

GLOSSARY OF CONCRETE MASONRY TERMS

Keywords: definitions, glossary, terminology

- “A” block:** Hollow masonry unit with one end closed by a cross web and the opposite end open or lacking an end cross web. (See “Open end block.”)
- Absorption:** The difference in the amount of water contained within a concrete masonry unit between saturated and oven-dry conditions, expressed as weight of water per cubic foot of concrete. [4]
- Accelerator:** A liquid or powder admixture added to a cementitious paste to speed hydration and promote early strength development. An example of an accelerator material is calcium nitrite.
- Adhesive anchor :** An anchoring device that is placed in a predrilled hole and secured using a chemical compound.
- Admixture:** Substance other than prescribed materials of water, aggregate and cementitious materials added to concrete, mortar or grout to improve one or more chemical or physical properties. [3]
- Aggregate:** An inert granular or powdered material such as natural sand, manufactured sand, gravel, crushed stone, slag, fines and lightweight aggregate, which, when bound together by a cementitious matrix forms concrete, grout or mortar. [3]
- Air entraining:** The capability of a material or process to develop a system of uniformly distributed microscopic air bubbles in a cementitious paste to increase the workability or durability of the resulting product. Some admixtures act as air entraining agents.
- Anchor:** Metal rod, tie, bolt or strap used to secure masonry to other elements. May be cast, adhered, expanded or fastened into masonry. [1]
- Angle:** A structural steel section that has two legs joined at 90 degrees to one another. Used as a lintel to support masonry over openings such as doors or windows in lieu of a masonry arch or reinforced masonry lintel. Also used as a shelf to vertically support masonry veneer. Sometimes referred to as a relieving angle.
- Arch:** A vertically curved compressive structural member spanning openings or recesses. May also be built flat by using special masonry shapes or specially placed units.
- Area, gross cross-sectional:** The area delineated by the out-to-out dimensions of masonry in the plane under consideration. This includes the total area of a section perpendicular to the direction of the load, including areas within cells and voids. [1]
- Area, net cross-sectional:** The area of masonry units, grout and mortar crossed by the plane under consideration, based on out-to-out dimensions and neglecting the area of all voids such as ungrouted cores, open spaces, or any other area devoid of masonry. [1]
- Axial load:** The load exerted on a wall or other structural element and acting parallel to the element’s axis. Axial loads typically act in a vertical direction, but may be otherwise depending on the type and orientation of the element.
- Backing:** The wall or surface to which veneer is secured. The backing material may be concrete, masonry, steel framing or wood framing. [1]
- Beam:** A structural member, typically horizontal, designed to primarily resist flexure.
- Burnished block:** (See “Ground face block.”)
- Bedded area:** The surface area of a masonry unit that is in contact with mortar in the plane of the mortar joint.
- Blast furnace slag cement:** A blended cement which incorporates blast furnace slag.
- Blended cement:** Portland cement or air-entrained portland cement combined through blending with such materials as blast furnace slag or pozzolan, which is usually fly ash. May be used as an alternative to portland cement in mortar.
- Block:** A solid or hollow unit larger than brick-sized units. (See also “Concrete block, concrete masonry unit, masonry unit”)
- Block machine:** Equipment used to mold, consolidate and compact shapes when manufacturing concrete masonry units.
- Bond:** (1) The arrangement of units to provide strength, stability or a unique visual effect created by laying units in a prescribed pattern. See reference 6 for illustrations and descriptions of common masonry bond patterns. (2) The physical adhesive or mechanical binding between masonry units, mortar, grout and reinforcement. (3) To connect wythes or masonry units.
- Bond beam:** (1) The grouted course or courses of masonry units reinforced with longitudinal bars and designed to take the longitudinal flexural and tensile forces that may be induced in a masonry wall. (2) A horizontal grouted element within masonry in which reinforcement is embedded.
- Bond beam block:** A hollow unit with depressed webs or with “knock-out” webs (which are removed prior to placement) to accommodate horizontal reinforcement and grout.
- Bond breaker:** A material used to prevent adhesion between two surfaces.

Bond, running: The placement of masonry units such that head joints in successive courses are horizontally offset at least one-quarter the unit length. [1] Centering head joints over the unit below, called center or half bond, is the most common form of running bond. A horizontal offset between head joints in successive courses of one-third and one-quarter the unit length is called third bond and quarter bond, respectively.

