

Insert pages for September 1, 2011, Wisconsin Commercial Building Code, Comm 61-66,  
into the International Mechanical Code, 2009 edition

Safety and Buildings Division - Wisconsin Department of Safety and Professional Services

IMC Chapter 4, Insert 4E, Page 1 of 5  
Insert between pages 34 and 35

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**Comm 64.0403 Mechanical ventilation. (6) SYSTEM OPERATION.** Substitute the following wording for the requirements in IMC section 403.5: The minimum flow rate of outdoor air that the ventilation system must be capable of supplying during its operation may be based on the rate per person indicated in Table 64.0403 and the actual number of occupants present.

Following are four pages of Table 64.0403, Ventilation Requirements, with the table footnotes.

Table 64.0403 – Continued  
Ventilation Requirements

Occupancy Classification	Estimated Maximum Occupant Load (persons per 1,000 sq. ft.) <sup>a</sup>	Exhaust <sup>c</sup> (cfm/net sq. ft. floor area)	Common Ventilation System Alternative – Minimum AC Rate per hour with A/C
<u>Private dwellings, single and multiple</u>			
Living areas	2 people for first bedroom plus one person for each additional bedroom	NR	1.0
Kitchens <sup>d</sup>	NA	100 cfm intermittent or 20 cfm continuous	NR
Toilet rooms and bathrooms <sup>d</sup>	NA	Mechanical exhaust capacity 50 cfm intermittent or 20 cfm continuous per room <sup>j</sup>	NR
Garages, separated by a solid wall for each dwelling	NA	100 cfm/vehicle	NR
Garages, common for multiple units <sup>c</sup>	NA	0.5	NR
<u>Retail stores, sales floors and showroom floors</u>	8	NR	1.0
<u>Seasonal occupancies, camps and lodges</u>			
Dining and recreational areas	15	NR	1.0
Living and sleeping areas	NA	NR	1.0
Club houses	15	NR	1.0
Drive-ins	15	NR	1.0
<u>Specialty shops</u>			
Automotive service and repair garages	NA	0.5	NR
Barber shops	25	NR	1.0
Beauty salons <sup>h</sup>	NA	0.5	NR
Car washes	NA	NR	NR
Clothier, furniture specialty shops	8	NR	1.0
Florist shops	8	NR	1.0
Hardware, drugs, fabrics stores	8	NR	1.0
Supermarkets	8	NR	1.0
<u>Sports and amusement</u>			
Ballrooms and discos	100	NR	2.0
Bleacher areas	363 or 18 in./person	NR	2.0
Bowling centers (seating areas)	70	NR	2.0
Game rooms	70	NR	2.0
Ice skating rinks (indoor)	5	NR	NR
Natoriums	NA	2.0 cfm/sq. ft. pool area	NR
Playing floor (gymnasiums)	30	NR	2.0
Roller skating rinks (indoor)	30	NR	2.0
Spectator areas (non-bleacher)	150	NR	2.0
<u>Storage</u>			
Chlorine storage and handling rooms	NA	2.0	NR
Enclosed parking garages <sup>i</sup>	NA	0.5	NR
Warehouses	NA	NR	NR

