

# Chapter 296-150C WAC

## COMMERCIAL COACHES

### WAC

296-150C-0010	Authority, purpose, and scope.
296-150C-0020	What definitions apply to this chapter?
296-150C-0030	How is this chapter enforced?
296-150C-0040	Will you keep my manufacturing information confidential?
296-150C-0050	Can you prohibit the sale or lease of my commercial coach?
296-150C-0060	Who handles consumer complaints about commercial coaches?
296-150C-0070	Do you have reciprocal agreements with other states to inspect commercial coaches?
296-150C-0080	Do you allow a local enforcement agency to inspect commercial coaches at the manufacturing location?
296-150C-0100	What happens if I disagree with your decision regarding my compliance with this chapter?
296-150C-0110	Do you have an advisory board to address commercial coach issues?
296-150C-0120	Where can I obtain technical assistance regarding commercial coaches?
296-150C-0140	Do you allow the use of alternate materials, alternate design and method of construction?
296-150C-0150	How does the department regulate commercial coaches that are used as medical units as defined in chapter 296-150V WAC?

### INSIGNIA

296-150C-0200	Who must obtain commercial coach insignia?
296-150C-0210	What are the insignia requirements?
296-150C-0220	How do I obtain insignia information and the required forms?
296-150C-0230	What are the insignia application requirements?
296-150C-0240	What documentation do you need to perform an alteration inspection?
296-150C-0250	How do I replace lost or damaged insignia?

### DESIGN PLAN

296-150C-0300	When is design-plan approval required?
296-150C-0310	Who can approve design plans?

### DESIGN-PLAN APPROVAL BY THE DEPARTMENT

296-150C-0320	What must I provide with my request for commercial coach design-plan approval by the department?
296-150C-0340	What must an engineering analysis for design plans include?
296-150C-0350	What must test procedures and results for design plans include?
296-150C-0380	What happens if you approve my design plan?
296-150C-0390	If my design plan is not approved, how much time do I have to submit a corrected design plan?
296-150C-0400	What happens after my design plan is approved?
296-150C-0410	When does my design plan expire?
296-150C-0415	Who approves addendums to design plans approved by the department?

### DESIGN-PLAN APPROVAL BY A LICENSED PROFESSIONAL OR FIRM

296-150C-0420	Who can be authorized to approve design plans?
296-150C-0430	What information must a professional or firm provide to be authorized to approve design plans?
296-150C-0440	How will I know whether I am authorized to approve design plans?
296-150C-0450	How long is a licensed professional or firms authorization effective?
296-150C-0460	What information must a manufacturer provide when a professional or firm does the design-plan approval?
296-150C-0470	What happens after we receive the professional or firm approved design plan and information?
296-150C-0480	Do you have a list of professionals or firms that are authorized to approve design plans?
296-150C-0490	Who approves addendums to design plans approved by a professional or firm?
296-150C-0495	Contractor deposit accounts.

### INSPECTIONS PRIOR TO ISSUANCE OF AN INSIGNIA

296-150C-0500	When is an inspection required?
296-150C-0510	How do I request an inspection?
296-150C-0520	What happens if my commercial coach passes inspection?
296-150C-0530	Am I charged if I request an inspection but I am not prepared?
296-150C-0540	Who inspects commercial coach installation at the building site?
296-150C-0550	Do you allow a commercial coach to be completed at the installation site?
296-150C-0560	What happens if I receive a notice of noncompliance after inspection of the alteration to my commercial coach?

### USED COMMERCIAL COACHES WITHOUT AN INSIGNIA

296-150C-0580	Must I obtain an insignia for used commercial coaches?
296-150C-0590	How do I obtain insignia for used commercial coaches?

### MANUFACTURER'S NOTICE TO THE DEPARTMENT

296-150C-0700	Must manufacturers of commercial coaches notify you if they manufacture at more than one location?
296-150C-0710	Must manufacturers of commercial coaches notify you of a change in business name or address?
296-150C-0720	Must manufacturers of commercial coaches notify you of a change in business ownership?

### COMMERCIAL COACH CONSTRUCTION CODE

#### GENERAL

296-150C-0800	What manufacturing codes apply to commercial coaches?
296-150C-0805	Are there any special requirements for portable school classrooms?
296-150C-0810	Construction definitions.

#### STRUCTURAL

296-150C-0820	What are the basic structural requirements of a commercial coach?
296-150C-0830	Fastening of structural systems.
296-150C-0840	Live loads.
296-150C-0850	Roof loads.
296-150C-0860	Snow loads.
296-150C-0870	Standard wind loads.
296-150C-0880	Windstorm protection—Provisions for support and anchoring.
296-150C-0900	Interior walls and partitions.
296-150C-0910	Minimum uniform and concentrated live loads.
296-150C-0920	Design load deflection.
296-150C-0930	Structural load tests.

#### CONSTRUCTION

296-150C-0940	Fastening of structural systems.
296-150C-0950	Roof coverings/membrane/weather resistant.
296-150C-0960	What requirements apply to commercial coach roof trusses?
296-150C-0970	Roof construction.
296-150C-0990	Sealing wall exterior openings.
296-150C-1000	Drilling or notching of wood wall structural members.
296-150C-1020	Wall construction.
296-150C-1030	Fire-blocking.
296-150C-1040	Floors.
296-150C-1050	Drilling or notching of wood joist structural members.
296-150C-1060	Fastening of structural systems.
296-150C-1070	Floor closure material.
296-150C-1080	What design and construction requirements apply to a commercial coach chassis?

#### MATERIALS

296-150C-1090	Standards for equipment and installations.
296-150C-1100	Flame-spread limitations.
296-150C-1110	Combustible limitations.

296-150C-1120	Kitchen cabinet protection.		
296-150C-1130	Insulation standards.		
296-150C-1140	Room sizes.		
296-150C-1150	Hallways.		
296-150C-1160	Accessibility standards.	296-150C-0980	Wall coverings. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0980, filed 10/23/96, effective 11/25/96.] Repealed by WSR 98-14-078, filed 6/30/98, effective 7/31/98. Statutory Authority: Chapter 43.22 RCW.
296-150C-1170	What are the lighting and ventilation requirements of a commercial coach?		
296-150C-1175	Glass and glazed openings.		
296-150C-1180	Commercial coach exits.		
296-150C-1190	Interior privacy.	296-150C-1345	May the electrical disconnect required for mechanical equipment be inside of or mounted on the equipment? [Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-1345, filed 6/4/99, effective 7/5/99.] Repealed by WSR 05-01-102, filed 12/14/04, effective 2/1/05. Statutory Authority: Chapter 43.22 RCW and 2003 c 291.
296-150C-1195	Fire warning equipment—Automatic smoke detectors.		
296-150C-1200	Installation instructions.		
296-150C-1210	Table: Number of ties required per side of commercial coach.		
<b>ELECTRICAL</b>			
296-150C-1220	Electrical—General.	296-150C-1580	What manufacturing codes apply when converting structures to vendor units? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1580, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1580, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1230	Electrical definitions.		
296-150C-1240	Branch circuit and feeder calculations.		
296-150C-1250	Disconnecting means and branch circuit protective equipment.		
296-150C-1260	Power supply—Feeder assembly equipment.		
296-150C-1270	Identification of feeder assembly connection.		
296-150C-1280	Wiring methods—Wiring of expandable or multiple units.	296-150C-1590	Is a structural analysis required when converting a vehicle or structure to a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1590, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1590, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1290	Under-chassis wiring.		
296-150C-1300	Equipment mounting.		
296-150C-1303	How must storage batteries be installed in a commercial coach?		
296-150C-1310	Grounding—General.		
296-150C-1320	Dielectric strength test.		
<b>MECHANICAL</b>			
296-150C-1330	Mechanical—General.	296-150C-1600	What are the live load requirements of a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1600, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1600, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1340	Mechanical definitions.		
296-150C-1346	When HVAC equipment is supplied with more than one CFM rating, which rating do I use?		
296-150C-1350	LPG system enclosure and mounting.		
296-150C-1360	Gas piping—Piping design.		
296-150C-1370	Gas piping—Expandable or multiple commercial coaches.	296-150C-1610	Design load deflection. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1610, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1380	Concealed tubing.		
296-150C-1390	Gas piping—Pipe-joint compound.		
296-150C-1400	Gas piping—Hangers and supports.		
296-150C-1410	Gas piping—Electrical ground.		
296-150C-1420	Identification of gas supply connections.	296-150C-1620	Structural load tests. [Statutory Authority: RCW 43.22.-340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1620, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1430	Gas piping system openings.		
296-150C-1440	Gas piping—Valves.		
296-150C-1450	Gas piping—Testing for leakage before appliances are connected.		
296-150C-1460	Gas piping—Testing for leakage after appliances are connected.		
<b>VENTILATION AND INDOOR AIR QUALITY</b>			
296-150C-1470	Ventilation and indoor air quality—General.	296-150C-1630	Roof coverings/membrane/weather resistant. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1630, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1480	Ventilation and indoor air quality definitions.		
296-150C-1490	Appliances—Installation.		
296-150C-1500	Safety devices—Water heater relief valves.		
296-150C-1510	Air ducts—Expandable or multiple commercial coach connections.	296-150C-1640	Floors. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1640, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1520	Air ducts—Duct and plenum insulation.		
<b>PLUMBING</b>			
296-150C-1530	Plumbing—General.	296-150C-1650	Floor closure material. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1650, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
296-150C-1540	Plumbing—Definitions.		
296-150C-1545	Does the department require a water system expansion tank be installed?		
296-150C-1550	Drainage—Cap or plug.		
296-150C-1560	Drainage—Clearance from drain outlet.		
296-150C-1570	Water supply connection.		
<b>COMMERCIAL COACH FEES</b>			
296-150C-3000	Commercial coach fees.	296-150C-1660	Chassis approval. [Statutory Authority: RCW 43.22.-340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1660, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
<b>DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER</b>			
296-150C-0330	What must I provide with my request for a commercial coach vendor unit design-plan approval by the department? [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0330, filed 10/23/96,	296-150C-1670	Standards for equipment and installations. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1670, filed 10/23/96, effective

- 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1680 Flame-spread limitations. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1680, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1690 Cabinet protection. [Statutory Authority: RCW 43.22.-340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1690, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1700 Insulation standards. [Statutory Authority: RCW 43.22.-340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1700, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1710 Light and ventilation. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1710, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1720 What requirements apply to vending unit exits? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1720, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1720, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1730 What code and installation requirements apply to vendor unit electrical systems? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1730, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1730, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1740 What are the mechanical requirements for a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1740, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1740, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1750 What are the LPG system enclosure and mounting requirements for a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1750, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1751 What are the fuel gas piping design requirements for a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1751, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1752 Can gas tubing be concealed in a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1752, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1753 What are the pipe-joint compound requirements for gas piping in a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1753, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1754 What are the gas piping hanger and support requirements for a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1754, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1755 What are the electrical bonding requirements for gas piping in a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1755, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1756 How are gas supply connections in a vendor unit identified? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1756, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1757 What requirements apply to gas piping system openings? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1757, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1758 Are gas piping shut-off valves required in a vendor unit? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1758, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1759 What requirements apply to testing for gas piping leaks before vendor unit appliances are connected? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1759, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1760 What requirements apply to testing for gas piping leaks after vendor unit appliances are connected? [Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1760, filed 6/30/98, effective 7/31/98.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1770 Appliances—Installation. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1770, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1780 Safety devices—Water heater relief valves. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1780, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1790 Plumbing—General. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1790, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1800 Plumbing—Definitions. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1800, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1810 Drainage—Cap or plug. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1810, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1820 Drainage—Clearance from drain outlet. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1820, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.
- 296-150C-1830 Water supply connection. [Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1830, filed 10/23/96, effective 11/25/96.] Repealed by WSR 00-01-188, filed 12/22/99, effective 2/8/00. Statutory Authority: RCW 43.22.480.

### WAC 296-150C-0010 Authority, purpose, and scope.

(1) This chapter is authorized by RCW 43.22.340 through 43.22.435 covering the construction, alteration and approval of commercial coaches sold, leased, or used in Washington state.

(2) This chapter applies to the approval of commercial coach manufacturers, dealers and to any person who manu-

factures or alters the plumbing, mechanical, or electrical system or the body or frame of a commercial coach.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0010, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0020 What definitions apply to this chapter? "Alteration"** is the replacement, addition, modification, or removal of any equipment or installation that affects the construction, fire and life safety, or the plumbing, mechanical, and electrical systems of a commercial coach.

The following are not considered alterations:

- Repairs with approved parts;
- Modification of a fuel-burning appliance according to the listing agency's specifications; or
- Adjustment and maintenance of equipment.

**"Approved"** is approved by the department of labor and industries.

**"Building site"** is a tract, parcel, or subdivision of land on which a commercial coach will be installed.

**"Consumer"** is a person or organization, excluding a manufacturer or dealer of commercial coaches, who buys or leases a commercial coach.

**"Commercial coach"** is a structure (referred to as a unit) that:

- Can be transported in one or more sections;
- Is used for temporary commercial purposes;
- Is built on a permanent chassis;
- Conforms to the construction standards of this chapter;
- May include plumbing, mechanical, electrical and other systems.

Note: A commercial coach may not be used as a single-family dwelling or hazardous storage building. A commercial coach does not have to be placed on a permanent foundation.

**"Damaged in transit"** means damage that affects the integrity of a structural design or any of the systems.

**"Dealer"** is a person, company, or corporation whose business is leasing, selling, offering for lease or sale, buying, or trading commercial coaches.

