

## QUALITY ASSURANCE FOR SEISMIC RESISTANCE

**§1705.1 Scope.** A quality assurance plan for seismic requirements shall be provided in accordance with [§1705.2](#) for the following:

1. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F, per [§1616](#).
2. Designated seismic systems in structures assigned to Seismic Design Category D, E or F.
3. The following additional systems in structures assigned to Seismic Design Category C:
  - 3.1. HVAC ductwork containing hazardous materials, and anchorage of such ductwork
  - 3.2. Piping systems and mechanical units containing flammable, combustible or highly toxic materials
  - 3.3. Anchorage of electrical equipment used for emergency or standby power systems.
4. The following additional systems in structures assigned to Seismic Design Category D:
  - 4.1. Systems required for Seismic Design Category C
  - 4.2. Exterior wall panels and their anchorage
  - 4.3. Suspended ceiling systems and their anchorage
  - 4.4. Access floors and their anchorage
  - 4.5. Steel storage racks and their anchorage, where the importance factor,  $I_p$ , determined in [§1621.1.6](#), is equal to 1.5.
5. The following additional systems in structures assigned to Seismic Design Category E or F:
  - 5.1. Systems required for Seismic Design Categories C and D
  - 5.2. Electrical equipment.

### EXCEPTIONS:

1. A quality assurance plan is not required for structures designed and constructed in accordance with the conventional construction provisions of [§2308](#).
2. A quality assurance plan is not required for structures designed and constructed in accordance with the following:
  - 2.1. The structure is constructed of light wood framing or light gauge cold-formed steel framing; the design spectral response acceleration at short periods,  $S_{DS}$ , as determined in [§1615.1](#), does not exceed 0.5g, and the height of the structure does not exceed 35 feet (10 668 mm) above grade; or
  - 2.2. The structure is constructed using a reinforced masonry structural system or reinforced concrete structural system; the design spectral response acceleration at short periods,  $S_{DS}$ , as determined in [§1615.1](#), does not exceed 0.5g, and the height of the structure does not exceed 25 feet (7620 mm) above grade; or
  - 2.3. The structure is a detached one- or two-family dwelling not exceeding two stories in height; and

- 2.3.1. The structure is classified as Seismic Use Group I, as determined in [§1616.2](#); and
- 2.3.2. The structure does not have any of the following plan irregularities as defined in [Table 1616.5.1](#) or any of the following vertical irregularities as defined in [Table 1616.5.2](#):
  - a. Torsional irregularity
  - b. Nonparallel systems
  - c. Stiffness irregularity - extreme soft story and soft story
  - d. Discontinuity in capacity - weak story.

**§1705.2 Quality assurance plan preparation.** The design of each designated seismic system shall include a quality assurance plan prepared by a registered design professional. The quality assurance plan shall identify the following:

1. The designated seismic systems and seismic-force-resisting systems that are subject to quality assurance in accordance with [§1705.1](#).
2. The special inspections and testing to be provided as required by [§1704](#) and [§1708](#) and other applicable sections of this code, including the applicable reference standards referred to by this code.
3. The type and frequency of testing required.
4. The type and frequency of special inspections required.
5. The required frequency and distribution of testing and special inspection reports.
6. The structural observations to be performed.
7. The required frequency and distribution of structural observation reports.

**§1705.3 Contractor responsibility.** Each contractor responsible for the construction of a seismic-force-resisting system, designated seismic system, or component listed in the quality assurance plan shall submit a written contractor's statement of responsibility to the [code enforcement](#) official and to the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain the following:

1. Acknowledgment of awareness of the special requirements contained in the quality assurance plan.
2. Acknowledgment that control will be exercised to obtain conformance with the construction documents approved by the [code enforcement](#) official.
3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting, and the distribution of the reports.
4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.

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