Bond, stack: For structural design purposes, *Building Code Requirements for Masonry Structures* considers all masonry not laid in running bond as stack bond. [1] In common use, stack bond typically refers to masonry laid so head joints in successive courses are vertically aligned. Also called plumb joint bond, straight stack, jack bond, jack-on-jack and checkerboard bond.

Bond strength: The resistance to separation of mortar from masonry units and of mortar and grout from reinforcing steel and other materials with which it is in contact.

Brick: A solid or hollow manufactured masonry unit of either concrete, clay or stone.

Cantilever: A member structurally supported at only one end through a fixed connection. The opposite end has no structural support.

Cap block: A solid slab used as a coping unit. May contain ridges, bevels or slopes to facilitate drainage. (See also "Coping block.")

Cavity: A continuous air space between wythes of masonry or between masonry and its backup system. Typically greater than 2 in. (51 mm) in thickness. (See "Collar joint.")

Cell: The hollow space within a concrete masonry unit formed by the face shells and webs. Also called core.

Cementitious material: A generic term for any inorganic material including cement, pozzolanic or other finely divided mineral admixtures or other reactive admixtures, or a mixture of such materials that sets and develops strength by chemical reaction with water. In general, the following are considered cementitious materials: portland cement, hydraulic cements, lime putty, hydrated lime, pozzolans and ground granulated blast furnace slag. [3]

Cleanout/cleanout hole: An opening of sufficient size and spacing so as to allow removal of debris from the bottom of the grout space. Typically located in the first course of masonry. [2]

Cold weather construction: Procedures used to construct masonry when ambient air temperature or masonry unit temperature is below 40°F (4.4°C).

Collar joint: A vertical longitudinal space between wythes of masonry or between masonry wythe and backup construction, sometimes filled with mortar or grout. Typically less than 2 in. (51 mm) in thickness. [1] (See also "Cavity.")

Color (pigment): A compatible, color fast, chemically stable admixture that gives a cementitious matrix its coloring.

Column: (1) In structures, a relatively long, slender structural compression member such as a post, pillar, or strut. Usually vertical, a column supports loads that act primarily in the direction of its longitudinal axis. (2) For the purposes of design, an isolated vertical member whose horizontal dimension measured at right angles to the thickness does not exceed 3 times its thickness and whose height is greater than 4 times its thickness. [1]

Composite action: Transfer of stress between components of a member designed so that in resisting loads, the combined components act together as a single member. [1]

Compressive strength: The maximum compressive load that a specimen will support divided by the net cross-sectional area of the specimen.

Compressive strength of masonry: Maximum compressive force resisted per unit of net cross-sectional area of masonry, determined by testing masonry prisms or as a function of individual masonry units, mortar and grout in accordance with ref. 2. [2] (See also "Specified compressive strength of masonry.")

Concrete: A composite material that consists of a water reactive binding medium, water and aggregate (usually a combination of fine aggregate and coarse aggregate) with or without admixtures. In portland cement concrete, the binder is a mixture of portland cement, water and may contain admixtures.

Concrete block: A hollow or solid concrete masonry unit. Larger in size than a concrete brick.

Concrete brick: A concrete hollow or solid unit smaller in size than a concrete block.

Concrete masonry unit: Hollow or solid masonry unit, manufactured using low frequency, high amplitude vibration to consolidate concrete of stiff or extremely dry consistency.

Connector: A mechanical device for securing two or more pieces, parts or members together; includes anchors, wall ties and fasteners. May be either structural or nonstructural. [1]

Connector, tie: A metal device used to join wythes of masonry in a multiwythe wall or to attach a masonry veneer to its backing. [1] (See also "Anchor.")

Control joint: A continuous unbonded masonry joint that is formed, sawed or tooled in a masonry structure to regulate the location and amount of cracking and separation resulting from dimensional changes of different parts of the structure, thereby avoiding the development of high stresses.

Coping: The materials or masonry units used to form the finished top of a wall, pier, chimney or pilaster to protect the masonry below from water penetration.

Coping block: A solid concrete masonry unit intended for use as the top finished course in wall construction.

Corbel: A projection of successive courses from the face of masonry. [1]

Core: (See "Cell.")

