## Ind 51,58

### RULES CERTIFICATE

STATE OF WISCONSIN  DEPT. OF INDUSTRY,  LABOR & HUMAN RELATIONS	) ) SS )	DEC 7 1981 REVISOR OF STATUTES FUREAU
<i>f</i>	ESENTS SHALL COME, GREETINGS:	the Department of
Industry, Labor and Hum	an Relations, and custodian of the	official records
Chs. Ind 50-64 Bldg. & Health C	hereby certify that the annexed rul Htg., Ventilating & Air Conditionir Care Facilities (Subject)	ng Code were duly
approved and adopted by	this department on (Date)	<u>48/</u> .
I further certify	that said copy has been compared by	me with the original
on file in this departm	ent and that the same is a true cop	y thereof, and of
the whole of such origi	nal.	·

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the department at

in the city of Madison, this 4

seal of the department at

day of

## ORDER OF ADOPTION

Pursuant to authority vested	in the Department of Industry, Labor and
Human Relations by section(s) 101.	02(1),101.02(15)(h)-(j), Stats., the Depart-
ment of Industry, Labor and Human	Relations hereby $(X)$ creates; $(X)$ amends;
igsim repeals and recreates; and $igsim$	
istrative Code chapter(s):	
	dg. & Htg., Ventilating & Air Conditioning Code alth Care Facilities
(Number)	(Title)
The attached rules shall take	e effect on The First Day Following Publication ive Register, pursuant to section
227.026, Stats.	
	Adopted at Madison, Wisconsin, this



# RULES in FINAL DRAFT FORM

Rule: w.	A.C. IND 58Subchapter I	
Relating	to: Health Care Facilities	

Administrative rules to create ss. Ind 51.01 (68a), Ind 51.01 (71a), Ind 51.01 (75a), Ind 51.01 (86a), Ind 51.25 (55), and ch. Ind 58; to renumber s. Ind 51.01 (71a) to be Ind 51.01 (71c); and to amend s. Ind 51.27 (7a) relating to health care facilities.

#### ANALYSIS OF RULES

The Division of Safety and Buildings of the Department of Industry, Labor and Human Relations, is responsible for the promulgation of the Building and Heating, Ventilating and Air Conditioning Code, chapters Ind 50-64. Sections of this code are being revised to establish minimum safety, health and welfare standards for health care facilities. The proposed rules, which are consistent with the administrative rules of DH&SS and the federal certification requirements, will replace existing rules governing health care facility design and construction.

The proposed rules include provisions for types of construction, occupancy separations, means of egress, fire resistive protection of building elements and components, interior finish, fire detection and suppression systems and sanitary facilities.

Pursuant to the authority vested in the state of Wisconsin's Department of Industry, Labor and Human Relations by s. 101.02 (1), ss. 101.02 (15) (h) through (j), Stats., the department hereby creates rules interpreting s. 101.02 (1) and ss. 101.02 (15) (h) through (j), Stats., as follows:

SECTION 1. Ind 51.01 (68a) is created to read:

- Ind 51.01 (68a) "Health care facility" means both hospital or nursing home.

SECTION 2. Ind 51.01 (71a) is renumbered to be Ind 51.01 (71c) and 51.01 (71a) is created to read:

Ind 51.01 (71a) "Hospital" means any building, structure, institution or place used for the maintenance and operation of facilities for the diagnosis, treatment of and medical or surgical care for 3 or more nonrelated individuals hereinafter designated patients, suffering from illness, disease, injury or disability, whether physical or mental, and including pregnancy and regularly making available at least clinical laboratory services, and diagnostic X-ray services and treatment facilities for surgery, or obstetrical care, or other definitive medical treatment.

#### SECTION 3. Ind 51.01 (75a) is created to read:

Ind 51.01 (75a) "Interior finish" means the exposed interior surfaces of buildings, including, but not limited to fixed or movable walls and partitions, columns, ceilings, and floors.

- (a) "Class A interior finish" includes any material classified at 25 or less on the flame spread test scale and 450 or less on the smoke test scale in accordance with ASTM E84-80, Test of Surface Burning Characteristics of Building Materials.
- (b) "Class B interior finish" includes any material classified at more than 25 but not more than 75 on the flame spread test scale and 450 or less on the smoke test scale in accordance with ASTM E84-80, Test of Surface Burning Characteristics of Building Materials.
- (c) "Class C interior finish" includes any material classified at more than 75 but not more than 200 on the flame spread test scale and 450 or less on the smoke test scale in accordance with ASTM E84-80, Test of Surface Burning Characteristics of Building Materials.
- (d) "Class I interior floor finish" includes any material having a minimum critical radiant flux of 0.45 watts per square centimeter as determined in accordance with ASTM E648-78, Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
- (e) "Class II interior floor finish" includes any material having a minimum critical radiant flux of 0.22 watts per square centimeter as in accordance with ASTM E648-78, Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

(f) "Class III interior floor finish" includes any material having a minimum critical radiant flux of 0.04 watts per square centimeter as determined in accordance with ASTM E648-78, Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

Note: All carpet manufactured for sale in the United States is required by federal regulation to pass the DOC FF-1-70 "pill test" (16 CFR Par. 1630). Compliance with the requirements of standard DOC FF-1-70 satisfy the definition specified in par. (f).

SECTION 4. Ind 51.01 (86a) is created to read:

Ind 51.01 (36a) "Nursing home" means any building, structure, institution or place which provides 24-hour services including board and room to 3 or more unrelated residents who because of their mental or physical condition require nursing care or personal care in excess of 7 hours a week. The term "nursing home" wherever used in chs. Ind 50-64, includes nursing and convalescent homes, skilled nursing facilities, infirmaries in homes for the aged, and intermediate care facilities of 15 beds or more.

