

407.1.3 Services/Systems and Utilities. See Section 313.2.

407.2 Outdoor Air Intakes and Exhaust Outlets.

407.2.1 Outdoor Air Intakes. Outdoor air intakes shall be located at least 25 feet (7.62 m) from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, cooling towers and areas that may collect vehicular exhaust or other noxious fumes. The bottom of outdoor air intakes shall be located as high as practicable, but not less than 10 feet (3048 mm), above ground level. If installed through the roof, they shall be located 18 inches (457 mm) above roof level or 3 feet (914 mm) above a flat roof where heavy snowfall is anticipated.

Exceptions:

1. These dimensions may be reduced if it is demonstrated by the submission of details and calculations that location of intakes with respect to exhausts and their orientation, or the use of special filters, provides equal performance.
2. The requirements regarding the bottom of outdoor air intakes and installation through the roof do not apply to skilled nursing facilities, intermediate-care facilities or nonsensitive areas in correctional treatment centers.

407.2.2 Exhaust Outlets. Exhaust outlets shall be located a minimum of 10 feet (3048 mm) above adjoining grade and 10 feet (3048 mm) from doors, occupied areas and operable windows.

Exception: Airborne infection isolation rooms shall comply with Section 414.1.

407.2.3 Relief Air Discharge. Building relief air discharge shall discharge at least 10 feet (3048 mm) from any outside air intake.

407.3 Air Balance.

407.3.1 The ventilation systems shall be designed and balanced to provide the general air balance relationship to adjacent areas, shown in Table 4-A. The ventilation systems shall be balanced in accordance with the latest edition of standards published by the Associated Air Balanced Council (AABC) or the National Environmental Balancing Bureau (NEBB).

407.3.2 Where the variation in static pressure drop across filters is a significant portion of the total pressure drop, static pressure or pressure differential controls or constant volume devices may be required to ensure the maintenance of air balance relationships shown in Table 4-A regardless of filter loading.

Exception: This section does not pertain to skilled nursing facilities, intermediate-care facilities and nonsensitive areas in correctional treatment centers, except for airborne infection isolation rooms and

protective environment rooms.

407.4 Air Circulation.

407.4.1 Air shall be introduced at the cleanest areas and removed at the dirtiest areas in order to reduce chances of airborne cross infection as follows:

407.4.1.1 Air supplied to operating rooms, cesarean operating rooms, cardiac catheterization labs, cystoscopy rooms, delivery rooms and nurseries, shall be delivered at or near the ceiling of the area served, and all air removed from the area shall be removed near floor level. At least two exhaust or recirculation air inlets shall be used in all operating and delivery rooms and shall be located not less than 3 inches (76 mm) nor more than 8 inches (203 mm) above the finished floor.

Exception: For airborne infection isolation rooms and protective environment rooms, see Section 414.0 and 415.0.

407.4.1.2 Room supply air outlets and room recirculation and exhaust air inlets installed in nonsensitive areas shall be located not less than 3 inches (76 mm) above the floor.

Exception: For airborne infection isolation rooms and protective environment rooms, see Section 414.0 and 415.0.

407.4.1.3 Corridors shall not be used to convey supply, return or exhaust air to or from any room if the corridor is required to be of fire resistive construction per the California Building Code.

Exception 1: Mechanically exhausted toilet rooms of 50 square feet (4.7 m²) or less and small rooms of 30 square feet (2.79 m²) or less such as janitor closets, housekeeping rooms, and electrical or telephone closets opening directly onto corridor.

Exception 2: Air transfer caused by pressure differentials in rooms required to have a positive or negative air balance by Table 4-A.

407.4.1.4 No space above a ceiling may be utilized as an outside-air, supply-air, exhaust-air or return-air plenum.

Exception: Designs specifically approved by the enforcing agency.

407.4.1.5 Air from a patient room, exam room, treatment room shall not be transferred to another similar room without first having passed through air filters as required by Table 4-B or Table 4-C.

407.4.1.6 Supply outlets and return and exhaust air inlets shall be located to prevent short-circuiting.

407.5 Variable Air Volume.

407.5.1 Variable Air Volume Systems (VAV).

Variable air volume systems subjecting the patient to