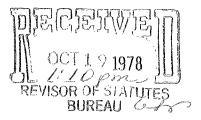
STATE OF WISCONSIN SS DEPARTMENT OF INDUSTRY. LABOR AND HUMAN RELATIONS)



## TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Zel S. Rice II, Secretary of the Department of Industry, Labor and Human Relations, and custodian of the official records of said department, do hereby certify that the attached rules to Wisconsin Administrative Code chapters Ind 50-64--Building and Heating, Ventilating and Air Conditioning Code, were adopted October 19, 1978. by this department on

I further certify that said copy has been compared by me with the original on file in this department and that the same is a true copy thereof and of the whole of such original.

> IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the department at the Capitol, in the 19th City of Madison, this day of October

A.D., 1978.

Zel S. Rice II, Secretary

### ORDER OF

# DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS

Pursuant to authority vested in the Department of Industry, Labor and Human Relations by sections 101.01 to 101.211, Wis. Stats., the Department of Industry, Labor and Human Relations hereby amends, creates, repeals, repeals and recreates, and adopts rules of Wisconsin Administrative Code Chapters Ind 50-64--Building and Heating, Ventilating and Air Conditioning Code.

The rules attached hereto shall become effective January 1, 1979, as provided in section 227.026, Wis. Stats.

OCT 1 9 1978

REVISOR OF STATUTES
BUREAU

Subsection Ind 50.07 (2) is amended to read:

- (a) <u>Building or structural design</u>. The plans and specifications for the design of the building or structure shall be prepared, signed and sealed by a Wisconsin registered architect or engineer.
- (b) <u>Heating</u>, ventilating and air conditioning design. The plans and specifications for the heating, ventilating and air conditioning system shall be prepared, signed and sealed by a Wisconsin registered architect, engineer or designer.
- (c) Energy conservation design. The plans and specifications for energy conservation design, including illumination, shall be prepared, signed and sealed by a Wisconsin registered architect, engineer or designer.
  - Note 1: See section Ind 51.01 (139a) for definition of total volume.
- <u>Note 2</u>: The above terms "registered architect, engineer or designer" mean registered architect, registered professional engineer or registered designer as defined by laws regulating the practice of engineering and architecture found in chapter 443, Wis. Stats. Registered designers are limited to the specific designations outlined in Wis. Adm. Code section A-E 1.20. See section A-E 1.04 for rules pertaining to signing, sealing and dating of plans prepared by Wisconsin registered architects, engineers and designers.
- Note 3: According to section 87.30, Wis. Stats., the construction or placement of every building, structure, fill or development placed or maintained within any flood plain is required to satisfy local or state regulations.

(Note to Revisor: Note 4 is repealed.)

Section Ind 50.11 Note is amended to read:

Note: For definition of owner, refer to chapter 101, section 101.01 (2) (i), Wis. Stats.

Subsection Ind 50.12 (1) (g) (intro. par.) is amended to read:

(g) Structures [see Ind 51.01 (125)].

Section Ind 50.25 is amended to read:

Ind 50.25\* PETITION FOR MODIFICATION. The department will consider and may grant modification to an administrative rule upon receipt of a fee, a completed petition for modification form from the owner, and a position statement from the fire department having responsibility and an interest in the rule, provided an equivalent degree of safety is established in the petition for modification which meets the intent of the rule being petitioned. The department may impose specific conditions in a petition for modification to promote the protection of the health, safety or welfare of employes or the public. Violation of those conditions under which the petition for modification is granted constitutes a violation of these rules.

- Note  $\frac{1}{4}$ : See Appendix A for an example of the petition for modification (form SB-8) and the fire department position statement (form SB-8A).
- Note #2: Section 101.02 (6), Wis. Stats., outlines the procedure for submitting petitions to the department and the department procedures for hearing petitions.

Subsections Ind 51.01 (23), (24), (25), (26) (97) and (139a) are amended; subsection Ind 51.01 (86) (c) is repealed.

#### Ind 51.01 DEFINITIONS.

- (23) <u>Court</u>. A court is an open, exterior space providing required natural light or ventilation for the building or providing a pathway for public egress from a building exit to a public thoroughfare.
- (24) <u>Court (inner)</u>. An inner court is a court surrounded on all sides by walls.
- (25) Court (inner lot line). An inner lot line court is a court bounded on 3 sides by walls and on the remaining side by a lot line or property line.
- (26) <u>Court (outer)</u>. An outer court is a court bounded on 3 sides with walls and on the remaining side by a street, alley or other open space not less than 15 feet wide.
- (86) (c) is repealed.
- (97) <u>Partition</u>. A partition is an interior nonbearing vertical element serving to enclose or divide an area, room or space. Portable or demountable partitions requiring tools for installation or removal are considered partitions, not furniture.
- (139a) Volume (total). The "total volume" (cube or cubage) of a building is the actual cubic space enclosed within the outer surfaces of the outside or enclosing walls and contained between the outer surfaces of the roof and the underside of the lowest floor. The volume of structures without enclosing walls (canopies, roofed shelters and similar structures) will be computed by projecting imaginary vertical planes as the enclosing walls at the outer surface of the exterior supports or columns. For cantilevered structures with interior supports, the imaginary vertical planes will be projected at the farthest roof projection or overhang.

<u>Note</u>: The definition of total volume requires the cube of dormers, penthouses, vaults, pits, enclosed porches and other enclosed appendages to be included as a part of the cube of the building. It does not include the cube of courts or light shafts, open at the top, or the cube of outside steps, cornices, parapets, or open porches or loggias.

Subsection Ind 51.02 (4) (a) is amended; (4) (b) 1. b. Note is created; (15) (a) is created; (18) and (19) are amended; and (20) is created to read:

- (4) Exterior wall construction:
  - (a) All exterior walls which are in contact with the soil shall be of masonry or concrete except that all-weather wood foundations are permitted if constructed in accordance with the provisions outlined in section Ind 53.64.
  - (b) 1. b. Note: Buildings utilizing wood foundations in accordance with the provisions outlined in section Ind 53.64 will be limited to 2 levels (onestory and basement, one-story and ground floor, or 2-story with wood frost wall).
- (15) (a) Exception. Fire-retardant treated wood may be applied to all required noncombustible exterior surfaces of "0" hourly rated construction without limit.
- (18) Access to attic and roof. (a) Attic. Every attic compartment shall be provided with access from the floor level immediately below it. The access opening shall be at least 20 by 30 inches and shall be located above the stair landing or in an accessible location.

<u>Note:</u> A single access point to the attic from the floor level immediately below will be acceptable if all the attic compartments are interconnected with access openings of at least 20 by 30 inches.

- (b) Roof. All buildings more than 2 stories, or 25 feet in height, where the slope of the roof is less than 3 in 12, shall be provided with a means of access to the main roof from the floor level immediately below. The roof opening shall be at least 20 by 30 inches and shall be provided with a permanent ladder or stairway.
  - 1. Exception. Roof access shall not be required in the sloped ceiling (cathedral ceiling) portions of buildings.
- (19) Attic compartmentalization. Attics of combustible construction, other than those above suspended ceilings, shall be divided into areas not greater than 3,200 square feet by firestopping as specified in section Ind 53.63 (1) (c). Compartmentalization shall extend into the eave and soffit areas to provide a complete separation between compartments. Panels for access openings in compartment walls shall be equipped with self-closing devices and shall normally be kept closed.
- (20) Class of construction separation. Portions of buildings of different classes of construction, as specified in section Ind 51.03, shall be separated by fire division walls as specified in section Ind 51.02 (13) or the building classification will be reduced to the lowest class of construction utilized.

Subsections Ind 51.03 (1) (f) (intro. par.), (1) (h) and (1) (i) are amended to read:

- (1) Fire-resistive type A (No. 1).
  - (f) Mansards shall be constructed of noncombustible material or fire-retardant treated wood.
  - (h) Wood may be used for finished floors, trim and wall paneling if open spaces behind the material are completely firestopped with noncombustible material or fire-retardant treated wood, unless prohibited under the occupancy requirements of this code.
  - (i) Acoustical materials, other than plastics, may be used on ceilings and walls provided they have a flame spread rating of 25 or less and the open spaces between furring on walls are completely firestopped with noncombustible material or fire-retardant treated wood.

Subsections Ind 51.03 (2) (g) (intro. par.), (2) (i) and (2) (j) are amended to read:

- (2) Fire-resistive type B (No. 2).
  - (g) Mansards shall be constructed of noncombustible material or fire-retardant treated wood.
  - (i) Wood may be used for finished floors, trim and wall paneling if open spaces behind the material are completely firestopped with noncombustible material or fire-retardant treated wood, unless prohibited under the occupancy requirements of this code.
  - (j) Acoustical materials, other than plastics, may be used on ceilings and walls provided they have a flame spread rating of 25 or less and the open spaces between furring on walls are completely firestopped with noncombustible material or fire-retardant treated wood.

Subsection Ind 51.03 (3) (e) (intro. par.) is amended to read:

- (3) Metal frame--protected (No. 3).
  - (e) Mansards shall be constructed of noncombustible material or fire-retardant treated wood.

Subsection Ind 51.03 (4) (a) is amended to read:

(4) Heavy timber (No. 4). (a) A building is of heavy timber construction if the structural frame consists of heavy timber or heavy timber in combination with metal, reinforced concrete or masonry and all building elements are as set forth in table 51.03-A unless otherwise exempted.

Subsection Ind 51.03 (5) (a) (intro. par.) is amended to read:

(5) Exterior masonry (No. 5). (a) A building is of exterior masonry construction if all enclosing walls are constructed of masonry or reinforced concrete and all building elements are as set forth in table 51.03-A unless otherwise exempted.

Subsection Ind 51.03 (5) (a) 2. Note is created to read:

Note: This rule is not intended to prohibit openings necessary to provide attic/ceiling ventilation.

Subsection Ind 51.03 (6) (b) is renumbered (6) (c). Subsection Ind 51.03 (6) (c) is renumbered (6) (d).

Subsection Ind 51.03 (6) (d) is renumbered (6) (e).

Subsection Ind 51.03 (6) (b) is created to read:

- (6) Metal frame--unprotected (No. 6).
  - (b) A pole building is considered type No. 6, metal frame unprotected construction, provided the following conditions are satisfied:
    - 1. The poles supporting the roof only shall be at least 6 inches by 8 inches nominal in dimension. Poles supporting floors shall be 8 inches by 8 inches nominal in dimension. Poles may be built up from individual 2-inch nominal lumber if the pieces are bolted or glued and nailed together.
    - 2. The girts shall be of noncombustible, fire-retardant treated wood or heavy timber construction.
    - 3. The enclosing wall skin shall be of noncombustible materials. A nonstructural 2"  $\times$  6" nominal wood skirt is permitted if it is in contact with the ground or foundation.
    - 4. The roof cover shall have a class B rating or better.
    - 5. All other requirements of this section and table 51.03-A are satisfied.

Subsection Ind 51.03 (7) (e) is created to read:

- (7) Wood frame--protected (No. 7).
  - (e) Buildings of wood frame protected construction may be located less than 10 feet to a property line or other building providing any wall closer than 10 feet to its adjacent property line or building is a 4-hour fire division wall, without openings, as specified in section Ind 51.02 (13).

Subsection Ind 51.03 (8) (a) is amended and (8) (d) is created to read:

- (8) Wood frame--unprotected (No. 8).
  - (a) A building is of wood frame unprotected construction if the structural parts and enclosing walls are of unprotected wood, or unprotected wood in combination with other materials as set forth in table 51.03-A. If such enclosing walls are veneered, encased or faced with stone, brick, tile, concrete, plaster or metal, the building is also termed a wood frame unprotected building.
  - (d) Buildings of wood frame unprotected construction may be located less than 10 feet to a property line or other building providing any wall closer than 10 feet to its adjacent property line or building is a 4-hour fire division wall, without openings, as specified in section Ind 51.02 (13).

Section Ind 51.044, Table 1, is amended to read:

TABLE 1

Name of Recognized Laboratories		ASTM Standard Tests								
		E-108	E-119	E-136	E-152	E-163				
Forest Products Lab., Madison, Wis.*			X	<b></b>	X					
Natl. Bureau of Stds., Washington, D.C.			Х	X						
Ohio State Univ., Columbus, Ohio			Х	X	X	X				
Portland Cement Assoc., Skokie, Ill.			X							
Southwest Research Inst., San Antonio, Tex.	X									
Underwriters' Labs., Inc., Chicago, Ill.	Х	X	X		X	X				
Underwriters' Labs., Inc., Scarborough, Ontario, Canada	X	X	X	X	X	X				
Univ. of Calif., Berkeley, Calif.		X	X			X				
U.S. Testing Co., Hoboken, N. J.	<u></u>	X	Х			X				
Warnock Hersey International, Inc. Antioch, Calif.	Х		X		Х	X				

<sup>\*</sup>Reference based on research and development data. Facility is not available for conducting routine rating tests.

Note: For column identification and specific standards adopted, see sections Ind 51.25 (47)-(50) and (52)-(53).

Subsection Ind 51.08 (2) (b) 1. is amended to read:

(2) (b) 1. All openings in floors forming this type of separation shall be protected by vertical enclosures extending above and below such openings. The walls of such vertical enclosures shall be of not less than 2-hour fireresistive construction as specified in section Ind 51.04 and all openings therein shall be protected on one side thereof by self-closing 1-1/2-hour fire-resistive doors as specified in section Ind 51.047 and such doors shall normally be kept closed.

Subsections Ind 51.15 (2) and (3) (b) 1. are amended to read:

(2) Every standard exit door shall swing outward or toward the natural means of egress. It shall be level with the floor, and shall be so hung that, when open, it will not block any part of the required width of any other doorway, passage—way, stairway or fire escape. No revolving door, overhead rolling door or sliding door shall be considered as a standard exit. Sliding doors serving as horizontal exits, in accordance with section Ind 51.19 (2) (a) 1., shall be considered standard exits.

(3) (b) 1. Exception. When authorized persons (employes, frequenters, patrons and other such occupants) are not present, the exit door may be secured by the use of a single bar or bolt. A sign or label shall be posted on the door near the single bar or bolt. The sign or label shall bear the following: "This bolt or bar shall be kept open during periods of occupancy."

Note: The intent of this rule is to prohibit padlocks or use of a key to open a door or lock at any time. The bar and bolt exception is to give added security against intruders from the outside while protecting persons in the building from being trapped.

Subsection Ind 51.16 (5) (f) Note is repealed. Subsection Ind 51.16 (7) (a) is created to read:

(7) (a) Exception. The headroom clearance for stairways in apartments, row houses and town houses may be reduced to not less than 6 feet 8 inches.

Section Ind 51.19 is repealed and recreated to read:

Ind 51.19 HORIZONTAL EXIT. (1) General. A horizontal exit shall consist of one or more openings through an occupancy separation; a 2-hour fire-rated separation wall extending from the basement or lowest floor to the underside of the roof deck rated in accordance with line 20 of table 51.03-A; or of one or more bridges or balconies connecting 2 buildings or parts of buildings entirely separated by occupancy separations as described in section Ind 51.08.

- (2) <u>Protection of openings</u>. Openings used in connection with horizontal exits shall be protected by fire-resistive doors as specified in section Ind 51.047.
  - (a) Doors serving as required exits shall be standard exit doors and shall swing in the direction of exit travel. Where a horizontal exit serves spaces on both sides of the wall, there shall be adjacent doorways equipped with doors which swing in opposite directions.
    - 1. Exceptions. a. Sliding doors may serve as standard exit doors in factories, warehouses and similar occupancies.
      - b. The swing of the exit door(s) may comply with the exceptions permitted in the occupancy chapters of this code.
  - (b) Approved illuminated exit signs shall be provided to indicate the horizontal exit.
  - (c) Such doors shall be kept unlocked, unobstructed, provided with a self-closing device and normally be kept closed.
    - 1. Exception. Doors protecting openings used in connection with horizontal exits may be left opened if equipped with an automatic closing device actuated by smoke density or products of combustion other than heat.

