

## CHAPTER 17

# STRUCTURAL TEST AND SPECIAL INSPECTIONS

### SECTION 1707.7.2

#### IBC Interpretation No. 01-04

#### 2003 Edition

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**1707.7.2 Component and attachment testing.** The component manufacturer shall test or analyze the component and the component mounting system or anchorage for the design forces in Chapter 16 for those components having a Component Importance Factor of 1.0 or 1.5 in accordance with Chapter 16. The manufacturer shall submit a certificate of compliance for review and acceptance by the registered design professional responsible for the design, and for approval by the building official. The basis of certification shall be by test on a shaking table, by three-dimensional shock tests, by an analytical method using dynamic characteristics and forces from Chapter 16 or by more rigorous analysis. The special inspector shall inspect the component and verify that the label, anchorage or mounting conforms to the certificate of compliance.

#### REFERENCED CODE SECTION

**1702.1 General.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**CERTIFICATE OF COMPLIANCE.** A certificate stating that materials and products meet specified standards or that work was done in compliance with approved construction documents.

**SPECIAL INSPECTION.** Inspection as herein required of the materials, installation, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and referenced standards (see Section 1704).

**SPECIAL INSPECTION, CONTINUOUS.** The full-time observation of work requiring special inspection by an approved special inspector who is present in the area where the work is being performed.

**SPECIAL INSPECTION, PERIODIC.** The part-time or intermittent observation of work requiring special inspection by an approved special inspector who is present in the area where the work has been or is being performed and at the completion of the work.



**Q:** Do the requirements for component and attachment testing provided in Section 1707.7.2 of the *2003 International Building Code* apply to mechanical equipment that does not carry flammable, combustible or highly toxic contents as referenced in Section 1707.7?

**A:** No. Section 1707.7.2 requires the manufacturer of designated seismic system components to test and certify that the design and manufacture of components and their mounting and/or anchoring systems comply with the design forces provided in Chapter 16 of the IBC. Under the provisions of this section, the manufacturer is required to submit a “certificate of compliance” to the design professional and to the building official for review. Section 1707.7 establishes when “periodic special inspections” are required for mechanical and electrical components, which includes only those piping systems intended to carry flammable, combustible or highly toxic contents. Section 1707.7.1 establishes when “special inspections” are required.

**ICC STAFF NOTE:** Section 1707 of the *2003 International Building Code* provides the requirements for “Special Inspections for Seismic Resistance” and is not intended to address testing and certification. Section 1707.7.2 includes requirements for “Component and Attachment Testing” which are inappropriately located in Section 1707. The requirements for component and attachment testing and certification for mechanical and electrical equipment is appropriately addressed in Section 1708.5 of the *2003 International Building Code* and is erroneously duplicated in Section 1707.7.2. Approved code change S82-04/05 deletes portions of Section 1707.7.2 related to testing and certification and Section 1707.7.3 from the *2006 International Building Code* which eliminates the duplication of requirements.

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