

1705.12.7 Storage racks. *Periodic special inspection* is required for the anchorage of storage racks that are 8 feet (2438 mm) or greater in height in structures assigned to *Seismic Design Category D, E or F*.

1705.12.8 Seismic isolation systems. *Periodic special inspection* shall be provided for seismic isolation systems in seismically isolated structures assigned to *Seismic Design Category B, C, D, E or F* during the fabrication and installation of isolator units and energy dissipation devices.

1705.12.9 Cold-formed steel special bolted moment frames. *Periodic special inspection* shall be provided for the installation of cold-formed steel special bolted moment frames in the *seismic force-resisting systems* of structures assigned to *Seismic Design Category D, E or F*.

1705.13 Testing for seismic resistance. Testing for seismic resistance shall be required as specified in Sections 1705.13.1 through 1705.13.4, unless exempted from *special inspections* by the exceptions of Section 1704.2.

1705.13.1 Structural steel. Nondestructive testing for seismic resistance shall be in accordance with Section 1705.13.1.1 or 1705.13.1.2, as applicable.

1705.13.1.1 Seismic force-resisting systems. Nondestructive testing of structural steel in the seismic force-resisting systems in buildings and structures assigned to *Seismic Design Category B, C, D, E or F* shall be performed in accordance with the quality assurance requirements of AISC 341.

Exceptions:

1. In buildings and structures assigned to *Seismic Design Category B or C*, nondestructive testing is not required for structural steel seismic force-resisting systems where the response modification coefficient, R , designated for “Steel systems not specifically detailed for seismic resistance, excluding cantilever column systems” in ASCE 7, Table 12.2-1, has been used for design and detailing.
2. In structures assigned to *Seismic Design Category D, E, or F*, nondestructive testing is not required for structural steel seismic force-resisting systems where design and detailing in accordance with AISC 360 is permitted by ASCE 7, Table 15.4-1.

1705.13.1.2 Structural steel elements. Nondestructive testing of structural steel elements in the seismic force-resisting systems of buildings and structures assigned to *Seismic Design Category B, C, D, E or F* other than those covered in Section 1705.13.1.1, including struts, collectors, chords and foundation elements, shall be performed in accordance with the quality assurance requirements of AISC 341.

Exceptions:

1. In buildings and structures assigned to *Seismic Design Category B or C*, nondestructive testing of *structural steel elements* is not required

for seismic force-resisting systems with a response modification coefficient, R , of 3 or less.

2. In structures assigned to *Seismic Design Category D, E or F*, nondestructive testing of *structural steel elements* is not required for seismic force-resisting systems where design and detailing other than AISC 341 is permitted by ASCE 7, Table 15.4-1. Nondestructive testing of *structural steel elements* shall be in accordance with the applicable referenced standard listed in ASCE 7, Table 15.4-1.

1705.13.2 Nonstructural components. For structures assigned to *Seismic Design Category B, C, D, E or F*, where the requirements of Section 13.2.1 of ASCE 7 for nonstructural components, supports or attachments are met by seismic qualification as specified in Item 2 therein, the *registered design professional* shall specify on the *approved construction documents* the requirements for seismic qualification by analysis, testing or experience data. *Certificates of compliance* for the seismic qualification shall be submitted to the *building official* as specified in Section 1704.5.

1705.13.3 Designated seismic systems. For structures assigned to *Seismic Design Category C, D, E or F* and with *designated seismic systems* that are subject to the requirements of Section 13.2.2 of ASCE 7 for certification, the *registered design professional* shall specify on the *approved construction documents* the requirements to be met by analysis, testing or experience data as specified therein. *Certificates of compliance* documenting that the requirements are met shall be submitted to the *building official* as specified in Section 1704.5.

1705.13.4 Seismic isolation systems. Seismic isolation systems in seismically isolated structures assigned to *Seismic Design Category B, C, D, E or F* shall be tested in accordance with Section 17.8 of ASCE 7.

[BF] 1705.14 Sprayed fire-resistant materials. *Special inspections* and tests of sprayed fire-resistant materials applied to floor, roof and wall assemblies and structural members shall be performed in accordance with Sections 1705.14.1 through 1705.14.6. *Special inspections* shall be based on the fire-resistance design as designated in the *approved construction documents*. The tests set forth in this section shall be based on samplings from specific floor, roof and wall assemblies and structural members. *Special inspections* and tests shall be performed after the rough installation of electrical, automatic sprinkler, mechanical and plumbing systems and suspension systems for ceilings, where applicable.

[BF] 1705.14.1 Physical and visual tests. The *special inspections* and tests shall include the following to demonstrate compliance with the listing and the *fire-resistance rating*:

1. Condition of substrates.
2. Thickness of application.
3. Density in pounds per cubic foot (kg/m^3).