Note: The department will accept detectors installed in accordance with the Standard on Automatic Fire Detectors, NFPA No. 72-E [Ind 51.27 (7a)].

- (3) Ramp slope. Where there is a difference of elevation between connected areas, the difference shall be overcome by a ramp with a slope of not more than one foot in 6.
- (4) Protection of adjacent openings. All doors and windows within 10 feet of any balcony or bridge shall be fire-resistive doors or fire-resistive windows as specified in sections Ind 51.047 and 51.048.

Subsection Ind 51.21 (7) is amended to read:

(7) <u>Maintenance</u>. All standpipe systems and equipment, whether required by this code or not, shall be maintained in an operable condition.

Section Ind 51.25 (intro. par.) Note is amended to read:

Note: Part numbers refer to 1973 set of standards unless otherwise noted.

Subsection Ind 51.25 (43) is amended to read:

(43) ESTABLISHING STRUCTURAL GRADES AND RELATED ALLOWABLE PROPERTIES FOR VISUALLY GRADED LUMBER. Part 16 ASTM Designation 245-74.

Subsection Ind 51.27 (6a) is created to read:

(6a) American Wood Preservers Bureau, 2740 S. Randolph St., Arlington, Virginia 22206, STANDARD FOR SOFT-WOOD LUMBER, TIMBER AND PLYWOOD PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES FOR ABOVE GROUND USE, AWPB standard LP-2, 1975; STANDARD FOR SOFT-WOOD LUMBER, TIMBER AND PLYWOOD PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES FOR GROUND CONTACT USE, AWPB standard LP-22, 1975; QUALITY CONTROL PROGRAM FOR SOFT-WOOD LUMBER, TIMBER AND PLYWOOD PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES FOR GROUND CONTACT USE IN RESIDENTIAL AND LIGHT COMMERCIAL FOUNDATIONS, AWPB standard FDN, 1975.

Subsection Ind 51.27 (8) is amended to read:

(8) National Forest Products Association, 1619 Massachusetts Ave. NW, Washington, D.C. 20036, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 1977 edition, with amendments to sections 2.2.5.3, 4.1.7 and 4.2.2, including DESIGN VALUES FOR WOOD CONSTRUCTION, a supplement to the 1977 edition of National Design Specification for wood Construction; THE ALL-WEATHER WOOD FOUNDATION SYSTEM, BASIC REQUIREMENTS, Technical Report No. 7, Revised 1976, with amendments to section 6.7, including Supplement to Technical Report No. 7, dated June 1, 1977, with amendments to Article 3.3.1 of section 3.3.

Subsection Ind 52.01 (2) (e) 2. a. is amended to read:

(2) (e) 2. a. Elevators, elevator lobbies, in stairways at every fifth floor, and all manual fire alarm boxes (2-way communication system).

Subsection Ind 52.04 (4) (c) 2. is amended to read:

(4) (c) 2. One accessible toilet room is required in buildings accommodating 10 or less employes and less than 25 patrons per section Ind 54.12 (1) (a) 1.

Subsection Ind 52.04 (5) (b) is amended to read:

(5) (b) Buildings 20,000 square feet or less. Multiple-use buildings with a total gross area 20,000 square feet or less, including all floors, shall be provided with a means of access to and throughout at least 2/3 of the total area of the primary floor and toilet facilities on the primary floor. Government-owned buildings and dental and medical clinics and offices shall comply with the criteria established in Table 52.04 for each specific use.

Subsections Ind 52.04 (6) (a), (b) and (c) are amended to read:

- (6) (a) More than 50% remodeled or added. If more than 50% of the total gross interior area of a building is remodeled, added to, or both, the entire building shall be provided with the requirements of Table 52.04 and sections Ind 52.04 (3), (4) and (9).
  - (b) 25% to 50% remodeled or added. If 25% to 50% of the total gross interior area of a building is remodeled, added to, or both, that part of the building which is remodeled, added to, or both, shall be provided with the requirements of Table 52.04 and section Ind 52.04 (4).
  - (c) Less than 25% remodeled or added. If less than 25% of the total gross interior area of a building is remodeled, added to, or both, the requirements of Table 52.04 and section Ind 52.04 (4) need not be provided unless the remodeling or addition involves an entrance or exit or toilet facilities.
    - 1. Exception. Additions, larger than 20,000 square feet gross area, shall comply with Table 52.04 and sections Ind 52.04 (3), (4) and (9) regardless of the percent of floor area of the entire building.

Subsection Ind 52.04 (7) (a) is amended to read:

(7) Ramp details. (a) Ramp slope. Ramps shall have a slope of not more than one foot of rise in 12 feet of run. An interior ramp with a slope of one foot of rise in 8 feet may be used to overcome a total height not greater than 2 feet. The ramps shall have a slip-resistant surface and shall have no side slope.

Subsection Ind 52.04 (8) (c) is amended to read:

- (8) (c) Grab bars. Each grab bar shall be designed and anchored to support a weight of at least 250 pounds, applied at the bar. The grab bars shall have a smooth finish, with an approximate outside diameter between one inch to 1-1/2 inches, and with 1-1/2 inches clearance between rail and wall.
  - 1. Side-mounted grab bars. Side-mounted grab bars shall be installed 33 inches high and parallel to the floor.

- 2. Rear-mounted grab bars. Rear-mounted grab bars shall be placed 33 inches high and parallel to the floor. If a tank-type water closet is used, which prohibits the installation of a grab bar 33 inches off the floor, the grab bar shall be mounted 2 inches above the top of the tank.
- 3. <u>Single-fixture toilet rooms</u>. In single-fixture toilet rooms containing one water closet and one lavatory, one grab bar shall be located on the wall adjacent to the water closet and one on the wall behind the water closet.
- 4. Bathing facilities. Grab bars for bathtubs shall be located along the side wall and one end wall and shall be mounted 4 to 6 inches above the rim of the tub. In shower stalls, grab bars shall be mounted 3 feet 6 inches above the floor of the shower stall and shall be located on the back wall and the wall opposite the seat. See Appendix for diagrams.
- 5. Seat-mounted grab bars are not permitted.

Table 52.04 is amended to read: (See following pages)

Section Ind 52.22 is repealed.

Subsection Ind 52.54 (1) Note #2 is created to read:

Note #2. The department of health and social services prohibits the use of ductless air circulating and treatment devices in licensed hospitals and nursing homes. (See Wis. Adm. Code section H 32.27 (2) (e) and Hill-Burton, "Minimum Requirements of Construction and Equipment for Hospital and Medical Facilities," HEW publication no. (HRA) 74-4000.)

TABLE 52.04
REQUIREMENTS FOR NEW CONSTRUCTION

		Access to	Interior	Toilet
Occupa	ncy and Type of Construction	Primary Floor	Circulation	Facilities
I.	All public buildings and places of employment not listed in categories II-XII	Yes	Yes <sup>1</sup>	Yes
II.	Government-owned buildings, except those occupancies listed under V and IX. D	Yes	Yes	Yes
III.	Factories, office and mercantile buildings	Yes	Yes <sup>1</sup>	Yes <sup>2</sup>
IV.	Theaters and assembly halls A. Churches (Ch. Ind 54 and 55)	Yes <sup>3</sup>	Yes <sup>1</sup> , <sup>5</sup>	Yes <sup>4</sup>
	permanent bleachers	Yes	Yes <sup>1</sup> , 5	Yes
	(Ch. Ind 54 and 55)	Yes	Yes <sup>1</sup>	Yes
	D. Recreational facilities (Ch. Ind 54 & 55) <sup>6</sup>	Yes	Yes	Yes
٧.	Schools and other places of instruction	Yes	Yes <sup>1</sup> , <sup>7</sup>	Yes
VI.	Libraries, museums and art galleries	Yes	Yes <sup>1</sup>	Yes
VII.	Places of abode A. Residential living units with individual exterior entrances	Yes <sup>8</sup> Yes <sup>11</sup>	Yes <sup>9</sup> Yes <sup>12</sup>	Yes <sup>10</sup>
	(apartment-type buildings)	Yes Yes Yes <sup>15</sup>	Yes <sup>7</sup> , 13 Yes <sup>16</sup>	Yes <sup>14</sup> Yes
VIII.	Day care centers 17	Yes	Yesl	Yes
IX.	Health care facilities  A. Hospitals <sup>18</sup>	Yes Yes Yes Yes	Yes Yes Yes Yes <sup>1</sup> , 20	Yes Yes Yes Yes
х.	Places of detention	Yes	Yes <sup>1</sup> , <sup>21</sup>	Yes
XI.	Garage occupancies	Yes	Yes <sup>1</sup>	Yes
XII.	Specialty occupancies A. Open parking structures <sup>22</sup>	Yes	Yes	Yes
XIII.	Mechanical equipment rooms, maintenance equipment and other storage rooms, janitor closets, storage warehouses, saw and feed mills, motion picture booths, portable bleachers and similar occupancies determined by the department	No	No	No

 $\underline{\text{Note:}}$  Floors used entirely for storage or mechanical purposes need not be included in determining the total gross area.

- 1 (a) All buildings. Access is not required to a mezzanine if duplicate facilities to those provided on the mezzanine are located on an accessible floor. Access is required to all special facilities for the employes such as, but not limited to, lunchrooms, change rooms and locker rooms. (b) Buildings having area 20,000 square feet or less. If the total gross area of the building, including all floors, is 20,000 square feet or less, interior circulation is required to a primary floor and throughout at least 2/3 of that floor area. Access is required to any raised or depressed area of the primary floor containing the only facility of its kind. (c) Buildings having area greater than 20,000 square feet. If the total gross area of the building, including all floors, is greater than 20,000 square feet, interior circulation is required to all floors and to at least 2/3 of the total area of each floor. Access is required to any floor level containing the only facility of its kind.
- <sup>2</sup>If the required toilet facilities in buildings accommodating 15 or less employes and 25 or less patrons are not accessible, one additional accessible toilet room for both sexes shall be provided. That toilet facility shall be located on an accessible floor and shall contain one lavatory and one water closet. A privacy lock for the door shall be provided.
- <sup>3</sup>If remodeling or adding, or both, involves an entrance or exit and constitutes less than 25% of the total square footage, access is not required to a primary floor.
- <sup>4</sup>In remodeled churches, a separate accessible toilet room for use by both sexes will be acceptable providing the toilet room is located on an accessible floor, contains one lavatory and one water closet, and is provided with a privacy lock.
- <sup>5</sup>Seating spaces, at the rate of 5% of the total capacity, with a maximum of 30 spaces required shall be integrated throughout the seating plan. One-half of the accessible seating spaces shall be designed for patrons using wheelchairs and shall be located on level grade; the othe half of the accessible seating spaces shall be designed for patrons using braces, crutches or similar aids. Ramps details [Ind 52.04 (7)] do not apply to the aisles in theater auditorium
- <sup>6</sup>In buildings containing recreational facilities, access shall be provided to 10% of the individual game areas (i.e., bowling alleys, tennis courts and similar areas), with a minimum of one. Access shall be provided to toilets, lounge areas, bar and dining areas and to the only facility of its kind of a similar nature. Access is not required to saunas, racquet ball courts, handball courts and locker rooms associated with those areas.
- <sup>7</sup>Interior circulation shall be provided to any level containing the only facility of its kind
- <sup>8</sup>Access shall be provided to at least 10% of the living units, with a minimum of one. In a complex of buildings, the accessible units shall be integrated throughout at least 50% of the buildings in the complex.
- All doors throughout the accessible living units shall be at least 32 inches wide. All cor-

Subsection Ind 53.311 (8) is amended to read:

(8) Miscellaneous units. See Ind 50.19 for all other potential masonry units.

Subsection Ind 53.312 (4) (a) is amended to read:

(4) (a) <u>High bond mortars</u>. See section Ind 50.19 for all such mortars, glues and special additives.

Subsection Ind 53.36 (1) (intro. par.) is amended to read:

(1) General. Veneer, furring and trim as used in this section refers to a facing of weather-resistant noncombustible materials securely attached to a backing, but not so bonded as to exert common action under load.

Subsection Ind 53.61 (1) (a) is amended to read:

(1) (a) "National Design Specification for Wood Construction" [Ind 51.27 (8)] and its supplement.

#### 1. Exceptions:

- a. Section 4.1.7. The provisions of this section shall also apply to reused lumber. Reused lumber shall be considered to have a duration of load factor of 0.90.
- b. Section 4.2.2. In addition to requiring grading in conformance with ASTM D 245 [Ind 51.25 (43)], lumber (including reused lumber) of species and grades not listed in the supplement to the NDS [Ind 51.27 (8)] shall be identified by the grade mark of, or certificate of inspection issued by, a lumber grading or inspection bureau or agency recognized as being competent.
- c. Section 2.2.5.3. The cumulative effects of short-time loads, such as snow, shall be considered in determining duration of load. For snow load, no greater duration of load factor than 1.05 shall be used.

Subsections Ind 53.61 (3) and (8) (intro. par.) are amended; (9) is created to read:

(3) Round poles. Allowable unit stresses for nongraded round poles used as structural members other than piling shall be 80% of the allowable unit stresses for select structural grade beams and stringers (19% moisture content) of the appropriate species as listed in the supplement to the National Design Specification for Wood Construction [Ind 51.27 (8)]. No obviously unsound load-bearing poles are to be used. Higher allowable stresses will be permitted for round poles graded in accordance with a recognized standard.

Note: ASTM designation D 3200-73 "Standard Specification and Methods for Establishing Recommended Design Stresses for Round Timber Construction Poles" is acceptable for graded round poles. ANSI Standard 05.1-1972 may be used for poles subject to transverse loads only.

- (8) <u>Timber fasteners</u>. The design and use of timber fasteners shall be in accordance with the requirements of National Design Specification for Wood Construction [Ind 51.27 (8)].
- (9) Wood foundations and walls below grade.
  - (a) <u>Design</u>. The design of wood foundations and walls below grade shall be in accordance with the following adopted standard and listed exceptions: "All-Weather Wood Foundation System, Basic Requirements," Technical Report No. 7 [Ind 51.27 (8)].

# 1. Exceptions:

- a. Section 3.3.1. Fasteners for use in preservative treated wood shall meet the requirements of this article. Fasteners of silicon bronze or copper or stainless steel types 304 or 316, as defined by the American Iron and Steel Institute classification, shall be permitted in preservative treated wood above or below grade. Fasteners or fastener materials not otherwise permitted under this article shall be permitted if adequate comparative tests for durability, including the effects associated with wood treating chemicals, demonstrate performance equal to or greater than the specified fasteners or fastener materials.
- b. Section 6.7. Six-mil thick polyethylene sheeting shall be applied over the below-grade portion of exterior basement walls prior to backfilling. Joints in the polyethylene sheeting shall be lapped 6 inches and bonded. The top edge of the polyethylene sheeting shall be bonded to the plywood sheathing. A treated lumber or plywood strip shall be attached to the wall to cover the top edge of the polyethylene sheeting. The wood strip shall extend several inches above and below finish grade level, as required to protect the polyethylene from exposure to light and from mechanical damage at or near grade. The joint between the strip and the wall shall be caulked full length prior to fastening the strip to the wall. Alternatively, asbestoscement board, brick, stucco or other covering appropriate to the architectural treatment may be used in place of the wood strip. The polyethylene sheeting shall extend down to the bottom of the wood footing plate but shall not overlap or extend into the gravel footing.
- (b) <u>Materials</u>. All lumber and plywood shall be treated in accordance with the following adopted standard and shall be identified as to conformance with such standard by an approved inspection agency:
  - 1. "Quality Control Program for Soft-Wood Lumber, Timber and Plywood Pressure Treated with Water-Borne Preservatives for Ground Contact Use in Residential and Light Commercial Foundations" [Ind 51.27 (6a)].