Corrosion resistant: A material that is treated or coated to retard corrosive action. An example is steel that is galvanized after fabrication.

Course: A horizontal layer of masonry units in a wall or, much less commonly, curved over an arch.

Crack control: Methods used to control the extent, size and location of cracking in masonry including reinforcing steel, control joints and dimensional stability of masonry materials.

Cull: A masonry unit that does not meet the standards or specifications and therefore has been rejected.

Curing: (1) The maintenance of proper conditions of moisture and temperature during initial set to develop a required strength and reduce shrinkage in products containing portland cement. (2) The initial time period during which cementitious materials gain strength.

Damp-proofing: The treatment of masonry to retard the passage or absorption of water or water vapor, either by application of a suitable coating or membrane to exposed surfaces or by use of a suitable admixture or treated cement.

Damp check: An impervious horizontal layer to prevent vertical penetration of water in a wall or other masonry element. A damp check consists of either a course of solid masonry, metal or a thin layer of asphaltic or bituminous material. It is generally placed near grade to prevent upward migration of moisture by capillary action.

- Diaphragm:** A roof or floor system designed to transmit lateral forces to shear walls or other lateral load resisting elements. [1]
- Dimension, actual:** The measured size of a concrete masonry unit or assemblage.
- Dimension, nominal:** The specified dimension plus an allowance for mortar joints, typically $\frac{3}{8}$ in. (9.5 mm). Nominal dimensions are usually stated in whole numbers. Width (thickness) is given first, followed by height and then length. [1]
- Dimension, specified:** The dimensions specified for the manufacture or construction of a unit, joint or element. Unless otherwise stated, all calculations are based on specified dimensions. Actual dimensions may vary from specified dimensions by permissible variations. [1]
- Dowel:** A metal reinforcing bar used to connect masonry to masonry or to concrete.
- Drip:** A groove or slot cut beneath and slightly behind the forward edge of a projecting unit or element, such as a sill, lintel or coping, to cause rainwater to drip off and prevent it from penetrating the wall.
- Drying shrinkage:** The change in linear dimension of a concrete masonry wall or unit due to drying.
- Dry stack:** Masonry work laid without mortar.
- Eccentricity:** The distance between the resultant of an applied load and the centroidal axis of the masonry element under load.
- Effective height:** Clear height of a braced member between lateral supports and used for calculating the slenderness ratio of the member. [1]
- Effective thickness:** The assumed thickness of a member used to calculate the slenderness ratio.
- Efflorescence:** A deposit or encrustation of soluble salts (generally white), that may form on the surface of stone, brick, concrete or mortar when moisture moves through the masonry materials and evaporates on the surface. In new construction, sometimes referred to as new building bloom. Once the structure dries, the bloom normally disappears or is removed with water.
- Equivalent thickness:** The solid thickness to which a hollow unit would be reduced if the material in the unit were recast into a unit with the same face dimensions (height and length) but without voids. The equivalent thickness of a 100% solid unit is equal to the actual thickness. Used primarily to determine masonry fire resistance ratings.
- Expansion anchor:** An anchoring device (based on a friction grip) in which an expandable socket expands, causing a wedge action, as a bolt is tightened into it.
- Face:** (1) The surface of a wall or masonry unit. (2) The surface of a unit designed to be exposed in the finished masonry.
- Face shell:** The outer wall of a hollow concrete masonry unit. [5]
- Face shell mortar bedding:** Hollow masonry unit construction where mortar is applied only to the horizontal surface of the unit face shells and the head joints to a depth equal to the thickness of the face shell. No mortar is applied to the unit cross webs. (See also "Full mortar bedding.")
- Facing:** Any material forming a part of a wall and used as a finished surface.
- Fastener:** A device used to attach components to masonry, typically nonstructural in nature.
- Fire resistance:** A rating assigned to walls indicating the length of time a wall performs as a barrier to the passage of flame, hot gases and heat when subjected to a standardized fire and hose stream test. For masonry, fire resistance is most often determined based on the masonry's equivalent thickness and aggregate type.
- Flashing:** A thin impervious material placed in mortar joints and through air spaces in masonry to prevent water penetration and to facilitate water drainage.
- Fly ash:** The finely divided residue resulting from the combustion of ground or powdered coal.
- Footing:** A structural element that transmits loads directly to the soil.
- Freeze-thaw durability:** The ability to resist damage from the cyclic freezing and thawing of moisture in materials and the resultant expansion and contraction.
- Full mortar bedding:** Masonry construction where mortar is applied to the entire horizontal surface of the masonry unit and the head joints to a depth equal to the thickness of the face shell. (See also "Face shell mortar bedding.")
- Glass unit masonry:** Masonry composed of glass units bonded by mortar. [1]
- Glazed block:** A concrete masonry unit with a permanent smooth resinous tile facing applied during manufacture. Also called prefaced block.
- Ground face block:** A concrete masonry unit in which the surface is ground to a smooth finish exposing the internal matrix and aggregate of the unit. Also called burnished or honed block.
- Grout:** (1) A plastic mixture of cementitious materials, aggregates, water, with or without admixtures initially produced to pouring consistency without segregation of the constituents during placement. [3] (2) The hardened equivalent of such mixtures.
- Grout, prestressing:** A cementitious mixture used to encapsulate bonded prestressing tendons. [2]
- Grout, self-consolidating:** Highly fluid and stable grout used in high lift and low lift grouting that does not require consolidation or reconsolidation.
- Grout lift:** An increment of grout height within a total grout pour. A grout pour consists of one or more grout lifts. [2]
- Grout pour:** The total height of masonry to be grouted prior to erection of additional masonry. A grout pour consists of one or more grout lifts. [2]
- Grouted masonry:** (1) Masonry construction of hollow units where hollow cells are filled with grout, or multiwythe construction in which the space between wythes is solidly filled with grout. (2) Masonry construction using solid masonry units where the interior joints and voids are filled with grout.
- Grouting, high lift:** The technique of grouting masonry in lifts for the full height of the wall.
- Grouting, low lift:** The technique of grouting as the wall is constructed, usually to scaffold or bond beam height, but not greater than 4 to 6 ft (1,219 to 1,829 mm), depending on code limitations.
- "H" block:** Hollow masonry unit lacking cross webs at both ends forming an "H" in cross section. Used with reinforced masonry construction. (See also "Open end block.")
- Header:** A masonry unit that connects two or more adjacent wythes of masonry. Also called a bonder. [1]
- Height of wall:** (1) The vertical distance from the foundation wall or other similar intermediate support to the top of the wall. (2) The vertical distance between intermediate supports.

