Department of Labor and Industries Factory Assembled Structures PO Box 44430 Olympia WA 98504-4430 www.lni.wa.gov



VENDOR/MEDICAL CONVERSION UNITS PRE-INSPECTION CHECKLIST

From time to time Labor & Industries receive inquiries by vendor owners, manufacturers and others on what they need to know how to get their vendor unit or medical unit approved with an insignia by Labor and Industries (as listed below). Local County/City Jurisdictions, Insurance Companies, Health Departments, and others may generate inquiries and will not accept a vendor unit unless it has had a Plan Review and field inspection by L&I to meet the requirements for usage at their respective venues.

Conversion Vendor/Medical units built to be used in Washington State are inspected by the Department of Labor and Industries, Specialty Compliance Services Division, Factory Assembled Structures and are to be converted or built to comply with the following Laws and Codes. RCW 43.22, WAC 296-150V, RCW 19.28, WAC 296-46B current edition NEC Article 551 and 552 and other applicable sections, current edition IMC, current edition UPC, current edition NFPA 1192, current edition IFC.

This checklist is designed to be generic in content and may not include all requirements for your particular installation. The Vendor unit may require a Plan Review approval and checklist installation instruction must be adhered to and available to the inspector at the time of the inspection. You may contact the L&I Factory Assemble Structures Plan Review section for additional information. Be sure you can answer YES to all of the questions before calling for inspection. Failure of the inspection will require a reinspection fee to be paid.

Please call your local L&I Factory Assembled Structures Inspector with any questions.

Reference Compliance WAC 296-150V-0020 Conversion vendor/medical unit is defined as a motor vehicle or other structure that has Yes No been converted or built for the purpose of being used for commercial sales at temporary locations. The unit must be 8 feet six inches or less in width (exterior floor measurement) in the set-up position, and the inside working area must be less than 40 feet in length (interior floor measurement) and are: (1) transportable in only one section (2) designed for highway use (3) temporarily occupied for distribution of items, e.g., food; (4) built on a permanent chassis; and (5) include at least one of the following systems: Plumbing, mechanical or electrical. If you are applying for insignia, you must have your design plan approved and your WAC 296-150V-0210 conversion vendor/medical unit inspected and approved by L&I. Complete Application for Insignia in its entirety including section (1) starting with Mfg. Serial Upon request L&I Factory Assembled Structures Plan Review, will provide you with a WAC 296-150V-0220 packet of information that includes all required forms. Design-plan approval required when you build a new unit, you modify an approved WAC 296-150V-0300 design plan through addendums; you add options to an approved design plan through addendums Electrical Show the general location of outlets, lights, switches, and the main distribution panel box. Include a schedule showing what the breakers in the main panel box are including breaker sizes and what they control. Provide electrical load calculations that show the overall electrical demand in amps. Mechanical If you have gas appliances in your vendor unit, you must show the gas piping layout and size. Provide BTU/H input requirements for all gas appliances. Show the location of the gas supply inlet or tank. Provide the type of fuel (i.e. natural gas or propane) and the length of the piping run from the tank or inlet to the furthest appliances.