#### Subsection Ind 53.62 (1) (c) is amended to read:

(1) (c) Mechanically fastened trusses shall conform to part 8.4, "Timber Connector Joints," of National Design Specification [Ind 51.27 (8)].

Section Ind 53.64 is created to read:

Ind 53.64\* WOOD FOUNDATIONS. Foundations for 2-story buildings of type 7 and 8 construction may be constructed of treated wood when the design is based upon the soilbearing values contained in section Ind 53.21 and the structural design is in accordance with the standards listed in section Ind 53.61. All pressure-treated wood and plywood shall be treated and identified in accordance with adopted standards of the American Wood Preservers Bureau [Ind 51.27 (6a)].

<u>Note</u>: Section Ind 51.02 (4) (b) 1. b. requires that exterior walls below the first floor structural system be counted as a story when constructed of materials other than masonry or concrete. Therefore, buildings utilizing wood foundations will be limited to 2 levels (one-story and basement, one-story and ground floor, or 2-story with wood frost wall).

Subsections Ind 54.01 (2) (b) 2. a. and (2) (c) are amended; (4) is created to read:

- (2) (b) 2. a. Exception. Nonbearing partitions may be of fire-retardant treated wood or combustible one-hour rated materials. Openings need not be protected by rated fire door or rated fire window assemblies.
- (2) (c) Buildings with no area limitations shall have a continuous all-weather, hard-surfaced area 30 feet or more in width for a distance of not less than 50% of the perimeter of the building. These buildings shall have at least one wall facing a street for its entire length. At least 2 of the remaining building walls shall face streets for at least 50% of their respective lengths.

(Note to Revisor: Notes #1 and #2 should be relocated to follow (2) (a).)

(4) <u>Street location</u>. Streets shall be within 50 feet of the adjacent building side with no obstructions between the street and the building which will impede fire-fighting efforts. (See section Ind 51.01 (124) for definition of street.)

Section Ind 54.02 is repealed and recreated to read:

Ind 54.02 NUMBER AND LOCATION OF EXITS.

- (1) Number of exits. Every building and every floor level thereof shall have at least 2 exits.
- (2) Exceptions. One exit will be permitted in the following conditions:
  - (a) Floor levels used entirely for storage in buildings 2 stories or less in height and not over 3,000 square feet gross area per floor.
  - (b) Interior balconies or mezzanine floors not over 3,000 square feet gross area used entirely for storage.
  - (c) Open interior balconies or open mezzanine floors not over 750 square feet gross area used for purposes other than nonoccupied storage.

<sup>\*</sup>See Appendix A for furthr explanatory material.

- (d) One-story office buildings, without a basement or mezzanine, having a gross floor area, per floor, of not more than 1,800 square feet. Only one office operation per floor level shall be permitted. The single exit from the first floor or ground floor(s) shall be an outside exit serving only that floor level.
- (e) Retail establishments not over 750 square feet net area, provided there are 2 directions for exiting from the entrance door of the store.
- (3) Office suite exiting. One exit will be permitted from office suites having a floor area of not more than 1,800 square feet net area, provided there are 2 directions for exiting from the entrance door of the suite.
- (4)\* Exit distance. Additional exits shall be provided so that no part of any factory, office, mercantile or other building within the scope of this chapter will be more than 100 feet distant from an exit. Where approved automatic sprinklers are provided throughout the building, an increase in exit distance to 150 feet will be permitted. Hazardous occupancies, as specified in sections Ind 54.50 54.52, and buildings having contents which are liable to burn with extreme rapidity or from which poisonous fumes may be liberated or explosions occur in case of fire, shall have exits provided so that the maximum distance to exit is limited to 75 feet.

<u>Note</u>: The department uses the "triangulation method" to determine exit distance. The use of arcs to determine exit distance does not satisfy the intent of the rule.

(5) Exit distribution. Exits in all buildings of this classification shall be so located and distributed so as to afford the best possible egress.

Subsection Ind 54.03 (1) (b) is amended to read:

(1) (b) Exception. Less than 3 risers may be used to elevated work stations (such as pharmacy floors, computer floors and similar areas) or to altars, podiums and similar areas, not in a required exit passageway.

Subsection Ind 54.06 (1) is amended to read:

Ind 54.06 EXIT DOORS. (1) Every door which serves as an exit from a room or space accommodating more than 25 persons, or is an exit from a public passageway or stairway, shall be a standard exit door as specified in section Ind 51.15.

Subsection Ind 54.08 (3) is repealed.

(Note to Revisor: The note following 54.08 (3) should follow (2) and add a second note as follows:)

Note: Monumental stairs: See section Ind 51.02 (11) (c).

<sup>\*</sup>See Appendix A for further explanatory material.

Subsections Ind 54.12 (1) (e) (intro. par.), (2) (intro. par.) and (2) (a) 2. are amended to read:

- (1) (e) Garages, service stations and filling stations. Toilet rooms shall be provided in accordance with the requirements of this subsection.
- (2) Sanitary fixtures. In public buildings and places of employment, except taverns, restaurants, filling stations and service stations, the total number of sanitary fixtures required in the building shall be based upon the total number of occupants of the building and shall be determined from the ratios established in Table 54.12-A, but in no case shall the number of fixtures to the number of employes be less than those specified in Table 54.12-B. The total number of occupants will be considered equally divided between men and women unless a different ratio is approved by the department. The requirements of this section do not apply to the buildings exempt from toilet rooms under Ind 54.12 (1).
  - (a) 2. Filling stations and service stations shall provide at least one toilet room for each sex. A minimum of one water closet (WC) and one lavatory (L) shall be provided for each sex, but in no case shall the ratio of number of fixtures to number of employes be less than those specified in Table 54.12-B.

Subsection Ind 54.14 (3) is amended to read:

- (3) Fuel-fired space heaters, suspended furnaces, and vented and unvented unit heaters may be used without an enclosure where approved by the department. Where suspended furnaces and vented and unvented unit heaters are used without an enclosure, all such units shall be located at least 7 feet above the floor.
  - (a) Exception. The rated enclosure for heating equipment in factories may be omitted if the burner of the equipment is located at least 7 feet off the floor and the equipment is protected from physical damage (see Table 64.21).

Section Ind 54.22 is created to read:

Ind 54.22 MINI-WAREHOUSES AND MINI-GARAGES.

- (1) <u>Scope</u>. The rules of this section shall apply to mini-warehouse and mini-garage buildings as defined in (2).
- (2) <u>Definitions</u>. (a) <u>Mini-warehouse</u>. <u>Mini-warehouses</u> are unoccupied compartmentalized warehouse buildings having one or more overhead doors serving each compartment.
  - (b) Mini-garage. Mini-garages are unoccupied compartmentalized storage buildings having one or more overhead doors serving each compartment. The compartments may be used for the storage of equipment having internal combustion engines. (Also see section Ind 54.50.)
- (3) Class of construction. (a) Mini-warehouses. 1. Mini-warehouses shall be of type 8, wood-frame unprotected construction, or better.
  - 2. Storage of hazardous materials or vehicles is prohibited. The owner shall submit an affidavit to the department to the effect that the building will not be used for this purpose.

- (b) Mini-garages. Hazardous storage or vehicle storage mini-garages shall be of type 6, metal frame unprotected construction, or better.
  - 1. Exception. Type 8 wood frame unprotected construction may be used if the storage space is compartmentalized into areas of 500 square feet or less by one-hour rated walls and ceilings, including exterior walls. One-hour rated ceilings are not required provided the one-hour rated walls are extended up to and make tight contact with the roof deck.

Note: The department will accept one layer of 5/8-inch type X gypsum wallboard on the inside of the exterior walls.

- (4) Number of exits. Two exits shall be required from each storage compartment.
  - (a) Exception. One exit is permitted from compartments of 3,000 square feet or less.
- (5) Type of exits. (a) Standard exit doors shall be required for compartments with the capacity of 25 persons or more, using the ratios established in section Ind 54.05.
  - (b) Nonstandard exit doors (i.e., overhead, sliding and similar doors) may be used for compartments with a capacity of less than 25 persons.
- (6) <u>General</u>. Mini-warehouses and mini-garages shall comply with the applicable sections of this code except as otherwise specified in this section.

Subsection Ind 55.02 (1) (a) is amended to read:

(1) (a) Exception. For unlimited capacity, the fire protection of structural steel supporting the roof may be omitted for one-story buildings meeting type No. 1, 2 and 3 construction provided the building has no ground or basement floors. Heavy timber columns and roof framing may be substituted for structural steel framing. The roof decking shall be of noncombustible or heavy timber construction.

Subsections Ind 55.02 (2) (a) 1., 2. and 3. are created to read:

- (2) (a) 1. Exception. Places of worship are permitted to have a full basement and a balcony seating not more than 30 persons.
  - 2. Exception. One-story and ground-floor assembly halls of type 7 or 8 construction will be permitted providing the following conditions are satisfied.
    - a. Both levels shall exit directly to grade. One exit stair from the lower level up to the exit discharge grade is permitted providing the stair is enclosed to the outside by 2-hour fire-resistive rated construction.
    - b. The ground story exterior walls shall be of masonry or concrete.
    - c. The lower level shall be separated from the upper level by 2-hour fire-resistive rated construction or better. The first floor supports shall also be of 2-hour fire-resistive rated construction.

- d. All stairways shall be enclosed by at least 2-hour fire-resistive rated enclosures.
- e. The maximum capacity of the building is limited to 750 occupants.
- f. All other requirements of chapter Ind 55 are satisfied.
- 3. Exception. Additions to existing buildings of type 7 or 8 construction having a basement or second floor, or both, will be permitted under the scope of chapter Ind 54 providing the following conditions are satisfied:
  - a. The building contains no other occupancy except the owner's private residence.
  - b. Public occupancy is prohibited in the basement and second floor.
  - c. The addition does not contain a basement or second floor.
  - d. The public occupancy areas are divided by partitions, dividers and similar objects into definable areas having a maximum capacity of 100 occupants each. Each definable area shall have 2 independent, remote exits to the outside.
  - e. The total capacity of the building is limited to 750 occupants.
  - f. All other requirements of chapter Ind 54 are satisfied.
  - g. This exception does not apply to buildings originally constructed within 5 years of submission of plans for the addition.

#### Subsection Ind 55.05 (4) is created to read:

(4) An occupancy separation is not required between a church and a day school operated by the church, providing the building complies with the requirements of chapters Ind 55 and Ind 56. Where these 2 chapters differ, the more stringent requirement shall apply.

Subsection Ind 55.09 (1) (Intro. par.) is amended and (4) (a) is created to read:

- (1) Every stairway in a theater or assembly hall shall be enclosed as specified in section Ind 51.18 with the following exceptions:
- (4) (a) Exception. Less than 3 risers may be used to elevated altars, podiums and similar areas in churches provided the elevated area is not part of a required exit passageway.

### Subsection Ind 55.32 (2) is amended to read:

(2) <u>Sanitary fixtures</u>. The number of water closets and urinals required for the total number of occupants of each sex shall be determined in accordance with the ratios established in Table 55.32, but in no case shall the ratio of number of fixtures to number of employes be less than those specified in Table 54.12-B. The total number of persons will be considered equally divided between men and women unless a different ratio is established.

Subsection Ind 55.33 (2) is amended to read:

(2) First-aid standpipes. First-aid standpipes shall be provided in all buildings, except churches and places of worship, having theaters and assembly halls with an occupancy load of more than 750 persons, unless an approved automatic sprinkler system is installed. First-aid standpipes shall also be provided on the stage of every theater and assembly hall where a fire curtain is required.

Subsection Ind 56.02 (4) (a) 1. is amended to read:

(4) (a) 1. Exception. For unlimited capacity, the fire protection of structural steel supporting the roof may be omitted for one-story buildings meeting type No. 1, 2 and 3 construction provided the building has no ground or basement floors. Heavy timber columns and roof framing may be substituted for structural steel framing. The roof decking shall be of noncombustible or heavy timber construction.

Subsection Ind 56.08 (2) is amended and (3) is created to read:

- (2) Classroom exit door width and swing. (a) Classroom doors serving 50 persons or less. Classroom doors serving classrooms with a capacity of 50 persons or less shall be not less than 3 feet 0 inches in width. The doors may swing into the classroom.
  - (b) <u>Classroom doors serving a capacity of 51-100 persons</u>. Classroom doors serving classrooms with a capacity of 51 to 100 persons shall be not less than 3 feet 0 inches in width and shall swing outward toward the means of egress.
  - (c) Classroom doors serving more than 100 persons. Classroom doors serving classrooms with a capacity of more than 100 persons shall be standard exit doors and shall swing outward toward the means of egress.
- (3) All other exit doors. Doors serving areas other than classrooms shall comply with section Ind 54.06.

Following section Ind 56.20, create heading:

#### PART II--RELOCATABLE CLASSROOMS

Sections Ind 56.30, 56.31, 56.32, 56.33, 56.34, 56.35, 56.36, 56.37 and 56.38 are created to read:

Ind 56.30 SCOPE. This part provides the minimum requirements for the design and construction of relocatable classrooms as defined in section Ind 56.31.

Ind 56.31 DEFINITIONS. (1) <u>Relocatable classrooms</u>. Relocatable classrooms are mobile home type structures located on permanent foundations and equipped and used for educational instruction.

Ind 56.32 GENERAL. Relocatable classrooms shall comply with the applicable sections of this code except as otherwise specified in this part.

Ind 56.33 ANCHORING REQUIREMENTS. Provisions acceptable to the department for the prevention of overturning of the relocatable classroom as a result of wind pressure shall be made.

Note: The department accepts provisions such as ground anchors installed in accordance with ASNI standard A 119.1.

Ind 56.34 EXIT DOORS AND EXIT LIGHTS. (1) Exit doors. Exit doors shall be at least 3 feet 0 inches in width.

(2) Exit lights. Illuminated exit lights are not required in relocatable classrooms.

Ind 56.35 SUBDIVISIONS AND FIRE STOPS. Relocatable classrooms connected to another building shall be provided with subdivisions and fire stops as specified in section Ind 56.04.

Ind 56.36 BARRIER-FREE REQUIREMENTS. Access to, interior circulation and toilet facilities for the physically disabled need not be provided for the relocatable classroom if the course(s) taught in the relocatable classroom are available in accessible facilities at the same school site.

Ind 56.37 SANITARY FIXTURES. (1) Sanitary fixtures for relocatable classrooms shall be provided in accordance with the requirements of sections Ind 52.50 through Ind 52.64 and section Ind 56.16.

(a) Exception. Sanitary fixtures within the relocatable classroom structure need not be provided if the sanitary fixtures in the main school building are available for use and the relocatable classroom structure is connected to the main school building with an enclosed passageway.

Ind 56.38 FIRE ALARMS. Relocatable classroom structures containing more than 2 classrooms or connected to another building shall be provided with a fire alarm system as specified in section Ind 51.24.

#### Create heading:

# PART III--MOBILE TRAINING UNITS

Sections Ind 56.40, 56.41, 56.42, 56.43, 56.44, 56.45 and 56.46 are created to read:

Ind 56.40 SCOPE. This part provides the minimum requirements for mobile training units as defined in section Ind 56.41.

Ind 56.41 DEFINITIONS. (1) Mobile training units. Mobile training units are trailer type units constructed and left on wheels. Mobile training units are used for education purposes at one site for a period of time no greater than 9 weeks per year.

