WAC 212-10-040 Location of smoke detection devices. (1) Smoke detection devices shall be installed outside of bedrooms or rooms used for sleeping purposes but in the immediate vicinity of such rooms, centrally located in the corridor or area giving access to the rooms. In dwelling units without separate sleeping rooms, the smoke detection devices shall be centrally located in the main room. Smoke detection devices shall be located on or near the ceiling. NOTE: Smoke detection devices should be installed in those locations recommended by the manufacturer except in those cases where the space above the ceiling is open to the outside and little or no insulation is present over the ceiling. Such cases result in the ceiling being excessively cold in the winter time or excessively hot in the summer time. Where the ceiling is significantly different in temperature from the air space below, smoke has difficulty reaching the ceiling and to a detector which may be placed there. In this situation, placement of the detector on a side wall, with the top four inches to twelve inches from the ceiling is preferred. In dwelling units employing radiant heating in the ceiling, the wall location is the preferred location. Radiant heating in the ceiling can create a hot-air boundary layer along the ceiling surface which can seriously restrict the movement of smoke to a ceilingmounted detector.

(2) A smoke detection device installed in a stairwell shall be so located as to assure that smoke rising in the stairwell cannot be prevented from reaching the detection device by an intervening door or obstruction.

(3) Smoke detection devices in rooms with ceiling slopes greater than one-foot rise per eight feet horizontally shall be located at the high side of the room.

(4) Smoke detection devices shall not be mounted in front of an air supply duct outlet or between the bedroom and the furnace cold air return.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-040, filed 2/4/81.]