

(Effective until July 1, 2020)

WAC 51-50-1705 Section 1705—Required special inspections and tests.

1705.5.3 Mass timber construction. *Special inspections of mass timber construction in buildings, structures, or portions thereof greater than 85 feet above grade plane shall be in accordance with Table 1705.5.3.*

**Table 1705.5.3
Required Special Inspections of Mass
Timber Construction**

Type	Continuous Special Inspection	Periodic Special Inspection
1. Inspection of anchorage and connections of mass timber construction to timber deep foundation systems.		X
2. Inspect erection and sequence of mass timber construction.		X
3. Inspection of connections where installation methods are required to meet design loads.		
a. Threaded fasteners.		
1. Verify use of proper installation equipment.		X
2. Verify use of predrilled holes where required.		X
3. Inspect screws, including diameter, length, head type, spacing, installation angle, and depth.		X
b. Adhesive anchors installed in horizontal or upwardly inclined orientation to resist sustained tension loads.	X	
c. Bolted connections.		X
d. Other proprietary concealed connection.		X

1705.11.1 Structural wood. *Continuous special inspection is required during field gluing operations of elements of the main windforce-resisting system. Periodic special inspection is required for nailing, bolting, anchoring and other fastening of elements of the main windforce-resisting system, including wood shear walls, wood diaphragms, drag struts, braces and hold-downs.*

EXCEPTION: *Special inspections are not required for wood shear walls, shear panels and diaphragms, including nailing, bolting, anchoring and other fastening to other elements of the main windforce-resisting system, where the lateral resistance is provided by sheathing of wood structural panels, and the fastener spacing of the sheathing is more than 4 inches (102 mm) on center.*

1705.12.2 Structural wood. For the seismic force-resisting systems of structures assigned to *Seismic Design Category C, D, E, or F*:

1. *Continuous special inspection* shall be required during field gluing operations of elements of the seismic force-resisting system.

2. *Periodic special inspection* shall be required for nailing, bolting, anchoring and other fastening of elements of the seismic force-resisting system, including wood shear walls, wood diaphragms, drag struts, braces, shear panels and hold-downs.

EXCEPTION: *Special inspections* are not required for wood shear walls, shear panels and diaphragms, including nailing, bolting, anchoring and other fastening to other elements of the seismic force-resisting system, where the lateral resistance is provided by sheathing of wood structural panels, and the fastener spacing of the sheathing is more than 4 inches (102 mm) on center.

1705.19 Sealing of mass timber. Periodic special inspections of sealants or adhesives shall be conducted where sealant or adhesive required by Section 703.9 is applied to mass timber building elements as designated in the approved construction documents.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 19-02-038, § 51-50-1705, filed 12/26/18, effective 7/1/19; WSR 16-03-064, § 51-50-1705, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 13-04-067, § 51-50-1705, filed 2/1/13, effective 7/1/13.]

(Effective July 1, 2020)

WAC 51-50-1705 Section 1705—Required special inspections and tests.

1705.5.3 Mass timber construction. *Special inspections* of mass timber elements in Types IV-A, IV-B and IV-C construction shall be in accordance with Table 1705.5.3.

**Table 1705.5.3
Required Special Inspections of Mass
Timber Construction**

Type	Continuous Special Inspection	Periodic Special Inspection
1. Inspection of anchorage and connections of mass timber construction to timber deep foundation systems.		X
2. Inspect erection and sequence of mass timber construction.		X
3. Inspection of connections where installation methods are required to meet design loads.		
3.1. Threaded fasteners.		
3.1.1. Verify use of proper installation equipment.		X
3.1.2. Verify use of predrilled holes where required.		X

Type	Continuous Special Inspection	Periodic Special Inspection
3.1.3. Inspect screws, including diameter, length, head type, spacing, installation angle, and depth.		X
3.2. Adhesive anchors installed in horizontal or upwardly inclined orientation to resist sustained tension loads.	X	
3.3. Adhesive anchors not defined in 3.2		X
3.4. Bolted connections.		X
3.5. Concealed connections.		X

1705.11.1 Structural wood. *Continuous special inspection* is required during field gluing operations of elements of the main windforce-resisting system. *Periodic special inspection* is required for nailing, bolting, anchoring and other fastening of elements of the main windforce-resisting system, including wood shear walls, wood diaphragms, drag struts, braces and hold-downs.

EXCEPTION: *Special inspections* are not required for wood shear walls, shear panels and diaphragms, including nailing, bolting, anchoring and other fastening to other elements of the main windforce-resisting system, where the lateral resistance is provided by sheathing of wood structural panels, and the fastener spacing of the sheathing is more than 4 inches (102 mm) on center.

1705.12.2 Structural wood. For the seismic force-resisting systems of structures assigned to *Seismic Design Category C, D, E, or F*:

1. *Continuous special inspection* shall be required during field gluing operations of elements of the seismic force-resisting system.

2. *Periodic special inspection* shall be required for nailing, bolting, anchoring and other fastening of elements of the seismic force-resisting system, including wood shear walls, wood diaphragms, drag struts, braces, shear panels and hold-downs.

EXCEPTION: *Special inspections* are not required for wood shear walls, shear panels and diaphragms, including nailing, bolting, anchoring and other fastening to other elements of the seismic force-resisting system, where the lateral resistance is provided by sheathing of wood structural panels, and the fastener spacing of the sheathing is more than 4 inches (102 mm) on center.

1705.12.6 Plumbing, mechanical and electrical components. Periodic special inspection of plumbing, mechanical and electrical components shall be required for the following:

1. Anchorage of electrical equipment for emergency and standby power systems in structures assigned to Seismic Design Category C, D, E or F.

2. Anchorage of other electrical equipment in structures assigned to Seismic Design Category E or F.

3. Installation and anchorage of piping systems designed to carry hazardous materials and their associated mechanical units in structures assigned to Seismic Design Category C, D, E or F.

4. Installation and anchorage of ductwork designed to carry hazardous materials in structures assigned to Seismic Design Category C, D, E or F.

5. Installation and anchorage of vibration isolation systems in structures assigned to Seismic Design Category C, D, E or F where the approved construction documents require a nominal clearance of .25

inch (6.4 mm) or less between the equipment support frame and restraint.

6. Installation of mechanical and electrical equipment, including ductwork, piping systems and their structural supports, where automatic fire sprinkler systems are installed in Risk Category IV structures assigned to Seismic Design Category C, D, E or F to verify one of the following:

6.1. Minimum clearances have been provided as required by Section 13.2.3 ASCE/SEI 7.

6.2. A nominal clearance of not less than 3 inches (76 mm) has been provided between fire protection sprinkler system drops and sprigs and: Structural members not used collectively or independently to support the sprinklers; equipment attached to the building structure; and other systems' piping.

Where flexible sprinkler hose fittings are used, special inspection of minimum clearances is not required.

1705.19 Sealing of mass timber. Periodic special inspections of sealants or adhesives shall be conducted where sealant or adhesive required by Section 703.9 is applied to mass timber building elements as designated in the approved construction documents.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 20-01-090, § 51-50-1705, filed 12/12/19, effective 7/1/20; WSR 19-02-038, § 51-50-1705, filed 12/26/18, effective 7/1/19; WSR 16-03-064, § 51-50-1705, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 13-04-067, § 51-50-1705, filed 2/1/13, effective 7/1/13.]