Height-to-thickness ratio: The height of a masonry wall divided by its nominal thickness. The thickness of cavity walls is taken as the overall thickness minus the width of the cavity.

High lift grouting: (See “Grouting, high lift.”)

Hollow masonry unit: A unit whose net cross-sectional area in any plane parallel to the bearing surface is less than 75 % of its gross cross-sectional area measured in the same plane. [4]

Honed block: (See “Ground face block.”)

Hot weather construction: Procedures used to construct masonry when ambient air temperature exceeds 100°F (37.8°C) or temperature exceeds 90°F (32.2°C) with a wind speed greater than 8 mph (13 km/h).

Inspection: The observations to verify that the masonry construction meets the requirements of the applicable design standards and contract documents.

Jamb block: A block specially formed for the jamb of windows or doors, generally with a vertical slot to receive window frames, etc. Also called sash block.

Joint: The surface at which two members join or abut. If they are held together by mortar, the mortar-filled volume is the joint.

Joint reinforcement: Steel wires placed in mortar bed joints (over the face shells in hollow masonry). Multi-wire joint reinforcement assemblies have cross wires welded between the longitudinal wires at regular intervals.

Lap: (1) The distance two bars overlap when forming a splice. (2) The distance one masonry unit extends over another.

Lap splice: The connection between reinforcing steel generated by overlapping the ends of the reinforcement.

Lateral support: The means of bracing structural members in the horizontal span by columns, buttresses, pilasters or cross walls, or in the vertical span by beams, floors, foundations, or roofs.

Lightweight aggregate: Natural or manufactured aggregate of low density, such as expanded or sintered clay, shale, slate, diatomaceous shale, perlite, vermiculite, slag, natural pumice, volcanic cinders, diatomite, sintered fly ash or industrial cinders.

Lightweight concrete masonry unit: A unit whose oven-dry density is less than 105 lb/ft³ (1,680 kg/m³). [4]

Lime: Calcium oxide (CaO), a general term for the various chemical and physical forms of quicklime, hydrated lime and hydraulic hydrated lime.

