

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** The type of special inspection required for anchors cast in concrete and post installed anchors in hardened concrete have been clarified.

**2012 CODE:**

## Table 1705.3

### Required Verification and Inspection of Concrete Construction

**TABLE 1704.4 1705.3** Required Verification and Inspection of Concrete Construction

Verification and Inspection	Continuous	Periodic	Referenced Standard <sup>a</sup>	IBC Reference
3. Inspection of bolts to be installed in concrete prior to and during placement of anchors cast in concrete where allowable loads have been increased or where strength design is used.	X	—	ACI 318: 8.1.3, 21.2.8	1908.5, 1909.1
4. Inspection of anchors post-installed in hardened concrete <u>members</u> <sup>b</sup>	—	X	ACI 318: 3.8.6, 8.1.3, 21.2.8	1909.1

(portions of table not shown are unchanged)

- a. Where applicable, see also Section ~~1707.1~~ 1705.11, Special Inspection for Seismic Resistance.
- b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with ACI 355.2 or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

*Table 1705.3 continues*



Screw-bolt anchor (Courtesy of Powers Fasteners)

**Table 1705.3 continued**

**CHANGE SIGNIFICANCE:** Anchors cast into concrete are visible for inspection from the time of installation until the concrete is placed, similar to concrete reinforcement, which may have periodic special inspection. Because it is sufficient for special inspectors to be present intermittently during installation of the cast-in-place anchors, the code now allows cast-in-place anchors to have periodic special inspection. The new footnote b has been added to account for post-installed anchors approved through the alternate methods of construction provisions of Section 104.11, such as anchors installed in accordance with ICC Evaluation Service Reports. It is also intended to distinguish between the requirements for special inspection of anchors designed to comply with the IBC alone versus those qualified by approved research reports in accordance with ACI 355.2, *Qualification of Post-Installed Mechanical Anchors in Concrete*. Typically, items requiring special inspection that are approved under Section 104.11 are covered by Section 1705.1.1, Special Cases. Where special inspection requirements are not provided in a research report, the special inspection requirements must be specified by the registered design professional, who would indicate whether inspections are continuous or periodic, and be approved by the building official prior to commencement of the work.