

**STATE OF OREGON
BUILDING CODES DIVISION
STATEWIDE INTERPRETATION**

No. OSSC 1707

**2004 OREGON STRUCTURAL SPECIALTY CODE
[SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE]**

As per requirements of Section 1707 of the 2004 OSSC (based on 2003 IBC), Special Inspections listed in the table below are the mandated minimum Special Inspections for seismic resistance. And they:

- are not required for minor nature work, Group R-3 occupancy and group U occupancy that are accessory to a residential use unless specified or required by the design engineer or required by the building official based on project specific conditions.
- are required for buildings in Category III or IV (Essential facilities, Special Occupancy etc.) unless otherwise required by the design engineer or the building official for buildings in other categories based on project specific design conditions.

	Seismic Design Category C	Seismic Design Category D	Seismic Design Category E	Seismic Design Category F
(I) Seismic Force Resisting System				
(a) Structural Steel: <ul style="list-style-type: none"> • for structural welding. • for floor/roof deck welding and for single-pass fillet weld $\leq 5/16$ inch. 	Continuous Periodic Inspection	Continuous Periodic Inspection	Continuous Periodic Inspection	Continuous Periodic Inspection
(b) Structural Wood: required for <ul style="list-style-type: none"> - field gluing of elements in the system. - nailing/bolting/anchoring and other fastening of components in the system. Exception: when the nailing spacing > 4 inches. 	Continuous Periodic Inspection	Continuous Periodic Inspection	Continuous Periodic Inspection	Continuous Periodic Inspection
(c) Cold-formed steel framing: required for welding of the system elements, screw attachment, bolting, anchoring & other fastenings.	Periodic Inspection	Periodic Inspection	Periodic Inspection	Periodic Inspection
(II) Designated seismic systems / Architectural Components				
(a) Anchorage of storage racks with Importance factor (I_p) of 1.5 and height ≥ 8 feet.	None	Periodic Inspection	Periodic Inspection	Periodic Inspection
(b) Anchorage of access floors with Importance factor (I_p) of 1.5	None	Periodic Inspection	Periodic Inspection	Periodic Inspection

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<p>(c) In buildings of height > 30 feet, special inspection is required for the erection and fastening of following:</p> <ul style="list-style-type: none"> • exterior cladding weighing > 5 psf • interior/ exterior veneer weighing > 5 psf • interior nonbearing walls weighing > 15 psf • exterior nonbearing walls including glazed curtain walls. 	None	Periodic Inspection	Periodic Inspection	Periodic Inspection
(III) Mechanical and Electrical Components				
<p>(a) Anchorage of electrical equipment in emergency or stand-by systems (emergency or stand-by systems include elements of the power system necessary to maintain integrity of the power supply after failure of the regular power supply and may include following elements such as: transfer switches, generators, invertors, un-interruptible power supplies, switchboards, motor control centers etc.).</p>	Periodic Inspection	Periodic Inspection	Periodic Inspection	Periodic Inspection
<p>(b) Anchorage of all other electrical equipment systems.</p>	None	None	Periodic Inspection	Periodic Inspection
<p>(c) Installation of Piping systems carrying:</p> <ul style="list-style-type: none"> • Flammable contents or • Combustible contents or • Highly toxic contents, and installation of associated mechanical units 	Periodic Inspection	Periodic Inspection	Periodic Inspection	Periodic Inspection

	Seismic Design Category C	Seismic Design Category D	Seismic Design Category E	Seismic Design Category F
(d) Installation of HVAC ductwork containing hazardous materials.	Periodic Inspection	Periodic Inspection	Periodic Inspection	Periodic Inspection
(e) Installation of following components associated with items in (a) through (d) above when importance factor (I_p) is 1.5 (i.e. they are required to be operational through and after an earthquake event): <ul style="list-style-type: none"> • components using combustible energy source. • electrical motors, transformers, switch-gear unit substations and motor control centers. • reciprocating and rotating-type machinery. • piping distribution system 3 inches and more in diameter. • tanks, <i>boilers</i>, heat exchangers and pressure vessels. 	Periodic Inspection	Periodic Inspection	Periodic Inspection	Periodic Inspection
(IV) Testing of Component and its attachment: <ul style="list-style-type: none"> - Components and their mounting or their anchorage systems, associated with items in III (a) through III (e) above need to be tested or analyzed. - Basis of certification is the shake table test. - Alternately an engineering analysis can be provided. - Special Inspector needs to verify in the field that the label on the component conforms to the certificate of compliance. 				
(V) Fabrication & Installation of Seismic Isolation Systems and energy dissipation system	Periodic Inspection	Periodic Inspection	Periodic Inspection	Periodic Inspection