Ind 56.42 GENERAL. Mobile training units shall comply with the applicable sections of this code except as otherwise specified in this part.

Ind 56.43 EXIT DOORS AND EXIT LIGHTS. (1) Exit doors. Exit doors shall be at least 3 feet 0 inches wide.

(2) Exit lights. Illuminated exit lights are not required for mobile training units.

Ind 56.44 BARRIER-FREE REQUIREMENTS. Access to, interior circulation and toilet facilities for the physically disabled need not be provided for the mobile training units if the course(s) taught in the mobile training units are available in accessible facilities at the same school site.

Ind 56.45 SANITARY FIXTURES. (1) General exemption. Sanitary fixtures are not required in the mobile training units provided the sanitary fixtures in the main school building are available for use.

- (2) General requirements. Toilet rooms within the mobile training unit shall comply with the requirements of sections Ind 52.50 through Ind 52.64 and section Ind 56.16.
  - (a) Exceptions. 1. The requirements specified in section Ind 52.59 are not applicable provided the toilet room door is equipped with a privacy lock.
    - 2. Accessible toilet facilities for the physically disabled need not be provided if accessible toilet facilities in the main school building are made available.

Ind 56.46 FIRE ALARMS. Mobile training units used individually are exempt from the provisions of section Ind 56.19.

Subsection Ind 57.07 (6) is created to read:

(6) Exits serving portions of buildings without sleeping rooms or living units (i.e., hospital and nursing home ancillary areas, basements of apartment buildings, and similar areas) shall comply with the requirements of sections Ind 54.02 through 54.07.

Section Ind 57.09 is numbered Ind 57.09 (1) and subsection (1) (a) is created to read:

(a) Exception. Sliding glazed patio-type doors may serve as the second exit from individual living units. The operable leaf of the door shall be located on the interior side of the track. A means to prevent accumulation of snow and ice in the door track or freezing of the door shall be provided.

Section Ind 57.11 is repealed and recreated to read:

Ind 57.11 ILLUMINATION AND EXIT LIGHTS. (1) Illumination. (a) Buildings having more than 4 living units accommodating more than 30 persons or accommodating transients shall have public passageways, stairways and exit doors illuminated from one hour after sunset to one hour before sunrise.

(b) The illumination requirements specified in (a) shall be provided at all intersections of passageways, at all exits and at the head, foot and landing of every stairway.

(2) Exit lights. Every required exit, other than those within private living units, from each floor shall be indicated by an approved illuminated, red exit sign bearing the word EXIT or OUT in plain letters not less than 5 inches in height.

Subsection Ind 57.25 (1) Note is created to read:

<u>Note:</u> The intent of this section is to allow piercing of the vertical occupancy separation by plumbing and electrical system components.

Section Ind 57.26 is created to read:

Ind 57.26 RESIDENTIAL HEALTH CARE FACILITIES. All new residential health care facilities, including hospitals and nursing homes, shall be provided with access to a primary floor, interior circulation and toilet facilities in accordance with section Ind 52.04 and the following requirements:

- (1) Interior circulation. Twenty percent of all rooms designated for patient use, and the toilet rooms provided for these rooms, shall be accessible to the physically disabled. The accessible rooms shall be integrated throughout all in-patient and out-patient areas. If an isolation facility is provided, at least one of the required accessible patient rooms shall be located in such facility.
- (2) <u>Toilet facilities</u>. The accessible patient toilet facilities shall be designed to permit unimpeded use by persons using standard wheelchairs. Fixture configuration, door swing and open space will determine the minimum size of accessible toilet rooms.

<u>Note</u>: See Appendix for examples of acceptable fixture layouts and door location and swing. In all cases where the toilet room door swings into the room, a 60-inch diameter turning space, with the door closed, is required.

- (3) <u>Bathing facilities</u>. Where bathing facilities are required, the bathtub and shower designs shall comply with the following requirements:
  - (a) Single accessible bathing facility. If accessible bathing facilities are not provided in all of the required accessible patient toilet rooms, at least one centrally located accessible bathing facility shall be provided near each nursing station on each floor. The bathing facility shall be available to both sexes and shall be accessible from a public corridor or public area.

<u>Note</u>: Shower stalls are preferred to bathtubs. See Appendix for examples of accessible bathing facilities.

(b) <u>Bathtubs</u>. The bathtub shall be equipped with a hand shower with a flexible hose not less than 6 feet in length. A seat of nonabsorbent material shall be provided and shall be mounted 17 to 20 inches above the floor of the bathtub, and may be either folding, retractable or fixed, unless an alternate method, such as a lift, is provided. Grab bars shall be mounted on 2 sides of the bathtub and shall comply with the requirements of section Ind 52.04 (8) (c) 4. (See Appendix for examples of accessible bathroom arrangements).

<u>Note</u>: Refer to Wis. Adm. Code chapter H 62--Design, Construction, Installation, Supervision and Inspection of Plumbing, for requirements pertaining to the plumbing system, including the use of vacuum breakers.

- (c) Showers. The shower stalls shall be equipped with level water controls. A seat of nonabsorbent material shall be provided and located 17 to 20 inches from the floor of the shower, and may be folding, retractable or fixed. Grab bars shall be mounted on 2 sides of the shower stall and shall comply with the requirements of section Ind 52.04 (8) (c) 4. (If a special wheelchair is provided for use in the shower, the grab bars and seat are not required.) The threshold to the shower stall shall be no more than 1/2 inch and the edges shall be beveled to provide a smooth, unbroken surface to accommodate a wheelchair. (See Appendix for examples of accessible shower room arrangements.)
- (4) Existing construction (remodeled or additions). Remodeling, additions, or both, to existing ancillary areas shall comply with the requirements of sections Ind 52.04 (6), Ind 57.26 and Table 57.26. Remodeling, additions, or both, to existing patient room areas shall comply with the requirements established in section Ind 57.26 and Table 57.26. The maximum number of required accessible patient sleeping rooms having toilet rooms in or for these rooms is 20% of the total number of patient sleeping rooms.

TABLE 57.26

Remodeling, additions, or both,	Gross Interior Area of Entire Building						
to existing facilities	Less than 25%	25-50%		More than 50%			
Remodeling, additions, or both, to existing patient sleeping rooms.	Entrances or toilet facili- ties being re- modeled, added to, or both, shall be acces- sible and comply with Ind 52.04 (4).	20% of the pa- tient sleeping rooms being re- modeled, added to, or both, shall be accessible and		20% of the total number of patient sleeping rooms shall be accessible and comply with Ind 52.04 (4).			
	25% or less		More	e than 25%			
Remodeling, additions, or both, to ancillary areas (such as surgery labs or similar areas), but no physical remodeling, additions, or both, to patient sleeping rooms.	Entrances or toilet faci- lities being remodeled, added to, or both, shall be accessible and comply with Ind 52.04 (4).		At least one toilet room per 50 patients, but not less than one toilet room per nursing station, shal be available to both sexe and shall be accessible from a public corridor or public area.				

Subsection Ind 62.10 (1) Note is amended to read:

 $\underline{\text{Note}}$ : The department is currently working with a project committee to develop rules for enclosed parking structures.

Subsection Ind 62.24 (1) (b) Note is amended to read:

<u>Note</u>: Open parking structures in excess of 60 feet in height are exempt from the administrative rules and legislation requiring automatic fire sprinkler systems (see Ind 52.01 (1) and (2) and section 101.14, Wis. Stats.).

Subsection Ind 62.26 (2) Note is created and (4) is amended to read:

Note: In all cases, required exit stairs are required to be enclosed (see Ind 62.27). If the designer elects to increase the exit distance by measuring to the stair enclosure, the enclosure must then have at least a noncombustible one-hour (NC-1) rating.

(4) Type of exits. At least one-half of the exits required in this section shall be standard exits to grade, stairways or horizontal exits as specified in sections Ind 51.15, 51.16 and 51.19, respectively. The other exits may be non-parking access ramps with a maximum slope of 1:6.

Section Ind 62.27 Note is created to read:

Note: It is the intent of this rule to require all required exit stairs to be enclosed. If the designer elects to measure the exit distance to the stair enclosure, the enclosure must then be rated [see Ind 62.26 (2)].

Subsection Ind 62.28 (1) (a) is amended to read:

(1) <u>Handrails</u>. (a) Handrails, or equivalent, not less than 3 feet 6 inches in height, conforming to the requirements of section Ind 51.16 (5) (f), shall be provided on all open sides of the structure on each level.

Subsection Ind 62.30 (1) (d) 2. is amended to read:

(1) (d) 2. The department will accept open parking structures without standpipes if clearances are provided to allow fire-fighting vehicles access throughout the structure.

Section Ind 62.34 is created to read:

Ind 62.34 BARRIER-FREE REQUIREMENTS. (1) <u>Parking spaces</u>. Accessible parking spaces shall be provided in accordance with the applicable requirements specified in section Ind 52.04 (3) (a).

(2) Toilet facilities. Toilet facilities provided for the employes, as specified in section Ind 62.31 (2), shall comply with the requirements of section Ind 52.04(4) (c).

Following section Ind 62.34, create the following heading:

PART II--TELEVISION AND RADIO TRANSMITTING AND RECEIVING ANTENNA

Sections Ind 62.35, 62.36, 62.37, 62.38, 62.39, 62.40 and 62.41 are created to read:

Ind 62.35 SCOPE. The requirements of this part shall apply to the outdoor portion of all apparatus, more than 12 feet in height, used for transmitting and receiving television or radio waves.

- Ind 62.36 CONSTRUCTION REQUIREMENTS. All television and radio antenna systems, including the supporting tower or mast, shall be constructed of galvanized steel or other corrosive-resistant noncombustible material. Where approved by the department, towers constructed of wood or wood poles set in the ground may be used to support antenna systems, but no wood tower or wood pole may be mounted on the roof of any building structure.
- Ind 62.37 DESIGN LOADS. The antenna and tower shall be designed to support the dead load of the structure plus an ice load at least 1/2 inch in radial thickness. The ice load shall be computed only upon the wires, cables, messengers and antenna.
- (1) <u>Wind loads</u>. The tower or mast shall be braced or guyed and anchored to resist a horizontal wind pressure of not less than 30 pounds for every square foot (net area) of exposed surface. Guy wires shall not be anchored to a chimney or to any roof ventilator or vent pipe.
- Ind 62.38 ANTENNA SYSTEMS ON BUILDINGS. Antenna systems installed on the roof of a building shall not be supported by or attached to a chimney. All such installations shall be mounted on an independent platform or base and anchored in place. The platform or base of the tower shall be sized to distribute the weight of the structure so the roof construction will safely support the weight of the structure in addition to the required live and dead roof loads.
- Ind 62.39 SETBACKS. All antenna systems shall be so installed that no part of the structure will be nearer to a street, or other public thoroughfare, than the height of the antenna as measured from its platform or base to the topmost point. No wires, cables, or guy wires shall extend over any street or other public thoroughfare or over any electric power or communication lines.
- Ind 62.40 ANTENNA SYSTEM SUPPORT. Poles used for electric power or for communication lines shall not be used for supporting or for guying any antenna system. Where antenna installations are so located that damage will be caused to adjacent power or communication lines by the falling of the antenna structure, a separate safety wire shall be attached to the top of the tower and secured in a direction away from the power or communication lines.
- Ind 62.41 ELECTRICAL REQUIREMENTS. Electrical installations in connection with antenna systems, including the grounding of the tower or mast, shall comply in all respects with the requirements of the Wisconsin state electrical code.

Subsection Ind 63.01 (1) is amended to read:

(1) Architectural and mechanical. Architectural and mechanical plans and specifications shall be submitted in accordance with the requirements outlined in sections Ind 50.07 and Ind 50.12 and shall contain details and data to demonstrate compliance with the requirements of this chapter. Such information shall include, but is not limited to: design criteria, exterior envelope component materials, resistance values of insulating materials, and the thermal performance value of the building envelope. Size and type of equipment, system and equipment controls and equipment efficiencies shall be submitted with the mechanical plans.

<u>Note:</u> The resistance values for insulating materials are expressed in Fahrenheit degrees per Btu/(hour)(square foot).

Section Ind 64.05, Table 1, is amended to read: (see following page)

Subsection Ind 64.05 (2) (b) is amended to read:

(b) Outdoor air requirement and percent of openings waived. The requirement for outdoor air or percent of openings may be omitted in large volume spaces containing 5,000 cubic feet per occupant.

Subsections Ind 64.06 (3) (a) and (3) (c) are amended to read:

- (a) Six air changes per hour. The total air movement for all occupancies shall be at least 6 air changes per hour as specified in Table 1 of section Ind 64.05.
- (c) <u>Air movement requirement waived</u>. The air movement requirement for 6 air changes per hour may be omitted in the following applications:
  - 1. Spot heating.
  - 2. Buildings containing large volume spaces of at least 5,000 cubic feet per occupant and where the requirement for outside air is waived in accordance with section Ind 64.05.
  - 3. Buildings utilizing ventilation classification (b) with percentage of openings as specified in Table 1 of section Ind 64.05.

Subsection Ind 64.09 (5) is amended to read:

(5) Burners in negative pressure locations. An atmospheric burner shall not be installed where the space in which the burner is located is under negative pressure due to an exhaust system.

Subsection Ind 64.20 (5) Note is created to read:

<u>Note</u>: The purpose of the technical report is to show that the equipment is in complete compliance with the national standard by which the equipment was designed, constructed and tested.