**"Department"** is the department of labor and industries. The department may be referred to as "we" or "us" in this chapter. Note: You may contact us at: Department of Labor and Industries, Specialty Compliance, P.O. Box 44440, Olympia, WA 98504-4440.

**"Design plan"** is a plan for the construction or alteration of a commercial coach or conversion of a vehicle to a commercial coach including floor plans, elevation drawings, specifications, engineering data, or test results necessary for a complete evaluation of the design.

**"Design option"** is a design that a manufacturer may use as an option to its commercial coach design plan.

**"Educational facility"** is a building or portion of a building used primarily for educational purposes by six or more persons at one time for twelve hours per week or four hours in any one day. Educational occupancy includes: Schools (preschool through grade twelve), colleges, academies, universities, and trade schools.

**"Equipment"** is all material, appliances, devices, fixtures, fittings, or accessories used in the manufacture, assembly, conversion to, or alteration of a commercial coach.

**"Factory assembled structure (FAS) advisory board"** is a board authorized to advise the director of the department regarding the issues and adoption of rules relating to commercial coaches. (See RCW 43.22.420.)

**"Health or personal care facilities"** are buildings or parts of buildings that contain, but are not limited to, facilities that are required to be licensed by the department of social and health services or the department of health (e.g., hospitals, nursing homes, private alcoholism hospitals, private psychiatric hospitals, boarding homes, alcoholism treatment facilities, maternity homes, birth centers or childbirth centers, residential treatment facilities for psychiatrically impaired children and youths, and renal hemodialysis clinics) and medical, dental or chiropractic offices or clinics, outpatient or ambulatory surgical clinics, and such other health care occupancies where patients who may be unable to provide for their own needs and safety without the assistance of another person are treated. (Further defined in WAC 296-46B-010.)

**"Insignia"** is a label that we attach to a commercial coach to verify that the structure meets the requirements of this chapter and the applicable codes.

**"Install"** is to erect, construct, assemble, or set a commercial coach in place.

**"Institutional facility"** is a building or portion of a building used primarily for detention and correctional occupancies where some degree of restraint or security is required for a time period of twenty-four or more hours. Such occupancies include, but are not restricted to: Penal institutions, reformatories, jails, detention centers, correctional centers, and residential-restrained care.

**"Labeled"** is to bear the department's insignia.

**"Listed"** is a piece of equipment or apparatus that has been approved by a testing agency to the appropriate standard.

**"Local enforcement agency"** is an agency of city or county government with power to enforce local regulations governing the installation of a commercial coach.

**"Master design plan"** is a design plan that expires when a new state building code has been adopted.

**"One-year design plan"** is a design plan that expires one year after approval or when a new state building code has been adopted.

**"System"** is part of a commercial coach designed to serve a particular function. Examples include structural, plumbing, electrical, or mechanical systems.

[Statutory Authority: Chapter 43.22 RCW. WSR 05-23-002, § 296-150C-0020, filed 11/3/05, effective 12/4/05. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-0020, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.480. WSR 00-01-187, § 296-150C-0020, filed 12/22/99, effective 2/8/00. Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0020, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0020, filed 10/23/96, effective 11/25/96.]

#### **WAC 296-150C-0030 How is this chapter enforced?**

(1) To enforce this chapter, we or another governmental inspection agency will inspect each commercial coach manufactured, sold, leased, or used in Washington state as required

by this chapter. (See WAC 296-150C-0070 - Reciprocal agreements.)

(2) We will inspect all commercial coach alterations.

(3) We will conduct inspections during normal work hours or at other reasonable times.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0030, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0040 Will you keep my manufacturing information confidential?** We will only release manufacturing information such as design plans, specifications, and test results according to the requirements of the Public Records Act (see RCW 42.17.310 (1)(h)) unless we are ordered to do so by a court or otherwise required by law.

[Statutory Authority: RCW 43.22.340 and 43.22.420. WSR 97-16-043, § 296-150C-0040, filed 7/31/97, effective 12/1/97. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0040, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0050 Can you prohibit the sale or lease of my commercial coach?** (1) We may prohibit the sale or lease of your commercial coach because it is unlawful for any person to sell, lease, or offer for sale a commercial coach within this state if it violates any of the requirements of this chapter. (See RCW 43.22.345.)

(2) If an inspection reveals that a commercial coach violates this chapter, we may post a notice prohibiting the sale or lease of a commercial coach.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0050, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0060 Who handles consumer complaints about commercial coaches?** (1) Consumer may file complaints within one year of the date of manufacture.

(2) The complaint should be in writing and describe the item(s) that may not comply with this chapter.

(3) After we receive the complaint, we will send the manufacturer and the dealer a copy of the complaint.

(4) The manufacturer and/or dealer have thirty days to respond. We shall base our actions on the response.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0060, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0070 Do you have reciprocal agreements with other states to inspect commercial coaches?**

(1) We have entered into reciprocal agreements with states who have inspection standards equal or greater than our standard.

(2) When we have a reciprocal agreement with another state:

(a) The reciprocal state inspects the commercial coaches manufactured in that state before shipment into Washington to ensure compliance with our laws. After inspection, the reciprocal state applies our insignia.

(b) The department inspects commercial coaches manufactured in Washington before shipment into the reciprocal state to ensure compliance with their laws. After inspection, we apply the insignia of the reciprocal state.

(7/17/12)

(3) We have reciprocal agreements on file.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0070, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0080 Do you allow a local enforcement agency to inspect commercial coaches at the manufacturing location?** (1) A local enforcement agency (city or county), under contract with us, can inspect commercial coaches. In some cases, their contract may be limited to specific portions of an inspection at specified manufacturing locations.

(2) After approving a unit, the local enforcement agency will attach the insignia, which indicates that the unit has passed inspection.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0080, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0100 What happens if I disagree with your decision regarding my compliance with this chapter?** (1) If we determine that you are in violation of this chapter, you will receive a notice of noncompliance. (See WAC 296-150C-0560.)

(2) If you disagree with our decision, you can send us a written request for a hearing, stating why you disagree.

(3) After we receive your hearing request, we will:

(a) Schedule a hearing within thirty days after we receive your request.

(b) Notify you of the time, date, and place for the hearing. If you fail to appear, your case will be dismissed.

(c) Hear your case.

(d) Send you written notice of our decision.

If you disagree with our decision, you may appeal it under the Administrative Procedure Act (chapter 34.05 RCW).

[Statutory Authority: RCW 43.22.340 and 43.22.420. WSR 97-16-043, § 296-150C-0100, filed 7/31/97, effective 12/1/97. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0100, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0110 Do you have an advisory board to address commercial coach issues?** The factory assembled structures (FAS) board advises us on issues relating to body and frame design, construction, alterations, plumbing, mechanical, electrical, installation, inspections, and rule adoption for commercial coaches. (See RCW 43.22.420.)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0110, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0120 Where can I obtain technical assistance regarding commercial coaches?** We offer field technical service to commercial coach manufacturers for an hourly fee. (See WAC 296-150C-3000.) Field technical service may include evaluation, consultation, plan examination, interpretation, and clarification of technical data relating to the application of our rules. It does not include inspections.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0120, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0140 Do you allow the use of alternate materials, alternate design and method of construction?** An applicant may apply for the use of alternate materials, alternate design and methods of construction different from the requirements of this chapter by filing a written request with the department.

(1) Responsibilities of applicant. The applicant must submit in writing the following information and sign and date the request.

(a) The applicant's name, address and phone number;

(b) The specific requirement or requirements from which the alternate material, alternate design or method of construction is requested;

(c) Justification that the requirements of this chapter cannot be met without using alternate materials, alternate design or method of construction;

(d) How the use of alternate materials, alternate design or method of construction will achieve the same result as the requirement and any specific alternative measures to be taken to show the alternate provides the same level of protection to life, safety and health as the requirements.

The department has a form that you may use for your request. Contact the department at the address shown in the definition section.

(2) Responsibilities of the department. The department will provide a written response to the applicant within thirty days of receipt of the written request. The written response will state the acceptance or denial of the request, including the reasons for the department's decision. At a minimum the department will base its decision based on:

(a) The applicant's request as described in subsection (1) of this section;

(b) Research into the request;

(c) Expert advise.

(3) Applicant's response to denials. The applicant may appeal the department's decision by following the procedure in WAC 296-150C-0100.

[Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150C-0140, filed 8/22/00, effective 9/30/00. Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-0140, filed 6/4/99, effective 7/5/99.]

**WAC 296-150C-0150 How does the department regulate commercial coaches that are used as medical units as defined in chapter 296-150V WAC?** (1) Commercial coaches that are used as medical units may either:

(a) Comply with the requirements of this chapter; or

(b) Receive approval by the department to comply with the applicable requirements found in chapter 296-150V WAC.

(2) You must contact the department to receive the approval required in subsection (1)(b) of this section prior to using the commercial coach as a medical unit by demonstrating that the commercial coach is being used for medical unit purposes.

[Statutory Authority: RCW 43.22.340, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.480, and 43.22.485, 2002 c 268, and chapter 43.22 RCW. WSR 03-12-044, § 296-150C-0150, filed 5/30/03, effective 6/30/03.]

## INSIGNIA

**WAC 296-150C-0200 Who must obtain commercial coach insignia?** (1) You must obtain an insignia from us for each commercial coach manufactured, sold, leased, or used in Washington state.

(2) You do not need an insignia for a commercial coach:

(a) When a unit has been used outside of the state for six months before being brought into Washington state (see RCW 43.22.380); or

(b) If a unit was manufactured prior to July 1, 1968. (See RCW 43.22.370.)

Note: All commercial coaches must have insignia if they are altered, this includes the exceptions in subsection (2)(a) and (b) of this section.

(3) You must obtain an insignia when commercial coaches are altered in Washington state.

(4) You must obtain an alteration insignia when a commercial coach is damaged in transit after leaving the manufacturing location or during an on-site installation, and an alteration or repair is necessary. The insignia indicates the commercial coach was altered or repaired.

(5) You must have an approved design plan and pass our inspection before we will attach an insignia.

[Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150C-0200, filed 8/22/00, effective 9/30/00. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0200, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0210 What are the insignia requirements?** (1) If you are applying for insignia, you must have your design plan approved and your commercial coach inspected and approved by us.

(2) If you are a manufacturer, dealer or owner applying for an alteration insignia, your alteration must be inspected and approved by us. Approval of the design plan may also be required.

(3) We will attach the insignia to your commercial coach after:

(a) We receive the required forms and fees from you (see WAC 296-150C-3000); and

(b) Your commercial coach has passed final inspection.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0210, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0220 How do I obtain insignia information and the required forms?** Upon request, we will provide you with a packet of information that includes the required forms.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0220, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0230 What are the insignia application requirements?** (1) If you are requesting insignia for commercial coaches that you intend to manufacture under a *new design plan*, your completed application must include:

(a) A completed design-plan approval request form;

(b) One complete set of design plans, specifications, engineering analysis, and test procedures and results, plus one additional set for each manufacturing location where the design plan will be used.

(c) At least one set of design plans must have an original wet stamp from a professional engineer or architect licensed in Washington state. We will retain the set with the original wet stamp; and

(d) A one-time initial filing fee, the design-plan fee (if you want us to approve your design plan), and the fee for each insignia. (See WAC 296-150C-3000.)

(2) If you are requesting insignia under an *approved design plan*, your completed application must include:

(a) A completed insignia application form; and

(b) The fee for each commercial coach insignia (see WAC 296-150C-3000).

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0230, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0240 What documentation do you need to perform an alteration inspection?** (1) If you alter a commercial coach, we must inspect the alteration.

(2) Before we perform an alteration inspection and attach an alteration insignia, you must send us:

(a) A description of the proposed alteration;

(b) Applicable specifications, engineering analysis, test procedures and results for design-plan review;

(c) The plan review fee (if you want us to approve your design plan);

(d) The inspection fee; and

(e) The insignia application and fee. (See WAC 296-150C-3000.)

(3) A design plan review is not required if the alteration can be made without altering any of the existing structure.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0240, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0250 How do I replace lost or damaged insignia?** (1) If an insignia is lost or damaged after it is placed on a commercial coach, you may obtain a replacement insignia.

(2) You should contact us and provide the following information:

(a) Your name, address, and telephone number;

(b) The name of the manufacturer or person converting the vendor unit;

(c) The serial number;

(d) The manufacturer number (CC#) if available;

(e) The insignia number if available; and

(f) The required fee. (See WAC 296-150C-3000.)

(3) If we can determine that your unit previously had an insignia, we will:

(a) Perform an inspection to ensure that no unauthorized remodeling has occurred;

Note: If unauthorized remodeling has occurred see WAC 296-150C-0200;

(b) Attach an insignia to your unit once we receive your insignia fee. (See WAC 296-150C-3000.)

(7/17/12)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0250, filed 10/23/96, effective 11/25/96.]

## DESIGN PLAN

**WAC 296-150C-0300 When is design-plan approval required?** Design plans for commercial coaches are required for units that are sold, leased, or used in Washington state and must be approved when:

(1) You build a new unit;

(2) You modify an approved design plan through addendums;

(3) You add options to an approved design plan through addendums; or

(4) You change the occupancy classification of the building.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0300, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0310 Who can approve design plans?** (1) Design plans can be approved by us or by a licensed professional or firm authorized by us. (See WAC 296-150C-0420 and 296-150C-0430.)

(2) All electrical design plans for new or altered electrical installations for educational institutions, health care facilities, and other buildings required by chapter 296-46 WAC, Safety standards—Installing electric wires and equipment—Administrative rules, must be reviewed and approved by us.

(3) A professional cannot approve plans submitted under a reciprocal agreement.

[Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0310, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0310, filed 10/23/96, effective 11/25/96.]

