

Replaced Reg. Feb. 1971
Reg. No. 182

DEPT. OF INDUSTRY, LABOR & HUMAN RELATIONS 161
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space" outside of the window having a width not less than $1\frac{1}{2}$ times the distance below grade at the bottom of the window.

Note: Width of "clear space" is the horizontal distance measured at right angles to the plane of the window.

(3) **ALTERNATE SERVICE AND CAPACITY.** Heating and ventilating systems installed in occupied areas of this class may be arranged for selective delivery of the entire service to either the auditorium floor area or to the basement floor area provided these areas are not used simultaneously.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65.

Ind 59.45 Schools. (1) **SCOPE.** This classification shall include all class, study, recitation, lecture, project rooms, kindergartens, library reading rooms and similar areas in all school, college and library buildings used for educational purposes. (See Wis. Adm. Code section Ind 59.42 for assembly rooms).

(2) **VENTILATION REQUIRED.** (a) *General.* The air movement and supply for all occupancies in this class shall conform to the requirements of sections Ind 59.40, 59.41 and 59.42.

(b) *Air movement and supply.* The air movement and supply for all occupancies under this classification shall conform to the requirements of section Ind 59.41. For corridors and halls used in conjunction with occupied areas of this class, the air movement shall not be less than 10 cubic feet per minute per lineal foot of corridor or hall. This air supply shall be accomplished by means of air inlets admitting air from adjacent classrooms or by a direct tempered air supply.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65.

Ind 59.46 Places for vocational instruction and research. (1) **SCOPE.** This classification shall include all places for vocational instruction and research, such as laboratories, school shops, domestic science rooms and similar occupied areas.

(2) **VENTILATION REQUIRED.** The air movement and supply for areas in this class shall conform to the requirements of sections Ind 59.41 and 59.52.

(3) **EQUIPMENT AND PROCESS EXHAUST.** (a) An exhaust system shall be provided for all equipment and processes that create dusts, fumes, vapors or gases injurious to health.

Note: See Wis. Adm. Code, Ch. Ind 20.

(b) Exhaust systems shall be separate from and independent of all other services and systems in a building.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65.

Ind 59.48 General sanitation and service areas. (1) **SCOPE.** This classification shall include toilet rooms, locker rooms, natatoriums and shower rooms.

Note 1: For exhaust ventilation requirements in hospital service areas, see Wis. Adm. Code section Ind 59.56 (2).

Note 2: For exhaust ventilation requirements in places of employment, see Wis. Adm. Code section Ind 59.53.

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(2) **VENTILATION REQUIRED.** (a) Exhaust ventilation shall be provided for all areas of this class unless otherwise exempted. The volume of air exhausted shall not be less than 2 cubic feet per minute per square foot of floor area.

(b) The effectiveness of the exhaust shall be greater than the supply.

(c) Exhaust ventilation shall be installed in toilet rooms having more than one fixture (water-closets and urinals).

Note: Exhaust ventilation is not required from toilet rooms having one water-closet or one urinal when the window area is greater than 4 square feet and more than 2 square feet is openable.

(d) The air movement in the natatorium shall be not less than 6 air changes per hour and the volume of tempered outside air supplied and exhausted shall be not less than 2 cubic feet per minute per square foot of pool surface.

(e) Locker rooms used with natatoriums, baths and toilet rooms, shall be supplied with tempered air.

Note: The air supplied may be exhausted through baths or toilet rooms.

(3) **EXHAUST VENTILATING SYSTEMS.** Exhaust ventilating systems serving this class of occupancy shall not be used for any other service.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65.

Ind 59.49 Kitchens. (1) **SCOPE.** This classification includes all areas where food is prepared, except places of vocational instruction and single unit apartments in apartment buildings, hotels and motels.

(2) **VENTILATION REQUIRED.** (a) *Exhaust.* The exhaust ventilation required for every occupied area of this class shall not be less than 4 cubic feet per minute per square foot of floor area. For kitchens in churches, auditoriums, lodge halls and schools, the exhaust ventilation shall be not less than 2 cubic feet per minute per square foot of floor area.

(b) *Exhaust ventilating system.* Exhaust ventilating systems serving this class of occupancy shall not be used for any other services.

(3) **RANGE HOODS.** (a) The air velocity over the face area of a single wall hood shall be not less than 100 feet per minute or 350 feet per minute through the slot opening of a double wall hood.

(b) The electrical wiring and fixtures shall be of a type approved for use in damp locations.

Note: See Wisconsin State Electrical Code, Volume 2.

(4) **DUCTS.** (a) Ducts or vents connected to range hoods and passing through any other area of the building shall be protected with not less than 2-hour fire-resistive construction. Where 2-hour fire-resistive construction cannot be provided, a manufactured or masonry chimney shall be used. The manufactured chimney shall be tested and approved for use at a flue gas temperature of not less than 1000° Fahrenheit.

Note: See Wis. Adm. Code section Ind 51.05 for various building materials having a 2-hour rating.

(b) Accessible clean-out openings shall be installed in the area of the duct not requiring a 2-hour fire-resistive construction.

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