SECTION 5. Ind 51.25 (55) is created to read:

Ind 51.25 (55) TEST FOR CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS USING A RADIANT HEAT SOURCE. Part 18 ASTM Designation E 648-78.

SECTION 6. Ind 51.27 (7a) is amended to read:

Ind 51.27 (7a) National Fire Protection Association, 470 Atlantic Avenue, Boston, Batterymarch Park, Quincy, Mass. 02210, 02269, STANDARD FOR PORTABLE FIRE EXTINGUISHERS, NFPA No. 10-1978; STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, NFPA No. 13-1974; 13-1980; STANDARD FOR THE CARE AND MAINTENANCE OF SPRINKLER SYSTEMS, NFPA No. 13A-1978; STANDARD FOR THE INSTALLATION OF CENTRIFUGAL FIRE PUMPS, NFPA No. 20-1974; 20-1980; STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION, NFPA No. 22-1974; 22-1978; STANDARD FOR OUTSIDE PROTECTION, NFPA NO. 24-1973; 24-1977; STANDARD FOR THE INSTALLATION OF OIL-BURNING EQUIPMENT, NFPA No. 31-1978; NATIONAL FUEL GAS CODE, NFPA No. 54-1974; STANDARD FOR CENTRAL STATION PROTECTIVE SIGNALING SYSTEMS, NFPA No. 74-1974; 71-1977; STANDARD FOR AUXILIARY PROTECTIVE SIGNALING SYSTEMS, NFPA No. 725-1974; 726-1979; STANDARD FOR REMOTE STATION PROTECTIVE SIGNALING SYSTEMS, NFPA No. 720-1974; 72C-1975; STANDARD FOR PROPRIETARY PROTECTIVE SIGNALING SYSTEMS, NFPA No. 72D-1974; 72D-1979; STANDARD ON AUTOMATIC FIRE DETECTORS, NFPA No. 72E-1974; 72E-1978; STANDARD FOR HOUSEHOLD FIRE WARNING EQUIPMENT, NFPA No. 74-1980; MANUAL ON CLEARANCES FOR HEAT PRODUCING APPLIANCES, NFPA No. 89M-1976; STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS, NFPA No. 90A-1981; STANDARD FOR CHIMNEYS, FIREPLACES AND VENTS, NFPA No. <del>211-1977</del> 211-1980.

SECTION 7. Chapter Ind 58 is created to read:

Chapter 58
Subchapter I
Health Care Facilities

SCOPE

Ind 58.001 SCOPE. (1) GENERAL. The provisions of this subchapter shall apply, on or after the effective date of this section, to the following:

- (a) New health care facilities and additions to existing health care facilities;
- (b) Alterations and remodeling affecting structural strength, fire hazard, natural lighting or replacement of major equipment. Alterations and remodeling do not include minor repairs necessary for the maintenance of any building or structure. Where buildings are being remodeled or altered, only those components or systems being remodeled or altered shall be made to conform with the rules in effect at the time the remodeling or alteration occurs; and
- (c) Change of use where the requirements for the new use are more stringent than those for the previous use.
- (2) APPLICATION. (a) The rules of this subchapter are not retroactive unless specifically stated in the individual administrative rule.
- (b) The rules of this subchapter do not apply to alterations or remodeling of buildings, constructed prior to the effective date of this paragraph, being undertaken solely for the purpose of obtaining federal certification or state licensure.
- (3) VARIANCE. Where explicit conformance with the rules of this subchapter is not attained, the department will consider and may grant a variance as specified in s. Ind 50.25. The department will consider the results obtained from nationally recognized evaluation procedures (for example, Fire Safety Evaluation System (FSES) as specified in Appendix C of the National Fire Protection Association (NFPA) Life Safety Codes 101-1981) in evaluating requests for variance.

Special Note: The purpose of this subchapter is to eliminate conflicting rules between DILHR and DH&SS. DH&SS is involved with the enforcement of the federal requirements for the Title XVIII (Medicare) and Title XIX (Medicaid) programs. Since the basis of the federal program for construction purposes is compliance with the NFPA, 101 Life Safety Code, the rules of this subchapter reflect the rules of the NFPA, 101 Life Safety Code, 1981 edition.

#### GENERAL REQUIREMENTS

- Ind 58.01 CLASS OF CONSTRUCTION. (1) TWO OR MORE STORIES. All health care facilities 2 or more stories in height shall be of fire-resistive type 1 construction as specified in s. Ind 51.03 (1) with the following modifications:
- (a) Floor framing support assemblies. Floor framing support assemblies shall have a minimum fire-resistive rating of 3 hours.
- (b) Roof assemblies. Roof assemblies shall have a minimum fire-resistive rating of 1-1/2 hours.
- (c) Exterior bearing walls. All exterior bearing walls shall have a minimum fire-resistive rating of 3 hours.
- (2) ONE STORY CONSTRUCTION. (a) Hospitals. One story hospitals shall be of type 3 metal frame protected construction or better as specified in Table 51.03-A with the following modifications:
- 1. Roof framing assemblies for types 1, 2 and 3 construction, shall have a minimum fire-resistive rating of one hour.
- 2. All exterior walls of type 3 construction shall have a minimum fire-resistive rating of one hour.
- (b) <u>Nursing Homes</u>. One story nursing homes shall be of type 7 wood frame protected construction or better as specified in Table 51.03-A.
- Ind 58.02 SEPARATION FROM OTHER OCCUPANCIES. (1) OCCUPANCY SEPARATIONS. Occupancies not within the scope of this subchapter built in connection with any health care facility, shall be separated from any such health care facility by at least 2-hour fire-resistive rated construction as specified in s. Ind 51.04, except as provided in subs. (2) and (3). Auditoriums, chapels, residential facilities and other similar areas provided for the patients or employes of health care facilities, need not be separated with rated construction, but shall comply with the exiting requirements of the appropriate occupancy chapter.
- (2) OUTPATIENT SERVICES. Doctor's offices, medical clinics and similar facilities which are primarily intended to provide outpatient services will be classified as a chapter 54 occupancy provided the facilities are separated from health care occupancies by not less than 2-hour fire-resistive rated construction. Class of construction separations shall comply with s. Ind 51.02 (20).