## DESIGN-PLAN APPROVAL BY THE DEPARTMENT

**WAC 296-150C-0320 What must I provide with my request for commercial coach design-plan approval by the department?** All requests for design-plan approval must include:

(1) A completed design-plan approval request form;

(2) Two sets of design plans plus elevation drawings, specifications, engineering analysis, and test results and procedures necessary for a complete evaluation of the design; (see WAC 296-150C-0340 and 296-150C-0350.)

(3) At least one set of design plans must have an original wet stamp from a professional engineer or architect licensed in Washington state. All new, renewed, and resubmitted plans, specifications, reports and structural calculations prepared by or prepared under his or her direct supervision shall be signed, dated and stamped with their seal. Specifications, reports, and structural calculations may be stamped only on the first sheet, provided this first sheet identifies all of the sheets that follow are included and identified in the same manner. Plans that have not been prepared by or under the engineer's or architect's supervision shall be reviewed by them and they shall prepare a report concerning the plans reviewed. This report shall:

(a) Identify which drawings have been reviewed by drawing number and date;

(b) Include a statement that the plans are in compliance with current Washington state regulations; and

(c) The report shall be stamped and signed by the reviewer.

Any deficiencies shall be corrected on the drawings before submitting to the department or be included in the report and identify as to how they are to be corrected. This report shall be attached to the plan(s) that were reviewed. We will retain the set with the original wet stamp;

(4) Receipt of a one-time initial design plan filing fee and the initial design plan fee (see WAC 296-150C-3000);

(5) A "key drawing" to show the arrangement of modules if the plan covers three or more modules;

(6) The occupancy class of the commercial coach according to the occupancy classifications in the International Building Code;

(7) Electrical plan review for educational, institutional or health care facilities and other buildings. Plan review is a part of the electrical inspection process; its primary purpose is to determine:

(a) That loads and service/feeder conductors are calculated and sized according to the proper NEC or WAC article or section;

(b) The classification of hazardous locations; and

(c) The proper design of emergency and standby systems.

(8) All electrical plans for new or altered electrical installations in educational, institutional, and health or personal care occupancies classified or defined in this chapter must be reviewed and approved before the electrical installation or alteration is started. Approved plans must be available for use during the electrical installation or alteration and for use by the electrical inspector.

(9) All electrical plans for educational facilities, hospitals and nursing homes must be prepared by, or under the direction of, a consulting engineer registered under chapter 18.43 RCW in compliance with chapters 246-320, 180-29, and 388-97 WAC as applicable and stamped with the engineer's mark and signature.

(10) Plans to be reviewed by the department must be legible, identify the name and classification of the facility, clearly indicate the scope and nature of the installation and the person or firm responsible for the electrical plans. The plans must clearly show the electrical installation or alteration in floor plan view, include switchboard and/or panel board schedules and when a service or feeder is to be installed or altered, must include a riser diagram, load calculation, fault current calculation and interrupting rating of equipment. Where existing electrical systems are to supply additional loads, the plans must include documentation that proves adequate capacity and ratings. The plans must be submitted with a plan review submittal form available from the department.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-0320, filed 7/17/12, effective 9/1/12; WSR 05-23-002, § 296-150C-0320, filed 11/3/05, effective 12/4/05. Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-0320, filed 6/4/99, effective 7/5/99. Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0320, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW

43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0320, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0340 What must an engineering analysis for design plans include?** (1) The engineering analysis must show that the structural design meets the requirements of this chapter.

(2) An engineering analysis must be conducted according to accepted engineering practices and must be signed by a professional engineer or architect licensed in Washington. (See WAC 296-150C-3000.)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0340, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0350 What must test procedures and results for design plans include?** (1) Tests to a design must be witnessed by a professional engineer or architect licensed in Washington or by a departmental employee.

(2) Test reports must contain the following items:

(a) A description of the methods or standards that applied to the test;

(b) Drawings and a description of the item tested;

(c) A description of the test set-up;

(d) The procedure used to verify the correct load;

(e) The procedure used to measure each condition;

(f) Test data, including applicable graphs and observations of the characteristics and behavior of the item tested; and

(g) Analysis, comments, and conclusion.

(3) The written test procedures and conclusions must reference the applicable design plan.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0350, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0380 What happens if you approve my design plan?** (1) Your design plan will be approved if it meets the requirements of this chapter.

(2) We will send you an approved copy of the design plan with the design-plan approval number.

(3) You must keep copies of the approved design plan available for inspection at each location where the commercial coach is built.

(4) If your design plan is not approved, you will be notified in writing of plan deficiencies. You may send a corrected design plan to us. (See WAC 296-150C-3000.)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0380, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0390 If my design plan is not approved, how much time do I have to submit a corrected design plan?** (1) You have ninety days to correct and resubmit your original design plan and send us the resubmittal fee after we notify you of plan deficiencies. After ninety days, your initial design plan is returned to you.

(2) If you submit your corrected design plan after ninety days, the initial design plan fee is required instead of the resubmittal fee. (See WAC 296-150C-3000.)



[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0390, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0400 What happens after my design plan is approved?** Once your design plan is approved, we will inspect each commercial coach.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0400, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0410 When does my design plan expire?** *Commercial Coach - Master Design Plan:*

(1) Your commercial coach master design plan expires when there is a code change. You must submit new design plans for approval when there is a state building code cycle change. You may use your approved master design plans to order insignia as long as they comply with the applicable codes.

*Commercial Coach - One-Year Design Plan:*

(2) Your commercial coach one-year design plan expires either one year after approval or when there is a code change. You must submit new design plans for approval when there is a state building code cycle change. You may use your design plans to order insignia as long as they comply with the applicable codes.

(3) All National Electrical Code amendments may be incorporated by an addendum to your design plan.

Note: The state building code is on a three-year code cycle which coincides with the state building code council amendment cycle. The National Electrical Code (NEC) cycle, however, does not coincide with the other code cycles.

[Statutory Authority: RCW 43.22.480. WSR 00-01-187, § 296-150C-0410, filed 12/22/99, effective 2/8/00. Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0410, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0410, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0415 Who approves addendums to design plans approved by the department?** You must have us approve an addendum to a design plan, if we initially approved your design plan.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0415, filed 10/23/96, effective 11/25/96.]

## DESIGN-PLAN APPROVAL BY A LICENSED PROFESSIONAL OR FIRM

**WAC 296-150C-0420 Who can be authorized to approve design plans?** (1) A professional engineer, architect or firm licensed by the state of Washington according to the Engineers Registration Act, chapter 18.43 RCW and/or the Architects Registration Act, chapter 18.08 RCW; or

(2) A professional engineer, architect or firm licensed in another state that has licensing or certification requirements that meet or exceed Washington requirements.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0420, filed 10/23/96, effective 11/25/96.]

(7/17/12)

**WAC 296-150C-0430 What information must a professional or firm provide to be authorized to approve design plans?** (1) Name, a copy of your certificate of registration, and address of the professional engineer or architect; or

(2) Name, a copy of your certificate of authority, and address of the firm; and

(3) A description of the services the professional engineer, architect, or firm will provide; and

(4) A description of the professional's area(s) of expertise and qualifications which include:

(a) A summary of the professional's or firm's experience; and

(b) Verification of experience in your area of expertise such as structural, mechanical, plumbing, energy, electrical, fire and life safety, and ventilation and indoor air quality.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0430, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0440 How will I know whether I am authorized to approve design plans?** Within sixty days after you submit the information requested in WAC 296-150C-0430, we will send you a letter either approving or denying your authorization request.

(1) If we approve your request, your name is added to the list of licensed professionals and firms authorized to approve design plans.

(a) We will authorize a professional to approve portions of a design plan within his or her area of expertise; and

(b) We will authorize an engineering or architectural firm to approve plans if the firm employs or contracts with professionals within the area of expertise necessary for the design plan.

(2) If we do not approve your request, we will notify you in writing why we are denying your request for authorization. If you disagree with our decision, you can send us a written request for a hearing, stating why you disagree. (See WAC 296-150C-0100.)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0440, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0450 How long is a licensed professional or firms authorization effective?** Your authorization to approve design plans is effective until your license expires, is revoked or is suspended.

(1) You must notify us of your license renewal at least fifteen days before your license expires, to prevent your name from being removed from our licensed professional and firm list.

(2) You must notify us immediately if your license is revoked or suspended. Your name is then removed from the list of licensed professionals and firms authorized to approve design plans.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0450, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0460 What information must a manufacturer provide when a professional or firm does the design-plan approval?** You must provide the following information with your approved design plans:

(1) A completed departmental design-plan approval request form;

(2) Two or more sets of design plans plus elevation drawings, specifications, engineering analysis, and test results and procedures necessary for a complete evaluation of the design. These design plans must have an original wet stamp, be signed, and dated by the approving professional(s) (see WAC 296-150C-0340 and 296-150C-0350);

(3) A cover sheet on the design plan noting which professional approved each portion of the design plan;

(4) A copy of the authorization letter from us;

(5) The design plan fee for design plans approved by professionals or firms; (see WAC 296-150C-3000.)

(6) A professional who designs and certifies that the commercial coach design meets state requirements cannot also approve the design plan in the plan approval process;

(7) A professional cannot approve those electrical designs listed in WAC 296-150C-0310(2); and

(8) A professional cannot approve plans submitted under a reciprocal agreement.

[Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0460, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0460, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0470 What happens after we receive the professional or firm approved design plan and information?** (1) After we receive your approved design plans and information, we will review the information and assign a plan approval number. We will send a copy of the design plan with the plan approval number to the manufacturer.

(2) We may periodically audit design plans approved by a professional engineer, architect, or firm to ensure compliance with design plan requirements. The department's periodic audit should not be construed as certifying that the plans are safe.

(3) If the audit reveals that the design plans approved by the professionals and firms do not comply with this chapter, you will be notified and required to pay our fees for review and approval of the design plans. (See WAC 296-150C-3000.)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0470, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0480 Do you have a list of professionals or firms that are authorized to approve design plans?** We will maintain a list of the licensed professionals and firms that are authorized to approve design plans for commercial coaches.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0480, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0490 Who approves addendums to design plans approved by a professional or firm?** (1) You

[Ch. 296-150C WAC p. 10]

must have the professional or firm approve an addendum to a design plan, if they initially approved your design plan.

(2) If the professional or firm who approved your design plan is no longer on the department list you may have us approve your addendum.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0490, filed 10/23/96, effective 11/25/96.]

#### **WAC 296-150C-0495 Contractor deposit accounts.**

Manufacturers are required to open and maintain, for the purpose of inspection payments, a deposit account. Funds, for the purpose of inspections performed by the department, must be withdrawn from the account and all inspections paid in full prior to an insignia being placed on the manufactured unit.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-0495, filed 7/17/12, effective 9/1/12.]

#### **INSPECTIONS PRIOR TO ISSUANCE OF AN INSIGNIA**

**WAC 296-150C-0500 When is an inspection required?** (1) Before we issue an insignia, each unit manufactured or converted must be inspected as many times as required to show compliance with this chapter.

Note: Each commercial coach must have a serial number so we can track inspections.

(2) Before we issue an insignia, each commercial coach must be inspected at the manufacturing location as many times as required. Inspections may include but are not limited to:

(a) A "cover" inspection during construction of the unit before the electrical, plumbing, mechanical, and structural systems are covered;

(b) Insulation and vapor barrier inspection, if required; and

(c) A final inspection after the commercial coach is complete.

(3) If we discover a violation during inspection, we will issue a notice of noncompliance. You can correct the violation during the inspection. If you cannot correct the violation during inspection, you must leave the item uncovered until we approve your correction.

(4) If a commercial coach is damaged in transit to the building site or during on-site installation, it must be inspected. This is considered an alteration inspection. (See WAC 296-150C-0240.)

(5) Approved design plans must be available in compliance with the applicable sections of the adopted state codes.

(6) Once your unit is inspected and approved we will attach the insignia.

[Statutory Authority: RCW 43.22.480. WSR 00-01-187, § 296-150C-0500, filed 12/22/99, effective 2/8/00. Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0500, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0500, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0510 How do I request an inspection?** (1) You must contact us, and we will let you know

(7/17/12)

where your request for inspection should be submitted. Our address is noted in the definition of department.

(2) We must receive in-state inspection requests at least seven calendar days prior to the date that you want the inspection.

(3) We must receive out-of-state inspection requests at least fourteen calendar days prior to the date that you want the inspection.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0510, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0520 What happens if my commercial coach passes inspection?** If your commercial coach passes inspection and you have met the other requirements of this chapter, we will attach the insignia.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0520, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0530 Am I charged if I request an inspection but I am not prepared?** (1) If you ask us to inspect a commercial coach within Washington state but you are not prepared when we arrive, you must pay the inspection fee and travel. (See WAC 296-150C-3000.)

(2) If you ask us to inspect a commercial coach outside Washington state but you are not prepared when we arrive, you must pay the inspection fee, travel, and per diem expenses. (See WAC 296-150C-3000.)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0530, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0540 Who inspects commercial coach installation at the building site?** The local enforcement agency (city or county) must approve the installation.

Note: The local enforcement agency may not open the concealed construction of a commercial coach to inspect it if our insignia is attached.

Note: Alterations to commercial coaches must be inspected and approved by us.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0540, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0550 Do you allow a commercial coach to be completed at the installation site?** Commercial coaches must be completed at the manufacturing location before an insignia is attached.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0550, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0560 What happens if I receive a notice of noncompliance after inspection of the alteration to my commercial coach?** (1) If your commercial coach alteration does not pass our inspection, you will receive a notice of noncompliance. The notice of noncompliance explains what items must be corrected.

