

COMMERCIAL KITCHEN HOODS

Updated 2/2024

Physical Address: Auburn City Hall Annex, 2nd Floor 1 E Main St Mailing Address: 25 W Main St Auburn, WA 98001-4998 Webpage & Application Submittal: www.auburnwa.gov applications@auburnwa.gov Phone and Email: Phone: (253) 931-3090 permitcenter@auburnwa.gov

TYPES OF HOODS

TYPE I HOODS: installed to exhaust grease or smoke laden vapors produced by cooking appliances such as griddles, fryers, broilers, ovens, ranges and wok ranges.

TYPE II HOODS: installed to ventilate cooking or dishwashing appliances that produce heat or steam but do not produce grease or smoke.

TYPE I HOOD REQUIREMENTS

Type I hoods shall be constructed in accordance with Section 507 of the International Mechanical Code.

Allowable materials: 18 or 20 Gage minimum thickness steel.

External Joints and Seams: joints, seams and penetrations for Type I hoods shall be made with a continuous external liquid-tight weld or braze to the lowest outermost perimeter of the hood.

Internal Joints and Seams: joints, seams, penetrations, filter support frames, and other appendages attached inside the hood are not required to be welded or brazed, but must be sealed to be liquid tight. Internal welded or brazed joints must be formed or ground smooth as to not trap grease and allow for ease of cleaning.

Clearances to combustibles: Type I hoods must be a minimum of 18" from combustibles (including wood framing members and wall sheathing). The 18" clearance is not required from gypsum wallboard attached to non-combustible structures (such as steel wall studs) when such drywall is covered on the hood side with a smooth, nonabsorbent and non-combustible material. Such covering and wallboard must extend at least 18" beyond the hood in all directions.

Ceiling penetrations: Hoods or ducts must be enclosed at the point of penetration of a ceiling or wall. The enclosure must be non-combustible and vented to the exterior of the building. The enclosure must be a listed 1 hour fire-resistance rated shaft. The shaft may be substituted for a listed alternate product intended by the manufacturer for such use.

Minimum airflow and Makeup Air: See Type II hood requirements.

Size and Location: Canopy hoods must have an inside lower edge extending horizontally at least 6" beyond cooking surfaces on all open sides. The front lower lip of canopy hoods must be no higher than 4' above cooking surfaces. *Non-canopy* hoods must be no higher than 3' above cooking surfaces and must extend at least 12" beyond all cooking surfaces.

Fire Suppression Requirements: Type I hoods must be equipped with automatic fire suppression systems installed in accordance with the 2018 International Fire Code (IFC) section 904 and National Fire Protection Association (NFPA) 96. Portable fire extinguishers are to be used as secondary protection. Appliances protected by the automatic fire suppression system must have sources of heat automatically shut off when the fire suppression system is activated.

The fire suppression system is reviewed under a fire suppression system permit by the City's Fire Marshal's Office. While submittal documents for a hood system may include fire suppression details, the mechanical permit for the hood will not include the fire suppression system.

Please call (253) 288-5871 for information regarding fire suppression requirements.

TYPE II HOOD REQUIREMENTS

Allowable materials:

- 22 Gage minimum thickness steel.
- 24 gage minimum thickness stainless steel.
- 24 ounce per foot minimum weight copper sheets.

Type II hoods must be sealed on the inside of the hood and must provide a smooth, watertight surface that is readily cleanable. Note there are 4 different types of cooking appliances:

Light-duty cooking appliances

Minimum airflow (measured in CFM per lineal foot of hood):

Wall-mounted canopySingle island canopy400

Double island canopy 250 per side

• All others 250

Makeup air: Makeup air approximately equal to the amount of exhaust air is required. Makeup air is to be conditioned to within 10°F of the building inside air unless the makeup air is part of an air conditioning system or is arranged in a manner that it does not decrease the comfort conditions of the inside space. Makeup air fans must be electrically interconnected with exhaust fans so that both fans operate in tandem.

Size and Location: Refer to Size and Location requirements for Type I hoods.

Tests: Required (test medium and equipment to be provided by the permit holder):

- A performance test is required to verify the airflow rates shown above are as required above.
- A capture and containment test to visually verify that steam produced is collected by the hood. Simulated cooking such as smoke candles or smoke puffers is allowed for this test.



