



# Portland Fire Department

Fire Prevention ♦ 380 Congress Street ♦ Portland, Maine 04101

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## Kitchen Exhaust System Guideline and Code Provisions

Dear Applicant,

The following are guidelines to assist you in filing for a permit to install a kitchen exhaust system. This checklist should be provided to the licensed engineer responsible for the design of the system. This checklist must be complete and submitted with all required supporting documentation and the permit application for permit approval. The applicable code for this installation is NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, 2008 edition.

### Designer Information

Name: Brian Haley

Phone Number: 207-284-8571

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### Required Plans

Key Plan (illustrating location of work within the building)

Plot plan showing duct systems and terminations, adjacent buildings, property lines, combustible construction, electrical equipment or lines, and closest point of any air intakes, doors, or windows within the distances specified in Section 7.8 of NFPA 96.

Interior and exterior elevations showing duct systems and terminations, clearances to adjacent buildings, property lines, combustible construction, electrical equipment, and closest point of all air intakes, doors, or windows within the distances specified in Section 7.8 of NFPA 96; and equipment, clearance reduction methods, rated enclosures, and cleanouts.

Type of cooking device to be used (i.e: open grill, solid fuel fried, or fryer)

### Required Documents

Equipment operation and installation manuals

**Type of System:**

Type 1:  X                       Type 2:  X

Type 1 systems are used for cooking equipment used in processes producing smoke or grease-laden vapors.

Type 2 systems are used to vent steam.

**Hood specs**

What type of material is the hood constructed of?  430 stainless steel

Thickness of hood material:  20 gauge

Style of hood:  wall canopy

Type of filter:  baffle

Height of filter above nearest cooking surface:  48" maximum

Capacity of hood (CFM):  Hood #1-3250, Hood #2- 2275, Hood #3-2600

Makeup air system description and capacity:  Heated-7075 CFM

Perforated supply plenum at front of each hood

**Exhaust Duct Specs**

What type of material is the duct constructed of?  Carbon steel

Thickness of duct material:  16 gauge

Air velocity within the duct system:  #1-1519 FPM, #2-1280 FPM, #3-1671 FPM

**Plan Details Required**

- Hood and duct supports
- Seams and joints
- Grease gutters
- Clearance reduction methods: hood and duct
- Vibration isolation system
- Grease accumulation prevention system
- Cleanouts
- Grease duct enclosure
- Exhaust termination

**\*\*A separate fire suppression system permit is required for Type 1 hoods\*\***