(7/17/12)

(2) You have twenty days after receiving the notice of noncompliance to send us a written response to explain how you will correct the violations.

(3) You are not allowed to sell, lease, offer for sale or use the altered commercial coach until you correct the violations. We must inspect and approve the corrections, and you must pay the inspection and insignia fees, if required (see WAC 296-150C-3000).

[Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0560, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0560, filed 10/23/96, effective 11/25/96.]

## USED COMMERCIAL COACHES WITHOUT AN INSIGNIA

**WAC 296-150C-0580 Must I obtain an insignia for used commercial coaches?** All used commercial coaches that are to be installed on a building site or used in Washington state must have an insignia of approval from us. (See exceptions WAC 296-150C-0200 (1)(a)(b).)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0580, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0590 How do I obtain insignia for used commercial coaches?** We consider used commercial coaches as new units for purposes of insignia approval. To obtain insignia, you must:

(1) Have the design plan approved (see WAC 296-150C-0300 through 296-150C-0480);

(2) Purchase insignia (see WAC 296-150C-0200 through 296-150C-0230); and

(3) Pass a unit inspection (see WAC 296-150C-0500 through 296-150C-0560).

Note: You will be required to open up as much of the construction of the unit as is necessary for inspection to show compliance with your approved design plan.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0590, filed 10/23/96, effective 11/25/96.]

## MANUFACTURER'S NOTICE TO THE DEPARTMENT

**WAC 296-150C-0700 Must manufacturers of commercial coaches notify you if they manufacture at more than one location?** (1) If you are manufacturing commercial coaches at more than one location, approved design plans must be available at each manufacturing location.

(2) You must send us the following information for each manufacturing location:

(a) Company name;

(b) Mailing and physical address; and

(c) Phone and fax number if available.

(3) You must update this information as it changes.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0700, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0710 Must manufacturers of commercial coaches notify you of a change in business name or address?** (1) If you are moving you must notify us in writing prior to a change of business name or address.

(2) Your notice must include the change of name and address.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0710, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0720 Must manufacturers of commercial coaches notify you of a change in business ownership?** (1) When a manufacturer changes ownership, the new owner must notify us in writing immediately.

(2) A new owner may continue to manufacture the units according to a prior approved design plan if the prior owner provides written releases of the design plan.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0720, filed 10/23/96, effective 11/25/96.]

## COMMERCIAL COACH CONSTRUCTION CODE

### GENERAL

**WAC 296-150C-0800 What manufacturing codes apply to commercial coaches?** (1) All design, construction, and installations of commercial coaches must conform with the following codes and the requirements of this chapter:

(a) The latest adopted version of the Washington State Ventilation and Indoor Air Quality Code, as adopted by chapter 51-13 WAC;

(b) The structural and other requirements of this chapter;

(c) Occupancy classification only from chapter 3 of the International Building Code, current edition, as adopted and amended by chapter 51-50 WAC, except commercial coaches must not be group H or R-3 occupancy;

(d) Accessibility requirements of chapter 11 of the International Building Code, current edition, as adopted and amended by chapter 51-50 WAC;

(e) Section 1607 Uniform and concentrated floor loads and footnotes of the International Building Code, current edition, as adopted and amended by chapter 51-50 WAC;

(f) The International Mechanical Code, current edition, as adopted and amended by chapter 51-52 WAC except when conflicting with the provisions of this chapter, this chapter controls;

(g) The National Electrical Code as referenced in chapter 19.28 RCW and chapter 296-46B WAC;

(h) The Washington State Energy Code, current edition, as adopted according to chapter 19.27A RCW;

(i) The Uniform Plumbing Code, current edition, as adopted and amended according to chapter 19.27 RCW;

(j) Where there is a conflict between codes, an earlier named code takes precedent over a later named code. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive governs. Where there is a conflict between a general requirement and a special requirement, the specific requirement must be applicable.

[Ch. 296-150C WAC p. 12]

(2) All construction methods and installations must use accepted engineering practices, provide minimum health and safety to the occupants of commercial coaches and the public, and demonstrate journeyman quality of work of the various trades.

(3) Requirements for any size, weight, or quality of material modified by the terms "minimum," "not less than," "at least," and similar expressions are minimum standards. The manufacturer may exceed these rules provided the deviation does not result in inferior installation or defeat the purpose and intent of this chapter.

Note: The codes, RCW's and WAC's referenced in this rule are available to view at the Washington State Library, the Washington State Law Library, and may also be available at your local library.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-0800, filed 7/17/12, effective 9/1/12. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-0800, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.-041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-150C-0800, filed 5/28/02, effective 6/28/02. Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0800, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0800, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0805 Are there any special requirements for portable school classrooms?** In addition to the requirements in this chapter, the department of health has rules regulating primary and secondary schools in chapter 246-366 WAC. One of those requirements in WAC 246-366-050(2) is that "Instructional areas shall have a minimum average ceiling height of 8 feet."

[Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-0805, filed 6/4/99, effective 7/5/99.]

**WAC 296-150C-0810 Construction definitions.** The following definitions and the definitions in each of the state codes adopted in WAC 296-150C-0800 apply to commercial coach construction.

**"Anchoring system"** is the means used to secure a commercial coach to ground anchors or to other approved fastening devices. It may include straps, cables, turnbuckles, bolts, fasteners, or other components.

**"Ceiling height"** is the clear vertical distance from the finished floor to the finished ceiling.

**"Chassis"** means that portion of the transportation system comprised of the following: Drawbar coupling mechanism and frame.

EXCEPTION: The running gear assembly shall not be considered as part of the chassis.

**"Dead load"** is the vertical load resulting from the weight of all permanent structural and nonstructural parts of a commercial coach including walls, floors, roof, partitions, and fixed service equipment.

**"Diagonal tie"** is a tie intended primarily to resist horizontal or shear forces and secondarily may resist vertical, uplift, and overturning forces.

**"Dormitory"** is a room designed to be occupied by more than two persons.

**"Exit"** is a continuous and unobstructed means of egress to a public way.

**"Frame"** means the fabricated rigid substructure, which provides support to the affixed commercial coach structure both during transport and onsite. It is considered a part of the commercial coach.

**"Glazed opening"** is a glazed skylight or an exterior window or glazing of a door of a commercial coach.

**"Gross floor area"** is the net floor area within the enclosing walls of a room where the ceiling is at least five feet high.

**"Habitable room"** is a room or enclosed floor space arranged for living, eating, food preparation, or dormitory sleeping purposes. It does not include bathrooms, toilet compartments, foyers, hallways, or other accessory floor spaces. Any reference to "habitable dwelling" in this chapter means a temporary structure not used as a single family dwelling.

**"Interior finish"** is the surface material of walls, fixed or movable partitions, ceilings and other exposed interior surfaces affixed to the commercial coach structure, including paint and wallpaper. Decorations or furnishings attached to the commercial coach structure are considered part of the interior finish.

**"Live load"** is the weight superimposed by the use and occupancy of the commercial coach, including wind load and snow load, but not including dead load.

**"Perimeter blocking"** is support placed under exterior walls.

**"Shear wall"** is a wall designed and constructed to transfer lateral loads.

**"Tiedown"** is a device designed to anchor a commercial coach to ground anchors.

**"Use"** or **"occupancy classification"** is the designed purpose of a commercial coach according to the International Building Code.

**"Wind load"** is the lateral or vertical pressure or uplift created by wind blowing in any direction.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-0810, filed 7/17/12, effective 9/1/12. Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-0810, filed 6/4/99, effective 7/5/99. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0810, filed 10/23/96, effective 11/25/96.]

## STRUCTURAL

**WAC 296-150C-0820 What are the basic structural requirements of a commercial coach?** Each commercial coach must be designed and constructed as a completely integrated structure capable of sustaining the design-load requirements of this chapter. It shall be capable of:

(1) Transmitting these loads to stabilizing devices without causing unsafe deformation or abnormal structural movement; and

(2) Withstanding the adverse effects of transportation shock and vibration as an integrated structure.

[Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0820, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0820, filed 10/23/96, effective 11/25/96.]

(7/17/12)

**WAC 296-150C-0830 Fastening of structural systems.** Roof framing must be securely fastened to wall framing, walls to floor structure, and floor structure to chassis. This must secure and maintain continuity between the floor and chassis and resist wind uplift, overturning, and sliding as imposed by design loads.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0830, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0840 Live loads.** (1) The design live loads must be established according to this chapter and must be considered to be uniformly distributed.

(2) The roof live load must not be considered as acting simultaneously with the wind load. The roof and the floor live loads must not be considered as resisting the overturning moment due to wind. The roof live load and the floor live load must be considered to act both simultaneously and separately in order to determine the critical design loading for stresses and deflections.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0840, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0850 Roof loads.** All roofs must be designed to sustain loads as follows:

(1) Dead loads plus a minimum unit live load of 30 lb/ft<sup>2</sup> (2 months load duration); and

(2) A vertical net uplift load of 9 lb/ft<sup>2</sup> (1 day load duration).

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0850, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0860 Snow loads.** The roof of a commercial coach must be designed for the loads to which it will be subjected in areas where snow records or experience indicate snow loads in excess of 30 lb/ft<sup>2</sup>.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0860, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0870 Standard wind loads.** The commercial coach and each wind resisting part must be designed for the following wind loads:

Horizontal	15 lb/ft <sup>2</sup>	(1 day load duration)
Vertical upward	9 lb/ft <sup>2</sup>	(1 day load duration)
Vertical downward	(see WAC 296-150C-0850 Roof loads)	

A commercial coach must be designed for higher wind loads if area records or experience indicate that it will be subjected to wind loads in excess of the above loads if required by the local jurisdiction.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0870, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0880 Windstorm protection—Provisions for support and anchoring.** (1) Each commercial coach must have provisions for support and anchoring systems that, when properly designed and installed, will resist

overturning and lateral movement of the commercial coach as imposed by the respective design loads. Support and anchoring systems can be installed according to the Table in WAC 296-150C-1210 or designed by a professional engineer.

(2) The manufacturer of each commercial coach is required to make provision for the support and anchoring systems but is not required to provide the anchoring equipment or stabilizing devices.

(3) The manufacturer must provide printed instructions with each commercial coach specifying the location and required capacity of stabilizing devices on which the design is based.

#### Single-Wide Commercial Coaches:

(4) The provisions made for anchoring systems must be based on the following design criteria for single-wide commercial coaches:

(a) The minimum number of ties required per side is noted in WAC 296-150C-1210.

(b) Ties must be as evenly spaced as practicable along the length of the commercial coach. No more than eight feet open-end spacing must occur on each end.

(c) If continuous straps are provided as vertical ties, they must be positioned at rafters and studs. If a vertical tie and diagonal tie are located at the same place, both ties may be connected to a single ground anchor, as long as, the anchor used is capable of carrying both loads.

(d) Add-on sections of expandable commercial coaches must have provisions for vertical ties at the exposed ends.

#### Double-Wide Commercial Coaches:

(5) Double-wide commercial coaches require only diagonal ties specified in the table in WAC 296-150C-1210. The ties must be placed along the outer side walls.

(6) Protection must be provided at sharp corners where the anchoring system requires the use of external cables or straps. Protection must also be provided to minimize damage to roofing or siding by the cable or strap.

(7) Anchoring equipment must be capable of resisting an allowable working load equal to or exceeding 3,150 pounds and must be capable of withstanding a 50 percent overload (4,725 pounds total) without failure of either the anchoring equipment or the attachment point on the commercial coach.

(8) Exposed anchoring equipment must have a resistance to weather deterioration at least equal to that provided by a coating of zinc on steel of at least 0.30 ounces per square foot of surface coated.

(a) Slit or cut edges of zinc-coated steel strapping do not need to be zinc-coated.

(b) Type 1, Class B, Grade 1 steel strapping, 1 1/4 inches wide and 0.035 inch thick, conforming with Federal Specification QQ-S-781-G, meets the requirements of this paragraph.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0880, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0900 Interior walls and partitions.** Interior walls and partitions must be:

(1) Constructed with structural capacity adequate for the intended purpose; and

[Ch. 296-150C WAC p. 14]

(2) Capable of resisting a horizontal load of at least five pounds per square foot without exceeding the deflections specified in WAC 296-150C-0920.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0900, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0910 Minimum uniform and concentrated live loads.** See use or occupancy of the 2003 edition of The International Building Code for group occupancy loads.

[Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-0910, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150C-0910, filed 8/22/00, effective 9/30/00. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0910, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0920 Design load deflection.** When a structural assembly is subjected to total design live loads, the deflection for structural framing members must not exceed the following:

*L = The clear span between supports or two times the length of a cantilever.*

Floor	L/240
Roof and ceiling	L/180
Headers, beams, girders	L/180
Walls and partitions	L/180

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0920, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0930 Structural load tests.** (1) A structural assembly or subassembly tested for qualification must sustain the design dead load plus the superimposed design live loads (see WAC 296-150C-0840) equal to 1.75 times the required live loads for a period of twelve hours without failure of the assembly or subassembly, unless otherwise specified in this chapter.

(2) An assembly or subassembly failure is defined as a rupture, fracture, or residual deflection which is greater than the limits set in WAC 296-150C-0920. The type and quality of material used in each test assembly or subassembly must be identified. The assembly or subassembly tested must represent the minimum quality of material.

(3)(a) Nationally recognized standards or engineering practices must be used for structural load tests for commercial coaches.

(b) Tests must be witnessed by a professional engineer or architect.

Note: We will provide test procedure forms upon request.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0930, filed 10/23/96, effective 11/25/96.]