- (3) GARAGES. (a) Storage garages and repair garages shall be separated from health care facilities as specified in s. Ind 59.13.
- (b) Areas accommodating emergency vehicles for temporary loading or unloading purposes need not be separated from health care facilities. The storage or repair of the vehicles is prohibited in these areas.
- (4) OPENINGS. All openings in occupancy separations shall occur only in corridors and shall be protected by self-closing fire-resistive door assemblies as specified in s. Ind 58.21.

Ind 58.03 <u>WINDOWS</u>. (1) OUTSIDE WINDOWS. Every habitable room shall be provided with outside windows having a total glazed area of at least 8% of the floor area of the room. The bottom of the window opening in sleeping rooms, shall be not more than 36 inches above the floor.

- (2) VENTILATION. (a) Where Required. Every patient sleeping room and every habitable room shall have an outside window or outside door located so it can be opened from the inside to permit the venting of products of combustion and to permit any occupant to have direct access to outside air in case of an emergency. Where windows require the use of tools or keys for operation, written approval from the department shall be obtained. The keys or tools shall be accessible to staff and located on each floor having such windows.
- (b) Openable Area of Outside Windows. The openable area of outside windows shall be equal to at least 4% of the floor area served, except as follows:
- 1. Rooms intended for occupancy for less than 24 hours, such as those housing obstetrical labor beds, recovery beds, observation beds in emergency department and newborn nurseries; or
- 2. Rooms where persons are forcibly confined, such as psychiatric wards, alcohol and drug abuse areas or other similar areas of protective placement; or
- 3. Buildings designed with an engineered smoke control system as specified in NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems.

#### MEANS OF EGRESS REQUIREMENTS

Ind 58.04 <u>REQUIRED MEANS OF EGRESS</u>. (1) GENERAL. All required means of egress shall comply with the requirements as specified in s. Ind 51.15, except as modified in this section.

- (2) EXIT DOORS. (a) Width. All exit doors shall be not less than 44 inches and not more than 48 inches in width, except that doors serving enclosed stairways may be a minimum of 36 inches in width.
- (b) <u>Door Swing</u>. A door which is used by not more than 25 persons shall not be required to open in the direction of egress.
- (c) <u>Force to Open Door</u>. The force required to fully open doors shall not exceed 37 pounds applied to the latch side.
- (d) <u>Door Platforms</u>. The floor on both sides of an exit door, except as specified in s. Ind 51.16 (4) (c), shall be at the same elevation and be level for a distance at least the width of the door, or as specified in s. Ind 52.04 (9) (b).
- (3) EXIT ACCESS DOORS. (a) <u>Width</u>. 1. All exit access doors from hospital and nursing home sleeping rooms; diagnostic and treatment areas, such as x-ray, surgery, or physical therapy; and all doors between these spaces and the required exits shall be at least 44 inches wide.
- 2. Exit access doors not subject to use by patients, shall be at least 36 inches wide.
- (b) <u>Door Swing</u>. A door which is used by not more than 25 persons shall not be required to open in the direction of egress.
- Ind 58.05 NUMBER AND TYPE OF EXITS. (1) NUMBER. At least 2 exits, located remote from each other, shall be provided from each floor and fire section of the building.
- (2) TYPE OF EXITS. (a) At least one exit from each floor or smoke compartment shall be by a door leading directly to a stairway, smokeproof tower, ramp, horizontal exit, exit passageway, or outside the building as specified in this subchapter.
  - (b) No more than one-half of the required exits shall be horizontal exits.
- Ind 58.06 STAIRS. (1) STAIR DETAILS. All stairs shall comply with the requirements specified in ss. Ind 51.16 and Ind 51.164, except as modified in this section.
- (a) All stairways and steps shall be so designed that the sum of 2 risers and a tread, exclusive of its nosing or projection, should be not less than 24 inches or more than 25 inches, with a tread not less than 11 inches. Treads of stairs shall be solid.
- (b) Every landing or platform shall be at least as wide as the stairway, measured at right angles to the direction of travel. The length of every landing or platform shall be at least as wide as the stairway. The length of the landing or platform need not exceed 48 inches.

- (c) The aggregate width for stairways shall comply with the requirements specified in s. Ind 58.12.
- (2) ENCLOSURE. (a) All stairways shall be enclosed as specified in s. Ind 51.18, except that nursing homes are required to enclose all stairways with a minimum of 2-hour fire-resistive construction.
- (b) Stairways in addition to those required by these rules, need not lead to the outside, but shall comply with the enclosure requirements.

Ind 58.07 <u>HANDRAILS</u>. Handrails shall be provided as specified in s. Ind 51.161, except that handrails protecting the open sides of stairways and ramps shall have intermediate rails or an ornamental pattern designed to prevent the passage of an object with a diameter larger than 6 inches.