Section Ind 64.21, Table 64.21, is amended to read: (see following page)

TABLE 1

ura yayan mar dayan madamin maraya a Tabban Taman mada Antar Taman miya Antar Taman Affilia (1990). Taman maraya maraya mada Antar Maraya (1990).			Ventillation Regul	rements!		
	Minimum		Determination of	Capacity CFM/no		
Jse or Occupancy	Inside	Ventilation	No. of Persons3.	ľ	sq. ft.	Applicable
	Temp.	Classifica-	Net sq. ft.	% of	Floor	Occupancy Code Section
	(Deg. F)	tion <sup>2</sup>	per person	OpenIngs"	Area	(Ind No.)
actories, office and mercantile buildings					1	
Barber and beauty salous	67	(b)	20	3		64.54
(where hair spray is used)	67	(d)	20			64.18
Canning factories	60	(b)	75	3		64.54, 64.68
Conference rooms	67	(b)	7	3		64.54
Court rooms	67	(b)	6	3		64.54
Factories and machine shops,	60	(b)	75	3		64.54
First aid rooms	67	(b)	6	3	·	64.54
Flammable liquids storage	NMR	(d)	76	3		64.18
Foundries and boiler shops	50	(b)	75	, ,	]	64.13, 64.54
Funeral homes: Chapel	67	(b)	6	5		64.54
Embalming room	67	(d)			2	64.54
Offices	67	(b)	75	3		64.54
Places of worship, entertainment and	1 "	(5)			1	1
recreation which accommodate less	ļ				ł	
than 100 persons	1 · · · · +	(b)	†	3		64.54
Printing establishments	60	(b)		3	·	64.18, 64.54
Retail establishments (basement)	65	. (ъ)	40	. 3		64.54
(other floors)	65	(b)	60	3		64.54
Shopping malls corridor areas	NMR	(g)	Aggregate capa-			64.54
(except mercantile areas)	1		city of stores			
		1	served by mall	1		
Security vaults (occupied)	65	(a)	300			64.54
Warehouses	NMR					64.18, 64.54
Theaters and places of assembly (which	1			ļ		
accommodate more than 100 persons)	İ		1	i		Ì
Arenas and field houses (use seated area)	60	(a)	, 6			64.55
Armories (drill halls)	55	(a)	30	_ <del>_</del>		64.55
Assembly halls (other than church)	67	(a)	6		! <del></del>	64.55
Bowling alleys	67	(a)	15	<b> </b> .		Based on occupied are
Cafeterias, dining areas, restaurants,				ł	1	
billiard rooms	67	(a)	15			64.55
Churches and places of worship:		1		_		64 55 40
Chapels	67	(b)	. 6	3		64.55 (3)
Dining and social rooms	67	(b)	15 6	3		64.55 (3)
Nave or auditorium	67	(b)	20	3		64.55 (3)
Sunday school rooms	67 67	(b) (a)	6	3		64.55 (3) 64.55
Club rooms (seated) (unseated)	67	(a)	15			64.55
Dance halls	67	(a)	15	! <u></u>		64.55
Ice skating rinks (indoor)	NMR	(a)	15			64.55
Ice resurfacing (indoor)	NMR	(d)	}			64.18, 64.55
Lodge halls	65	(a)	15			64.55
Roller skating rinks (indoor)	50	(a)	15			64.55
Taverns	67	(a)	20			64.55
Tennis courts (indoor)	55	(a)	·			64.55
Theaters	67	(a)	6			64.55
Lobbies	65	(a)	15			64.55
Lounge rooms	67	(a)	15		l	64.55
Motion picture booths	60	(a) or (c)			2	64.55 (5)
lospitals and nursing homes		1		ļ	}	
Autopsy rooms	60	(d)			2	64.57
Bathrooms, toilet rooms	75	(d)			2 or 60	64.57, 64.65
	1	1	1	į.	CFM/TF	Į.
Day rooms (living, dining and		4.5	1.5	1 -		
recreational areas)	-75	(p)	15	5		64.57
Delivery rooms	70	(b)		5	J	64.57
Laboratories (general)	67 60	(a) (c)				64.18 64.65
Laundries	75	(b)		5	2	64.57
Nurses stations	70	(a)				64.57
Operating rooms	75	(b)	1	5	1 ==	64.57
Patient rooms Recovery isolation rooms nurseries	75	(b)		5	<u></u>	64.57
Recovery, isolation rooms, nurseries Storage rooms for flammable anesthetics	60	(e)		1	2	64.18, 64.57
Storage rooms for frammable anesthetics Storage rooms for bedpans, soiled linens,	1	1	1	1	1 -	1
soiled utility, and sterilizing	1	1		Ì	1	
	60	(d)			2	64.57
	75	(b)	_	5		64.57
equipment rooms Therapy (physical and hydrotherapy)				5		

- (a) Requires a supply of outside air and an equal amount of exhaust ventilation be provided at the rate of 5 CFM per person and a minimum air movement of 6 air changes per hour.
- (b) Requires a supply of outside air and an equal amount of exhaust ventilation at the rate of 5 CFM per person and a minimum air movement of 6 air changes per hour, or a percentage of openings.
- (c) Requires a supply of outside air and exhaust determined on the basis of CFM per square foot of floor area.
- (d) Requires exhaust ventilation determined on the basis of CFM per square foot of floor area. The area shall be provided with negative pressure relative to adjacent areas. A supply of outside air is required when the total building exhaust exceeds one air change per hour, unless otherwise exempted. In multiple-use occupancies, the area of each occupancy shall be considered separately.
- (e) Requires a supply of outside air and exhaust determined on the basis of CFM per square foot of floor area. The area shall be provided with a negative pressure relationship with respect to the adjacent areas.
- (f) Requires a percentage of openings.
- (g) Does not require a separate supply of outside air provided the outside air introduced in the store areas adjacent to the mall is circulated through and exhausted from the shopping mall corridor area.

LF = Lineal foot.

NMR = No minimum requirements.

TF = Toilet facilities (water closets and urinals).

+See Theaters and places of assembly for inside design temperature and net square feet per person.

lyentilation requirements. See sections Ind 64.06, 64.07 and 64.09 for mechanical, natural and exhaust ventilation systems; and sections Ind 64.11 through 64.18 for ventilation and air standards.

<sup>&</sup>lt;sup>2</sup>Ventilation classifications.

<sup>&</sup>lt;sup>3</sup>Determination of number of persons. In determining the number of occupants in a given space, the department will accept the net square feet per person as listed in Table 1 or the actual number of persons, provided the expected occupancy is indicated on the plans and is reasonable. Where no value is indicated for net square feet per person, use the actual number of occupants to determine the required amount of outside air.

<sup>\*</sup>Percent of openings. See section Ind 64.07 for special considerations on natural ventilation.

TABLE 1 (CONTINUED)

THE STATE OF THE S	Samples of white page 20					
	ł		Basis o	Capacity		
Use or Occupancy	Mentmum	]	Determination of		CFM/net	)
. ,	Inside	Ventilation	No. of Persons 3	]	sq. it.	Applicable
	Temp.	Classifica-	Net sq. ft.	% of	Floor	Occupancy Code
	(Deg. F)	tion-	per person	Openings4	Area	Section (Ind No.)
Schools and other places of instruction	ł	}		1	}	
Administrative office space	67	(b)	75	3		64.56
Arts, crafts, drafting rooms	67	(a)	30			64.56
Classrooms	67	(a)	20	l		64.56
Gymnasiums, field houses, auditoriums,		}	<u> </u>	ļ	1	
theaters (fixed sents) Bleachers	55-67	(a)	6			64.56
Locker and shower rooms	70	(a) (c) or (d)	2.75 or 18"/LF			64.56
Natatoriums	76	(c) or (a)			2	64.65
Chlorine storage rooms	NMR	(a)			1 or 2/pool sf.	64.66 64.65
Home economics	67	(a)	30			64.56
(cooking)	67	(d)			200/cA	64.67
Kitchens	60	(c) or (d)			2	64.67
Laboratories (science)	67 .	(a)	30			64.18
Lecture halls Libraries and resource centers	67	(a)	6			64.56
Reading rooms	67	(a)	20			64.56
Stack areas	67	(a) (a) or (d)	20			64.56
Lunchrooms	65	(a) or (d)	100 10		1/4	64.56
Museums and art galleries	67	(a)	40			64.56 64.56
Music rooms (instrumental)	67	(a)	20			64.56
(vocal)	67	(a)	10			64.56
Special education	67	(a)	35			64.56
Study halls, common areas with	1			ļ :		
nonfixed seating Toilet rooms	67	(a)	10			64.56
Vocational shops:	65	(d)			2 or 60/TF	64.56
With vehicle service and repair	60	(c) or (d)		1	0.17	
Without vehicle service and repair	60	(a)	50		3/4	64.18
Wardrobes	NMR	(d)	J0	==	2	64.18 64.65
Penal institutions and places of detention		, ,			2	64.63
	}	]		]		•
Cells	67	(a)		-		64.58
Residential occupancies		1				
Living and sleeping areas	67	(f)		5		: 6/ 50
Day care facilities	67	(b)	25	1		64.59
	"	(8)	35	5		64.60
Garages and service stations		1		1		
Automobile showrooms	60	(b)		3		64.64
Garages: 6 or more vehicles	NMR	(c) or (d)			. 1/2	64.63
Repair areas Vehicle service buildings	60	(c) or (d)			3/4	64.61
·	60	(c) or (d)			1/2	64.62
General sanitation and service areas	-	1 1				
Chlorine storage rooms	NMR	(d)	<u></u>		1	64.65
Cloak rooms	NMR	(d)			2	64.65
Janitor closets	NMR	(d)			2	64.65
Locker rooms and shower rooms	70	(c) or (d)			2	64.65
Toilet rooms	65	(d)	<del></del>	)	2 or 60/TF	64.65
Natatoriums	76	(c)			1 or 2/pool sf.	64.66
Kitchens	60	(c) or (d)			2	64.67
Seasonal occupancies	1			[ ]	-	
Camps and lodges:		1 1				
Dining and recreational areas	NMR	(ъ)	15	,		(1 (0
Living and sleeping areas	NMR	(f)		3 5		64.68
Club houses	NMR	(b)	15	3		64.68 64.68
Drive-ins	NMR	(b)	1.5	3		64.68
Kitchens	NMR	(c) or (d)			2	64.67
Outdoor toilets	NMR	(d)	the day	l l	2	64.65

- (a) Requires a supply of outside air and an equal amount of exhaust ventilation be provided at the rate of 5 CFM per person and a minimum air movement of 6 air changes per hour.
- (b) Requires a supply of outside air and an equal amount of exhaust ventilation at the rate of 5 CFM per person and a minimum air movement of 6 air changes per hour, or a percentage of openings.
- (c) Requires a supply of outside air and exhaust determined on the basis of CFM per square foot of floor area.
- (d) Requires exhaust ventilation determined on the basis of CFM per square foot of floor area. The area shall be provided with negative pressure relative to adjacent areas. A supply of outside air is required when the total building exhaust exceeds one air change per hour, unless otherwise exempted. In multiple-use occupancies, the area of each occupancy shall be con-
- (e) Requires a supply of outside air and exhaust determined on the basis of CFM per square foot of floor area. The area shall be provided with a negative pressure relationship with respect to adjacent areas.
- (f) Requires a percentage of openings.
- (g) Does not require a separate supply of outside air provided the outside air introduced in the store areas adjacent to the mall is circulated through and exhausted from the shopping mall corridor area.

CA = Cooking appliance.

LF = Lineal foot.

NMR = No minimum requirements.

TF = Toilet facilities (water closets and urinals).

+See Theaters and places of assembly for inside design temperature and net square feet per person.

 $<sup>\</sup>frac{1}{\text{Ventilation requirements.}} \quad \text{See sections Ind 64.06, 64.07 and 64.09 for mechanical, natural and exhaust ventilation systems; and sections Ind 64.11 through 64.18 for ventilation and air standards.}$ 

<sup>&</sup>lt;sup>2</sup>Ventilation classifications.

<sup>3 &</sup>lt;u>Determination of number of persons</u>. In determining the number of occupants in a given space, the department will accept the net square feet per person as listed in Table 1 or the actual number of persons, provided the expected occupancy is indicated on the plans and is reasonable. Where no value is indicated for net square feet per person, use the actual number of occupants to determine the required amount of outside air.

<sup>&</sup>lt;sup>4</sup>Percent of openings. See section Ind 64.07 for special considerations on natural ventilation.

#### TABLE 64.21--LOCATION OF EQUIPMENT

			VENTED UNITS		1	UNVENTED	UNITS	ELECTRIC	WATER-LOW PRES. STEAM
Location and Type of Occupancy				Gas	Gas or	Gas		Furnaces, Unit Reaters, Heat	Unit Ventilators, Heaters, Makeup Air
	+	1 Furnace	Gas or Oil	or Oil	Oil Space		Gas	Pumps, Basebrd	Units, Baseboard
	Central	Suspended	Unit Heater	Infrared	Heater	Makeup Air	Infrared	Heaters, etc.	Heaters, etc.
	Rated En-	, 45010	7' above	7' above		7' above	7' above	I	
	closure	floor	floor	floor	ļ	floor	floor		
Type of occupancy				1					
Factories	Yes <sup>2</sup>	Yes	Yes	Yes	N.P.	Yes	Yes		
Mercantile buildings	Yes	Yes	Yes	N.P.3	N.P.4	N.P.	N.P.	S	. 6
Office buildings	Yes	Yes	Yes	N.P.	Yes	N.P.	N.P.	IE	
Places of assembly, entertainment,					1		1	OCCUPANCIES	OCCUPANCIES
recreation and dining (less than		1			[	1	ļ	ΡΑ	T. A.
100 persons)	Yes	Yes	Yes	Yes	N.P.	N.P.5	N.P.	CO	5
Tennis facilities	Yes	Yes	Yes	Yes	N.P.	N.P.	N.P.	8	8
Theaters and places of assembly,			1	1	ł		İ	H	17
entertainment, and worship								ALL	ALL
(100 persons or more)	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	NI	N I
Restaurants	Yes	N.P.	N.P.	N.P.	N.P.	N.P.5	N.P.	8	1
Tennis facilities (court areas only)	Yes	Yes <sup>6</sup>	Yes <sup>6</sup>	Yes	N.P.	N.P.	N.P.	PERMITTED	PBRALLTED
Tennis facilities (all other areas)	Yes	N.P.6	N.P.6	N.P.	N.P.	N.P.	N.P.	Į į	
Schools & other places of instruction	Yes	N.P. 7	N.P. 7	N.P.	N.P.	N.P.	N.P.	M A	H H
Hospitals, nursing homes & penal insts	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	ER	ii ii
Residential occupancies	Yes	N.P.	N.P.	N.P.	N.P.8	N.P.	N.P.	P.	a.
Hazardous occupancies		ľ		)		1	ľ		1 -
Garages	Yes	Yes <sup>9</sup>	Yes <sup>9</sup>	Yes <sup>9</sup>	N.P.	Yes <sup>9</sup> ·	Yes <sup>9</sup>		
Aircraft hangars	Yes	Yes <sup>10</sup>	Yes <sup>10</sup>	Yes <sup>10</sup>	N.P.	Yes <sup>10</sup>	Yes <sup>10</sup>		1
Day care centers	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	1	

N.P. = Not permitted.

Direct-fired makeup air units shall be mechanically exhausted in the range of 90% to 110% of the air supplied.

The rated enclosure may be omitted if the burner of the equipment is located at least 7 feet off the floor [section Ind 54.14 (3) (a)].

<sup>&</sup>lt;sup>3</sup>Permitted in mercantile buildings having a total capacity of less than 100 persons.

Permitted in retail stores less than 1500 square feet gross area with combustion air ducted to unit.

5Permitted in kitchens to provide makeup air for kitchen exhaust systems if located outside building or in a rated enclosure.

<sup>6</sup>Spectator areas in tennis facilities may be served by suspended equipment located in court areas.

Permitted only in shops with a 4-hour separation from other parts of the building.

<sup>&</sup>lt;sup>8</sup>Gas-fired, direct-vent wall furnaces are permitted in apartments and motels.

<sup>&</sup>lt;sup>9</sup>Suspend heating units in garages at least 8 feet off the floor.

<sup>10</sup> Suspend unit 10 feet above the upper surface of the wings or engine enclosure of the aircraft.

<sup>&</sup>lt;u>Unlisted occupancies</u> - Use the above occupancy that is most similar to the listed occupancy.

Clearances - Equipment shall be installed in accordance with the clearances from combustibles indicated on the name plate of the unit.

Subsection Ind 64.22 (1) (b) is amended and (7) is created to read:

- (1) (b) Installation notification. The installing contractor shall notify the department of boiler installation, in accordance with the requirements of section Ind 41.05, before the boiler or pressure vessel is put into operation.
- (7) Floor-standing vented or unvented equipment. Floor-standing, vented or unvented unit heaters, furnaces and boilers in metal fabricating plants, foundries and machine shops are exempt from the requirements of section Ind 54.14.

Subsections Ind 64.23 (1), (3) and (4) are amended to read:

- (1) Pipe sizes and arrangement. All supply and return piping carrying steam, hot water or other fluids, air-line piping and auxiliary equipment shall be of appropriate sizes, elevations and arrangements to accomplish the calculated services in practical operation, without undue noise, stress or other detriment.
- (3) Pipe insulation. All supply and return piping carrying steam, hot water or other fluids shall be covered with insulating material where the pipes pass through occupied areas and the surface temperature exceeds 180° F, unless guarded.
- (4) Pipe protection. No pipe carrying hot water, steam, or other fluid at a surface temperature exceeding 250° F shall be placed within one inch of any woodwork, pass through a combustible floor, ceiling or partition unless the pipe is protected by a metal tube one inch larger in diameter than the pipe or with approved pipe covering.