**CONSTRUCTION**

**WAC 296-150C-0940 Fastening of structural systems.** Roof framing must be securely fastened to wall framing, walls to floor structure, and floor structure to chassis to secure and maintain continuity between the floor and chassis and to resist wind uplift, overturning, and sliding as imposed by design loads.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0940, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0950 Roof coverings/membrane/weather resistant.** (1)(a) The roof covering must be securely fastened in an approved manner to the supporting roof construction and must provide weather protection for the commercial coach and the occupants. The roof covering must be installed according to the manufacturer's instructions and approved by us.

(b) Roofing membranes must be rigid enough to prevent deflection that would permit ponding of water or separation of seams due to snow or wind or during assembly or transportation.

(2) Exterior covering materials, including metal coverings, must be moisture and weather-resistant and contain corrosion resistant fasteners to prevent wind and rain deterioration.

Note: Electro-plated, electro-deposited zinc, and electro-galvanized staples are not considered corrosion resistant materials.

(3) All exterior openings or penetrations into the commercial coach around piping, ducts, plenums, or vents must be sealed with moisture resistant material.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0950, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0960 What requirements apply to commercial coach roof trusses?** (1) The construction of roof trusses must be approved by a professional engineer. Roof trusses may be produced by one of the following methods:

(a) Use of graded materials when an approved testing agency certifies truss construction and load requirements are met; the testing agency must prepare an approved quality control program which allows them to test the trusses with appropriate testing procedures.

(b) Use of nongraded materials, if each truss is tested in an approved testing jig at the manufacturer's site with a load equivalent to full design load (1.75 times the full design load sustained for twelve hours). See WAC 296-150C-0930.

(2)(a) Representative trusses must be tested from the production line, when we request. The approved testing agency or engineer must submit the testing report to us.

(b) All test reports are to be stamped, signed, and dated by the approved testing agency or engineer who performs the test.

(c) These tests must not occur more than two times a year per design unless there are problems with the roof trusses.

(d) The manufacturer is required to maintain an acceptable quality level not exceeding one percent using acceptable sampling procedures.

(7/17/12)

Note: The acceptable quality level is defined as the maximum allowable percentage of defective units.

[Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-0960, filed 6/4/99, effective 7/5/99. Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-0960, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0960, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0970 Roof construction.** (1) All roofs must be framed and tied into the framework and supporting walls to form an integral part of the commercial coach.

(2) All trusses must be laterally braced.

(3) All roof decks must be designed and built with sufficient slope or camber to assure adequate drainage, or must be designed to support maximum loads including possible ponding of water due to deflection.

(4) Cutting roof framework members for passage of electrical, plumbing, or mechanical systems is prohibited except where substantiated by engineering analysis.

(5) Electrical, plumbing, or mechanical systems must not penetrate the roofing membrane unless the penetration point is adequately sealed.

(6) Ventilation. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain and snow. Where eave or cornice vents are installed, insulation shall not block the free flow of air. A minimum of 1 inch of air space shall be provided between the insulation and roof sheathing. The net free ventilating area shall not be less than 1/150 of the space ventilated, except:

(a) The area may be 1/300, provided 50 percent of the required opening area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet above eave or cornice vents; or

(b) A vapor barrier not exceeding 1 perm is installed on the warm side of the attic insulation.

[Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150C-0970, filed 8/22/00, effective 9/30/00. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0970, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-0990 Sealing wall exterior openings.** All exterior wall openings or penetrations into the commercial coach around piping, ducts, plenums, or vents must be sealed with moisture-resistant material.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-0990, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1000 Drilling or notching of wood wall structural members.** (1) **Cutting and notching.** In exterior walls and bearing partitions, any wood stud may be cut or notched to a depth not exceeding twenty-five percent of its width. Cutting or notching of studs to a depth not greater than forty percent of the width of the stud is permitted in nonbearing partitions supporting no loads other than the weight of the partition.

[Ch. 296-150C WAC p. 15]

(2) **Bored holes.** A hole not greater in diameter than forty percent of the stud width may be bored in any wood stud. Bored holes not greater than sixty percent of the width of the stud are permitted in nonbearing partitions or in any wall where each bored stud is doubled, provided not more than two such successive doubled studs are so bored.

In no case shall the edge of the bored hole be nearer than 5/8 inch (16mm) to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut or notch.

(3) Drilling or notching of studs greater than allowed in subsection (1) or (2) of this section must be substantiated by engineering analysis.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1000, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1020 Wall construction.** Walls must be of sufficient strength to withstand the load requirements of this chapter. The connections between the bearing walls, floor, and roof framework members must be fabricated to provide support for the material used to enclose the commercial coach and to provide for the transfer of all lateral and vertical loads to the floor and the chassis.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1020, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1030 Fire-blocking.** (1) Fire-blocking must be provided in commercial coaches to cut off all concealed draft openings in all stud walls and partitions, including furred spaces at the ceiling and floor levels and at ten foot intervals both vertical and horizontal.

(2) Fire-blocking must be provided around vents, pipes, ducts, chimneys, fireplaces, and similar openings which afford a passage for fire at ceiling and floor levels, with non-combustible material.

(3) Fire blocking must be two inch nominal lumber, gypsum board, cement asbestos board, mineral fiber or other approved materials securely fastened in place.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1030, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1040 Floors.** (1) Wood floors or sub-floors in kitchens, bathrooms (including toilet compartments), laundry rooms, water heater compartments, and any other areas subject to excessive moisture must be moisture resistant; or they must be made moisture resistant by sealing or by an overlay of nonabsorbent material applied with water-resistant adhesive.

(2) Carpeting cannot be used under a heat producing appliance unless the appliance is listed for such use.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1040, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1050 Drilling or notching of wood joist structural members.** (1) Notches on the ends of joists must not exceed one-fourth the joist depth, unless substantiated by engineering design or approved tests.

[Ch. 296-150C WAC p. 16]

(2) Holes bored in joists must not be within two inches of the top or bottom of the joist, and the diameter of any such hole must not exceed one-third of the depth of the joist.

(3) Notches in the top or bottom of the joists must not exceed one-sixth the depth and must not be located in the middle third of the span.

(4) Joists in transverse floor framing systems, which do not have perimeter blocking, must not be drilled or notched, unless substantiated by engineering design or approved tests.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1050, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1060 Fastening of structural systems.** Roof framing must be securely fastened to wall framing, walls to floor structure, and floor structure to chassis to secure and maintain continuity between these elements to resist wind uplift, overturning and sliding imposed by the design loads.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1060, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1070 Floor closure material.** The closure material must meet ASTM D-781 standard or equal and be installed as follows:

(1) Fibrous material (with or without patches) must meet or exceed the level of 48 inch-pounds of puncture resistance as tested.

(2) The material must be installed according to installation instructions furnished by the supplier of the material.

(3) Patching material must be suitable for patches and the patch life must be equivalent to the material life.

(4) Floor closure material around piping, ducts, plenums, or vents must prevent damage to the underside of the commercial coach due to air, water, insects, dust, and must be rodent resistant.

[Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150C-1070, filed 8/22/00, effective 9/30/00. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1070, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1080 What design and construction requirements apply to a commercial coach chassis?** Each commercial coach chassis must be designed and constructed to be capable of:

(1) Effectively sustaining the design loads consisting of the dead load plus five PSF load on the floor and the superimposed dynamic load resulting from highway movement, in no case shall the dynamic load be required to exceed twice the dead load; and

(2) Accepting the shock and vibration from the roadway and towing vehicle through the use of adequate running gear assemblies.

(3) In the set up mode, the commercial coach must be designed to accommodate the design live floor load established in WAC 296-150C-0800 (1)(e).

[Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-1080, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-1080, filed



6/4/99, effective 7/5/99. Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1080, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1080, filed 10/23/96, effective 11/25/96.]

## MATERIALS

**WAC 296-150C-1090 Standards for equipment and installations.** The manufacturer's equipment and installation specifications must be followed. Other approved standards are acceptable when:

- Installed according to the manufacturer's installation instructions; and
- Approved by a listing or testing agency.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1090, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1100 Flame-spread limitations. (1)** The interior finish of all walls and partitions must have a flame-spread rating not exceeding two hundred except as otherwise specified in this section. The flame-spread limitation does not apply to:

(a) Molding, trim, windows, doors, or series of doors four feet wide or less;

(b) Permanently attached decorative items such as pictures or accent panels constituting a maximum of ten percent of the aggregate wall surface in any room or space or more than thirty-two square feet in surface area, whichever is less.

(2) All ceiling interior finish must have a maximum flame-spread rating of two hundred, excluding molding and trim two inches wide or less.

(3) Furnace and water heater spaces must be enclosed by walls, ceiling, and doors having an interior finish with a maximum flame-spread of twenty-five.

(4) Combustible kitchen cabinet doors, countertops, exposed bottom and end panels must have a maximum flame-spread of twenty-five. Cabinet rails, stiles, mullions, and toe strips are exempted.

(5) Exposed interior finishes adjacent to the cooking range must have a flame-spread of fifty. Adjacent surfaces are the exposed vertical surfaces between the range top and the overhead cabinets or ceiling and within six horizontal inches of the cooking range.

(6) Finish surfaces of plastic bath tubs, shower units and tub or shower doors must have a flame-spread of two hundred.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1100, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1110 Combustible limitations. (1)** The exposed wall adjacent to the cooking range, must be fifty flame-spread or less, such as 5/16 inch gypsum board or material having equivalent fire protective properties.

(2) All openings for pipes and vents in furnace and water heater spaces shall be tight-fitted or fire-stopped.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1110, filed 10/23/96, effective 11/25/96.]

(7/17/12)

**WAC 296-150C-1120 Kitchen cabinet protection.** The bottom and sides of combustible kitchen cabinets over cooking ranges or tops including a space of six inches from the edge of the burners must be protected with at least materials rated at twenty-five or less flame-spread covered with at least twenty-six gauge sheet metal (.017 stainless steel, .024 aluminum or .020 copper) or equivalent protection. The protective metal over the range must form a hood with at least a three-inch eyebrow (measuring horizontally from face of cabinet). The hood must be centered over and at least as wide as the top of the cooking range.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1120, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1130 Insulation standards.** Insulation standards for commercial coaches must comply with the Washington State Energy Code, unless another state law supersedes the Washington State Energy Code.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1130, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1140 Room sizes. (1)** Every habitable room must have a minimum ceiling height of not less than seven feet.

(2) No habitable room, except a kitchen, must be less than five feet in any clear horizontal dimension.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1140, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1150 Hallways. (1)** Hallways in structures required to meet accessibility standards must have a minimum horizontal dimension that conforms to accessibility standards set by the International Building Code, current edition, standards set in the accessibility standard in WAC 296-150C-0800 (1)(d).

(2) Hallways in nonaccessible construction site trailers must have a minimum horizontal dimension of 32 inches.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-1150, filed 7/17/12, effective 9/1/12. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-1150, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1150, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1160 Accessibility standards.** When applicable, a commercial coach must meet the accessibility standards set by the Washington State Building Code in RCW 19.27.030(5).

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1160, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1170 What are the lighting and ventilation requirements of a commercial coach? (1)** Habitable rooms must be provided with exterior windows or doors having a total glazed area of at least ten percent of the floor area, or they must have artificial light.

(2) An area equal to a minimum of five percent of the floor area must be available for unobstructed ventilation.

Glazed areas do not need to be opened if a mechanical ventilation system is provided. The mechanical ventilation system must be capable of producing a change of air in the room every thirty minutes with at least one-fifth of the air supply taken from outside the commercial coach.

(3) Each bathroom must be provided with artificial light and with external windows or a mechanical exhaust must be provided. The external window must have at least 1/2 square feet of glazed area fully able to open. A mechanical ventilation system must be capable of producing a change of air every twelve minutes. Any mechanical ventilation system must exhaust directly to the outside of the commercial coach.

[Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1170, filed 6/30/98, effective 7/31/98. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1170, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1175 Glass and glazed openings.** The provisions of this section shall apply to the installation of glass or glazed openings, including hazardous locations.

(1) Standards. Standards for material shall meet International Building Code Section 2406.1.

(2) Identification. Flat glass shall bear the manufacturer's label designating the type and thickness of glass. Safety glazing shall have the manufacturer's identification etched or ceramic fired on the glass and be visible when the unit is glazed.

(3) Wind loads. Exterior glass and glazing shall be capable of withstanding a wind pressure of twenty pounds per square foot.

(4) Hazardous locations. The following shall be considered specific hazardous locations for the purposes of glazing:

(a) Glazing in ingress and egress doors;

(b) Glazing in fixed and sliding panels of sliding door assemblies and panels in swinging doors other than wardrobe doors;

(c) Glazing in storm doors;

(d) Glazing in fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within a twenty-four-inch arc of either vertical edge of the door in a closed position;

(e) Glazing in a fixed or operable panel, other than locations in (d) of this subsection, that meets all of the following conditions:

(i) Exposed area of an individual pane greater than nine square feet.

(ii) Exposed bottom edge less than eighteen inches above the floor;

(f) Shower doors and tub enclosures.

[Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-1175, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150C-1175, filed 8/22/00, effective 9/30/00.]

**WAC 296-150C-1180 Commercial coach exits.** When applicable, a commercial coach must comply with International Building Code, Chapter 11 Accessibility and with the following requirements:

(1) Commercial coaches must have at least two exterior doors that are remote from each other. Remote means that in:

(a) Single-wide units the doors may not be less than twelve feet apart; and

(b) Multiwide units the doors may not be less than twenty feet apart, center to center from each other measured in a straight line direction regardless of the length of travel between doors.

Exception: A commercial coach that is twenty-four feet long or less needs only one exit door, unless it has a dormitory sleeping area.

