

(Insert facing page 9)

115.9 Reestablishment of expired permits. A new permit is required to complete work if a permit has expired and was not renewed.

Exception: A permit that expired less than one year prior to the date of a request for reestablishment may be reestablished upon approval of the code official if it complies with Items 2 and 3 of Section ~~((117.8))~~ 115.8. Once reestablished the permit will not be considered to have expired. The new expiration date of a re-established permit shall be determined in accordance with Section ~~((117.7))~~ 115.7.

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[W]306.6 Appliances above ceilings. Appliances that are located above the ceiling shall be accessible for inspection, service, and repair without removing *permanent construction*. Appliances shall be accessible from an access panel or removable ceiling tile with minimum nominal dimensions of 24 inches x 24 inches (609mm x 609mm).

The appliance is not required to be removable or replaceable through the access panel or removable ceiling tile. The appliance may be removed or replaced by removing the ceiling or wall assemblies adjacent to the appliances as long as they are not *permanent construction*.

Exception:

1. This section shall not apply to replacement appliances installed in existing compartments and alcoves where the working space *clearances* are in accordance with the *equipment* or appliance manufacturer's installation instructions.
2. A smaller access panel or ~~((removal))~~ removable ceiling tile shall be permitted when allowed by the *equipment* or appliance manufacturer installation instructions.

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Table 403.4.1
Ventilation Rates for All Group R Private Dwellings,
Single and Multiple
(Continuously Operating Systems)

Floor Area (ft ²)	Bedrooms ¹				
	0-1	2-3	4-5	6-7	≥(8) 7
<500	30	40	45	55	60
500 – 1000	45	55	60	70	75
1001 – 1500	60	70	75	85	90
1501 – 2000	75	85	90	100	105
2001 – 2500	90	100	105	115	120
2501 – 3000	105	115	120	130	135
3001 – 3500	120	130	135	145	150
>3500	135	145	150	160	165

¹ Ventilation rates in table are minimum outdoor airflow rates measured in cfm.

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506.4.2 Type II terminations. Exhaust outlets serving Type II hoods shall terminate in accordance with the hood manufacturer's installation instructions and shall comply with all of the following:

1. Exhaust outlets shall terminate not less than 3 feet (914 mm) in any direction from openings into the building.
2. Outlets shall terminate not less than 10 feet (3048 mm) from property lines or buildings on the same lot.
3. Outlets shall terminate not less than 10 feet (3048 mm) above grade.
4. Outlets that terminate above a roof shall terminate not less than 30 inches (762 mm) above the roof surface.
5. (~~Vertical outlets on roofs~~) Outlets shall terminate not less than 30 inches (762 mm) from exterior vertical walls.
6. Outlets shall be protected against local weather conditions.
7. Outlets shall not be directed onto walkways.
8. Outlets shall meet the provisions for exterior wall opening protectives in accordance with the *International Building Code*.

507.4 and 507.5. Spaces in which such systems are located shall be considered to be kitchens and shall be ventilated in accordance with Table 403.3.1.1. The kitchen exhaust system shall discharge in accordance with Section 501.3.1, item 3. For the purpose of determining the floor area required to be ventilated, each individual *appliance* shall be considered as occupying not less than 100 square feet (9.3 m²).

3. Where cooking appliances are equipped with integral down-draft exhaust systems and such appliances and exhaust systems are *listed* and *labeled* for the application in accordance with NFPA 96, a hood shall not be required at or above them.

SECTION 507 COMMERCIAL KITCHEN HOODS

507.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of this section. Hoods shall be Type I or II and shall be designed to capture and confine cooking vapors and residues. A Type I or Type II hood shall be installed at or above all *commercial cooking appliances* in accordance with Sections 507.2 and 507.3 and Table 507.2.1. Where any cooking *appliance* under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required, a Type I or Type II hood shall be installed. Where a Type I hood is installed, the installation of the entire system, including the hood, ducts, exhaust *equipment* and *makeup air* system shall comply with the requirements of Sections 506, 507, 508 and 509.

