

## CODE

**crosstie**—a continuous reinforcing bar having a seismic hook at one end and a hook not less than 90 degrees with at least a  $6d_b$  extension at the other end. The hooks shall engage peripheral longitudinal bars. The 90-degree hooks of two successive crossties engaging the same longitudinal bars shall be alternated end for end.

**cutoff point**—point where reinforcement is terminated.

**D-region**—portion of a member within a distance  $h$  of a force discontinuity or a geometric discontinuity.

**design displacement**—total calculated lateral displacement expected for the design-basis earthquake.

**design information**—project-specific information to be incorporated into construction documents by the licensed design professional, as applicable.

**design load combination**—combination of factored loads and forces.

**design story drift ratio**—relative difference of design displacement between the top and bottom of a story, divided by the story height.

**development length**—length of embedded reinforcement, including pretensioned strand, required to develop the design strength of reinforcement at a critical section.

**discontinuity**—abrupt change in geometry or loading.

**distance sleeve**—sleeve that encases the center part of an undercut anchor, a torque-controlled expansion anchor, or a displacement-controlled expansion anchor, but does not expand.

**drilled piers or caissons**—cast-in-place concrete foundation elements with or without an enlarged base (bell), constructed by excavating a hole in the ground and filling with reinforcement and concrete. Drilled piers or caissons are considered as uncased cast-in-place concrete drilled or augered piles, unless they have permanent steel casing, in which case they are considered as metal cased concrete piles.

**drop panel**—projection below the slab used to reduce the amount of negative reinforcement over a column or the minimum required slab thickness, and to increase the slab shear strength.

**duct**—conduit, plain or corrugated, to accommodate prestressing reinforcement for post-tensioning applications.

**ductile coupled structural wall**—see **structural wall, ductile coupled**.

**durability**—ability of a structure or member to resist deterioration that impairs performance or limits service life

## COMMENTARY

**design displacement**—The design displacement is an index of the maximum lateral displacement expected in design for the design-basis earthquake. In documents such as **ASCE/SEI 7** and the International Building Code, the design displacement is calculated using static or dynamic linear elastic analysis under code-specified actions considering effects of cracked sections, effects of torsion, effects of vertical forces acting through lateral displacements, and modification factors to account for expected inelastic response. The design displacement generally is greater than the displacement calculated from design-level forces applied to a linear-elastic model of the building.