(2) Exterior doors must be constructed for exterior use. Exterior doors must provide at least a thirty-five inch wide by seventy-nine inch high clear opening (36" x 80" door). Each swinging exterior door must have a key-operated lock that has a deadlock latch. A deadlock with a passage set installed below the deadlock may be used as an acceptable alternate for each exterior door. The locking mechanism must be engaged or disengaged by the use of a lever or other device from the interior of the commercial coach. Locks must not require the use of a key for operation from the inside.

(3) Every room designed for dormitory sleeping, unless it has an exterior exit door, must have at least one window which can be opened from the inside without using tools. This window must provide a clear opening of at least twenty-two inches in its smallest dimension and five square feet in area with the bottom of the opening not more than three feet above the floor. If a screen or storm window is used it must be readily removable without using tools.

[Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-1180, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1180, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1190 Interior privacy.** If a commercial coach interior door, such as a bathroom door, has a privacy lock, the lock must contain an emergency release. The emergency release must be on the outside to permit entry when the door is locked from the inside.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1190, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1195 Fire warning equipment—Automatic smoke detectors.** (1) At least one smoke detector (which may be a single station smoke detector) must be installed in each commercial coach to protect each separate bedroom. Smoke detectors must meet the requirements of the Standard for Single and Multiple Station Smoke Detectors of the Underwriters Laboratories Inc. (UL 217). All dormitories must have at least one installed smoke detector.

(2) A smoke detector must be installed in the hallway or area next to the bedroom, and must be mounted, where possible, between the commercial area and the first bedroom door on an interior wall. Where mounting cannot be achieved due to limited interior wall space, the smoke detector must be located as close as practical to the first bedroom door on an interior wall. Commercial coaches having bedrooms separated by one or a combination of common use areas (such as a kitchen, dining area, or a commercial area, but, not a bathroom) must have at least two smoke detectors, one smoke detector protecting each bedroom.

(3) Smoke detectors must be installed per their listing. The smoke detector mounting must be attached to an electrical outlet box and the detector must be permanently wired into a general purpose electrical circuit. There must be no switches in the circuits to the detectors other than the circuit breaker serving the circuits.

(4) The commercial coach manufacturer must provide a copy of the testing and maintenance instructions supplied by the manufacturer of the smoke detector for the information of the consumer and users of the commercial coach.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1195, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1200 Installation instructions.** The manufacturer must provide printed instructions upon request for each commercial coach specifying the following:

- (1) The location and required capacity of stabilizing devices, such as tie downs, piers, and blocking;
- (2) Devices and methods used to connect all components and systems including, chassis and utilities; and
- (3) Leveling, including releveling.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1200, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1210 Table: Number of ties required per side of commercial coach.**

NUMBER OF TIES REQUIRED PER SIDE OF COMMERCIAL COACH

Note: This table is based on a minimum working load per anchor of three thousand one hundred fifty pounds with a fifty percent overload (four thousand seven hundred twenty-five pounds total).

Length of Commercial Coach (Feet)	No. of Vertical Ties	No. of Diagonal Ties
00-40	2	3
41-46	2	3
47-49	2	3
50-54	2	3
55-58	2	4
59-64	2	4
65-70	2	4

(1) Double-width commercial coaches require only the diagonal ties specified, and these must be placed along the outer side walls;

(2) Length of commercial coach (as used in this table) means length excluding draw bar;

(3) Diagonal ties in this method must deviate at least forty degrees from a vertical direction; or

(4) The number of ties required can be designed by a professional engineer.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1210, filed 10/23/96, effective 11/25/96.]

(7/17/12)

**ELECTRICAL**

**WAC 296-150C-1220 Electrical—General.** This chapter applies to the installation of electrical equipment in any commercial coach bearing or required to bear a department insignia.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1220, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1230 Electrical definitions.** Definitions contained in the current adopted edition National Electrical Code (NEC), and the following definitions apply to the commercial coach electrical standards in this chapter.

**"Converter"** is a device that changes electrical energy from one form to another, as from alternating current to direct current.

**"Feeder assembly" or "subpanel"** is the overhead or under-chassis feeder conductor, including the grounding conductor, fittings, and equipment, or power-supply cord approved for commercial coach.

The feeder assembly or subpanel is used in commercial coaches and designed to deliver energy from the source of electrical supply to the distribution panelboard within the commercial coach.

**"Low voltage"** is an electromotive force rated at thirty-two volts or less, supplied from a transformer, converter, or battery.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1230, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1240 Branch circuit and feeder calculations.** Branch circuit and feeder calculations must be determined according to the National Electrical Code.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1240, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1250 Disconnecting means and branch circuit protective equipment.** (1) The branch circuit equipment may be combined with the disconnecting means as a single assembly. Such a combination may be designated as a distribution panelboard. If a fused distribution panelboard is used, the maximum fuse size for the mains must be plainly marked with lettering at least 1/4 inch high and visible when fuses are changed.

Note: See the National Electrical Code concerning identification of each disconnecting means and each feeder or branch circuit at the point where it originated and type of marking needed.

(2) Plug fuses and fuseholders must be tamper-resistant, Type "S," enclosed in dead-front fuse panelboards.

(3) A single disconnecting means must be provided in each commercial coach. It must consist of a circuit breaker or a switch, fuses, and their accessories installed in a readily accessible location near the point of entrance of the supply cord or conductors into the commercial coach. The main circuit breakers or fuses must be plainly marked "main." This equipment must contain a solderless type of grounding connector or bar for the purposes of grounding, with sufficient

terminals for all grounding conductors. The neutral bar termination of the grounded circuit conductors must be insulated.

(4) The disconnecting equipment must have a rating suitable for the connected load. The distribution equipment, either circuit breaker or fused type, must be located a minimum of twenty-four inches from the bottom of such equipment to the floor level of the commercial coach. There must be an accessible space of at least thirty inches wide by thirty-six inches deep by seventy-eight inches high in front of the electrical disconnect equipment. The main circuit breakers or switches must be plainly marked "main." There must be a label attached to the panelboard stating:

"This panelboard must be connected by a feeder assembly having overcurrent protection rated at not more than \_\_\_\_\_ amperes." (The correct ampere rating must be marked in the blank space.)

(5) Branch circuit distribution equipment must be installed in each commercial coach and must include overcurrent protection for each branch circuit consisting of either circuit breakers or fuses.

(6) The branch circuit overcurrent devices must be rated:

- (a) Not more than the circuit conductors; and
- (b) Not more than one hundred fifty percent of the rating of a single appliance rated ten amperes or more; but
- (c) Not more than the overcurrent protection rating marked on the motor-operated appliance. A device not approved for branch circuit protection, such as a thermal cut-out or motor overload protective device, must not be considered as the overcurrent device protecting the circuit.

(7) A 20-ampere fuse or circuit breaker must be considered adequate protection for fixture leads, cords for portable appliances and No. 14 AWG (American Wire Gauge) tap conductors, not over six feet long, for recessed lighting fixtures.

(8) If more than one outlet or load is on a branch circuit, a 15-ampere receptacle must be considered protected by a 20-ampere fuse or circuit breaker.

(9) When circuit breakers are provided for branch circuit protection, 240-volt circuits must be protected by two-pole common or companion trip circuit breakers.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1250, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1260 Power supply—Feeder assembly equipment.** A commercial coach must be provided with feeder assembly equipment, installed by the manufacturer according to National Electrical Code and the provisions of this chapter. The assembly must be either:

(1) One overhead assembly containing the required number of insulated color-coded feeder conductors, one of which must be a grounding conductor; or

(2) One under-vehicle assembly consisting of conduit running from the commercial coach branch circuit panelboard to the underside of the commercial coach. Conduit must be sized in accordance with the National Electrical Code; or

(3) Other installations approved by the department.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1260, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1270 Identification of feeder assembly connection.** (1) Each commercial coach equipped with a 120-volt electrical system must have a label, permanently attached on the outside wall adjacent to the point of entrance of the feeder assembly, that reads:

"THIS CONNECTION IS FOR 110-125 VOLT AC SERVICE. DO NOT CONNECT HIGHER VOLTAGE."

(2) Each commercial coach equipped with a 120/240-volt AC electrical system must have a label, permanently attached on the outside wall, adjacent to the point of entrance of the supply assembly or permanently installed feeders, that reads:

"THIS CONNECTION IS FOR 120/240 VOLT AC \_\_\_\_\_ AMPERE SERVICE." (The correct service rating shall be stamped in the blank space.)

(3) Each commercial coach equipped with a 480/277-volt electrical system must have a label, permanently attached on the outside wall, adjacent to the point of entrance of the supply assembly or permanently installed feeders, that reads:

"THIS CONNECTION IS FOR 480/277 VOLT AC \_\_\_\_\_ AMPERE SERVICE." (The correct service rating shall be stamped in the blank space.)

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1270, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1280 Wiring methods—Wiring of expandable or multiple units.** (1) Where circuits in expandable or multiple units are designed to be energized from one main panelboard, permanent-type wiring methods and materials must be used for connecting the units to each other.

(2) Commercial coaches may have individual branch circuit panelboards installed in each unit subject to the requirements of this chapter.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1280, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1290 Under-chassis wiring.** Outdoor or under-chassis wiring (120/240 volts) exposed to moisture and mechanical damage must be protected by rigid metal conduit, electrical metallic tubing, liquid-tight flexible metal conduit, or nonmetallic conduit. The conductors shall be type RW, TW, or equivalent.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1290, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1300 Equipment mounting.** Electrical equipment must be securely mounted to prevent displacement during transit. Meter bases must not be mounted on commercial coaches.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1300, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1303 How must storage batteries be installed in a commercial coach?** Storage batteries subject to the provisions of this standard must be securely attached to the commercial coach. They must be installed in an area

which is vapor-tight to the interior and ventilated directly to the exterior of the coach. When batteries are installed in a compartment, the compartment must be ventilated with openings of not less than two square inches at the top and two square inches at the bottom. Batteries must not be installed in a compartment containing spark or flame producing equipment, except in an engine generator compartment if the only charging source is the generator itself.

[Statutory Authority: Chapter 43.22 RCW. WSR 98-14-078, § 296-150C-1303, filed 6/30/98, effective 7/31/98.]

**WAC 296-150C-1310 Grounding—General.** Grounding of both electrical and nonelectrical metal parts in a commercial coach must be through connection to a grounding bus in the commercial coach distribution panel. The grounding bus must be grounded through the green conductor in the supply cord. It may also be grounded through the feeder wiring to the service ground in the service-entrance equipment located adjacent to the commercial coach location. Do not connect either the frame of the commercial coach or the frame of any appliance to the neutral conductor in the commercial coach.

(1) The insulated neutral requirements are as follows:

(a) The grounded (neutral) circuit conductor must be insulated from the grounding conductors, from equipment enclosures, and from other grounded parts.

(b) The grounded (neutral) circuit terminals in the distribution panels and in ranges, clothes dryers, counter-mounted cooking units, and wall-mounted ovens must be insulated from the equipment enclosure.

(c) Bonding screws, straps, or buses in the distribution panel or in appliances *must be removed and discarded*.

(d) Connections of ranges and clothes dryers with 120/240 volt, 3-wire ratings must be made with 4-conductor cord and 3-pole, 4-wire grounding-type plugs or by type AC metalclad cable or individual conductors enclosed in flexible metal conduit.

(e) Type NM or type SE cable must not be used to connect a range or a dryer. This does not prohibit the use of type NM or type SE cable between the branch circuit overcurrent protective device and a junction box or range or dryer receptacle.

(f) For 120-volt rated devices, a 3-conductor cord and 2-pole, 3-wire grounding-type plug is permitted.

(2) The following equipment grounding means must be used:

(a) The green grounding wire in the supply cord or permanent feeder wiring must be connected to the grounding bus in the distribution panel or disconnecting means.

(b) In the electrical system, all exposed metal parts, enclosures, frames, lamp fixture canopies, etc., must be effectively bonded to the grounding terminal or enclosure of the distribution panel.

(c) Cord-connected appliances must be grounded by means of an approved cord with grounding conductor and grounding-type attachment plug.

(3) The following bonding requirements of noncurrent-carrying metal parts must apply:

(a) All exposed noncurrent-carrying metal parts that may become energized must be effectively bonded to the grounding terminal or enclosure of the distribution panelboard. A

(7/17/12)

bonding conductor must be connected between each distribution panelboard and an accessible terminal on the chassis.

(b) Grounding terminals must be of the solderless type and approved as pressure-terminal connectors recognized for the wire size used.

(c) The bonding conductor must be solid or stranded, insulated or bare and must be No. 8 copper minimum or equal. It must be routed so as not to be exposed to physical damage.

(d) Metallic gas, water, and waste pipes and metallic air circulating ducts must be considered bonded if they are connected to the terminal on the chassis by clamps, solderless connectors or by suitable grounding-type straps.

(e) Any metallic roof and exterior covering must be considered bonded if:

(i) The metal panels overlap one another and are securely attached to the wood or metal frame parts by metallic fasteners;

(ii) The lower panel of the metallic exterior covering is secured at a cross member of the chassis by two metal fastener straps per commercial coach unit or section at opposite ends; and

(iii) The bonding strap must be a minimum of 30 gauge galvanized metal and must be a minimum of four inches wide.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1310, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1320 Dielectric strength test.** (1)(a)

The wiring of each commercial coach must be subjected to a one-minute, 900-volt, dielectric strength test between live parts (including neutral) and the commercial coach ground. All switches must be closed during the test. (Closed switches are in the on position.)

(b) The test may also be performed at 1,080 volts for one second. This test must be performed after branch circuits are complete and after fixtures or appliances are installed.