Lintel: A beam placed or constructed over a wall opening to carry the superimposed load.

Lintel block: A U-shaped masonry unit, placed with the open side up to accommodate horizontal reinforcement and grout to form a continuous beam. Also called channel block.

Loadbearing: (See “Wall, loadbearing.”)

Low lift grouting: (See “Grouting, low lift.”)

Manufactured masonry unit: A man-made noncombustible building product intended to be laid by hand and joined by mortar, grout or other methods. [5]

Masonry: An assemblage of masonry units, joined with mortar, grout or other accepted methods. [5]

Masonry cement: (1) A mill-mixed cementitious material to which sand and water is added to make mortar. (2) Hydraulic cement produced for use in mortars for masonry construction.

Medium weight concrete masonry unit: A unit whose oven-dry density is at least 105 lb/ft³ (1,680 kg/m³) but less than

125 lb/ft³ (2,000 kg/m³). [4]

Metric: The Systeme Internationale (SI), the standard international system of measurement. Hard metric refers to products or materials manufactured to metric specified dimensions. Soft metric refers to products or materials manufactured to English specified dimensions, then converted into metric dimensions.

Mix design: The proportions of materials used to produce mortar, grout or concrete.

Modular coordination: The designation of masonry units, door and window frames, and other construction components that fit together during construction without customization.

Modular design: Construction with standardized units or dimensions for flexibility and variety in use.

Moisture content: The amount of water contained within a unit at the time of sampling expressed as a percentage of the total amount of water in the unit when saturated. [4]

Mortar: (1) A mixture of cementitious materials, fine aggregate water, with or without admixtures, used to construct unit masonry assemblages. [3] (2) The hardened equivalent of such mixtures.

Mortar bed: A horizontal layer of mortar used to seat a masonry unit.

Mortar bond: (See “Bond.”)

Mortar joint, bed: The horizontal layer of mortar between masonry units. [1]

Mortar joint, head: The vertical mortar joint placed between masonry units within the wythe. [1]

Mortar joint profile: The finished shape of the exposed portion of the mortar joint. Common profiles include:
Concave: Produced with a rounded jointer, this is the standard mortar joint unless otherwise specified. Recommended for exterior walls because it easily sheds water.

Raked: A joint where 1/4 to 1/2 in. (6.4 to 13 mm) is removed from the outside of the joint.

Struck: An approximately flush joint. See also “Strike.”

Net section: The minimum cross section of the member under consideration.

Nonloadbearing: (See “Wall, nonloadbearing.”)

Normal weight concrete masonry unit: A unit whose oven-dry density is 125 lb/ft³ (2000 kg/m³) or greater. [4]

Open end block: A hollow unit, with one or both ends open. Used primarily with reinforced masonry construction. (See “A” block and “H” block.)

Parging: (1) A coating of mortar, which may contain damp-proofing ingredients, over a surface. (2) The process of applying such a coating.

Pier: An isolated column of masonry or a bearing wall not bonded at the sides to associated masonry. For design, a vertical member whose horizontal dimension measured at right angles to its thickness is not less than three times its thickness nor greater than six times its thickness and whose height is less than five times its length. [1]

Pigment: (See “Color.”)

Pilaster: A bonded or keyed column of masonry built as part of a wall. It may be flush or project from either or both wall surfaces. It has a uniform cross section throughout its height and serves as a vertical beam, a column or both.

Pilaster block: Concrete masonry units designed for use in the construction of plain or reinforced concrete masonry pilasters and columns.

Plain masonry: (See “Unreinforced masonry.”)

Plaster: (See "Stucco.")

Plasticizer: An ingredient such as an admixture incorporated into a cementitious material to increase its workability, flexibility or extensibility.

Post-tensioning: A method of prestressing in which prestressing tendons are tensioned after the masonry has been placed. [1] See also "Wall, prestressed."

Prestressing tendon: Steel element such as wire, bar or strand, used to impart prestress to masonry. [1]

Prism: A small assemblage made with masonry units and mortar and sometimes grout. Primarily used for quality control purposes to assess the strength of full-scale masonry members.

Prism strength: Maximum compressive force resisted per unit of net cross-sectional area of masonry, determined by testing masonry prisms.

