



FIRE CONSTRUCTION PERMIT SUBMITTAL CHECKLIST

SERVING THE CITIES OF LAKE STEVENS, MONROE AND SULTAN

MOTOR VEHICLE REPAIR ROOMS AND BOOTHS

PROJECT INFORMATION

Site address:	Associated Permits:
Project Name / Tenant:	Property Owner:

Electronic file standards

File naming standard: Electronic plans and documents shall be named as specified in bold type under “permitting requirements”. For example, the seating plan must be named “Seating Plan”.

Acceptable file types: Plans, calculations, specifications and supporting documents shall be uploaded as a PDF file.

Document Orientation: All plans must be uploaded in “Landscape” format in the horizontal position. All other documents can be in “Portrait” format.

CODE EDITIONS

- 2021 Washington State Fire and Building Code, Lake Stevens Municipal Code 14.84, Monroe Municipal code 15.04.110 and Sultan Municipal Code 15.05.

PERMITTING REQUIREMENTS

A Fire Construction Permit is required to install or modify a **Motor vehicle repair room and booths** required by Section 105.6.16 of the 2021 Washington State Fire Code and local code amendments. **The following information is required at time of application for the Fire Construction Permit.**

- Completed "Fire Construction Permit Application"
- Completed "Motor Vehicle Repair Rooms and Booths – submittal checklist"
- Plans
- Completed design standard checklist
- Provide all manufacturers' information on the booth

PLANS

The following is a list of information required on all plan submittals for review of a "Motor vehicle repair rooms and booths" permit application. The plan shall be drawn to 1/8"=1'-0" minimum scale. The applicant is required to submit all of this information so an accurate and timely review may be done:

- Floor plan that has the following:
 - Show location of booth or room
 - Indicate the fire resistance rating of the interior walls, ceilings, exterior walls, floors in the area of the booth or room
 - Indicate the type of fuel that will be in the vehicles being repaired
 - Indicate the automatic fire protection type and provide the sprinkler system riser placard information for the system
 - Indicate all fire extinguishers and sizes
 - Address and suite number
 - All electrical wiring and appliances installed
 - Egress pathways
 - Egress doors and distances to the public way
 - Exit signs and emergency lighting installed
 - Location of fire alarm, gas detection system, ventilation system

MOTOR VEHICLE REPAIR ROOMS

- Motor vehicle repair rooms shall be enclosed with not less than 1-hour fire barriers constructed in accordance with Section 707 of the IBC, or horizontal assemblies constructed in accordance with Section 711 of the IBC, or both, with 1-hour rated opening protectives

MOTOR VEHICLE REPAIR BOOTHS – WSFC 2311.8.4

- Booth shall be constructed of approved noncombustible materials.
 - Sheet metal, single-skin assemblies shall not be thinner than 0.0478 (18 gauge)
 - Sheet metal, double-skin assemblies shall not be thinner than 0.0359 (20 gauge)
 - Structural sections shall be sealed in an approved manner
- Surfaces of booths shall be constructed to permit the free passage of exhaust air from all parts of the interior.
- Means of egress shall be provided:
 - In accordance with chapter 10
 - OR
 - Pre-manufactured doors shall be not less than 30 inches in width and 80 inches in height
- All parts of the booth shall be provided with ready access for cleaning. A ~~3~~ 3-foot clear width around the booth shall be maintained on all sides of the booth.
 - EXCEPTIONS:
 - If the interior partition, wall or floor/ceiling assembly has a fire resistance rating of not less than 1 hour, the booth can be placed closer than 3 feet to the assemblies, providing that the booth can be adequately maintained and cleaned
 - If an exterior wall or a roof assembly is constructed of noncombustible material, the booth can be placed closer than 3 feet to the wall, provided the booth can be adequately maintained and cleaned

FIRE PROTECTION

- IF a booth or space is installed in a room or area protected by an automatic sprinkler system, the system shall be extended to include the inside of the booth or space.
- Portable fire extinguishers shall be provided complying with Section 906

EXHAUST VENTILATION SYSTEM

- An approved mechanical ventilation system (in accordance with the IMC) shall be provided for garages repairing CNG, LNG, or other lighter-than-air motor fuels other than hydrogen
- For indoor locations, air supply inlets and exhaust outlets for mechanical ventilation shall be arranged to provide uniformly distributed air movement with the inlets arranged on walls near floor level and outlets at the high point of the room in walls or the roof
- Ventilation rate shall be not less than 1 cubic foot per minute per 12 cubic feet of room volume.

- Ventilation shall operate continuously
 - EXCEPTIONS:
 - Systems interlocked with a gas detection system
 - Systems in repair garages that are used only for repair of vehicles fueled by liquid fuels or odorized gases where the ventilation system is electrically interlocked with the lighting circuit

GAS DETECTION SYSTEM

- A gas detection system is required for repair garages servicing vehicles fueled by non-odorized gases such as hydrogen, and non-odorized LNG. The system shall comply with Section 916. The system shall detect leakage of non-odorized gaseous fuel, and sensors shall be located in areas such as pits or anywhere gases may collect
- Activation of the gas detection system shall:
 - Initiation of local audible and visual alarms in approved locations
 - Deactivation of heating systems located in the repair garage
 - Activation of mechanical exhaust ventilation system, of interlocked with the gas detection
- Failure of the gas detection system shall automatically deactivate the heating system, activate the mechanical exhaust system where it is interlocked with the gas detection system and cause a trouble signal to sound in an approved location

CLASSIFIED ELECTRICAL AREA

- Electrical wiring and appliances installed in areas within 18 inches of a ceiling within a booth or room shall be designed and installed in accordance with the requirements of Class I, Division 2 classified locations, as set forth in NFPA 70
 - EXCEPTIONS:
 - Rooms with exhaust ventilation of not less than 1 cubic foot per minute per square foot of floor area, with suction taken from a point within 18 inches of the highest point in the ceiling
 - Rooms used for the repair of hydrogen-fueled vehicles that have an approved exhaust ventilation system in accordance with the IMC and NFPA 2