Exceptions:

1. Factory-built commercial exhaust hoods that are *listed* and *labeled* in accordance with UL 710, and installed in accordance with Section 304.1, shall not be required to comply with Sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3, 507.4 and 507.5.
2. Factory-built commercial cooking recirculating systems that are *listed* and *labeled* in accordance with UL 710B, and installed in accordance with Section 304.1, shall not be required to comply with Sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3,

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[W] Table 507.2.1
Type of Hood Required for Commercial Cooking Appliances

TYPE OF APPLIANCE ¹	TYPE OF HOOD REQUIRED ²		
	TYPE I ³	TYPE II	NONE ⁵
Baking oven	Solid fuel	> 6 kW	≤ 6 kW
Charbroiler	All sizes		
Coffee maker		> 6 kW	≤ 6 kW
Coffee roaster ⁴		All sizes	
Convection ovens (electric)		> 6 kW	((<)) ≤ 6 kW
Deep-fat fryer	All sizes		
Dishwasher		> 140°F	≤ 140°F
Grill	All sizes		
Hot dog display heater		> 6 kW	≤ 6 kW
Microwave oven			All sizes
Pastry oven		> 6 kW	≤ 6 kW
Pizza oven	Solid fuel	> 6 kW	≤ 6 kW
Popcorn maker		> 6 kW	≤ 6 kW
Roasting oven ⁵	> 6 kW	≤ 6 kW	
Roll warmer		> 6 kW	≤ 6 kW
Solid-fuel burning appliances	All sizes & all food products		
Soup warmer, soup preparation cooking unit		> 6 kW	≤ 6 kW
Steam reconstitution device		> 6 kW	≤ 6 kW
Steam table		> 6 kW	≤ 6 kW
Steamer		> 6 kW	≤ 6 kW
Toaster		> 6 kW	≤ 6 kW
Warming oven		> 6 kW	≤ 6 kW

1 The code official shall determine hood requirements for appliances not listed in the table.

2 Section 507.2 describes Type I and Type II kitchen hoods.

3 The definition of extra-heavy-duty cooking appliance includes all appliances utilizing solid fuel.

4 Puget Sound pollution control requires an after-burner for particulates.

5 Roasting ovens are used to cook raw or partially cooked food.

6 Where no hood is required, general kitchen exhaust shall be required per Section 507.3.

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SECTION 508 COMMERCIAL KITCHEN MAKEUP AIR

508.1 Makeup air. *Makeup air* shall be supplied during the operation of commercial kitchen exhaust systems that are provided for *commercial cooking appliances*. ~~((The amount of *makeup air* supplied to the building from all sources shall be approximately equal to the amount of *exhaust air* for all exhaust systems for the building))~~ A separate *makeup air* system for the kitchen shall ((supply)) be capable of providing not less than 90 percent of the air to be exhausted. The *makeup air* shall not reduce the effectiveness of the exhaust system. *Makeup air* shall be provided by gravity or mechanical means or both. Mechanical *makeup air* systems shall be automatically controlled to start and operate simultaneously with the exhaust system. Exterior windows and doors shall not be used to provide commercial kitchen *makeup air*. *Makeup air* intake opening locations shall comply with Section 401.4.

Note: Refer to Section 403.2.7.1 of the *Seattle Energy Code* in addition to the requirements of this section.

Exceptions:

1. Where the total airflow for the exhaust system is less than 400 cfm, *makeup air* is not required; or
2. In atriums, food courts, and similar areas, occupant *ventilation air* that would otherwise exfiltrate or be exhausted by other mechanical exhaust systems may be used to provide all *makeup air*, or a portion of *makeup air* when a direct path through permanent openings exists for occupant *ventilation air* to transfer to the kitchen hood area. That portion of air not supplied by occupant *ventilation air* shall be provided by a separate *makeup air* system. The combined air quantity provided by a separate *makeup air* system and occupant *ventilation air* shall provide 100 percent of the air to be exhausted.