Project specifications: The written documents that specify project requirements in accordance with the service parameters and other specific criteria established by the owner or owner's agent.

Quality assurance: The administrative and procedural requirements established by the contract documents and by code to assure that constructed masonry is in compliance with the contract documents. [1]

Quality control: The planned system of activities used to provide a level of quality that meets the needs of the users and the use of such a system. The objective of quality control is to provide a system that is safe, adequate, dependable and economic. The overall program involves integrating factors including: the proper specification; production to meet the full intent of the specification; inspection to determine whether the resulting material, product and service is in accordance with the specifications; and review of usage to determine any necessary revisions to the specifications.

Reinforced masonry: (1) Masonry containing reinforcement in the mortar joints or grouted cores used to resist stresses. (2) Unit masonry in which reinforcement is embedded in such a manner that the component materials act together to resist applied forces.

Reinforcing steel: Steel embedded in masonry in such a manner that the two materials act together to resist forces.

Retarding agent: An ingredient or admixture in mortar that slows setting or hardening, most commonly in the form of finely ground gypsum.

Ribbed block: A block with projecting ribs (with either a rectangular or circular profile) on the face for aesthetic purposes. Also called fluted.

Sash block: (See "Jamb block.")

Scored block: A block with grooves on the face for aesthetic purposes. For example, the grooves may simulate raked joints.

Screen block: An open-faced masonry unit used for decorative purposes or to partially screen areas from the sun or from view.

Shell: (See "Face shell.")

Shoring and bracing: The props or posts used to temporarily support members during construction.

Shrinkage: The decrease in volume due to moisture loss, decrease in temperature or carbonation of a cementitious material.

Sill: A flat or slightly beveled unit set horizontally at the base of an opening in a wall.

Simply supported: A member structurally supported at top and bottom or both sides through a pin-type connection, which assumes no moment transfer.

Slenderness ratio: (1) The ratio of a member's effective

height to radius of gyration. (2) The ratio of a member's height to thickness.

Slump: (1) The drop in the height of a cementitious material from its original shape when in a plastic state. (2) A standardized measurement of a plastic cementitious material to determine its flow and workability.

Slump block: A concrete masonry unit produced so that it slumps or sags in irregular fashion before it hardens.

Slushed joint: A mortar joint filled after units are laid by "throwing" mortar in with the edge of a trowel.

Solid masonry unit: A unit whose net cross-sectional area in every plane parallel to the bearing surface is 75 percent or more of its gross cross-sectional area measured in the same plane. [4] Note that Canadian standards define a solid unit as 100% solid.

Spall: To flake or split away due to internal or external forces such as frost action, pressure, dimensional changes after installation, vibration, impact, or some combination.

Specified dimensions: (See "Dimension, specified.")

Specified compressive strength of masonry, f'_m : Minimum masonry compressive strength required by contract documents, upon which the project design is based (expressed in terms of force per unit of net cross-sectional area). [1]

Split block: A concrete masonry unit with one or more faces purposely fractured to produce a rough texture for aesthetic purposes. Also called a split-faced or rock-faced block.

Stirrup: Shear reinforcement in a flexural member. [1]

Strike: To finish a mortar joint with a stroke of the trowel or special tool, simultaneously removing extruded mortar and smoothing the surface of the mortar remaining in the joint.

Stucco: A combination of cement and aggregate mixed with a suitable amount of water to form a plastic mixture that will adhere to a surface and preserve the texture imposed on it.

Temper: To moisten and mix mortar to a proper consistency.

Thermal movement: Dimension change due to temperature change.

Tie: (See "Connector, tie.")

Tolerance: The specified allowance in variation from a specified size, location, or placement.

Tooling: Compressing and shaping the face of a mortar joint with a tool other than a trowel. See "Mortar joint profile" for definitions of common joints.

Unreinforced masonry: Masonry in which the tensile resistance of the masonry is taken into consideration and the resistance of reinforcement, if present, is neglected. Also called plain masonry. [1]

Veneer, adhered: Masonry veneer secured to and supported by the backing through adhesion. [2]

Veneer, anchored: Masonry veneer secured to and supported laterally by the backing through anchors and supported vertically by the foundation or other structural elements.