Reference Compliance

Reference	•	∠ompi	iance
Plumbing	Show the locations of all sinks, holding tanks, and other plumbing fixtures. Include pipe sizes for water supply and drainage, waste and vent pipes. Provide information on the	Yes	No
	operating pressure in the water supply system, length of water piping from the inlet or pump to the furthest fixture. Show the location and size of the drainage system outlet. Provide type of piping material being used for water and DWV.		
Structural	Only concentrated loads of 500 lbs. or more in a 16 square foot area need to be engineered.		
WAC 296-150V-1420	Provide label at exterior gas connection listing type of system (LP or NATL), BTU Input Rating and if excess input is allowed.		
WAC 296-150V-1100	The flame-spread requirements for all walls and ceilings must be 200 flame-spread or less.		
WAC 296-150V-1110	The exposed wall adjacent to the cooking range must be 50 flame-spread or less, such as 5/16 inch gypsum board or material having equivalent fire protective properties. All openings for pipes and vents in furnace and water heater spaces shall be tight-fitted or fire-stopped.		
WAC 296-150V-1120	The bottom and sides of combustible cabinets over cooking appliances or tops including a space of 6 inches from the edge of the burners must be protected with at least 5/16 inch sheetrock with a 25 flame spread. This material must be behind deep fat fryers, grills, ranges, and other cooking appliances. It must extend 6 inches beyond the edge of the appliance and range hood. (1) Range hoods for commercial equipment must meet the requirements of the International Mechanical Code such as Type I or II hoods and Fire suppression. (2) Range hoods for noncommercial equipment may be of a residential type, the hood must be centered over and at least as wide as the top of the cooking appliance.		
WAC 296-150V-1180	Pass-through window areas shall be safety glazed based on the IBC 2406.1 Each pane of safety glazing installed in a hazardous location shall be identified		
WAC 296-150V-1185	The exit door must have at least 28 inches wide opening by 72 inches high, units with doors less than 28 inches in width must have a second means of exit. The second means of exit shall be 24 inches by 17 inches. When there are employees, a minimum of 28 inch clear door opening must be provided		
WAC 296-150V-1303	Storage batteries must be securely attached to the vendor unit. They must be installed in an area which is vapor tight to the interior and ventilated directly to the exterior. When batteries are installed in a compartment, the compartment must be ventilated with openings not less than 2 square inches at the top and 2 square inches at the bottom. Batteries shall not be installed in a compartment containing spark or flame producing equipment.		
WAC 296-150V-1350	LP-Gas containers must be mounted on either; (1) the A-frame and not lower than the bottom of the trailer frame. (2) installed in a compartment that is vapor-tight to the inside of the vendor/medical unit and accessible only from the outside; or be mounted on the chassis or to the floor and neither the container nor its supports may be lower than the top of the axle height.		
WAC 296-150V-1350 NFPA1192 5.2.6.1	LP-Gas container being housed in a compartment enclosure shall be ventilated at or near the top and at the extreme bottom to facilitate diffusion of vapors. The vents shall be equally distributed between the floor and ceiling of the compartment. Vents shall have an unrestricted discharge to the outside atmosphere. LP-Gas containers shall be secured in place so they will not become dislodged.		
WAC 296-150V-1360- 1390	Vendor & Medical units using gas may be piped for LPG, NG or both. Fuel gas piping shall not be concealed inside walls or floors of the unit. It may pass perpendicular through a wall or floor only when protected by a weather resistant and snug fitting grommet. Only pipe joint compound approved for the type of Fuel gas & Fuel gas pipe shall be used and shall be supported every 4 feet by metal hangers or strapping or by a structural member. Fuel gas piping shall be rigidly anchored within 6 inches of the supply connections.		

Reference Compliance

Reference		Compl	<u>iance</u>
WAC 296-150V-1410	Fuel gas piping shall not be used for an electrical ground. Fuel gas line must be bonded with a number 8 copper minimum or equal conductor to the ground buss or the electrical panel	Yes	No
WAC 296-150V-1440	A full-way fuel gas shut off valve shall be installed with-in 6 feet of the cooking appliance or within 3 foot of any other appliance inside the unit. A shut off valve may serve more than one appliance		
WAC 296-150V-1450	The fuel gas piping system must stand a pressure of at least 10 psi gauge for a period of not less than 15 minutes without showing any drop in pressure. Pressure must be measured with a gauge calibrated to be read in increments of not greater than 1/10 pound. 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.		
WAC 296-150V-1550	Drain outlets must be equipped with a watertight cap or plug that must be permanently attached to the unit.		
WAC 296-150V-1570	All piping for potable water shall be of approved material. When potable water holding tanks are used they shall be a listed product, (IAPMO, NSF, & UPC). All potable water supply connections shall be equipped with a water tight cap or plug that is permanently attached to the vehicle, chain or strap.		
WAC 296-150V-1580	Water heater relief valves must be provided with full-size drains. Drains must be directed to the exterior of the unit, exiting at least 6 inches above the ground, and must exhaust downward. 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.		
WAC 296-150V-1590	Waste water holding tanks must be listed for the intended use, securely installed, easily removable for service, Neither the inlet nor vent fitting may extend downward into the tank more than 1-1/2 inches. Drain opening must be located at the lowest point of the tank. Tanks must be vented at the highest point in the top of the tank by one of the following methods; (1) A 1-1/4 inch diameter vent pipe. (2) A continuous vent serving as a drain from one additional fixture provided the drain portion is increased one pipe size larger than the connected trap arm. (3) Two or more vented drains when at least one is wet vented and each drain is separately connected to the top of the tank. All waste lines from sinks shall be a minimum of 1-1/2 inches, ABS or equivalent. Drain lines from hand wash sink may be 1-1/4 inches. An auto-vent may be used to vent drain lines from 1-2 compartment sinks. Three compartment sinks shall be vented per Uniform Plumbing Code. The waste water tank shall have a minimum of 1-1/4 inch vent extending to the outside of the unit at least 6 foot above the ground. The tank must be approved for this purpose. IAPMO, UPC		
NFPA 1192 – 5.2.5	Propane containers located less than 18 inches from the exhaust system, the transmission, or a heat-producing component of the internal combustion engine shall be shielded by a vehicle frame member or by a noncombustible baffle with an air space on both sides of the frame member or baffle.		
NFPA 1192–6.4.5	Internal combustion engine-driven generator units shall be listed and installed in accordance with manufacturer's instructions and shall be vapor resistant to the interior of the vehicle. The generator compartment shall be lined with galvanized steel not less than 26 MSG thick		