Ind 58.08 <u>GUARDRAILS</u>. Guardrails shall be provided as specified in s. Ind 51.162, except that guardrails shall have intermediate rails or an ornamental pattern designed to prevent the passage of an object with a diameter larger than 6 inches.

Ind 58.09 <u>SMOKEPROOF TOWERS</u>. Smokeproof stair towers shall comply with the requirements specified in ss. Ind 51.17, Ind 58.04, and Ind 58.06.

Ind 58.10 HORIZONTAL EXITS. (1) GENERAL. Horizontal exits shall comply with the requirements specified in s. Ind 51.19, except as modified in this section.

- (2) AREA. At least 30 net square feet per occupant in a facility shall be provided within areas such as corridors, patient rooms, treatment rooms, lounge or dining areas on each side of the horizontal exit for the total number of people in the adjoining compartment.
- (3) DOORS. (a) A single door used as a horizontal exit shall serve one direction only, be at least 44 inches wide, swing in the direction of egress and comply with the requirements specified in s. Ind 58.21.
- (b) A horizontal exit in a corridor 8 feet or more in width serving as a means of egress from both sides of the doorway shall have the opening protected by a pair of swinging doors, arranged to swing in the opposite direction from the other, with each door being at least 44 inches wide.
  - (c) Center mullions are prohibited.
- (d) A vision panel, complying with the requirements specified in s. Ind 51.048 and not exceeding 100 square inches, shall be provided in each horizontal exit door. Vision panels shall be set in steel frames and shall be tested as part of the entire rated door assembly.
- (4) RESTRICTIONS. If a horizontal exit is used as a smoke barrier it shall comply with the requirements specified in s. Ind 58.30.

- Ind 58.11 RAMPS. (1) MINIMUM WIDTH. (a) Interior Ramps. Interior ramps shall be a minimum of 44 inches wide, of which not more than 4 inches on each side may be occupied by a handrail.
- (b) Exterior Ramps. Exterior ramps shall be a minimum of 48 inches wide, of which not more than 4 inches on each side may be occupied by a handrail.
- (2) SLOPE. Ramps shall have a slope of not more than one foot of rise in 12 feet or run.
- (3) ENCLOSURE. Ramps used as a required means of egress and that connect different floor levels shall comply with the enclosure requirements for stairways specified in s. Ind 58.06 (2).
- Ind 58.12 CAPACITY OF MEANS OF EGRESS. (1) OCCUPANT LOAD. (a)

  Capacity. The occupant load for which means of egress shall be provided for any
  floor shall be the maximum number of persons to occupy that floor, but not less
  than one person for each 120 square feet gross floor area.
- (b) Exits Serving More than One Floor. Where exits serve more than one floor, only the occupant load of each floor considered individually need be used in computing the capacity of the exits at that floor, provided the exit capacity is not decreased in the direction of exit travel.
- (2) REQUIRED EXIT WIDTH. (a) <u>Units of Exit Width</u>. The required exit width shall be measured in units of exit width of 22 inches. Fractions of a unit less than 12 inches shall not be counted. Fractions of a unit 12 inches or more, added to one or more full units, shall be counted as 1/2 unit of exit width.
- (b) Clear Width. The clear width of the means of egress shall be measured at the narrowest point of the exit component under consideration, except as provided below:
- 1. The exit width for doorways shall be the measured width of each door leaf.
- 2. A handrail may project inside the measured width on each side not more than 4 inches.
- 3. A stringer may project inside the measured width on each side not more than 1-1/2 inches.
- (3) CAPACITY PER UNIT OF EXIT WIDTH. (a) <u>Stairways</u>. The capacity of means of egress providing travel by means of stairs shall be 22 persons per exit unit, except that in buildings protected with a complete automatic sprinkler system the capacity shall not exceed 35 persons per exit unit.
- (b) <u>Horizontal Travel</u>. The capacity of means of egress providing horizontal travel, such as doors, ramps, or horizontal exits shall be 30 persons per exit unit, except that in buildings protected with a complete automatic sprinkler system the capacity shall not exceed 45 persons per exit unit.
- Ind 58.13 ARRANGEMENT OF MEANS OF EGRESS. (1) PATIENT SLEEPING ROOMS. Every patient sleeping room shall have an exit access door leading directly to an exit access corridor, except as provided below:

- (a) If there is an exit door opening directly to the outside from the room at ground level.
- (b) One adjacent room, such as a sitting room or anteroom, may intervene, if all doors along the means of egress are equipped with nonlockable hardware, except as specified in s. Ind 51.15 (3), and if the intervening room is not used to serve as an exit access for more than 8 patient sleeping beds.
- (2) CORRIDORS. Every aisle, corridor and hallway shall provide access to at least 2 exits complying with the requirements specified in s. Ind 58.05.
- (a) Exit Access Corridors. Every aisle, corridor and hallway used for exit access shall be at least 8 feet in clear and unobstructed width.
- (b) Areas Not Intended for Patient Use. Aisles, corridors and hallways in areas not intended for the housing, treatment or use of patients shall be at least 44 inches in clear and unobstructed width.
- (3) AREA EXITING. In buildings of type 1 and type 2 construction, a total area of not more than 1,200 square feet may be placed between an exit and the end of the building, provided that at least 2 directions of travel are available from the area to a required exit.
- (4) SUITE EXITING. Any room, suite of rooms, space or area more than 1,000 square feet in area, shall have at least 2 exit access doors remote from each other.
- Ind 58.14 MEASUREMENT OF TRAVEL DISTANCE TO EXITS. All exits of health care facilities shall be located to provide remote means of egress.
- (1) EXIT ACCESS TO AN EXIT. Travel distance measured along passageways between any room door required as an exit access and an exit shall not exceed 100 feet, except that in buildings protected with a complete automatic sprinkler system the distance shall not exceed 150 feet.
- (2) ROOM TO AN EXIT. Travel distance measured along passageways between any point in a room and an exit shall not exceed 150 feet, except that in buildings protected with a complete automatic sprinkler system the distance shall not exceed 200 feet.
- (3) SLEEPING ROOM TO AN EXIT ACCESS. Travel distance measured along passageways between any point in a health care sleeping room or suite and an exit access door to that room or suite shall not exceed 50 feet.
- Ind 58.15 <u>DISCHARGE FROM EXITS</u>. All required ramps or stairs serving as exits shall discharge directly to the outside at grade or be arranged to travel through an exit passageway discharging to the outside at grade.
- Ind 58.16 ILLUMINATION OF MEANS OF EGRESS. (1) ILLUMINATION. Artificial lighting shall be provided at all exits and for such period of times as required to maintain safe exiting.
- (2) ILLUMINATION LEVEL. The floors of means of egress shall be illuminated at all points including angles and intersections of corridors and passageways, stairways, landings of stairs and exit doors to the values specified in ch. Ind 19, Wis. Adm. Code.