Exception: Fixtures and appliances are not required to withstand the dielectric strength test.

(2) Each commercial coach designed with a 480-volt electrical system must be subjected to a one-minute 1,275-volt dielectric strength test between current-carrying conductors and the coach ground. The test may also be performed at 1,500 volts for one second.

(3) Low-voltage circuit conductors in each commercial coach must withstand the applied potential without electrical breakdown of a one-minute, 500-volt, or a one-second, 600-volt, dielectric strength test. The potential must be applied between live and grounded conductors.

(4) The test is to be performed by the manufacturer and witnessed by the inspector.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1320, filed 10/23/96, effective 11/25/96.]

**MECHANICAL**

**WAC 296-150C-1330 Mechanical—General.** This chapter applies to the installation of mechanical, ventilation, and indoor air quality equipment in any commercial coach

[Ch. 296-150C WAC p. 21]

bearing or required to bear a department insignia. Mechanical, ventilation, and indoor air quality equipment and installations in or on a commercial coach shall be installed according to the requirements of the International Mechanical Code, current edition.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-1330, filed 7/17/12, effective 9/1/12. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1330, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1340 Mechanical definitions.** Definitions contained in the International Mechanical Code, current edition, and the following definitions apply to the commercial coaches.

**"Accessible"** is having access to a fixture, connection, appliance, or equipment that requires the removal of an access panel, door, or similar obstruction.

**"Appliance compartment"** is a room having a floor area not in excess of twice the largest plan area of the room's appliance or appliances plus clearances required in this chapter.

**"Automatic pilot device"** is a device employed with gas-burning equipment that will either automatically shut off the gas supply to the burner being served or automatically activate, electrically or otherwise, a gas shutoff device when the pilot flame is extinguished.

**"Btuh"** is British thermal units per hour.

**"Clearance"** is the distance between the appliance, chimney, vent, or chimney or vent connector, or plenum and the nearest surface.

**"Combustible material"** is a material adjacent to or in contact with a heat-producing appliance, vent connector, chimney, or steam and hot water pipes, made of or surfaced with wood, compressed paper, plant fibers, or other products that will ignite and burn. Such material must be considered combustible even though flame-proofed, fire-retardant treated, or plastered.

**"Connector-gas appliance"** is a flexible or semi-rigid connector listed as conforming to ANSI Standard Z21.24, Metal Connectors for Gas Appliances, used to convey fuel gas, three feet or less in length (six feet or less for gas ranges), between a gas outlet and a gas appliance in the same room.

**"Fuel gas piping system"** is the arrangement of piping, tubing, fittings, connectors, valves, and devices designed and intended to supply or control the flow of fuel gas to an appliance.

**"Gas"** is fuel gas, such as natural gas, manufactured gas, undiluted liquefied petroleum gas (vapor phase only), liquefied petroleum air-gas mixtures, or mixtures of these gases that would ignite in the presence of oxygen.

**"Gas-supply connection"** is the terminal end or connection to which a gas-supply connector is attached.

**"Input rating"** is the maximum fuel-burning capacity of any warm-air furnace, recessed heater, or burner expressed in British thermal units per hour.

**"Liquefied petroleum gases (LPG)"** is any material that is composed predominantly of propane, propylene, butanes (normal butane or isobutane), and butylenes, or any mixture of them.

**"Quick-disconnect device"** is a hand-operated means of connecting and disconnecting a gas supply or connecting

gas systems and is equipped with an automatic device to shut off the gas supply when disconnected.

**"Readily accessible"** is having direct access without the necessity of removing any panel, door, or similar obstruction.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-1340, filed 7/17/12, effective 9/1/12. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1340, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1346 When HVAC equipment is supplied with more than one CFM rating, which rating do I use?** Where HVAC equipment manufacturers show multiple cubic feet per minute (CFM) ratings and/or multiple water gauge ratings, you must use the highest rated capacity.

[Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150C-1346, filed 8/22/00, effective 9/30/00.]

**WAC 296-150C-1350 LPG system enclosure and mounting.** (1) LPG containers must not be installed, nor stored temporarily, inside any commercial coach.

Exception: This prohibition does not apply to completely self-contained hand torches, lanterns, or similar equipment with containers having a maximum water capacity of two and one-half pounds (approximately one pound LPG capacity).

(2)(a) Containers, control valves and regulating equipment, when installed, must be mounted on the "A" frame of the commercial coach or installed in a compartment that is *vapor-tight* to the inside of the commercial coach and accessible only from the outside.

(b) The compartment must be ventilated at top and bottom to diffuse vapors. The compartment must be ventilated with two vents having an aggregate area of not less than two percent of the floor area of the compartment and must open without restriction to the outside. The required vents must be equally distributed between the floor and ceiling of the compartment. If the lower vent is located in the access door or wall, the bottom edge of the vent shall be flush with the floor level of the compartment. The top vent must be located in the access door or wall with the bottom of the vent not more than twelve inches below the ceiling level of the compartment. All vents must have an unrestricted discharge to the outside atmosphere. Access doors or panels of compartments must not be equipped with locks or require special tools or knowledge to open.

(3) Doors, hoods, domes, or portions of housings and enclosures required to be removed or opened for container replacement must incorporate means for clamping them firmly in place and preventing them from working loose during transit. Provisions must be incorporated in the assembly to hold the containers firmly in position and prevent their movement during transit.

(4) LPG containers must be mounted on a substantial support or a base secured firmly to the commercial coach chassis. Neither the container nor its support can extend below the commercial coach frame.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1350, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1360 Gas piping—Piping design.**

Commercial coaches requiring fuel gas for any purpose must be equipped with a gas piping system that is designed for LPG only or combination LPG and natural gas.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1360, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1370 Gas piping—Expandable or multiple commercial coaches.** Where gas piping is to be installed in more than one portion of an expandable or multiple commercial coach, the design and construction must be as follows:

- (1) There must be only one point of cross over, readily accessible from the exterior of the commercial coach.
- (2) The connector between units must be a listed flexible gas connector approved for exterior use.
- (3) A shut-off valve must be located on the supply side of the connection. Both a flexible gas connector that is approved for exterior use and a quick disconnect type of connector must be tested and approved to IAPMO TSC-9 standard or equal; and both must have a shut-off valve installed that is tested and approved to ANSI Z21.15 standard or equal.
- (4) Protective caps or plugs must be permanently attached to the coach and used to seal the system when not in use.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1370, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1380 Concealed tubing.** (1) Tubing must not be run inside walls, floors, partitions, or roofs.

(2) If tubing passes through walls, floors, partitions, roofs, or similar installations, the tubing must be protected by the use of weather resistant grommets that snugly fit both the tubing and the hole through which the tubing passes.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1380, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1390 Gas piping—Pipe-joint compound.** (1) Screw joints must be made tight with pipe-joint compound that is insoluble in liquefied petroleum gas.

(2) Pipe-joint compound must be approved for the type of gas used. The pipe-joint compound must be applied to the male threads only.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1390, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1400 Gas piping—Hangers and supports.** (1) All gas piping must be adequately supported by galvanized or equivalently protected metal straps or hangers at intervals of not more than four feet, except where adequate support and protection is provided by structural members.

(2) Gas pipe supply connections must be rigidly anchored to a structural member within six inches of the supply connections.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1400, filed 10/23/96, effective 11/25/96.]

(7/17/12)

**WAC 296-150C-1410 Gas piping—Electrical ground.** (1) Gas piping must not be used for an electrical ground.

(2) The gas line must be bonded.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1410, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1420 Identification of gas supply connections.** A label must be permanently attached on the outside of the exterior wall of the commercial coach adjacent to the gas supply connection which provides the following information:

- (1) The type of system (i.e., liquid petroleum system or natural gas system or combination liquid petroleum and natural gas system);
- (2) The appropriate Btuh input rating; and
- (3) If excess ("or more") Btuh input is allowed.

*For example:      Natural Gas System  
                                 250,000 Btuh  
                                 Or More*

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1420, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1430 Gas piping system openings.** All openings in the gas piping system must be closed gas-tight with threaded pipe plugs or pipe caps.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1430, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1440 Gas piping—Valves.** (1) In addition to any valve on the appliance, a shut-off valve must be installed in the fuel piping outside of each gas appliance but inside the commercial coach structure and upstream of the union or connector. The shut-off valve must be located within six feet of a cooking appliance and within three feet of any other appliance. A shut-off valve may serve more than one appliance if located as required above.

(2) Shut-off valves used in connection with gas piping must be of a type designed for use with liquefied petroleum gas. Shut-off valves must be tested and approved to ANSI Z21.15 standard or equal.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1440, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1450 Gas piping—Testing for leakage before appliances are connected.** (1) The piping system must stand a pressure of at least ten psi gauge for a period of not less than fifteen minutes without showing any drop in pressure.

(2) Pressure must be measured with a gauge calibrated to be read in increments of not greater than one-tenth pound.

(3) The source of pressure must be isolated before the pressure tests are made. Before a test is begun, the temperature of the ambient air and of the piping must be approximately the same, and constant air temperature must be maintained throughout the test.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1450, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1460 Gas piping—Testing for leakage after appliances are connected.** (1) After gas appliances have been connected, the gas-piping system must be subjected to a pressure test with the burner valves closed. The test consists of air at not less than ten inches nor more than fourteen inches pressure of water column (six to eight ounces). The system must hold this pressure for a period of not less than ten minutes with no leakage. Before beginning the test, the temperature of the gas-piping system and the test air must be equalized, and this shall be maintained throughout the test.

(2) Appliance shut-off valves ahead of gas cooking appliances may be closed for the performance of this test. When the test is satisfactorily performed, these valves must be opened and, while the system is under pressure, the appliance connectors must be tested with an approved leak detector or approved bubble solution.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1460, filed 10/23/96, effective 11/25/96.]

## VENTILATION AND INDOOR AIR QUALITY

**WAC 296-150C-1470 Ventilation and indoor air quality—General.** Ventilation and indoor air quality equipment and installations in or on a commercial coach must be made according to the requirements of the International Mechanical Code, current edition, the rules of this chapter, and the conditions of the equipment approval.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-1470, filed 7/17/12, effective 9/1/12. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1470, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1480 Ventilation and indoor air quality definitions.** The International Mechanical Code, current edition, and the following definitions apply to the commercial coach ventilation and indoor air quality rules in this chapter.

**"Duct"** is a conduit or passageway for conveying air to or from heating, cooling, air conditioning, or ventilation equipment, not including the plenum.

**"Plenum"** is an air compartment that is part of an air-distributing system to which one or more ducts are connected.

- **A furnace-supply plenum** is a plenum attached directly to, or an integral part of, the air-supply outlet of the furnace.
- **A furnace-return plenum** is a plenum attached directly to, or an integral part of, the return inlet of the furnace.

**"Vent connector"** is a pipe for conveying products of combustion from a fuel-burning appliance to a vent.

**"Water heater"** is an appliance for heating water for domestic purposes other than for space heating.

[Statutory Authority: Chapter 43.22 RCW. WSR 12-15-061, § 296-150C-1480, filed 7/17/12, effective 9/1/12. Statutory Authority: RCW 43.22.340,

[43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1480, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1490 Appliances—Installation.** In addition to requirements of the Washington State Ventilation and Indoor Air Quality Code:

(1) The installation of each appliance must conform to the manufacturer's installation instructions. The manufacturer's instructions must be attached to the appliance.

(2) Combustion air inlets and flue gas outlets must be listed as components of the appliance and must be completely separated. The required separation may be obtained by:

(a) The installation of direct vent system (sealed combustion system) appliances; or

(b) The installation of appliances within enclosures so that the appliance combustion system and venting system are separate from the interior atmosphere of the commercial coach. There must not be any door, removable access panel, or other opening into the enclosure from inside the commercial coach. Any openings for ducts, piping, wiring, etc., must be sealed.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1490, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1500 Safety devices—Water heater relief valves.** In addition to requirements of the Washington State Ventilation and Indoor Air Quality Code:

(1) All water heaters must be installed with approved fully automatic valve or valves designed to provide temperature and pressure relief. Temperature and pressure relief valves must be tested and approved to ANSI Z21.22 standard or equal.

(2) Any temperature relief valve or combined pressure and temperature relief valve installed for this purpose must have the temperature sensing element immersed in the hottest water within the upper six inches of the tank. It must be set to start relieving at a pressure of 150 psi or the rated working pressure of the tank, whichever is lower, and at or below a water temperature of 210 degrees Fahrenheit.

(3) Relief valves must be provided with full-sized drains. Drains must be directed to the exterior sides of the unit, exiting at least six inches above the ground, and each drain pipe must exhaust with a ninety degree downward turn. Drain lines must be of a material approved for hot water distribution and must drain fully by gravity, must not be trapped, and must not have their outlets threaded.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1500, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1510 Air ducts—Expandable or multiple commercial coach connections.** In addition to the requirements of the International Mechanical Code and the Washington State Energy Code air ducts for:

(1) An expandable or multiple commercial coach may have ducts of the heating system installed in the various units. The points of connection must be so designed and constructed that when the commercial coach is fully expanded or coupled, the resulting duct joint will conform to the requirements of this chapter.



(2) Installation instructions for supporting the crossover duct from the commercial coach must be provided for on-site installation. The duct must not touch the ground.

[Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-1510, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1510, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1520 Air ducts—Duct and plenum insulation.** Every heating and cooling duct and plenum must be installed according to the International Mechanical Code and the Washington State Energy Code.

[Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-1520, filed 12/14/04, effective 2/1/05. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1520, filed 10/23/96, effective 11/25/96.]

