDED FORMWORK	A wall formwork system having only one forming side, requiring special provisions for tying and support. Commonly required when placing concrete against sheet pile, slurry walls, soldier beam embankments, and existing concrete or concrete block walls.	RIGGING	Suspension components, such as chains, shackles, connecting links and eye hooks used to suspend formwork gangs or components from a crane or similar lifting device.
PANEL	A section of form sheathing constructed from boards, plywood, metalsheets, etc., that can be erected and stripped as a unit. Panels can be built on jobsite or prefabricated factory built.	RUSTIFICATION	A groove in the concrete formed by securing a strip to the face of the formwork. Also referred to as a "feature strip."
PAN-JOIST	A light slab with ribs normally 24 to 36 inches on center acting as beams. The joists or ribs run at right angles to primary beams or girders.	SAFETY FACTOR	See Factor of Safety.
PARAPET	Part of a wall that extends above the roof level.	SCAB	A small piece of wood fastened to two formwork members to secure a butt joint.
PENCIL ROD	Metal rod (wire), usually about 1/4" diameter, used in conjunction with special bearing clamps to perform as a wall form tie.	SCAFFOLD BRACKET	A premanufactured cantilevered bracket designed to attach to formwork gangs and support scaffold planks that are used for a work platform when placing and vibrating concrete.
PENETRATION	Any concrete embedment device that must pass through the form face (such as anchor bolts, rebar, or dowel rods).	SCAFFOLDING	An elevated platform supporting workers, tools, and materials, either attached to wall forms or free standing.
PERMANENT FORM	Any form that remains in place after the concrete has developed its design strength. The form may or may not become an integral part of the structure.	SCREED	The tool used to control the top surface elevation of freshly placed concrete.
		SEATHING	The material forming the contact face of forms, also called lagging or sheeting.
		SHE-BOLT	The outer unit of a three-piece wall tie that contains female threads to engage the external threaded inner unit (rod). SHIM Thin pieces of material used to bring abutting members to an even, level bearing.
		SIDERAIL	Perimeter frame member of prefab form panel which is perpendicular to crossmembers.
		SILL	Horizontal bearing member as a plate. See Plate.
		SKIN PLATE	The steel form face of an all-steel form brace.

SLAB	The thinner portion of the floor, usually of uniform depth, that is between the drop heads or beams.	TELLTALE	Any device designed to indicate movement of formwork.
SLING	A length of cable with a loop at each end, usually the cable line from the crane hook to ganged form.	TEMPLATE	Thin plate or board frame used as a guide in positioning or spacing of form parts, reinforcements, anchors, etc.
SLIP FORM	A form which moves, usually continuously, during placing of the concrete. Movement may be either horizontal or vertical. Slip forming is like an extrusion process with the forms acting as moving dies to shape the concrete.	TIE	A concrete form tie is a tensile unit adapted to holding concrete forms secure against the lateral pressure of unhardened concrete, with or without provision for spacing the forms a definite distance apart, and with or without provision for removal of metal to a specified distance back from the finished concrete surface.
SNAP TIE	A wire-type tie with or without spreader washer or cones. After forms are released, the protruding tie ends are snapped off by twisting at a predetermined break-off crimp usually about 1" in the concrete.	TIE DADO	Half-slot thickness dado's at the siderails of adjoining forms provide the tie location slot common to many prefabricated form systems.
SOLDIERS	Vertical wales used for strengthening or alignment.	TOENAIL	To drive a nail at an angle.
SPANDREL BEAM	A beam in the perimeter of a building, spanning between columns and usually supporting floors or roof. An up-turned spandrel depth dimension extends above the floor, and a down-turned spandrel extends below the floor.	TRAVELER	Traveling support and bracing for ganged tunnel and culvert formwork.
SPREADER	A brace, usually of wood, inserted in forms to keep the form faces the proper distance apart until the concrete is placed.	WALER	Load gathering members used to hold studs or panel forms in position.
SPREADER BEAM	A beam utilized to distribute the weight of a ganged form through two or more equalized vertical pick-up points.	WALKWAY SYSTEM	All components including, but not limited to, scaffold brackets, scaffold planks, guard rails, toeboards and guard rail posts erected to provide a work platform for placing and vibrating concrete and to prevent workers from falling.
SPUD	Adjustable bolt-like strut extending between the skin of tunnel forms and bored rock tunnel walls to provide position support of the formwork.	WATERSTOP	Rubber, plastic, or other material inserted in a construction joint to prevent the seepage of water through the joint.
STAKE	A pointed wood or metal object driven in ground to attach brace or to support form sides in footing forming.	WEDGE	A piece of wood or metal tapered to a thin edge, used to adjust elevation, tighten formwork, etc.
STIFFENER	A structural member for the support of the plywood face or skin plate on panel forms sometimes called ribs.	WEDGE BOLT	A two-way action designed wedge which contains a slot to facilitate its function as a connecting bolt also.
STRIP	To remove formwork from concrete.		
STRIPPING BAR	A solid bar positioned in-between form panels or adjoining ganged forms which is the first unit stripped thereby providing relief to readily strip the large form panels; also referred to as "wrecking strips."		
STRONGBACK	A load gathering member attached to the back of the formwork on the outside of the walers for added strength, to hold proper alignment (sometimes referred to as "stiffbacks").		
STUD	Supporting member to which sheathing is attached.		
TAG LINE	Line connected to gang form or flying form to control free swing movement during crane lifting.		
TAPER TIE	A one-piece reusable form tie with a slight taper to facilitate removal.		