Veneer, masonry: A masonry wythe that provides the finish of a wall system and transfers out-of-plane loads directly to a backing, but is not considered to add load resisting capacity to the wall system. [1]

Wall, bonded: A masonry wall in which two or more wythes are bonded to act as a composite structural unit.

Wall, cavity: A multiwythe noncomposite masonry wall with a continuous air space within the wall (with or without insulation), which is tied together with metal ties. [1]

Wall, composite: A multiwythe wall where the individual masonry wythes act together to resist applied loads. (See also "Composite action.")

Wall, curtain: (1) A nonloadbearing wall between columns or piers. (2) A nonloadbearing exterior wall vertically supported only at its base, or having bearing support at prescribed vertical intervals. (3) An exterior nonloadbearing wall in skeleton frame construction. Such walls may be anchored to columns, spandrel beams or floors, but not

Wall, foundation: A wall below the floor nearest grade serving as a support for a wall, pier, column or other structural part of a building and in turn supported by a footing.

Wall, loadbearing: Wall that supports vertical load in addition to its own weight. By code, a wall carrying vertical loads greater than 200 lb/ft (2.9 kN/m) in addition to its own weight. [1]

Wall, multiwythe: Wall composed of 2 or more masonry wythes.

Wall, nonloadbearing: A wall that supports no vertical load other than its own weight. By code, a wall carrying vertical loads less than 200 lb/ft (2.9 kN/m) in addition to its own weight. [1]

Wall, panel: (1) An exterior nonloadbearing wall in skeleton frame construction, wholly supported at each story. (2) A nonloadbearing exterior masonry wall having bearing support at each story.

Wall, partition: An interior wall without structural function. [2]

Wall, prestressed: A masonry wall in which internal compressive stresses have been introduced to counteract stresses resulting from applied loads. [1]

Wall, reinforced: (1) A masonry wall reinforced with steel embedded so that the two materials act together in resisting forces. (2) A wall containing reinforcement used to resist shear and tensile stresses.

Wall, retaining: A wall designed to prevent the movement of soils and structures placed behind the wall.

Wall, screen: A masonry wall constructed with more than 25% open area intended for decorative purposes, typically to partially screen an area from the sun or from view.

Wall, shear: A wall, bearing or nonbearing, designed to resist lateral forces acting in the plane of the wall. [1]

Wall, single wythe: A wall of one masonry unit thickness.

Wall, solid masonry: A wall either built of solid masonry units or built of hollow units and grouted solid.

Wall tie: A metal connector that connects wythes of masonry.

Wall tie, veneer: A wall tie used to connect a facing veneer to the backing.

Water permeance: The ability of water to penetrate through a substance such as mortar or brick.

Waterproofing: (1) The methods used to prevent moisture flow through masonry. (2) The materials used to prevent moisture flow through masonry.

Water repellency: The reduction of absorption.

Water repellent: Material added to the masonry to increase resistance to water penetration. Can be a surface treatment or integral water repellent admixture.

Web: The portion of a hollow concrete masonry unit connecting the face shells.

Weep hole: An opening left (or cut) in mortar joints or masonry face shells to allow moisture to exit the wall. Usually located immediately above flashing.

Workability: The ability of mortar or grout to be easily placed and spread.

Wythe: Each continuous vertical section of a wall, one masonry unit in thickness. [1]

REFERENCES

1. *Building Code Requirements for Masonry Structures*, ACI 530-02/ASCE 5-02/TMS 402-02. Reported by the Masonry Standards Joint Committee, 2002.
2. *Specification for Masonry Structures*, ACI 530.1-02/ASCE 6-02/TMS 602-02. Reported by the Masonry Standards Joint Committee, 2002.
3. *Standard Terminology of Mortar and Grout for Unit Masonry*, ASTM C 1180-03. ASTM International, 2003.
4. *Standard Terminology of Concrete Masonry Units and Related Units*, ASTM C 1209-01a. ASTM International, 2001.
5. *Standard Terminology of Masonry*, ASTM C 1232-02. ASTM International, 2002.
6. *Concrete Masonry Bond Patterns*, TEK 14-6. National Concrete Masonry Association, 1999.

Disclaimer: Although care has been taken to ensure the enclosed information is as accurate and complete as possible, NCMA does not assume responsibility for errors or omissions resulting from the use of this TEK.