**PLUMBING**

**WAC 296-150C-1530 Plumbing—General.** This chapter also applies to the installation of plumbing equipment in any commercial coach bearing or required to bear a department insignia. Plumbing fixtures, equipment, and installations in commercial coaches must conform to the provisions of the Uniform Plumbing Code and the amendments adopted by the State Building Code Council, except part 1, unless specifically exempted or required by this section.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1530, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1540 Plumbing—Definitions.** The definitions listed below, in addition to the Uniform Plumbing Code definitions apply to this chapter.

**"Drain outlet"** is the discharge end of the commercial coach main drain to which a drain connector may be attached.

**"Main drain"** is the principal artery of the commercial coach drainage system to which drainage branches may be connected.

**"Water-supply connection"** is the fitting or point of connection of the commercial coach water distribution system designed for connection to a water connector.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1540, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1545 Does the department require a water system expansion tank be installed?** The department will only require that a tee be installed in an accessible location for the future addition of an expansion tank where one may be installed if required.

[Statutory Authority: RCW 43.22.340 and 43.22.480. WSR 99-13-010, § 296-150C-1545, filed 6/4/99, effective 7/5/99.]

**WAC 296-150C-1550 Drainage—Cap or plug.** Drain outlets must be equipped with a watertight cap or plug that is permanently attached to the vehicle.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1550, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1560 Drainage—Clearance from drain outlet.** The drain outlet and couplers must have a minimum clearance of three inches in any direction from all parts of the structure or appurtenances and at least eighteen inches unrestricted clearance directly in front of the drain outlet.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1560, filed 10/23/96, effective 11/25/96.]

**WAC 296-150C-1570 Water supply connection. (1)** Each commercial coach equipped with a water distribution system must have a water-supply connection that terminates within eighteen inches of the outside wall of the commercial coach.

(2) Water-supply connections must be equipped with a watertight cap or plug that is permanently attached to the commercial coach.

[Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-1570, filed 10/23/96, effective 11/25/96.]

**COMMERCIAL COACH FEES**

**WAC 296-150C-3000 Commercial coach fees.**

GENERAL INFORMATION	
Manufacture:	Manufacturer #
1. Building use:	2. Building occupancy:
3. Type of construction: VB	4. Square footage of building:
5. Valuation of the building shall be based on the following:	
• Square footage of the building multiplied by the amount in the BVD valuation table .....	\$ .....
6. <b>Total valuation:</b> .....	\$ .....
PERMIT FEE	
7. Calculate from building permit fee table using the total valuation .....	\$ .....

<b>STRUCTURAL PLAN REVIEW FEE*</b>		
8.	One year design review: (Valid for one year) multiply the total on line 7 by 0.35	\$ .....
9.	Master plan review: (Valid for the code cycle) multiply the total on line 7 by 0.50	\$ .....
* Minimum plan review fee is 2 1/2 hours x \$76.00 per hour		
<b>FIRE AND LIFE-SAFETY PLAN REVIEW FEE (if required)</b>		
10.	Fire and life-safety plan review:	
a.	One year design—Multiply the total on line 7 by 0.15	\$ .....
b.	Master plan design—Multiply the total on line 7 by 0.25	\$ .....
• Required for all structures that are more than 4,000 square feet and for all A and I occupancy		
<b>PLUMBING PLAN-REVIEW FEE</b>		
11.	Plumbing \$18.00 + \$6.00 per fixture	\$ .....
12.	Medical gas \$18.00 + \$6.00 per gas outlet	\$ .....
<b>DESIGN RENEWAL OR ADDENDUM</b>		
13.	10% of building permit + \$76.00	\$ .....
<b>RESUBMITTAL</b>		
14.	10% of building permit + \$76.00	\$ .....
<b>ELECTRICAL PLAN-REVIEW FEE</b>		
15.	See WAC 296-46B-906(9) for electrical review fees	
<b>INSIGNIA FEES</b>		
16.	FIRST SECTION	\$ 22.80
17.	EACH ADDITIONAL SECTION	\$ 14.10
<b>TOTAL FEES</b>		
18.	<b>Total</b> plan review fees: Add lines 8 or 9 and 10 through 15	\$ .....
19.	<b>Total fees due:</b> Includes plan fees and insignia fees	\$ .....
20.	<b>Total amount paid</b>	\$ .....

**Square Foot Construction Costs (BVD Table)<sup>a, b, c, and d</sup>**

Group (2009 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	211.15	203.98	198.73	190.05	178.25	173.30	183.31	162.97	156.05
A-1 Assembly, theaters, without stage	193.16	185.99	180.74	172.06	160.31	155.36	165.32	145.04	138.12
A-2 Assembly, nightclubs	163.22	158.56	154.17	148.00	138.96	135.24	142.52	126.06	121.36
A-2 Assembly, restaurants, bars, banquet halls	162.22	157.56	152.17	147.00	136.96	134.24	141.52	124.06	120.36
A-3 Assembly, churches	195.10	187.93	182.68	174.00	162.21	157.26	167.26	146.94	140.02
A-3 Assembly, general, community halls, libraries, museums	163.81	156.64	150.39	142.71	129.91	125.96	135.97	114.63	108.71
A-4 Assembly, arenas	192.16	184.99	178.74	171.06	158.31	154.36	164.32	143.04	137.12
B Business	164.76	158.78	153.49	145.97	132.45	127.63	139.92	116.43	110.93
E Educational	176.97	170.85	165.64	158.05	146.37	138.98	152.61	127.91	123.09
F-1 Factory and industrial, moderate hazard	97.87	93.28	87.66	84.46	75.44	72.26	80.79	62.17	58.48
F-2 Factory and industrial, low hazard	96.87	92.28	87.66	83.46	75.44	71.26	79.79	62.17	57.48
H-1 High hazard, explosives	91.74	87.15	82.53	78.33	70.49	66.31	74.66	57.22	N.P.

Group (2009 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
H-2, 3, 4 High hazard	91.74	87.15	82.53	78.33	70.49	66.31	74.66	57.22	52.53
H-5 HPM	164.76	158.78	153.49	145.97	132.45	127.63	139.92	116.43	110.93
I-1 Institutional, supervised environment	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
I-2 Institutional, hospitals	277.07	271.09	265.80	258.28	243.90	N.P.	252.23	227.88	N.P.
I-2 Institutional, nursing homes	193.00	187.02	181.74	174.22	160.98	N.P.	168.16	144.96	N.P.
I-3 Institutional, restrained	187.72	181.73	176.45	168.93	156.64	150.82	162.87	140.63	133.13
I-4 Institutional, day care facilities	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
M Mercantile	121.57	116.92	111.53	106.36	96.96	94.25	100.88	84.07	80.36
R-1 Residential, hotels	166.21	160.43	155.99	149.29	137.39	133.80	145.70	123.43	119.10
R-2 Residential, multiple family	139.39	133.61	129.17	122.47	111.23	107.64	119.54	97.27	92.94
R-3 Residential, one and two family	131.18	127.60	124.36	121.27	116.43	113.53	117.42	108.79	101.90
R-4 Residential, care/assisted living facilities	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
S-1 Storage, moderate hazard	90.74	86.15	80.53	77.33	68.49	65.31	73.66	55.22	51.53
S-2 Storage, low hazard	89.74	85.15	80.53	76.33	68.49	64.31	72.66	55.22	50.53
U Utility, miscellaneous	71.03	67.02	62.71	59.30	52.86	49.43	56.33	41.00	39.06

- a Private garages use utility, miscellaneous
- b Unfinished basements (all use group) = \$15.00 per sq. ft.
- c For shell only buildings deduct 20 percent
- d N.P. = not permitted

**Building Permit Fees**

Total Valuation	Fee
\$1.00 to \$500.00	\$23.50
\$501.00 to \$2,000.00	\$23.50 for the first \$500.00 plus \$3.05 for each additional \$100.00, or fraction thereof, to and including \$2,000.00
\$2,001.00 to \$25,000.00	\$69.25 for the first \$2,000.00 plus \$14.00 for each additional \$1,000.00, or fraction thereof, to and including \$25,000.00
\$25,001.00 to \$50,000.00	\$391.25 for the first \$25,000.00 plus \$10.10 for each additional \$1,000.00, or fraction thereof, to and including \$50,000.00
\$50,001.00 to \$100,000.00	\$643.75 for the first \$50,000.00 plus \$7.00 for each additional \$1,000.00, or fraction thereof, to and including \$100,000.00
\$100,001.00 to \$500,000.00	\$993.75 for the first \$100,000.00 plus \$5.60 for each additional \$1,000.00, or fraction thereof, to and including \$500,000.00
\$500,001.00 to \$1,000,000.00	\$3,233.75 for the first \$500,000.00 plus \$4.75 for each additional \$1,000.00, or fraction thereof, to and including \$1,000,000.00
\$1,000,001.00 and up	\$5,608.75 for the first \$1,000,000.00 plus \$3.65 for each additional \$1,000.00, or fraction thereof

<b>INITIAL FILING FEE (first time applicants)</b>	\$37.60
<b>DESIGN PLAN FEES:</b>	
INITIAL FEE - MASTER DESIGN (code cycle), 50% of permit fee*	
INITIAL FEE - ONE YEAR DESIGN, 35% of permit fee*	
RENEWAL FEE - 10% of permit fee +	\$76.00

RESUBMIT FEE - 10% of permit fee +	\$76.00
ADDENDUM (approval expires on same date as original plan) - 10% of permit fee +	\$76.00
ELECTRONIC PLAN SUBMITTAL FEE \$5.40 per page for the first set of plans and \$1.00 per page for each additional set of plans. These fees are in addition to any applicable design plan fees required under this section.	
PLUMBING PLAN FEE, \$18.00 + PER FIXTURE FEE of	\$6.00
MEDICAL GAS PLAN FEE, \$18.00 + PER OUTLET FEE of	\$6.00
Note: Mechanical systems are included in the primary plan fee	
<b>FIRE SAFETY PLAN REVIEW AS REQUIRED</b> (Required for all structures that are more than 4,000 square feet and for all A, I, and H occupancy)	
MASTER DESIGN - 25% of permit fee	
One year design 15% of the permit fee	
<b>ELECTRICAL PLAN REVIEW</b> - Find fee @ <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=296-46B-906">http://apps.leg.wa.gov/wac/default.aspx?cite=296-46B-906</a>	
<b>RECIPROCAL PLAN REVIEW:</b>	
INITIAL FEE - MASTER DESIGN (minimum 3 hours)	\$76.00 per hour
INITIAL FEE - ONE YEAR DESIGN (minimum 2 hours)	\$76.00 per hour
RENEWAL FEE (minimum 1 hour)	\$76.00 per hour
ADDENDUM (minimum 1 hour)	\$76.00 per hour
<b>PLANS APPROVED BY PROFESSIONALS</b> - 10% of permit fee +	\$76.00
<b>APPROVAL OF EACH SET OF DESIGN PLANS BEYOND FIRST TWO SETS</b> - 5% of permit fee +	\$76.00
<b>DEPARTMENT INSPECTION FEES</b>	
INSPECTION/REINSPECTION (Per hour** plus travel time* and mileage***)	\$76.00
TRAVEL (Per hour)	\$76.00
PER DIEM***	
HOTEL ****	
MILEAGE***	
RENTAL CAR****	
PARKING****	
AIRFARE****	
<b>DEPARTMENT AUDIT FEES:</b>	
AUDIT (Per hour*)	\$76.00
TRAVEL (Per hour**)	\$76.00
PER DIEM***	
HOTEL ****	
MILEAGE***	
RENTAL CAR****	
PARKING****	
AIRFARE****	
ALTERATION INSPECTION (one hour minimum + alteration insignia fee)	\$98.80
<b>INSIGNIA FEES:</b>	
FIRST SECTION (NEW or ALTERATION)	\$22.80
EACH ADDITIONAL SECTION (NEW or ALTERATION)	\$14.10
REISSUED-LOST/DAMAGED	\$14.10
<b>OTHER FEES:</b>	
FIELD TECHNICAL SERVICE (Per hour** plus travel time** and mileage***)	\$76.00
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free copy per year upon request)	\$14.10
<b>REFUND FEE</b>	\$25.00
* Minimum plan review fee is 2 1/2 hours at the field technical service rate	
** Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments	
*** Per state guidelines	
**** Actual charges incurred	

[Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150C-3000, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.106, 43.22 RCW, 2008 c 285 and c 329. WSR 08-12-042, § 296-150C-3000, filed 5/30/08, effective 6/30/08. Statutory Authority: Chapter 43.22 RCW. WSR 07-19-086, § 296-150C-3000, filed 9/18/07, effective 10/19/07. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-150C-3000, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-150C-3000, filed 5/2/06,

effective 6/30/06. Statutory Authority: Chapter 43.22 RCW. WSR 05-23-002, § 296-150C-3000, filed 11/3/05, effective 12/4/05. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150C-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-3000, filed 12/14/04, effective 2/1/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150C-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-150C-3000, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-150C-3000, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150C-3000, filed 5/29/01, effective 6/29/01. Statutory Authority: Chapters 43.22, 18.27, 70.87 and 19.28 RCW. WSR 99-12-080, § 296-150C-3000, filed 5/28/99, effective 6/28/99. Statutory Authority: Chapters 18.106, 18.27 and 43.22 RCW. WSR 98-12-041, § 296-150C-3000, filed 5/29/98, effective 6/30/98. Statutory Authority: RCW 70.87.030, 18.27.070, [18.27.]075, 43.22.350, [43.22.]355, [43.22.]434 and [43.22.]480(2). WSR 97-11-053, § 296-150C-3000, filed 5/20/97, effective 6/30/97. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-3000, filed 10/23/96, effective 11/25/96.]