- Ind 58.17 EMERGENCY LIGHTING. Emergency lighting shall comply with the requirements specified in ch. ILHR 16, Wis. Admin. Code.
- Ind 58.18 MARKING OF MEANS OF EGRESS. (1) EXIT SIGNS. Every required exit shall be identified with an internal illuminated, red exit sign bearing the word "EXIT" or "OUT" in plain letters not less than 6 inches high, with the principal strokes of letter not less than 3/4 inches.
- (2) DIRECTIONAL SIGNS. An illuminated sign, not less than 6 inches high, reading "EXIT" or similar designation, with an arrow indicating the direction, shall be placed in every location where the direction of travel to reach the nearest exit is not immediately apparent.
- (3) OBSTRUCTIONS. Decorations, furnishings or equipment which impair visibility of an exit sign shall not be permitted. Displays, objects in or near the line of vision to the required exit sign, or brightly illuminated signs used for purposes other than exits shall not be permitted so as to detract attention from the exit sign.
- (b) Hangings or draperies shall not be placed over exit doors or be located as to conceal or obscure any exit. Mirrors shall not be placed on exit doors. Mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of exit.
- (4) SPECIAL SIGNS. Any door, passage, or stairway which is neither an exit nor a way of exit access, and which is located or arranged that it may be mistaken for an exit, shall be identified by a sign indicating it is not an exit.
- Ind 58.19 HEADROOM. Every means of egress shall be provided with a ceiling clearance of not less than 7 feet 6 inches.
- Ind 58.29 <u>DOOR LOCKS</u>. Locks on exit doors and exit access doors are prohibited, except as specified in s. Ind 51.15 (3).

#### PROTECTION

- Ind 58.21 <u>PROTECTION OF OPENINGS</u>. (1) DOORS. Doors protecting openings in occupancy separations, smoke barriers, or horizontal exits shall be self-closing fire-resistive door assemblies as specified in s. Ind 51.047.
- (2) AUTOMATIC CLOSING DEVICE. Doors protecting such openings shall be equipped with an automatic closing device and shall normally be kept closed, except the doors may be held open by a magnetic hold open device actuated by products of combustion other than heat. The automatic closing device shall be arranged such that the activation of any one or all of the following systems will initiate the self-closing action of all such doors:
  - (a) Manual fire alarm system;
- (b) Automatic smoke detection system or a local device designed to detect smoke on either side of the opening; and
- (c) Complete automatic sprinkler system or fire detection system, if provided.

Ind 58.22 ELEVATOR LOBBY ENCLOSURES. All elevator lobbies shall be enclosed with at least one-hour fire-resistive construction as specified in s. Ind 51.04, to limit the spread of smoke and fire. All openings shall be protected with fire-rated door assemblies specified in s. Ind 58.21.

Ind 58.23 PROTECTION OF VERTICAL OPENINGS. (1) INTERIOR SHAFTS. Every elevator shaft, dumbwaiter shaft, pipe shaft, and other similar vertical shaft in buildings, shall be enclosed with at least 2-hour fire-resistive partitions as specified in s. Ind 51.043, except as provided in pars. (a) and (b):

- (a) One-hour rated enclosures are permitted in hospitals of type 3 construction.
- (b) Duct penetrations of floor assemblies which are protected as specified in NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems.
- (2) ESCALATORS. All escalators shall be enclosed as specified in s. Ind 58.06 (2).

Ind 58.24 PROTECTION FROM HAZARDS. (1) ENCLOSURES. All hazards listed in Table 58.24-A shall be enclosed from other areas of the building with fireresistive rated construction as specified in Table 58.24-A. All openings shall be protected with self-closing fire-rated assemblies specified in s. Ind 51.047.

Table 58.24-A

<sup>1</sup>The minimum hourly ratings specified may be reduced by one hour in buildings less than 3 stories in height and protected by an automatic sprinkler system. The minimum rating shall be not less than one hour.

(2) SEPARATIONS. All hazards listed in Table 58.24-B shall be vertically separated from other areas of the building with fire-resistive rated construction as specified in Table 58.24-B. All openings shall be protected with self-closing fire-rated assemblies specified in s. Ind 51.047.