Reference Compliance

Reference	•	Compl	<u>iance</u>
IMC 507.2.1 IMC 509	Type I hood, classified as commercial equipment, shall be installed where cooking appliances produce grease or smoke, such as occurs with griddles, fryers, boilers, ovens,	Yes	No
	ranges and wok ranges. Commercial food heating-processing appliances required to have a Type 1 hood shall be provided with an automatic fire suppression/extinguishing system to protect the cooking equipment. Per IMC 509		
IMC 507.2.2	Type II hood shall be installed where cooking or dishwashing appliances produce heat or steam and do not produce grease or smoke, such as steamers, kettles, pasta cookers and dishwashing machines.		
NEC 404.8	The electrical service panel shall be located so that breakers may be operated from a readily accessible place. They shall be installed such that the center of the grip of the operating handle of the circuit breaker, when in its highest position, is not more than 6' ft 7" inches above the floor or working platform		
NEC 551.41(C)	GFCI, Ground-Fault Circuit-Interrupter receptacles required when the receptacles are installed to serve the countertop surfaces and are within 6 feet of any lavatory or sink and when located on the exterior side of the vehicle.		
NEC 551.42 (C)	A maximum of two to five 15- or 20-ampere circuits to supply lights, receptacles outlets, and fixed appliances shall be permitted. Such vendor/medical units shall be equipped with a distribution panel board rated at 120 volts maximum with a 30-ampere rated main power supply assembly		
NEC 551.42 (D)	A 50-ampere, 120/240-volt power supply shall be used where six or more circuits are employed. It shall use a listed 50-ampere, 120/240-volt main power-supply assembly		
NEC 551.44	Power Supply Assembly, (A) (B) (C) (D) Fifteen, Twenty, Thirty and Fifty-ampere service panels shall use a listed main power supply assembly for their respective ampere service.		
NEC 551.45(B)	The distribution panel board shall be installed in a readily accessible location. Working clearance for the panel board shall not be less than 24 inches wide and 30 inches deep. Exception 1: Where the panel board cover is exposed to the inside aisle space, one of the working clearance dimensions shall be permitted to be reduced to a minimum of 22" inches. A panel board is considered exposed where the panel board cover is within 2" inches of the aisles finished surfaced		
NEC 551.46	The power supply cord shall be installed with a strain relief connector listed for use in wet location. The strain relief is intended to keep the cord secured so that conductors will not be compromised in the electrical service panel. The cord assembly shall have permanent provisions for protection against corrosion and mechanical damage while the vehicle is in transit		
NEC 551.56	All exposed non current carrying metal parts that may become energized shall be effectively bonded. A bonding conductor shall be connected between the distribution panel board and an accessible terminal on the chassis		
NEC 517.13	All branch circuits serving patient care areas shall be installed in a metal raceway system, or a cable having a metallic armor or sheath assembly qualifying as an equipment grounding conductor. All receptacles and electrical equipment over 100 volts, and subject to personal contact, shall be connected to an insulated copper equipment grounding conductor. The equipment ground shall be installed in the same metal raceway, or listed cable having a metallic armor or sheath assembly, with the branch circuit conductors.		