CHAPTER 8

INDOOR ENVIRONMENTAL QUALITY AND COMFORT

SECTION 801
GENERAL

801.1 Scope and intent. The provisions of this chapter are intended to provide an interior environment that is conducive to the health of building occupants.

801.2 Demolition and construction phase indoor air quality management plan required. An indoor air quality management plan shall be developed and submitted with permit application materials. Such plan shall address the methods and procedures to be used during design and construction to obtain compliance with Sections 802 through 805.

SECTION 802
BUILDING CONSTRUCTION FEATURES, OPERATIONS AND MAINTENANCE FACILITATION

802.1 Scope. To facilitate the operation and maintenance of the completed building, the building and its systems shall comply with the requirements of Sections 802.2 and 802.3.

802.2 Air-handling system access. The arrangement and location of air-handling system components including, but not limited to, ducts, air handler units, fans, coils and condensate pans, shall allow access for cleaning and repair of the air-handling surfaces of such components. Access ports shall be installed in the air-handling system to permit such cleaning and repairs. Piping, conduits, and other building components shall not be located so as to obstruct the required access ports.

802.3 Air-handling system filters. Filter racks shall be designed to prevent airflow from bypassing filters. Access doors and panels provided for filter replacement shall be fitted with flexible seals to provide an effective seal between the doors and panels and the mating filter rack surfaces. Filter access panels and doors shall not be obstructed.

SECTION 803
HVAC SYSTEMS

803.1 Construction phase requirements. The ventilation of buildings during the construction phase shall be in accordance with Sections 803.1.1 through 803.1.3.

803.1.1 Duct openings. Duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or shall be closed by an *approved* method to reduce the amount of dust and debris that collects in the system from the time of rough-in installation and until startup of the heating and cooling equipment. Dust and debris shall be cleaned from duct openings prior to system flush out and building occupancy.

803.1.2 Indoor air quality during construction. Temporary ventilation during construction shall be provided in accordance with Sections 803.1.2.1 through 803.1.2.3.

803.1.2.1 Ventilation. Ventilation during construction shall be achieved through openings in the building envelope using one or more of the following methods:

1. Natural ventilation in accordance with the provisions of the *Building Code* or the *Mechanical Code*.
2. Fans that produce a minimum of three air changes per hour.
3. Exhaust in the work area at a rate of not less than 0.05 cfm/ft2 (0.24 L/s/in2) and not less than 10 percent greater than the supply air rate so as to maintain negative pressurization of the space.

Exception: For interior tenant alterations that cannot meet ventilation requirements, other air quality measures shall be used to control emissions sources and improve air quality. Measures are allowed to include portable filtration units, sweeping compounds, point source filtration at cutting and grinding operations, vacuum drywall sanding, low-dust drywall compounds, and other measures acceptable to the *code official* and as outlined in the Construction Phase Indoor Air Quality Management Plan.

803.1.2.2 Protection of HVAC system openings. HVAC supply and return duct and equipment openings shall be protected during dust-producing operations.

803.1.2.3 Return air filters. Where a forced air HVAC system is used during construction, new return air filters shall be installed prior to system flush out and building occupancy.

803.1.3 Construction phase ductless system or filter. Where spaces are conditioned during the construction phase, space conditioning systems shall be of the ductless variety, or filters for ducted systems shall be rated at MERV 8 or higher in accordance with ASHRAE 52.2, and system equipment shall be designed to be compatible. Duct system design shall account for pressure drop across the filter.

803.2 [Reserved]

803.3 [Reserved]

803.4 Isolation of pollutant sources. The isolation of pollutant sources related to print, copy and janitorial rooms shall be in accordance with Section 803.4.1.

803.4.1 Printer, copier and janitorial rooms. Enclosed rooms or spaces that are used primarily as a print or copy