Section Ind 64.41 is repealed and recreated to read:

Ind 64.41 SUSPENDED CEILING PLENUM.

- (1) General. Plenums above ceilings used for the supply, return and transfer of air shall be of noncombustible construction as defined in section Ind 51.01 (86) (a).
- (2) <u>Ductwork within the plenum</u>. Ducts within the plenum shall be constructed of metal in accordance with Ind 64.34 (1) or approved nonmetallic materials in accordance with Ind 64.34 (3).
- (3) <u>Duct connectors</u>. Duct connectors shall comply with the requirements of section Ind 64.35.

Note: Flame-retardent fabric or metal or mineral listed in the Building Materials List, published by Underwriters' Laboratories, Inc., are acceptable.

(4) <u>Duct and pipe insulation</u>. Duct and pipe insulation, including coverings, linings, tapes and core materials, shall have a flame spread rating of not over 25 without evidence of continued progressive combustion, and a smoke developed rating no higher than 50. If coverings and linings are to be applied with adhesives, they shall be tested as applied with such adhesives, or the adhesives used shall have a flame spread rating not over 25 and a smoke developed rating no higher than 50 when in the final dry state.

- (5) <u>Hazardous piping and cables</u>. The installation of hazardous piping and cables within the plenum is prohibited.
- (6) Openings. Openings into the plenum that would affect the fire-resistive rating of the roof and ceiling are prohibited.

<u>Note</u>: This section permits the use of steel, painted steel bar joists and metal decking, concrete, plaster, and other inorganic materials and prohibits the use of certain combustible materials including plastic wire sheathing, plastic thermal insulation, plastic pipe, intumescent paint and organic materials which will not pass ASTM test procedure E-136 [Ind 51.25 (50)], except plastic control tubing that meets the criteria of ASTM test procedure D-635.

(7) Smoke detection. Suspended ceiling plenums which do not satisfy the requirements of (2) through (4) of this section shall be provided with an approved smoke detection system acceptable to the department.

 $\underline{\text{Note}}$ : The department will accept smoke detection systems designed, installed and maintained in accordance with National Fire Protection Association standard No. 72-E.

Subsection Ind 64.42 (2) (d) is created to read:

(2) (d) Interior bearing walls and partitions if unrated openings are permitted by other sections of this code.

Subsection Ind 64.47 (1) (intro. par.) is amended to read:

Ind 64.47 METAL SMOKESTACKS. (1) Smokestacks in excess of 30 feet. The thickness of the metal walls shall be at least 3/16 inch for smokestack heights up to 40 feet and 1/4 inch for greater heights. Stacks used for manufacturing, high-pressure boilers, furnaces or other similar heating or manufacturing appliances shall be lined with firebrick, or equivalent, for a distance of not less than 25 feet from the place where the smoke pipe enters and shall be protected on the outside up to and through the roof of the building with 8 inches of masonry, or a metal shield which provides an 8-inch ventilated air space between such shield and the stack. All stacks shall be properly guyed if the height of the stack exceeds 15 times its least diameter.

Section Ind 64.48 is repealed and recreated to read:

Ind 64.48 FACTORY-BUILT CHIMNEYS AND GAS VENTS. (1) General. Factory-built chimneys and gas vents shall be of an approved type.

- (2) Types of approved chimneys and gas vents. (a) Residential type and building heating appliance. An approved "residential type and building heating appliance" chimney or "building heating appliance only" chimney may be used with solid, liquid or gas-fired heating appliances where the flue gas temperature does not exceed 1000° F continuously, and does not exceed 1400° F for infrequent brief periods of forced firing.
  - (b) Type "B". An approved type "B" gas vent may be used with gas-fired appliances where the flue gas temperature does not exceed 550° F at the outlet of the draft hood.

- (c) Type "BW". An approved type "BW" gas vent may be used with a vented recessed wall heater.
- (d) Single wall vent pipe. An approved single wall vent pipe may be used with gas-fired, low-heat appliances (low-pressure boilers, furnaces and space heaters). The vent shall be not less than No. 20 standard gauge galvanized iron, No. 24 Brown and Sharpe gauge sheet copper, or other approved corrosion-resistant material. The installation shall conform to the requirements of section Ind 64.49.
- (e) Type "L". An approved type "L" vent may be used with oil-fired appliances listed as suitable by a recognized agency and with gas-fired appliances approved for type "B" vents.

Note: The department recognizes as approved, chimneys designated as "residential types and building heating appliance," "building heating appliance," "B", "BW", and "L" types listed by Underwriters' Laboratories, Inc.

Section Ind 64.50 is amended to read:

Ind 64.50 GAS VENTS. (1) General. All gas ranges (except those for domestic use), water heaters and other gas-fired equipment shall be provided with vent pipes conforming to the requirements for gas vents as specified in section Ind 64.48 for smoke pipes as specified in section Ind 64.49.

(a) Exception. Commercial kitchen appliances (i.e., ranges, ovens, booster heaters and similar equipment) may be vented into the kitchen hood exhaust system.

Subsection Ind 64.54 (1) Note is created to read:

Note: For mall corridors of enclosed mall shopping centers, see Ind 64.05, Table 1.

Subsection Ind 64.61 (4) is amended to read:

(4) <u>Miscellaneous repair areas</u>. Areas involved in the servicing of small internal combustion engines such as lawnmowers, snowmobiles, chainsaws, cycles, boat engines and similar types of engines, and battery charging areas, shall be provided with at least 3/4 cubic foot per minute of outside air per square foot of enclosed service floor area and an equivalent exhaust. Exhaust from battery charging areas shall be from the top of the area.

Subsection Ind 64.65 (3) (b) 1. Note #2 is created to read:

Note #2: The department of health and social services prohibits the use of ductless air circulating and treatment devices in licensed hospitals and nursing homes. (See Wis. Adm. Code section H 32.27 (2) (e) and Hill-Burton, "Minimum Requirements of Construction and Equipment for Hospital and Medical Facilities," HEW publication no. (HRA) 74-4000.)

Subsections Ind 64.67 (4) and (6) (f) 1. are amended to read:

- (4) Recirculation of air. Recirculation of air as described under section Ind 64.06 (5) is prohibited during occupied periods.
- (6) (f) Concealed exhaust ducts. 1. Horizontal ducts. Horizontal concealed ducts connected to hoods that pass through any other area of the building, including suspended ceilings, shall be protected with insulating material to withstand a flue temperature of not less than 1000° F. The temperature of the exposed surface of the insulating material shall not exceed 250° F above the normal ambient temperature of 68° F.

<u>Note</u>: The department will accept the use of masonry chimneys or manufactured chimneys which are tested and approved for use at a flue gas temperature of not less than  $1000^{\circ}$  F, or insulating materials for fire endurance systems listed in the Fire Resistance Index published by Underwriters' Laboratories, Inc.

#### APPENDIX A

The material contained in this appendix is for clarification purposes only. The notes, illustrations, etc. are numbered to correspond to the number of the rule as it appears in the text of the code.

A-50.10-50.25 FORMS. The following forms (SB-2, 8, 8A, 118, 198, 224B and SBD-4927) are referred to in sections Ind 50.10, 50.12, 50.14, 50.18, 50.20 and 50.25. Copies of these forms are available from the Division of Safety and Buildings, P. O. Box 7969, Madison, Wisconsin 53707.

#### Department of Industry, Labor and Human Relations

### SB-2 Building REV. 10/76 Inspection Report and Orders INSPECTION DATE FILE NO. WNERS NAME OCCUPANCY INSPECTED MAILING ADDRESS LOCATED AT (STREET ADDRESS) CITY STATE ZIP CODE COUNTY An Inspection of the above occupancy discloses violations of orders of the Dept. of Industry, Labor & Human Relations promulgated under authority of Chapter 101 of the Revised Statutes of Wisconsin Plan No. -SEE REVERSE SIDE FOR APPLICABLE WISCONSIN STATUTES ITEM NOTE **ORDER** REQUIREMENTS: ☑ Done X Not Done Sample Only **IMPORTANT** • Please report when orders are completed Avoid Delay • Forfeiture for violations are \$10 to \$100 each day for each violation. · Keep us informed. "Failure of an employer reasonably to enforce compliance by employes with such statute or order of the Department shall constitute failure by the employer to comply with such statute or order." Sec. 102.57 Wis. Stats. **VIOLATIONS EXPLAINED TO:** *JMPLIANCE DATE* TITLE

**DEPUTY** 

DEPUTY NO.

SAFETY & BUILDINGS DIVISION

SB-8(6/77)
PETITION FOR MODIFICATION
OF A RULE IN THE
WISCONSIN ADMINISTRATIVE CODE

#### WISCONSIN DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS DIVISION OF SAFETY & BUILDINGS P. O. BOX 7969, MADISON, WI 53707

#### PETITION REVIEW FEE - \$75.00

Name of Owner	Building Occupancy or Use	Agent, Architect or Engineering Firm
ompany	Tenant Name, if any	Street & No.
treet & No.	Building Location, Street & No.	City State & Zip
ry State & Zip	City County	/ Phone
Rule Ind.	of the Wisconsin Adminstrative code can	not be entirely satisfied because:
	rule, the following alternative is proposed	as a means of providing an equivalent
degree of safety:		
	ample	
<u>G</u>		
Supporting arguments are:		alla alla et describe de la companya (et l'occession de la companya del companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya del companya de la companya del la compa
Interview of the Annual System Annual System and Annual State Annual System of the Control of the Control of the Annual System A		
Vertification by owner		
	, being duly sworn, says he is the	he petitioner herein, thus he has read the fore-
going petition and that the same is tru	e, as he verily believes.	
		signature of owner
subscribed and sworn to me thisd	lay of 19, in	
	Redengens	Notary Public
Commission Action	My	commission expires:
Secretary	Date	
1	· · · · · · · · · · · · · · · · · · ·	PETITION IS VALID ONLY IF NOTARIZE

POSITION STATEMENT: To be compiled by Chief of Fire Department SB 8-A (2-77)

# WISCONSIN DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS DIVISION OF SAFETY & BUILDINGS P.O. BOX 7969, MADISON WI 53707

Name of Owner	Building Oc	Building Occupancy or Use			Agent, Architect or Engineering Firm		
Company	Tenant Nan	Tenant Name, if any					
Street & No.	Building Lo	Building Location, Street & No.		City	State & Zip		
City State & Zip	City		County	Phone			
1. I have read the petition for modification	on of rule: Inc	d					
2. I recommend (Check appropriate box)	Denial	Approval	Conditiona	l Approval	No Comment*		
3. Explanation for Recommendation:							
			*				
		<i>*</i> ** <i>*</i> ***					
	68	Will					
* If desired, Fire Departments may indica	te "Nomm	nent" on non-fire s.	afety issues such	as sanitary, ener	gy conservation, structural		
<ul> <li>If desired, Fire Departments may indica barrier free environments, etc.</li> </ul>	te "Nomm	nent" on non-fire s	afety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  1.  I find no conflict with local rules a	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structura		
barrier free environments, etc.  1.  I find no conflict with local rules a	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structura		
barrier free environments, etc.  1.  I find no conflict with local rules a	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  1.  I find no conflict with local rules a	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		
barrier free environments, etc.  4.   I find no conflict with local rules a  I find that the petition is in conflic	nd regulations	S	arety issues such	as sanitary, ener	gy conservation, structural		

### PLANS APPROVAL APPLICATION

### Department of INDUSTRY, LABOR AND HUMAN RELATIONS

Safety & Building Division Box **7969** 201 E. Washington Avenue Madison, Wisconsin 53707

SB -118 (Rev. 1/78)

INSTRUCTIONS: Fill in all applicable data, Submittal of Plan Approval Application form is required with each plan submittal. Examination and inspection fees, as determined on back of form, are required to be submitted with a minimum of three sets of plans. Data required on plans is described in code section Ind 50.12. Codes can be purchased from the Department of Administration, Document Sales, 202 S. Thornton Ave., Madison, 53703 Other \_\_\_\_\_ 1. THIS APPLICATION IS FOR: ☐ Building Plan Approval ☐ Heating Plan Approval 2. PLANS FOR: New Building Addition Alteration Structural Footing & Foundation Revision to previously approved plans Other \_\_\_ 3. PROJECT INFORMATION Name of Owner **Building Occupancy or Use** Designer or Design Firm Tenant Name, if any Street & No. Company Street & No. Building Location, Street & No. City State & Zip City State & Zip County Phone Village Town [ Return Plans to Previous Owner if any Designer 4. DETERMINATION OF FEES SEE CHAP. IND. 69 FOR FULL SCHEDULE FOR OFFICE USE ONLY SEE BACK OF PAGE FOR FEE CALCULATION AND ABBREVIATED FEE SCHED Amount Rec'd ..... 4a Building Plan Fee Total Volume 4b Heating-Ventilation Fee Date Rec'd Receipt No. 4c Other 4d Inspection 4e TOTAL 5. OTHER INFORMATION 5a Type of Construction ☐ Exterior Masonry ☐Wood Frame Protected Metal Frame tected Fire Resistive—Type A ☐ Heavy Timber Fire Resistive—Type B 5b Mechanical Information: Type of Heating \_\_\_ \_\_\_\_\_ Net Rating of Heating Units \_\_\_\_ 5c SOIL BEARING CAPACITY (See Ind. 53,21) Yes Method used to determine capacity: Sprinkler System Provided? Check One- Verified Presumptive [ ☐ Fire Alarm Provided? Check Value Used- PSF 2000 ☐ , 3000 ☐ , 4000 ☐ 6000 , 12000 , Other \_\_\_\_ Other Detection System Provided? ☐ Emergency Power Provided? 6. DESIGN AND SUPERVISION (IND 50.13) The design, plans, computations and specifications for this project have been prepared under my supervision. I am registered as an ☐ Architect ☐ Engineer ☐ Designer in Wisconsin as provided in Section 443.01 of the Wisconsin Statutes. ☐ I am not registered. If this building, existing and additions, contains over 50,000 cu. ft. total volume, it must be designed by a registered person. SEE BACK OF PAGE FOR ADDITIONAL INFORMATION ON PUBLIC RECORDS. Registration Number Signature of designer If this building, existing and additions, contains over 50,000 cu. ft. total volume, the construction of this project shall be under the supervision of a Wisconsin registered architect, engineer or in the case of heating and ventilating, designer. Plans for buildings over 50,000 cu, ft, will not be approved until the name of the supervising professional is known, Name of Supervising Professional Registration Number

#### 4. DETERMINATION OF FEES

#### INSTRUCTIONS:

- 1. Refer to fee schedule shown below.
- 2. Enter area of each floor in appropriate space.
- 3. Enter height of each floor (Height includes attic and space between floors).
- Compute volume of each floor/attic space and total volume for building.\*
- 5. Compute building and/or heating fee per building.
- 6. Enter other fee (if any) in space per building.
- 7. Compute inspection fees per building.
- 8. Total fees and transfer information to front page.

#### **EXAMINATION FEES PER BUILDING**

Building Plan Fee: Fee, 60 per 1000 cu, Ft.

Minimum Fee \$25.00

Heating & Ventilating Plan Fee: Fee. 40 per 1000 cu. ft. Minimum Fee \$25.00

Alterations to bldgs: Fee \$1.50 per \$1,000 est. cost. Minimum fee \$25.00

\*Structural Plans \$25,00 per Bldg.

Revision to approved Plan \$25.00

- \*Exhaust Systems \$25.00 per plan (Govt, Owned only)
- \*Spray Booths \$25.00 per Plan (Govt. Owned only)

Permit to Start Construction (SB-198) \$35,00 per Bldg.

