

**1346.0403** [Repealed, 19 SR 1306]

**1346.0403 SECTION 403 MECHANICAL VENTILATION.**

Subpart 1. **Section 403.1.** IMC Section 403.1 is amended to read as follows:

**403.1 Ventilation system.** Mechanical ventilation shall be provided by a method of supply air and return or exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The system to convey ventilation air shall be designed and installed in accordance with IMC Chapter 6.

Ventilation supply systems shall be designed to deliver the required rate of supply air to the occupied zone within an occupied space. The occupied zone shall have boundaries measured at 3 inches (76 mm) and 72 inches (1829 mm) above the floor and 24 inches (610 mm) from the enclosing walls.

Subp. 2. **Section 403.2.** IMC Section 403.2 is amended to read as follows:

**403.2 Outdoor air required.** The minimum ventilation rate of required outdoor air shall be determined in accordance with the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004, or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004.

**Exceptions:**

1. Enclosed parking garages shall comply with amended IMC Section 404.
2. Dwellings that are required to comply with Minnesota Rules, chapter 1322.
3. Buildings or portions of buildings that are not intended for normal human occupancy, or where the primary purpose is not associated with human comfort.

**403.2.1 Recirculation of air.** The air required by the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004, or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004, shall not be recirculated. Air in excess of that required shall not be prohibited from being recirculated as a component of supply air to building spaces, except that:

1. Ventilation air shall not be recirculated from one dwelling unit to another or to dissimilar occupancies.
2. Supply air to a swimming pool and associated deck areas shall not be recirculated unless the air is dehumidified to maintain the relative humidity of the area at 60 percent or less. Air from this area shall not be recirculated to other spaces.
3. Where mechanical exhaust is required by the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004, or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004, recirculation of air from such spaces shall be prohibited. All air supplied to such spaces shall be exhausted, including any air in excess of that required.

**403.2.2 Transfer air.** Except where recirculation from such spaces is prohibited by the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004, or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004, air transferred from occupied spaces is not prohibited from serving as makeup air for required exhaust systems in such spaces as kitchens, baths, toilet rooms, elevators, and smoking lounges. The amount of transfer air and exhaust air shall be sufficient to provide the flow rates as specified in the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004, or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004. The required outdoor air rates shall be introduced directly into such spaces or into the occupied spaces from which air is transferred, or a combination of both.

Subp. 3. **Section 403.3.** IMC Section 403.3 is amended to read as follows:

**403.3 Ventilation rate.** Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004 or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004, based on the occupancy of the space and the occupant load or other parameters as stated therein. The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004, or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004. Ventilation rates for occupancies not represented shall be determined by an approved engineering analysis. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of the code.

**Exception:** The occupant load is not required to be based on the estimated maximum occupant load rate where approved statistical data document the accuracy of an alternate anticipated occupant density.

Subp. 4. **Section 403.3.1.** IMC Section 403.3.1 is amended to read as follows:

**403.3.1 System operation.** The minimum flow rate of outdoor air that the ventilation system must be capable of supplying during its operation shall be permitted to be based on the rate per person indicated in the Ventilation Rate Procedure, Section 6.2 of ASHRAE 62.1-2004, or the Indoor Air Quality Procedure, Section 6.3 of ASHRAE 62.1-2004, and the actual number of occupants present.

Subp. 5. **Section 403.3.4.** IMC Section 403.3.4 is amended to read as follows:

**403.3.4 Balancing.** Ventilation systems shall be balanced in accordance with amended IMC Section 309.2.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13*

**History:** *29 SR 299; L 2007 c 140 art 4 s 61; art 13 s 4; 34 SR 537*

**Published Electronically:** *October 23, 2009*