Table 64.0403  
Ventilation Requirements

Occupancy Classification	Estimated Maximum Occupant Load (persons per 1,000 sq. ft.) <sup>a</sup>	Exhaust <sup>c</sup> (cfm/net sq. ft. floor area)	Common Ventilation System Alternative – Minimum AC Rate per hour with A/C
<u>Correctional facilities</u>			
Sleeping rooms <sup>d</sup>	20	NR	2.0
Dining halls	100	NR	2.0
Guard stations	40	NR	1.5
<u>Dry cleaners, laundries</u>			
Coin-operated dry cleaners	8	NR	1.0
Coin-operated laundries	8	NR	1.0
Commercial dry cleaners	NA	2.0	NR
Commercial laundries	NA	2.0	NR
Storage, pick up	8	NR	1.0
Apartment laundry rooms	NA	0.5	NR
<u>Education</u>			
Auditoriums	150	NR	2.0
Classrooms	50	NR	2.0
Day care facilities	30	NR	2.0
Laboratories (science)	30	NR	2.0
Music rooms	50	NR	2.0
Special education	35	NR	2.0
Training shops	30	NR	2.0
<u>Food and beverage service</u>			
Bars and cocktail lounges	100	NR	2.0
Cafeterias, fast food	100	NR	2.0
Dining rooms	70	NR	2.0
Kitchens (cooking) <sup>d, e</sup>	20	NR	1.0
<u>Health care facilities</u>			
Hospitals	See s. Comm 64.0300	See s. Comm 64.0300	See s. Comm 64.0300
Nursing homes			
Outpatient surgical facilities			
<u>Hotels, motels, resorts and dorms</u>			
Assembly rooms	120	NR	2.0
Bathrooms <sup>c, d</sup>	NA	35 cfm/room	NR
Bedrooms	footnote f	NR	1.0
Conference rooms	50	NR	2.0
Dormitory sleeping areas	20	NR	1.0
Casinos	NA	2.0	NR
Living rooms	footnote f	NR	1.0
Lobbies	30	NR	2.0
<u>Industrial/Factory</u>			
Factories and machine shops	13	NR	NR
Foundries	13	NR	NR
Sawmills	NA	NR	NR
<u>Offices</u>			
Conference rooms	50	NR	1.5
Office spaces	7	NR	1.5
Reception areas	60	NR	1.5
Telecommunication centers and data entry	60	NR	1.5

Unofficial Text (See Printed Volume). Current through date and Register shown on Title Page.

Table 64.0403 – Continued  
Ventilation Requirements

Occupancy Classification	Estimated Maximum Occupant Load (persons per 1,000 sq. ft.) <sup>a</sup>	Exhaust <sup>c</sup> (cfm/net sq. ft. floor area)	Common Ventilation System Alternative – Minimum AC Rate per hour with A/C
<u>Theaters</u>			
Auditoriums	150	NR	2.0
Lobbies	150	NR	2.0
Stages, studios	70	NR	2.0
Ticket booths	60	NR	2.0
<u>Transportation</u>			
Platforms	100	NR	2.0
Waiting rooms	100	NR	2.0
<u>Utility and public spaces</u>			
Elevator cars <sup>m</sup>	NA	NR	NR
Janitor closets	NA	2.0 or 75 cfm/sink <sup>g</sup>	NR
Locker and dressing rooms <sup>c</sup>	NA	0.5	NR
Shower rooms	NA	2.0	NR
Toilet rooms <sup>c, d</sup>	NA	75 cfm/TF <sup>g</sup>	NR
<u>Workrooms</u>			
Bank vault	5	NR	NR
Meat processing	10	NR	NR
Pharmacy	20	NR	1.5
Photo studio	10	NR	1.0
Printing	13	footnote j	NR

**Footnotes to Table 64.0403**

NA = not applicable; NR = none required; cfm = cubic feet per minute; TF = toilet fixtures (water closets and urinals); A/C = air conditioning

a Based upon net floor area.

b The ventilation rate is based upon cubic feet per minute per square foot of the floor area being ventilated.

c Mechanical exhaust is required and the recirculation of air from these spaces that would otherwise be allowed by IMC section 403.2.1 is prohibited.

d Outdoor air shall be provided at the rate of 1.0 cfm/net sq. ft. floor area. Transfer air is permitted in accordance with IMC section 403.2.2.

e The sum of the outdoor and transfer air from adjacent spaces shall be sufficient to provide an exhaust rate of not less than 1.5 cfm/sf.

f The minimum mechanical ventilation rate is 15 cfm/room of outside air.

g Natural ventilation may be allowed under this section.

h The classification of a 'beauty' salon depends on the types of services provided. Only beauty salons routinely provide chemical processing of hair to produce texture or color changes, or manicures or other services with a similar need for air-borne contaminant and odor control.

i Enclosed parking garages are parking garages with less than 30% open areas in the total wall area enclosing the garage. Ventilation systems in enclosed parking garages shall comply with IMC section 404. A mechanical ventilation system shall not be required in garages having a floor area of 850 square feet or less and used for the storage of 5 or fewer motorized vehicles.

j Refer to IMC chapter 5 for exhaust requirements based upon the chemicals used.