Table 58.24-B

	Fire Resistive Rating
HAZARDS	In Hours <sup>1</sup>
tSoiled Linen Rooms	1
Kitchens	1
Handicraft Shops	1
†Carpenter Shops	1
Repair Shops	1
†Paint Shops	. 1
tTrash Collection Rooms	1
†Storage Rooms (containing	1
quantities of flammable	
or combustible material	
not exceeding 1 lb. of	
material per square foot	
of floor area)	·
Gift Shops	1
Laboratories (containing	1
quantities of flammable	
or combustible material	
not exceeding 1 lb. of	
material per square foot	
of floor area)	
-All other	
laboratories	1
Employe Locker Rooms	1

†These areas are required to be protected with an automatic sprinkler system in addition to the fire-resistive enclosure requirements specified in the table.

<sup>1</sup>The minimum hourly ratings specified may be reduced by one hour in buildings protected by an automatic sprinkler system. The separation shall be not less than a smoke separation with a self-closing door.

Ind 58.25 RUBBISH CHUTES AND LAUNDRY CHUTES. (1) VERTICAL PROTECTION. Any rubbish chute or laundry chute shall be enclosed with walls or partitions of 2-hour fire-resistive construction specified in s. Ind 51.043, except that horizontal portions of pneumatic rubbish and laundry chute systems need not be enclosed. All openings shall be protected with self-closing fire-rated assemblies specified in s. Ind 51.047 and shall include the opening from the chute into the collection room.

- (a) All rubbish chutes shall discharge into trash collecting rooms, which are used for no other purpose and are enclosed in accordance with this section. The incinerator shall not be directly flue-fed nor shall any floor discharging chute directly connect with the combustion chamber.
- (b) All laundry chutes shall discharge into laundry rooms or laundry collecting rooms, which are used for no other purpose and are enclosed in accordance with this section.

- (2) SPRINKLER PROTECTION. All rubbish chutes or laundry chutes, including pneumatic rubbish and laundry systems, shall be provided with automatic sprinkler protection specified in s. Ind 51.23.
- (3) FIRE DAMPERS. Fire dampers are required where chutes penetrate 2-hour fire-rated floor or wall systems in a horizontal run.

Ind 58.26 INTERIOR FINISH. (1) SCOPE. The requirements of this section apply to the interior finishes and surfaces of a building.

Note: See s. Ind 51.06 for specific requirements pertaining to foam plastics.

- (2) WALLS AND CEILINGS. All walls and ceilings shall be Class A as specified in s. Ind 51.01 (75a).
- (a) <u>Materials</u>. Materials such as carpeting having a napped, tufted, looped, or similar surface, when applied on walls or ceilings, shall meet the requirements of Class A interior finish except as provided in par. (b).

Note: See ch. Ind 4, Wis. Adm. Code, for interior finish for elevator cabs.

- (b) Exceptions. 1. Walls and ceilings of individual rooms having a capacity of not more than 4 persons may have a Class B interior finish as specified in s. Ind 51.01 (75a).
- 2. Interior finish not in excess of 10 percent of the aggregate wall and ceiling areas of any room or space may be Class C materials in occupancies where interior finish of Class  $\Lambda$  or Class B is required.
- (3) FLOORS. All interior finishes of floor materials shall be Class I or better as specified in this section.
- (a) Tongue and Groove Wood Flooring. Tongue and groove wood flooring, one-half inch thick or greater, shall be permitted.
- (b) Floor Material. Floor material such as carpeting, shall be fire tested with the underlayment used and shall comply with the requirements as specified in ASTM E648-78, Test for Criteria Radiant Flux of Floor Covering Systems Using a Radiant Heat Source.
- (4) FIRE RETARDANT PAINTS OR SOLUTIONS. Fire retardant paints or surface applied solutions shall not be used to satisfy the requirements of this section.
- Ind 58.27 <u>DETECTION</u>, ALARM AND COMMUNICATION SYSTEMS. (1) GENERAL. All required detection and signaling devices and systems shall comply with the requirements of this section.
- (a) All such systems shall be tested at least once a week and a record of such tests shall be kept. All system components or equipment shall be restored to normal condition promptly after each test or alarm and shall be maintained in an operable condition.

- (b) The system shall be so arranged that the operation of any one station will actuate all devices connected to the system.
- (c) A signaling system may be arranged to automatically perform local, incidental control functions to make the premises safer in the event of fire or to make it possible to hear alarm signals. The performance of incidental control functions, such as the release of self-opening or self-closing doors, shutting off supplies of gas, fuel oil, or electrical power, switching on emergency lights, switching off air supply ventilating fans, and other similar functions, shall not in any way impair the effective response of all required alarm indicating devices. The performance of incidental control functions shall not interfere with the power for lighting or for operating elevators.
- (2) FIRE ALARMS. Every building shall have a manually operated fire alarm system as specified in s. Ind 51.24 and shall comply with the following requirements:
- (a) The operation of any fire alarm activating device shall automatically, without delay, accomplish general alarm indication and control functions as specified in sub. (1). Zoned, coded systems may be used.
- (b) The fire alarm system shall be arranged to transmit an alarm automatically to the fire department required to serve the area in which the health care facility is located, by the most direct and reliable method approved by local regulations.
- (3) AUTOMATIC SMOKE DETECTION SYSTEM. (a) An approved automatic smoke detection system shall be installed in all corridors in nursing homes. Such systems shall be installed and maintained as specified in NFPA 72E, but in no case shall smoke detectors be spaced more than 30 feet apart on center or more than 15 feet from any wall. All automatic smoke detection systems required by this section shall be electrically interconnected to the fire alarm system.
- (b) Corridor smoke detection systems are not required on the patient sleeping room floors, where each patient sleeping room is protected by an approved smoke detection system.
- (4) FIRE EXTINGUISHERS. Portable fire extinguishers shall be provided and maintained as specified in s. Ind 51.22.
- Ind 58.28 STANDPIPES. (1) FIRST-AID STANDPIPES. First-aid standpipes shall be provided as specified in s. Ind 51.21 for all health care facilities, unless an approved automatic sprinkler system is installed.
- (2) FIRE DEPARTMENT STANDPIPES. Fire department standpipes shall be provided in all buildings exceeding 60 feet in height and shall comply with the requirements specified in s. Ind 51.21.
- Ind 58.29 AUTOMATIC SPRINKLER AND OTHER SUPPRESSION SYSTEMS. Automatic sprinkler systems shall comply with the requirements specified in s. Ind 51.23, except as modified in this section.
- (1) WHERE REQUIRED. (a) Hospitals. Automatic sprinkler systems shall be provided as specified in ss. Ind 52.01 and Ind 58.24.