- \*Footing & Foundation Plans \$25.00 per Bldg.
- \*Stadium, Grandstand, Bleacher \$10.00/1000 Seats Minimum Fee \$25.00
- \*Fire Escapes \$25.00 per fire escape

#### NOTE

- (1) Heating & Ventilating Plans submitted separately require an inspection fee of \$44.00.
- (2) Plans other than building or heating require an inspection fee of \$25,00.
- (3) Warehouses-Reduce plan examination fees (Not inspection fees) by 30%.
- (4) Building plan fee for Bldgs, exceeding 1,000,000 cu, ft. is \$600 plus \$0.40 per 1,000 cu, ft. in excess of 1,000,000 cu, ft..
- (5) Heating & Ventilation plan Fee for Buildings exceeding 1,000,000 cu. ft. is \$400 plus \$0.25 per 1000 cu. ft. in excess of 1,000,000 cu. ft.

#### INSPECTION FEES PER BUILDING:

Building Volume/Alt. Cost Fee
Up to 25,000 cu, ft./dollars \$50.00
25,001 - 100,000 cu, ft./dollars \$75.00
100,001 - 500,000 cu, ft./dollars \$100.00
500,001 - 1,000,000 cu, ft./dollars \$125.00
In excess of 1,000,000 cu, ft./dollars \$150.00

No. of Floors	Area	Height	Total each Floor	Total Vol./1000	×	Exam Fee	Building Plan Fee
Basement/Ground	×		= cu. ft.		x	.60 =	\$
1st Floor	×		= cu.ft.	Total Vol./1000	×	Exam Fee	Heating Ventilating Fee
2nd	×		= cu. ft.		×	.40 =	\$
3rd	×		= cu.ft.	Structural \$25.00		Alteration \$1.50/1000	Other
4th & 5th attic & etc.	×		= cu. ft.	□Permit to start \$35 □Ftg. & Found \$25.			\$
	Total Volume or	•		:		,	Inspection Fee
	Total Cost of Alteration	on	=				\$
	Series - 19 - 19 - 19 - 19 - 19 - 19 - 19 - 1						Total
	TRAI	NSFER AL	L DOLLAR AMOUNTS AND	VOLUME TO FRONT	PAC	SE	\$

PUBLIC RECORDS

A copy of the plans submitted with this application will be held in the files of this division and are considered Public Records. Interested persons may, upon request, review the plans and files in this office.

<sup>\*</sup>The "total volume" is determined by the overall outside dimensions of length, width and height.



## DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS SAFETY & BUILDINGS DIVISION P.O. BOX 7969

MADISON, WISCONSIN 53707

### PERMIT TO START CONSTRUCTION FEE \$35.00 (per bldg.) IN ADDITION TO EXAMINATION/INSPECTION FEES

Location of Project:	,	•	
Owner:	-	E	4-1
Street:		Plan File Number	
City:		Date Plans Rec'd	
County:			
Occupancy:			
We, the undersigned, request to begin  Complete plans have been submitted	_	ork prior to approval of the plans. dustry, Labor & Human Relations, Division of Indus	strial Safety and
Buildings, and all information request			
Ind. 56.02, Ind. 57.01 (construction, applicable, and have shown compliance	height and allowald be on the drawings	structure including, but not limited to, Ind. 54, and 1, 50.12, Ind. 51.03, Ind. 53, Ind. 55.05 and Ind.	nd. 54.50, when
We agree to make any changes require the foundation and/or footings.	plans have be	een reviewed and to remove or replace noncode con	nplying parts of
We agree to proceed with the footing until approval has been received.  Owner's Signature	gs and foundation only an	Accepted By	ling or structure
Name:		Dept. of Ind., Labor & Human Relations	
		Div. of Industrial Safety & Buildings.	
Address:		Not Accepted Because	
		Plans will be examined within the next	
Designer's Signature	Date	days.	
Name:	NAME OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OWNER OF THE OWNER OWNE	NOTE: Footing and foundation plans submitted p	orior to
Address:		final building plans will not be accepted for this p	

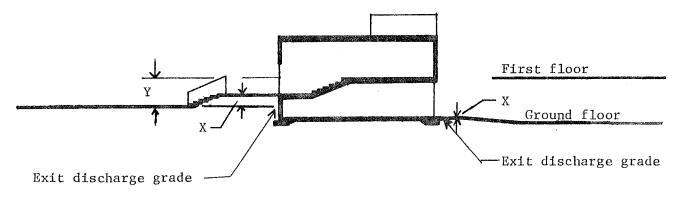
S.101.102(2). Wisconsin Statutes, requires a \$15 inspection fee for each building inspection conducted, payable at time of plan review.

								OCCUP	ANCY		<del></del>
E NO.	unuar anno de laboridos				PLAN F	ILE NO.		BUILDI	NG ADDRESS		
				~~~	- VALUE OF THE STREET			CITY	ZIP CODE	COUNTY	
TO:	wo	NER			DESIGNER	R 🗆		<u> </u>	DATE INSPECTED	CHECK ON	VE
	NAM								1	∏ SB-191	
	ADI	JHES	5						3	☐ TYPE ORDER	rs
	CIT	Y			STATE		ZIP		BLDG. FINALH & V FINALOTHER FINAL	COMPLIANCE	DATE
			(x) N	OT DON	VE.	47.47	(√)	) DONE	O'IIIII III		
INSP.		- 1- 14-day			ORDER NUMBER				FINDINGS		
PERSO	N CO	NTA	CTED				Sal		SIGNATURE		REG. NO.
	OWN	ERS	NAM	E (IF DI	FFERENT	FROM ABO	VE)	IF YOU	HAVE ANY QUESTIONS I WILL B	E IN MY OFFICE o	on: '
	ADD	RESS	6		w,,,,						
	CITY	,			STATE		ZIP	TEI	EPHONE		

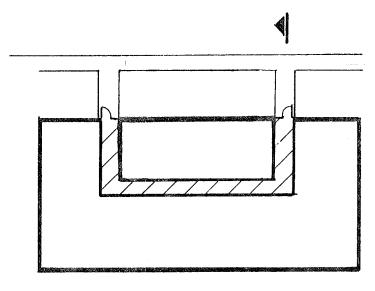
Date			

Sai P. 201	partment of Indust fety and Buildings O. Box 7969 L E. Washington Ave dison, WI 53707	
Gentleme	en:	
RE: Fil	Le Number:	
P1a	an Number:	
Own	ner:	
0cc	cupancy:	
Bui	ilding Street Addre	ess;
Cit	ту:	County:
		Sample
This cer	tificate covers:	Building
		Heating & Ventilation
		Structural
		Other Specify)
Name:		Signature:
Registra	tion Number:	
Address:		

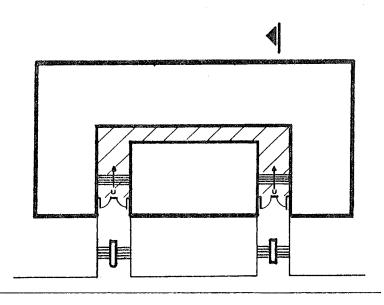
A-51.02 (14) DETERMINATION OF NUMBER OF STORIES. The following illustrations are provided to give visual aid to this rule and the definition of Ind 51.01 (121) Stories, Number of.



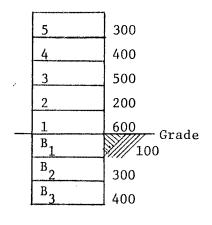
Note: X = 3'-0'' (maximum) Y = 6'-0'' (maximum)



Ground floor



#### A-51.15 (6) EXAMPLE TO DETERMINE TOTAL AGGREGATE EXIT WIDTH.



Type No. 1 sprinklered construction.

Aggregate exit width required from a floor into the stairwell is 30 inches per 100 people on that floor; i.e.,

5th floor to stairwell =  $3 \times 30 = 90$ "

4th floor to stairwell =  $4 \times 30 = 120$ "

3rd floor to stairwell =  $5 \times 30 = 150$ "

#### Stair width required:

5th to 4th  $- 300 \text{ persons } (100\%) \times 30''/100 \text{ persons } = 90''$ 

4th to 3rd - [400 persons (100%) + 300 persons (50%)] 30''/100 persons = 165''

3rd to 2nd - [500 persons (100%) + 400 persons (50%) + 300 persons (25%)] 30"/100 persons = 232.5"

2nd to 1st - [200 persons (100%) + 500 persons (50%) + 400 persons (25%)] 30"/100 persons = 165" (Use 232.5")

1st to exterior - [600 persons (100%) + (200 persons + 100 persons) (50%) + (500 persons + 300 persons) (25%)] 30"/100 persons = 285"

 $^{8}1$  to 1st - [100 persons (100%) + 300 persons (50%) + 400 persons (25%)]  $^{30}$ "/100 persons = 105" (Use 150")

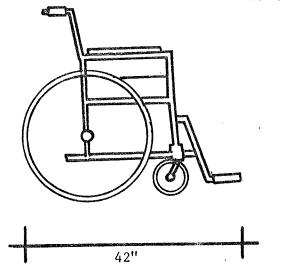
 $B_2$  to  $B_1$  - [300 persons (100%) + 400 persons (50%)] 30"/100 persons = 150"

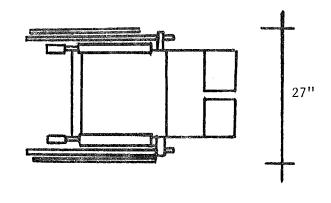
 $B_3$  to  $B_2$  - 400 persons (100%) x 30"/100 persons = 120"

Stair width required from  $B_1$  to 1 is 150" as stair cannot decrease in width along path to exit [Ind 51.16 (2) (c)].

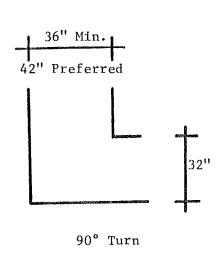
A-52.04 REQUIREMENTS FOR BARRIER-FREE ENVIRONMENTS. The following illustrations are provided to give the designer visual aids for making facilities accessible.

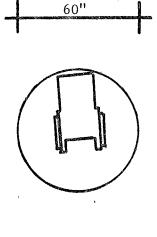
#### WHEELCHAIR DIMENSIONS



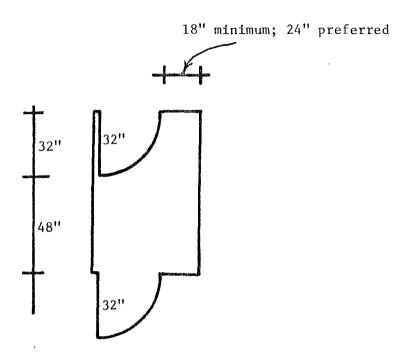


TURNING SPACE



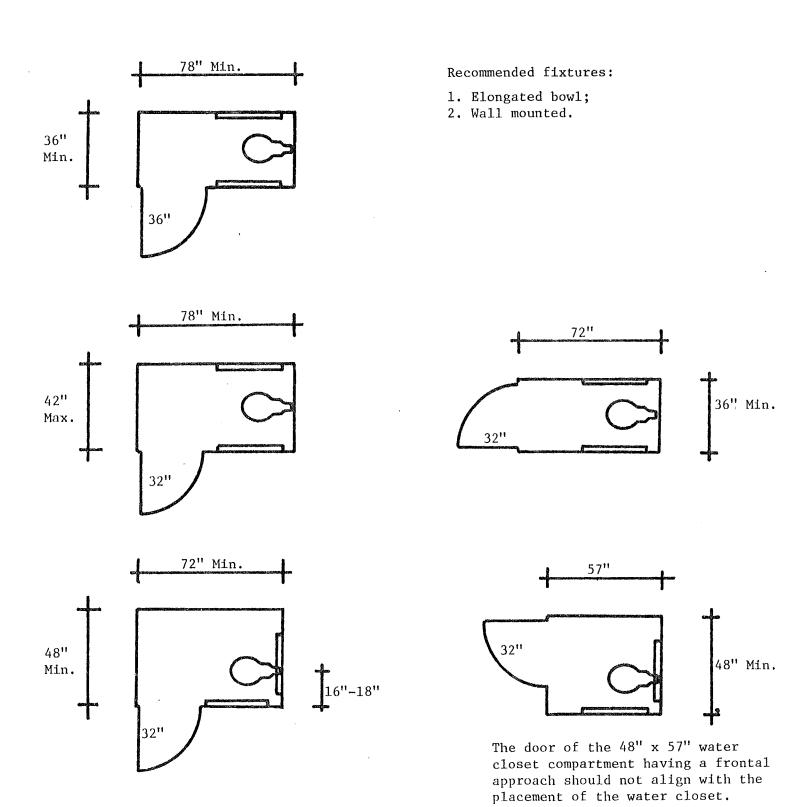


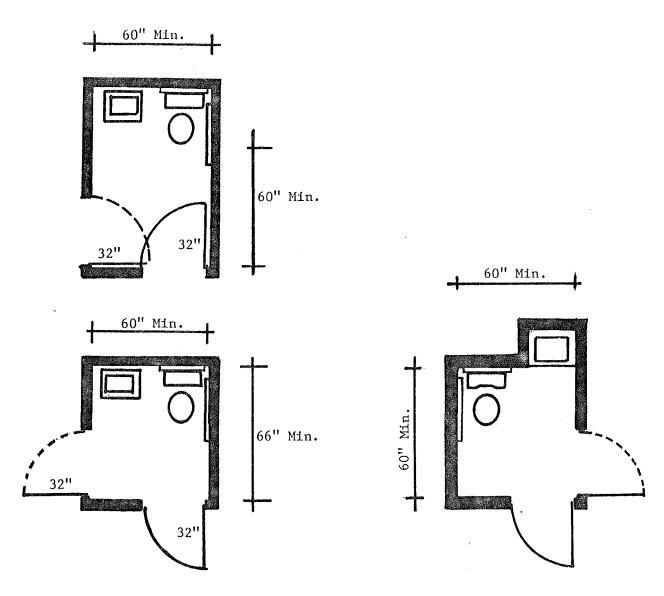
180-360° Turn



Doors in series should be hinged on the same side and should swing in the same direction. A minimum of 18 inches of clear space should be provided on the door knob side of the door. The length of the vestibule should be a minimum of 48 inches plus the width of the door in the open position (i.e., 32-inch door plus 48 inches length equals 80 inches overall length of vestibule).

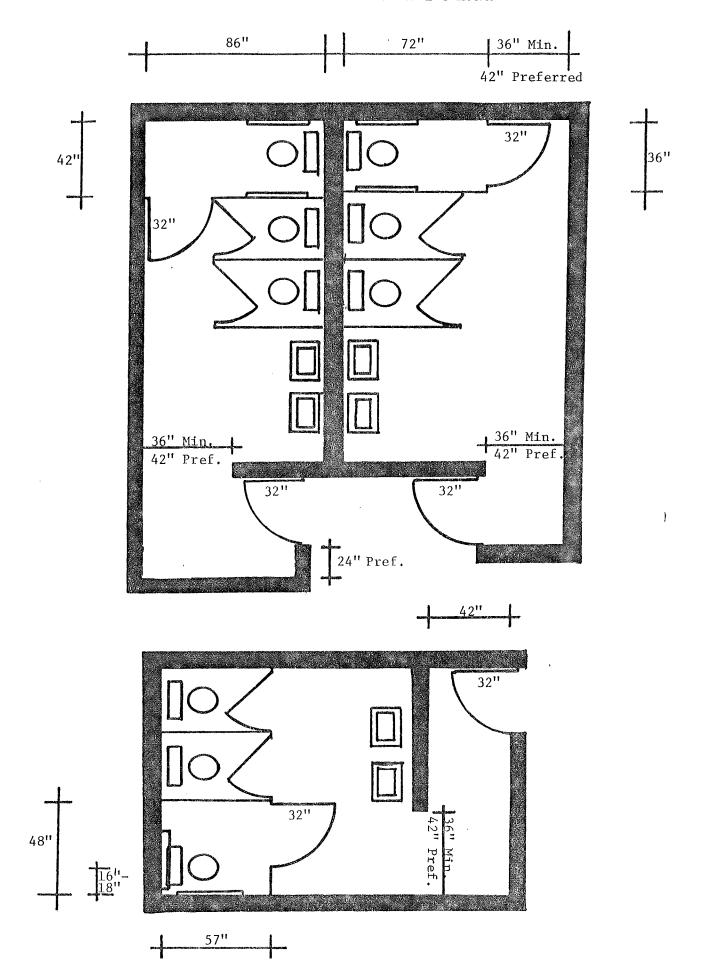
### EXAMPLES OF ACCESSIBLE TOILET COMPARTMENTS AS SPECIFIED IN TABLE 52.04-A



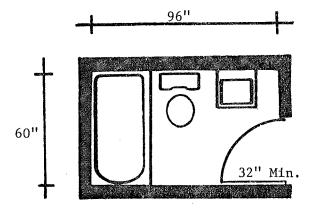


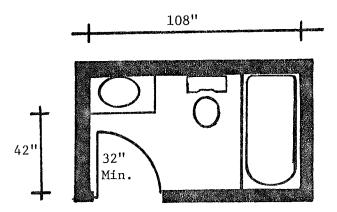
Note #1: These examples of accessible toilet rooms may be used in health care facilities in that sufficient room for the attendant is provided.

