

WAC 296-24-37007 Ventilation. (1) **Conformance.** Ventilating and exhaust systems must be in accordance with the Standard for Blower and Exhaust Systems for Vapor Removal, NFPA No. 91-1961, where applicable and must also conform to the provisions of this section.

(2) **General.** You must provide all spraying areas with mechanical ventilation adequate to remove flammable vapors, mists or powders to a safe location and to confine and control combustible residues so that life is not endangered. You must keep mechanical ventilation in operation at all times while spraying operations are being conducted and for a sufficient time thereafter to allow vapors from drying coated articles and drying finishing material residue to be exhausted.

(3) **Independent exhaust.** Each spray booth must have an independent exhaust duct system discharging to the exterior of the building, except that multiple cabinet spray booths in which identical spray finishing material is used with a combined frontal area of not more than 18 square feet may have a common exhaust. If more than one fan serves one booth, all fans must be interconnected so that one fan cannot operate without all fans being operated.

(4) **Fan-rotating element.** The fan-rotating element must be non-ferrous or nonsparking or the casing must consist of or be lined with such material. There must be ample clearance between the fan-rotating element and the fan casing to avoid a fire by friction, necessary allowance being made for ordinary expansion and loading to prevent contact between moving parts and the duct or fan housing. Fan blades must be mounted on a shaft sufficiently heavy to maintain perfect alignment even when the blades of the fan are heavily loaded, the shaft preferably to have bearings outside the duct and booth. All bearings must be of the self-lubricating type, or lubricated from the outside duct.

(5) **Electric motors.** You must not place electric motors driving exhaust fans inside booths or ducts. See also WAC 296-24-37005.

(6) **Belts.** Belts must not enter the duct or booth unless the belt and pulley within the duct or booth are thoroughly enclosed.

(7) **Exhaust ducts.** Exhaust ducts must be constructed of steel and must be substantially supported. Exhaust ducts without dampers are preferred; however, if dampers are installed, you must maintain them so that they will be in a full open position at all times the ventilating system is in operation.

(a) You must protect exhaust ducts against mechanical damage and have a clearance from unprotected combustible construction or other combustible material of not less than 18 inches.

(b) If combustible construction is provided with the following protection applied to all surfaces within 18 inches, clearances may be reduced to the distances indicated:

(i) 8-gauge sheet metal on 1/4-inch 12 inches.
asbestos mill board.

(ii) 28-gauge sheet metal on 1/8-inch 9 inches.
asbestos mill board spaced out 1 inch on noncombustible spacers.

(iii) 22-gauge sheet metal on 1-inch 3 inches.
rockwool batts reinforced with wire mesh or the equivalent.

(iv) Where ducts are protected with an approved automatic sprinkler system, properly maintained, the clearance required in (7)(a) of this section may be reduced to 6 inches.

(8) **Discharge clearance.** Unless the spray booth exhaust duct terminal is from a water-wash spray booth, the terminal discharge point must be not less than 6 feet from any combustible exterior wall or roof nor discharge in the direction of any combustible construction or

unprotected opening in any noncombustible exterior wall within 25 feet.

(9) **Air exhaust.** You must not direct air exhaust from spray operations so that it will contaminate makeup air being introduced into the spraying area or other ventilating intakes, nor directed so as to create a nuisance. You must not recirculate air exhausted from spray operations.

(10) **Access doors.** When necessary to facilitate cleaning, you must provide exhaust ducts with an ample number of access doors.

(11) **Room intakes.** Air intake openings to rooms containing spray finishing operations must be adequate for the efficient operation of exhaust fans and must be so located as to minimize the creation of dead air pockets.

(12) **Drying spaces.** You must only dry freshly sprayed articles in spaces provided with adequate ventilation to prevent the formation of explosive vapors. In the event adequate and reliable ventilation is not provided you must consider such drying spaces a spraying area. (See also WAC 296-24-37019.)

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 15-24-100, § 296-24-37007, filed 12/1/15, effective 1/5/16; Order 76-6, § 296-24-37007, filed 3/1/76; Order 73-5, § 296-24-37007, filed 5/9/73 and Order 73-4, § 296-24-37007, filed 5/7/73.]