

**(Effective until March 15, 2024)**

**WAC 51-52-0505 Section 505—Domestic kitchen exhaust equipment.**

**505.1 Domestic systems.** Where domestic range hoods and domestic appliances equipped with downdraft exhaust are provided, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper and shall be independent of all other exhaust systems.

Domestic kitchen exhaust ducts may terminate with other domestic dryer exhaust and residential local exhaust ducts at a common location where each duct has an independent back-draft damper.

Listed and labeled exhaust booster fans shall be permitted when installed in accordance with the manufacturer's installation instructions.

- EXCEPTIONS:
1. In other than Group I-1 and I-2, where installed in accordance with the manufacturer's installation instructions and where mechanical ventilation is otherwise provided in accordance with Chapter 4, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.
  2. Ducts for domestic kitchen cooking appliances equipped with downdraft exhaust systems shall be permitted to be constructed of Schedule 40 PVC pipe and fittings provided that the installation complies with all of the following:
    - 2.1. The duct shall be installed under a concrete slab poured on grade.
    - 2.2. The underfloor trench in which the duct is installed shall be completely backfilled with sand or gravel.
    - 2.3. The PVC duct shall extend not more than 1 inch (25 mm) above the indoor concrete floor surface.
    - 2.4. The PVC duct shall extend not more than 1 inch (25 mm) above grade outside of the building.
    - 2.5. The PVC ducts shall be solvent cemented.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 16-01-148, § 51-52-0505, filed 12/21/15, effective 7/1/16. Statutory Authority: RCW 19.27.031, 19.27.074 and chapters 19.27 and 34.05 RCW. WSR 13-04-053, § 51-52-0505, filed 2/1/13, effective 7/1/13. Statutory Authority: RCW 19.27.190, 19.27.074, 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 10-03-099, § 51-52-0505, filed 1/20/10, effective 7/1/10.]

**(Effective March 15, 2024)**

**WAC 51-52-0505 Section 505—Domestic cooking exhaust equipment.**

**505.3 Domestic exhaust ducts.** Ducts serving domestic cooking exhaust equipment shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be airtight, shall be equipped with a backdraft damper and shall be independent of all other exhaust systems.

Domestic kitchen exhaust ducts may terminate with other domestic dryer exhaust and residential local exhaust ducts at a common location where each duct has an independent back-draft damper.

Listed and labeled exhaust booster fans shall be permitted when installed in accordance with the manufacturer's installation instructions.

- EXCEPTIONS:
1. In other than Group I-1 and I-2, where installed in accordance with the manufacturer's installation instructions and where continuous local exhaust is provided in an enclosed kitchen in accordance with Table 403.4.7, listed and labeled ductless range hoods shall not be required to discharge to the outdoors. The local exhaust from the residential dwelling or sleeping unit kitchen area may be combined with other exhaust ductwork where the exhaust register/grille in the kitchen is a minimum of 6 feet (1.8 M) from the domestic range cooktop. The exhaust register/grille shall be provided with a minimum MERV 3 filter or mesh filter (washable) for trapping grease.
  2. Ducts for domestic kitchen cooking appliances equipped with downdraft exhaust systems shall be permitted to be constructed of Schedule 40 PVC pipe and fittings provided that the installation complies with all of the following:
    - 2.1. The duct shall be installed under a concrete slab poured on grade.
    - 2.2. The underfloor trench in which the duct is installed shall be completely backfilled with sand or gravel.
    - 2.3. The PVC duct shall extend not more than 1 inch (25 mm) above the indoor concrete floor surface.
    - 2.4. The PVC duct shall extend not more than 1 inch (25 mm) above grade outside of the building.
    - 2.5. The PVC ducts shall be solvent cemented.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 23-02-055, 23-12-106, and 23-20-025, § 51-52-0505, filed 1/3/23, 6/7/23, and 9/25/23, effective 3/15/24; WSR 16-01-148, § 51-52-0505, filed 12/21/15, effective 7/1/16. Statutory Authority: RCW 19.27.031, 19.27.074 and chapters 19.27 and 34.05 RCW. WSR 13-04-053, § 51-52-0505, filed 2/1/13, effective 7/1/13. Statutory Authority: RCW 19.27.190, 19.27.074, 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 10-03-099, § 51-52-0505, filed 1/20/10, effective 7/1/10.]