

**1710.1 General.** Where required by the provisions of Section 1710.2 or 1710.3, the owner shall employ a *registered design professional* to perform structural observations as defined in Section 1702.

Prior to the commencement of observations, the structural observer shall submit to the *building official* a written statement identifying the frequency and extent of structural observations.

At the conclusion of the work included in the permit, the structural observer shall submit to the *building official* a written statement that the site visits have been made and identify any reported deficiencies which, to the best of the structural observer's knowledge, have not been resolved.

**1710.2 Structural observations for seismic resistance.** Structural observations shall be provided for those structures assigned to *Seismic Design Category D, E or F*, as determined in Section 1613, where one or more of the following conditions exist:

1. The structure is classified as *Occupancy Category III or IV* in accordance with Table 1604.5.
2. The height of the structure is greater than 75 feet (22 860 mm) above the base.
3. The structure is assigned to *Seismic Design Category E*, is classified as *Occupancy Category I or II* in accordance with Table 1604.5, and is greater than two *stories above grade plane*.
4. When so designated by the *registered design professional* responsible for the structural design.
5. When such observation is specifically required by the *building official*.

**1710.3 Structural observations for wind requirements.** Structural observations shall be provided for those structures sited where the basic wind speed exceeds 110 mph (49.0 m/sec) determined from Figure 1609, where one or more of the following conditions exist:

1. The structure is classified as *Occupancy Category III or IV* in accordance with Table 1604.5.
2. The *building height* of the structure is greater than 75 feet ( 23.0 m).
3. When so designated by the *registered design professional* responsible for the structural design.
4. When such observation is specifically required by the *building official*.

## **SECTION 1711 DESIGN STRENGTHS OF MATERIALS**

**1711.1 Conformance to standards.** The design strengths and permissible stresses of any structural material that are identified by a manufacturer's designation as to manufacture and grade by mill tests, or the strength and stress grade is otherwise confirmed to the satisfaction of the *building official*, shall conform to the specifications and methods of design of accepted engineering practice or the *approved* rules in the absence of applicable standards.

**1711.2 New materials.** For materials that are not specifically provided for in this code, the design strengths and permissible stresses shall be established by tests as provided for in Section 1712.

## **SECTION 1712 ALTERNATIVE TEST PROCEDURE**