

CHAPTER 17
OREGON AMENDMENTS
STRUCTURAL TESTS AND SPECIAL INSPECTIONS
2007 OSSC

Amend Section 1704.1 as Follows:

1704.1 General. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the types of work listed under Section 1704. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection. These inspections are in addition to the inspections specified in Section 109.

For ORS 672 which regulates practice of engineering, administrative rules 820 related to engineering practice and a copy of the reference manual for building officials, please visit <http://www.osbeels.org/>.

Exceptions:

1. Special inspections are not required for work of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
2. Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by applicable state statutes and regulations governing the professional registration and certification of engineers or architects.
3. Unless otherwise required by the building official, special inspections are not required for occupancies in Group R-3 as applicable in Section 101.2 and occupancies in Group U that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.

Amend Section 1704.2.2 as Follows:

1704.2.2 Fabricator approval. Special inspections required by this code are not required where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by ~~an approved special inspection agency~~ **a nationally recognized accrediting authority**. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction documents.

Amend Section 1704.3 as Follows:

1704.3 Steel construction. The special inspections for steel elements of buildings and structures shall be as required by Section 1704.3 and Table 1704.3.

Exceptions:

1. Special inspection of the steel fabrication process shall not be required where the fabricator does not perform any welding, thermal cutting or heating operation of any kind as part of the fabrication process. In such cases, the fabricator shall be required to submit a detailed procedure for material control that demonstrates the fabricator's ability to maintain suitable records and procedures such that, at any time during the fabrication process, the material specification, grade and mill test reports for the main stress-carrying elements are capable of being determined.
2. The special inspector need not be continuously present during welding of the following items, provided the materials, welding procedures and qualifications of welders are verified prior to the start of the work; periodic inspections are made of the work in progress; and a visual inspection of all welds is made prior to completion or prior to shipment of shop welding.
 - 2.1. Single-pass fillet welds not exceeding 5/16 inch (7.9 mm) in size.
 - 2.2. Floor and roof deck welding.
 - 2.3. ~~Welded studs when used for structural diaphragm~~ **Welded studs not installed with an automatically timed stud welding machine per AWS D1.1 Section 7.**
 - 2.4. Welded sheet steel for cold-formed steel framing members such as studs and joists.
 - 2.5. Welding of stairs and railing systems.
3. **For welded studs installed with an automatically timed stud welding machine and in accordance with AWS D1.1 Section 7, the special inspector need not be continuously present during installation of welded studs subject to the following provisions:**
 - 3.1 **The special inspector shall perform a visual inspection of all welded studs per AWS D1.1 Section 7 and Section 7.8.1. Visual inspection of welded studs installed with an automatically timed stud welding machine may take place either in fabrication shop prior to completion or prior to shipment; or on-site prior to coverage.**
 - 3.2 **The fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction documents.**

Amend Section 1705.3 as Follows:

1705.3 Seismic resistance. The statement of special inspections shall include seismic requirements **for structures in occupancy categories III and IV** for the following cases:

1. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F in accordance with Section 1613.
2. Designated seismic systems in structures assigned to Seismic Design Category D, E or F.
3. The following additional systems and components in structures assigned to Seismic Design Category C:
 - 3.1. Heating, ventilating and air-conditioning (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 and components 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 is equal to 1.5 in accordance with Section 15.5.3 of ASCE 7.
5. The following additional systems and components 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.

Exception: Seismic requirements are permitted to be excluded from the statement of special inspections for structures designed and constructed in accordance with the following:

1. The structure consists of light-frame construction; the design spectral response acceleration at short periods, *SDS*, as determined in Section 1613.5.4, does not exceed 0.5g; and the height of the structure does not exceed 35 feet (10 668 mm) above grade plane; or
2. The structure is constructed using a reinforced masonry structural system or reinforced concrete structural system; the design spectral response acceleration at short periods, *SDS*, as determined in Section 1613.5.4, does not exceed 0.5g; and the height of the structure does not exceed 25 feet (7620 mm) above grade plane; or
3. ~~Detached one- or two- family dwellings not exceeding two stories in height, provided the structure does not have any of the following plan or vertical irregularities in accordance with Section 12.3.2 of ASCE 7:~~ **The structure is classified as building occupancy category I; and**
 - 3.1. ~~Torsional irregularity.~~
 - 3.2. ~~Nonparallel systems.~~
 - 3.3. ~~Stiffness irregularity – extreme soft story and soft story.~~
 - 3.4. ~~Discontinuity in capacity – weak story.~~
4. **The structure does not have any of the following plan or vertical irregularities:**
 - 4.1 **Torsional irregularity**
 - 4.2 **Nonparallel systems.**
 - 4.3 **Stiffness irregularity – extreme soft story and soft story**

4.4 Discontinuity in capacity-weak story.

Amend Section 1706.1 as Follows:

1706.1 Contractor responsibility. Each contractor responsible for the construction of a main wind- or seismic-force-resisting system, designated seismic system or a wind- or seismic-resisting component listed in the statement of special inspections **for building occupancy categories III and IV** shall submit a written statement of responsibility to the building official and 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 statement of special inspections;
2. Acknowledgment that control will be exercised to obtain conformance with the construction documents approved by the building official;
3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports; and
4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.

Amend Section 1707.1 as Follows:

1707.1 Special inspections for seismic resistance. For structures in occupancy categories III and IV Special inspections itemized in Sections 1707.2 through 1707.10, unless exempted by the exceptions of Section 1704.1, are required for the following:

1. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F, as determined in Section 1613.
2. Designated seismic systems in structures assigned to Seismic Design Category D, E or F.
3. Architectural, mechanical and electrical components in structures assigned to Seismic Design Category C, D, E or F that are required in Sections 1707.7 and 1707.8.

Amend Section 1707.8 as Follows:

1707.8 Mechanical and electrical components. Special inspection for mechanical and electrical equipment shall be as follows:

1. Periodic special inspection is required during the anchorage of electrical equipment for emergency or standby power systems in structures assigned to Seismic Design Category C, D, E or F;
2. Periodic special inspection is required during the installation of anchorage of other electrical equipment in structures assigned to Seismic Design Category E or F;
3. Periodic special inspection is required during installation **of the anchorage** of piping systems intended to carry flammable, combustible or highly toxic contents and their associated mechanical units in structures assigned to Seismic Design Category C, D, E or F;

4. Periodic special inspection is required during the installation **of the anchorage** of HVAC ductwork that will contain hazardous materials in structures assigned to Seismic Design Category C, D, E or F; and
5. Periodic special inspection is required during the installation of vibration isolation systems in structures assigned to Seismic Design Category C, D, E or F where the construction documents require a nominal clearance of 0.25 inches (6.4 mm) or less between the equipment support frame and restraint.