- (b) <u>Nursing Homes</u>. A complete automatic sprinkler system shall be provided in all nursing homes constructed after the effective date of this rule.
- (2) SPRINKLER CONTROL VALVES. (a) The main sprinkler control valves shall be electrically supervised so that at least a local alarm will sound at a constantly attended location when the valve is closed.
- (b) All valves other than the main sprinkler control valve shall be electrically supervised or secured with a key locking device.
- (3) WATER FLOW SWITCH. The water flow alarm switch for the automatic sprinkler system shall be electrically interconnected with the fire alarm system.
- (4) PARTIAL AUTOMATIC SPRINKLER SYSTEM. The sprinkler piping serving no more than 6 sprinklers for any isolated hazardous area, may be connected directly to a domestic water supply system having a capacity sufficient to provide 0.15 gallons per minute per square foot of floor area throughout the entire enclosed area.
- (a) <u>Indicating Shut-Off Valve</u>. An indicating shut-off valve shall be installed in an accessible location between the sprinklers and the connection to the domestic water supply.
- (b) <u>Water Flow Detection</u>. Where more than 2 sprinklers are installed in a single area, water flow detection shall be provided to sound the building fire alarm system in the event of sprinkler operation.
- (5) OTHER AUTOMATIC SUPPRESSION SYSTEMS. (a) <u>Types</u>. Other automatic suppression systems such as, but not limited to, carbon dioxide, dry chemical, foam and Halon 1301, may be installed in lieu of an automatic water sprinkler system in any occupancy where the extinguishment or control of fire may be more effectively accomplished by this type of automatic suppression system.
- (b) Activation. These suppression systems shall be installed such that the fire alarm system will sound when the suppression system is activated.
- Ind 58.30 SMOKE BARRIER. (1) DEFINITION. A smoke barrier is a separation wall which is continuous from outside wall to outside wall and from floor slab to the underside of the floor slab or roof slab above, including all concealed spaces such as those found above a ceiling including interstitial spaces.
- (2) FIRE-RESISTIVE RATING. Smoke barriers shall have a one-hour fire-resistive rating specified in s. Ind 51.047.
  - (3) WHERE REQUIRED. Smoke barriers are required to:
- (a) Limit the area on any story to a length and width of not more than 150 feet;
  - (b) Divide every story into at least 2 compartments; and
  - (c) Enclose elevator lobbies on each floor.

- (4) DOORS. (a) Corridor openings in smoke barriers shall be protected by a pair of swinging doors, each door to swing in a direction opposite from the other. Each door shall have a minimum width of 44 inches, except corridor openings in areas not intended for the housing, treatment, or use of patients shall have a minimum width of 36 inches.
- (b) Doors in smoke barriers shall be self-closing and have at least a 20 minute fire-resistive rating, except doors may be held open as specified in s. Ind 58.21.
- (c) Door louvers and grills are prohibited. Doors may be undercut to a maximum of 3/4 inches.
- (d) A vision panel complying with the requirements of s. Ind 51.048 and not exceeding 1,296 square inches in area, shall be provided in each door in a smoke barrier and shall be set in steel frames. The bottom of the vision panel shall be located not more than 40 inches off the floor.
- (e) Rabbets, levels, or astragals are required at the meeting edges, and stops are required on the head and sides of door frames. Positive latching hardware is not required.
  - (f) Center mullions are prohibited.
- (5) DAMPERS. An approved damper designed to resist the passage of smoke shall be provided at each point a duct penetrates a smoke barrier. The damper shall close upon detection of smoke by an approved smoke detector, located within the duct except that:
- (a) The approved damper, if located above a smoke barrier door, may be arranged to close upon detection of smoke by the local device designed to detect smoke on either side of the smoke barrier door opening.
- (b) Buildings designed with an engineered smoke control system as specified in NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, need not comply with this requirement.
- (6) VISION PANELS. (a) Except as provided in par. (b), fixed wire glass vision panels shall be permitted in smoke barrier walls, provided the vision panels do not exceed 1,296 square inches in area. The vision panels shall have bolted steel frames and the glazing material shall be listed by an approved testing laboratory.
- (b) Vision panels shall not be restricted in area and in fire resistance of glass or frames in buildings equipped throughout with an approved automatic extinguishing system.
- Ind 58.31 CONSTRUCTION OF CORRIDOR WALLS. (1) FIRE-RESISTIVE RATING. Except as otherwise provided in this section, corridors shall be separated from all other areas by partitions which are continuous from the floor slab to the underside of the roof or floor slab above, through any concealed spaces such as those above suspended ceilings, and through interstitial structural and mechanical spaces, and shall have at least a one-hour fire-resistive rating as specified in s. Ind 51.043.

