

CODE

COMMENTARY

concrete, reinforced—structural concrete reinforced with at least the minimum amounts of nonprestressed reinforcement, prestressed reinforcement, or both, as specified in this Code.

concrete, sand-lightweight—lightweight concrete containing only normalweight fine aggregate that conforms to **ASTM C33** and lightweight coarse aggregate that conforms to **ASTM C330**.

concrete, steel fiber-reinforced—concrete containing a prescribed amount of dispersed, randomly oriented, discontinuous deformed steel fibers.

concrete-filled pipe piles—steel pipe with a closed end that is driven for its full length in contact with the surrounding soil, or a steel pipe with an open end that is driven for its full length and the soil cleaned out; for both installation procedures, the pipe is subsequently filled with reinforcement and concrete.

concrete strength, specified compressive, (f'_c)—compressive strength of concrete used in design and evaluated in accordance with provisions of this Code, MPa; wherever the quantity f'_c is under a radical sign, the square root of numerical value only is intended, and the result has units of MPa.

connection—region of a structure that joins two or more members; a connection also refers to a region that joins members of which one or more is precast.

connection, ductile—connection between one or more precast elements that experiences yielding as a result of the earthquake design displacements.

connection, strong—connection between one or more precast elements that remains elastic while adjoining members experience yielding as a result of earthquake design displacements.

construction documents—written and graphic documents and specifications prepared or assembled for describing the location, design, materials, and physical characteristics of the elements of a project necessary for obtaining a building permit and construction of the project.

contraction joint—formed, sawed, or tooled groove in a concrete structure to create a weakened plane and regulate the location of cracking resulting from the dimensional change of different parts of the structure.

cover, specified concrete—distance between the outermost surface of embedded reinforcement and the closest outer surface of the concrete.

and unbonded prestressed concrete are combined with nonprestressed concrete under the generic term “reinforced concrete.” Provisions common to both prestressed and nonprestressed concrete are integrated to avoid overlapping and conflicting provisions.

concrete, reinforced—Includes members satisfying the requirements for nonprestressed and prestressed concrete.

concrete, sand-lightweight—By Code terminology, sand-lightweight concrete is lightweight concrete with all of the fine aggregate replaced by sand. This definition may not be in agreement with usage by some material suppliers or contractors where the majority, but not all, of the lightweight fines are replaced by sand. For proper application of the Code provisions, the replacement limits should be stated, with interpolation if partial sand replacement is used.