

5.17.7 Signage. A sign shall be posted outside each entrance to each ETS area. The sign shall state, as a minimum, "This Area May Contain Environmental Tobacco Smoke" in letters at least 1 in. (25 mm) high or otherwise in compliance with accessibility guidelines.

Exception: Instead of the specified sign, equivalent notification means acceptable to the authority having jurisdiction may be used.

Informative Note: Based on the definition of *ETS area*, such a sign might be posted outside a larger ETS area that includes the area where smoking is permitted.

5.17.8 Reclassification. An area that was previously an ETS area but now meets the requirements of an ETS-free area shall be permitted to be classified as such where smoke exposure has stopped and odor and irritation from residual ETS contaminants are not apparent.

6. PROCEDURES

6.1 General. The Ventilation Rate Procedure, the IAQ Procedure, the Natural Ventilation Procedure, or a combination thereof shall be used to meet the requirements of this section. In addition, the requirements for exhaust ventilation in Section 6.5 shall be met regardless of the method used to determine minimum outdoor airflow rates.

Informative Note: Although the intake airflow determined using each of these approaches may differ significantly because of assumptions about the design, any of these approaches is a valid basis for design.

6.1.1 Ventilation Rate Procedure. The prescriptive design procedure presented in Section 6.2, in which outdoor air intake rates are determined based on space type/application, occupancy level, and floor area, shall be permitted to be used for any zone or system.

Informative Note: The Ventilation Rate Procedure minimum rates are based on contaminant sources and source strengths that are typical for the listed occupancy categories.

6.1.2 IAQ Procedure. This performance-based design procedure presented in Section 6.3, in which the building outdoor air intake rates and other system design parameters are based on an analysis of contaminant sources, contaminant concentration limits, and level of perceived indoor air acceptability, shall be permitted to be used for any zone or system.

6.1.3 Natural Ventilation Procedure. The prescriptive design procedure presented in Section 6.4, in which outdoor air is provided through openings to the outdoors, shall be permitted to be used for any zone or portion of a zone in conjunction with mechanical ventilation systems in accordance with Section 6.4.

6.2 Ventilation Rate Procedure. The outdoor air intake flow (V_{OI}) for a ventilation system shall be determined in accordance with Sections 6.2.1 through 6.2.7.

Informative Note: Additional explanation of terms used below is contained in Normative Appendix A, along with a ventilation system schematic (Figure A-1).

6.2.1 Outdoor Air Treatment. Each ventilation system that provides outdoor air through a supply fan shall comply with the following subsections.

Exception: Systems supplying air for enclosed parking garages, warehouses, storage rooms, janitor's closets, trash rooms, recycling areas, shipping/receiving/distribution areas.

Informative Note: Occupied spaces ventilated with outdoor air that is judged to be unacceptable are subject to reduced air quality when outdoor air is not cleaned prior to introduction to the occupied spaces.

6.2.1.1 Particulate Matter Smaller than 10 Micrometers (PM₁₀). In buildings located in an area where the national standard or guideline for PM₁₀¹ is exceeded, particle filters or air-cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. Particulate matter filters or air cleaners shall have an efficiency reporting value (MERV) of not less than 6 where rated in accordance with ASHRAE Standard 52.2¹².

Informative Note: See Informative Appendix F for resources regarding selected PM₁₀ national standards and guidelines.

6.2.1.2 Particulate Matter Smaller than 2.5 Micrometers (PM_{2.5}). In buildings located in an area where the national standard or guideline for PM_{2.5}¹ is exceeded, particle filters or air-cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. Particulate matter filters or air cleaners shall have an efficiency reporting value (MERV) of not less than 11 where rated in accordance with ASHRAE Standard 52.2¹².

Informative Note: See Informative Appendix F for resources regarding selected PM_{2.5} national standards and guidelines.

6.2.1.3 Ozone. Air-cleaning devices for ozone shall be provided when the most recent three-year average annual fourth-highest daily maximum eight-hour average ozone concentration exceeds 0.107 ppm (209 µg/m³).

Such air-cleaning devices shall have a volumetric ozone removal efficiency of not less than 40% where installed, operated, and maintained in accordance with manufacturer recommendations and shall be approved by the authority having jurisdiction. Such devices shall be operated where the outdoor ozone levels are expected to exceed 0.107 ppm (209 µg/m³).

Exceptions: Air cleaning for ozone shall not be required where

1. the system design outdoor air intake flow is 1.5 ach or less,
2. controls are provided that sense outdoor ozone level and reduce intake airflow to 1.5 ach or less while complying with the outdoor airflow requirements of Section 6, or
3. outdoor air is brought into the building and heated by direct-fired makeup air units.

Informative Note: See Informative Appendix F for a map of United States locations exceeding the most recent three-year average annual fourth-highest daily maximum eight-hour average ozone concentration of 0.107 ppm (209 µg/m³).

6.2.1.4 Other Outdoor Contaminants. In buildings located in an area where the national standard for one or more contaminants not addressed in Section 6.2.1 is exceeded, any