- (a) In health care facilities equipped throughout with an approved automatic extinguishing system, a corridor may be separated from all other areas by nonfire-rated partitions, and where suspended ceilings are provided, the partitions may be terminated at the suspended ceiling.
- (b) Corridor partitions may terminate at ceilings which are not an integral part of a floor construction if there is at least 5 feet of space between the top of the ceiling subsystem and the bottom of the floor or roof above provided:
  - 1. The ceiling is of membrane type with a finish rating of 15 minutes, and
- 2. Corridor partitions form smoke-tight joints with the ceilings (joint filler, if used, must be noncombustible), and
- 3. Each compartment of interstitial space which constitutes a separate smoke area is vented, in case of smoke emergency, to the outside by mechanical means having a capacity to provide at least 2 air changes per hour, but in no case having a capacity less than 5,000 cfm, and
  - 4. The interstitial space shall not be used for storage, and
- 5. The space shall not be used as a plenum for supply, exhaust or return air except as provided in subd. 3.
- (c) Waiting areas on a patient sleeping floor may be open to the corridor, provided:
  - 1. The area does not exceed 250 square feet, and
- 2. The area is located to permit direct supervision by the facility staff, and
- 3. The area is equipped with an electrically supervised automatic smoke detection system installed as specified in s. Ind 51.047 (6) (a), and
- 4. Not more than one such waiting area is permitted in each smoke compartment.
- (d) Waiting areas on floors other than institutional sleeping floor may be open to the corridor, provided:
  - 1. Each area does not exceed 600 square feet, and
- 2. The area is located to permit direct supervision by the facility staff, and
  - 3. The area is arranged not to obstruct any access to required exits, and
- 4. The area is equipped with an electrically supervised, automatic smoke detection system installed as specified in s. Ind 58.21.
- (e) Buildings equipped throughout with an approved automatic sprinkler system may have spaces open to the corridor which are unlimited in size provided:

- 1. The spaces are not used for patient sleeping rooms, treatment rooms or hazardous areas, and
- 2. Each space is located to permit direct supervision by the facility staff, and
- 3. The space and corridors which the space opens onto in the same smoke compartment are protected by an electrically supervised automatic smoke detection system installed as specified in s. Ind 58.27, and
  - 4. The space is arranged not to obstruct access to required exits.
- (f) Space for doctors' and nurses' charting, communications, and related clerical areas may be open to the corridor.
- (2) VISION PANELS. (a) Fixed wire glass vision panels shall be permitted in corridor walls provided they do not exceed 1,296 square inches in area and comply with the requirements specified in s. Ind 51.048.
- (b) Vision panels shall not be restricted in area and in fire resistance of glass or frames in buildings equipped throughout with an approved automatic extinguishing system.
- (3) DOORS. Except as otherwise provided in this subsection, doors protecting corridor openings, other than required enclosures of exits or hazardous areas, shall have a 20-minute fire-resistive rating and be provided with latches. Fixed wire glass vision panels installed in these doors shall not exceed 720 square inches in area and shall be mounted in approved steel frames.
- (a) In buildings equipped with a complete approved automatic sprinkler system:
- 1. Such doors and frames are not required to have a fire-resistive rating, but shall be constructed to resist the passage of smoke.
- 2. Such doors are provided with latches of a type suitable for keeping the door tightly closed.
- 3. There is no restriction on the area of vision panels in these doors, the vision panels do not need to be wired glass, and there is no restriction in the type of frames.
- (b) Door closing devices are not required on doors in corridor wall openings, other than those exits or required enclosures of hazardous areas.
- (c) Labeled door frames are not required on openings other than those serving exits or required enclosures of hazardous areas, providing the door frames and stops are of steel construction.
- (d) Doors to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces which do not contain flammable or combustible materials need not comply with this section.
- (4) TRANSFER GRILLS. Transfer grills shall not be used in these walls or doors, except doors to toilet rooms, bathrooms, shower rooms, sink closets and similar auxiliary spaces which do not contain hazardous quantities of flammable or combustible materials may have ventilating louvers or may be undercut.

#### SANITARY FACILITIES

- Ind 58.32 SANITATION REQUIREMENTS. (1) TOILET ROOMS. Every building included under the scope of this subchapter shall be provided with separate toilet rooms for each sex, and shall comply with the requirements specified in this section and ss. Ind 52.50-52.62.
- (2) PATIENTS. The number of fixtures required for each sex shall comply with the ratios specified in Table 58.32.
- (3) EMPLOYES. The number of fixtures for employes shall comply with the requirements specified in Table 54.12-B and s. Ind 52.04 (4) and (8).
- (4) GENERAL PUBLIC. The number of fixtures for the general public shall comply with the requirements specified in Table 54.12-A and s. Ind 52.04 (4) and (8).

Note: See ch. H24 - General and Special Hospitals, and ch. H32 - Nursing Homes, rules of the Department of Health and Social Services, for special requirements and locations for water closets, lavatories and bathing facilities.

TABLE 58.32

	Type of Fixture				
Type of	Water Closets (WC)	Lavatories	Bathtubs	Drinking	
Occupancy		(L)	or Showers	Facilities	
				(DF)	
Health Care	1 (WC) per 2 patient	1 (L) per 2	Nursing	1 (DF) for	
Facilities	rooms and not more	patient rooms,	Homes	each 100	
	than 4 beds	not more than	1 for each	persons	
		4 persons	20 persons		
		per (L)	or fraction		
			thereof		
			Hospitals		
			1 for each		
			15 patients		
			or fraction		
			thereof		

#### EFFECTIVE DATE

Pursuant to s. 227.026 (1), Intro., Stats., these rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register.