Note #2: These examples may be modified by substituting pocket sliding doors for the swing doors shown in the examples. Surface-mounted hardware is recommended for pocket sliding doors.



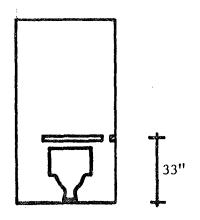
## EXAMPLES OF ADAPTABLE BATHROOM LAYOUTS FOR RESIDENTIAL LIVING UNITS (not including hotels and motels)



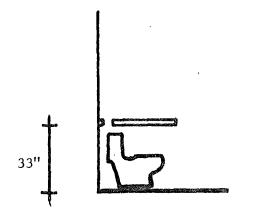


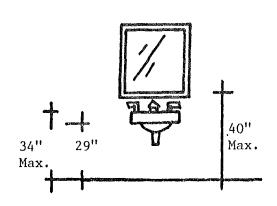
These examples may be modified for accessibility by using outward swinging doors or pocket sliding doors.

#### ACCESSIBLE TOILET ROOMS

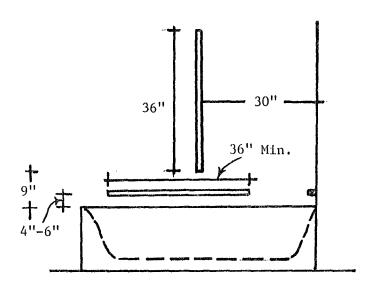


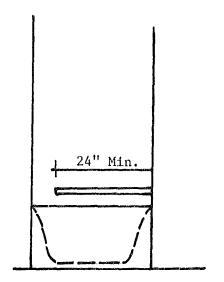
It is recommended that grab bars be from 30 to 42 inches in length and located no more than 12 inches from the back wall.

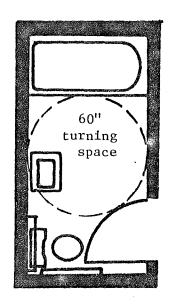


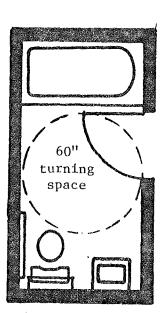


#### ACCESSIBLE BATHING FACILITIES



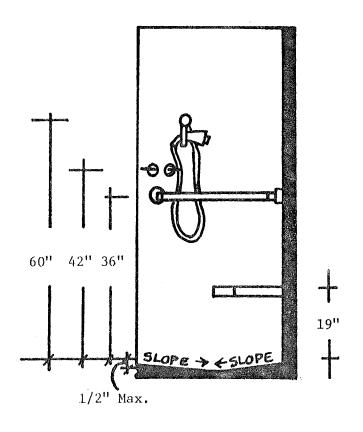


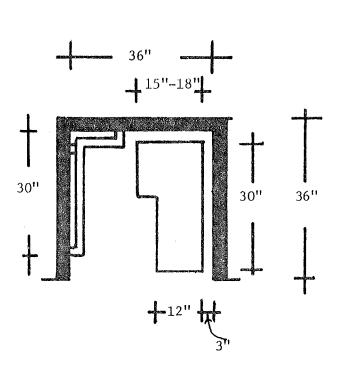


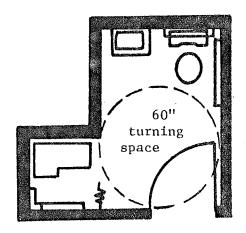


These diagrams are examples of accessible bathrooms which may be used for motels, hotels, hospitals and nursing homes.

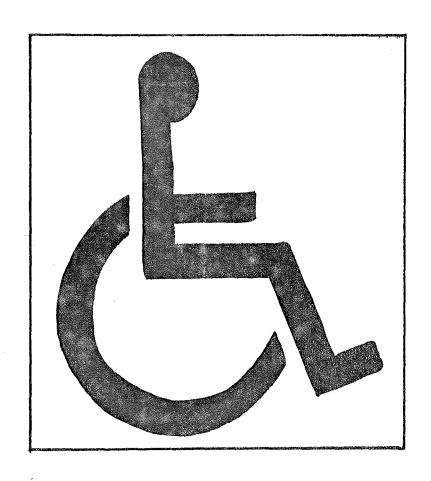
#### ACCESSIBLE BATHING FACILITIES







1



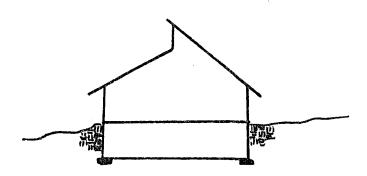
INTERNATIONAL SYMBOL FOR BARRIER-FREE ENVIRONMENTS

#### A-53.15 is amended to read:

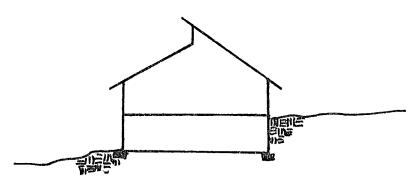
- A-53.15 LOAD COMBINATIONS. It is the intent of this section that loads specified in sections Ind 53.10 through Ind 53.14 be considered to act in the following combinations, whichever is critical, for the design of the building frame, foundation or structural member:
  - 1. Dead load plus live load.
  - 2. Dead load plus wind load.
  - 3. Dead load plus live load plus wind load.
  - 4. Dead load plus live load plus crane loads.

Distribution of live loads which would cause the maximum shear, bending moment or stress in structural members should be investigated.

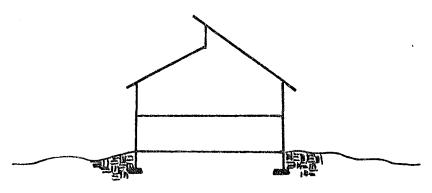
A-53.64 WOOD FOUNDATIONS. The following illustrations are provided to give visual aid to the limitations specified in this rule and to indicate the three typical designs permitted by the rule.



One-story with full basement



One-story with ground floor



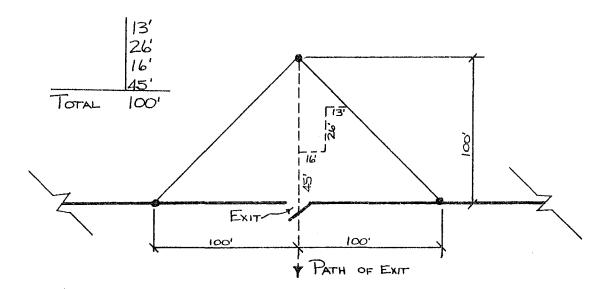
Two-story with wood foundation (No basement or crawl space)

A-54.02 (4). EXIT DISTANCE. The following illustrations and text are provided to explain the procedure and intent of using the triangulation method of exit distance determination.

Exit travel must terminate at one of the following types of exits:

- 1. Standard exit to grade (Ind 51.15)
- 2. Enclosed stairways (Ind 51.17 and 51.18)
- 3. Horizontal exits (Ind 51.19)
- 4. Fire escapes (Ind 51.20)

Therefore, exit distance must be measured from one of these exit types. All exits must lead to a street, alley or open court which is connected to a street or alley.



#### Procedure:

- 1. Beginning at designated exit type, measure required exit distance (100 feet, for example) at right angles to and parallel with (on both sides) the exit.
- 2. Connect end points to form the "exit triangle."
- 3. All areas within the triangle are within the required exit distance when traveling toward or at right angles to the exit.
- 4. All the interior space of a building must fall within the "exit triangles" formed by using the required exits for the building.
- 5. When measuring exit distance in stairways, only the horizontal travel distance is included in the determination.

A-63.41 FORM. Copies of the following form (SBD-5315) are available from the Division of Safety and Buildings, P. O. Box 7969, Madison, Wisconsin 53707. This form may be used to verify compliance with the illumination requirements of this section.

LUMINATION BUDGET
ALCULATION FORM
(LIR-SBD-5315 (N.5/78)
SUBMIT

ROJECT INFORMATION

### Department of INDUSTRY, LABOR AND HUMAN RELATIONS

Safety & Building Divisio Box 7969 201 E. Washington Avent Madison, Wisconsin 5370

#### SEE BACK OF SHEET FOR NOTES AND INSTRUCTIONS

OJECT INFORMATION								
me of Owner	Building Occupand	Designer or Design Firm						
mpany		Tenant Name, if ar	Street & No.					
eet & No.	Building Location,	Street & No.		City		State & Zip		
y Sta	City Village Town		County	Phone				
ALLOWAB	LE ILLUMINATIO	ON BUDGET			INSTALLED	ILLUMIN	ATION	
Room or area desig.	Room area (Sq. Ft.)	Allowable watts Per Sq. Ft. Ind 63.41	Room wattage	Fixtu	re No.	Watts per fix.	Total wattage	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
and Administration of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of								
and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s								
	×	i						
			16					
		sami						
							·	
		}	п					
gnature of designer	·····							
gistration Number	Date							
			,					
AL)			·• .					
		j						
					-Sheet Totals -			
					uilding Totals — Final Sheet)			
		, L			·			

#### **NOTES AND INSTRUCTIONS**

- 1. Fixture schedules must accompany this form, or be shown on the plans, or in the specifications.
- 2. A completed SB-118, *Plans Approval Application Form*, must accompany these calculations if they are submitted separately from the building plans.
- 3. The first sheet of this form must be signed and sealed by a Wisconsin registered architect, engineer or electrical designer if the total building volume is greater than 50,000 cubic feet.
- 4. All electric discharge lighting must meet the minimum power factor requirements of Ind 63.40.
- 5. Use of form:
  - A. Calculations are on an individual room or area basis.
  - B. Enter room or area designation in column (1). This should correspond to the designations shown on the building plans.
  - C. Calculate the floor area, in Sq. Ft., of the room or area. Enter area in column (2).
  - D. Determine the allowable "Watts per Sq. Ft." from Ind 63.41. Enter this value in column (3),
  - E. Multiply value in column (2) by value in column (3). Enter product in column (4),
  - F. Enter fixture type(s) from fixture schedule in column (5).
  - G. Enter number of fixtures of each type, located in the room or area, in column (6).
  - H. Enter the wattage for one fixture of that type in column (7).
  - 1. Multiply value in column (6) by value in column (7). Enter product in column (8).
  - J. Total columns (4) and (8), entering sheet totals at the bottom of each sheet, and the total of all sheets at the bottom of the final sheet.
  - K. Column (8) building total must be less than, or equal to, the building total in column (4).

#### INDEX

See also first page of each chapter for listing of section headings.

NOTE: An asterisk (\*) following a subject reference indicates further requirements will be found in the "occupancy chapters" of the code--chapters Ind 54 through 62.

Α

11	
	Ind Section No(s).
ACADEMIES	56.001
ACCESS	
Access or accessible, for physically disabled	52.04
To panels, for fire department	52.02
To roofs	51.02
ACCESSIBLE CONSTRUCTION, Requirements for	52.04
ACCESSORY ROOM, Definition of	51.01
ACOUSTICAL MATERIAL	51.03
ADDITIONS, TO EXISTING BUILDINGS	50.03, 50.07, 52.04
ADJOINING BUILDINGS, Doors and windows	51.03
ADJOINING PROPERTY, Protection of	53.26
ADMINISTRATION AND ENFORCEMENT	
Additions	50.03, 50.07, 52.04
Alterations	50.03, 50.07, 50.12
Appeals	50.24
Application of code	50.03
Approval by certified city inspector	50.22
Approval of materials, equipment and devices	50.19
Approval of plans and specifications	50.12, 63.01, 64.02
Approval, revocation of	50.16
Buildings exempt from code requirements	50.04
Certificate of occupancy, local requirement	50.06
Change of use	50.03, 52.04, 63.001
Changes to plans and specifications	50.09, 63.001
Design	50.07
Enforcement	50.23
Evidence of plan approval	50.15
Existing buildings (also refer to chapters Ind 160-164)	50.05
Expiration of plan approval	50.17
Fees (also refer to chapter Ind 69)	50.20 50.21
First class city examination and approval	50.13
Local regulations	50.06
Penalties	50.26
Permit to start construction	50.14
Petition for modification	50.25
Plans prepared outside Wisconsin	50.08
Right of entry on premises (refer to chapter 101, Wis. Stats.)	30.00
Scope of code (See also chapters Ind 51-64)	50.02
Tests and test reports	50.19, 51.044, 64.20
AGED, HOMES FOR	57.001
AGGREGATES	
Concrete	53.40-53.42
Masonry mortar	53.312
Moisture content	53.312

-2-	
	Ind Section No(s).
AGRICULTURAL BUILDINGS, farm use exempt	50.04
AIR CONDITIONING	64.01 51.01, 64.12
AIRCRAFT HANGARS	50.12, 54.50
AIR DUCTS	64.31-64.45
AIR INTAKES  Combustion equipment (solid and liquid fuels)  Fresh air	64.09 64.19 55.44
AIRPLANE HANGARS	50.12, 54.50
AISLES*	
ALARM SYSTEMS	51.24
ALLEY, Definition of	51.01
ALLEYS, Location and maintenance of	52.21
ALLOWABLE AREAS AND HEIGHT OF BUILDINGS*	51.02, 51.03
ALLOWABLE STRESSES	53.14, 53.322, 53.323
ALTERATIONS	0.07, 50.12, 52.04
ALTERNATE CONSTRUCTION METHODS PERMITTED	50.19
ALTERNATE MATERIALS PERMITTED	50.19
ALUMINUM CONSTRUCTION	53.54
AMERICAN PREFIX STANDARDS (see STANDARDS)	
AMUSEMENT PARK BUILDINGS AND STRUCTURES Amusement structures (Refer to chapter Ind 47) Assembly occupancies	55.001 54.001
ANCHORAGE, ANCHORS	
Bolts	53.34 53.322 6, 53.322, 53.323, 53.34 53.322, 53.36 53.52 53.322, 53.61, 53.63
Uplift and suction forces on buildings, structures, roofs. Walls and partitions, intersecting	53.12 53.63 53.61 53.322, 53.323 53.322, 53.323 53.63 53.63
Wood joist anchors	53.63 53.63 53.63 53.12, 53.62

(

	Ind Section No(s).
ANTENNA, RECEIVING, Television and radio	62.35-62.41
APARTMENT BUILDINGS, HOTELS, PLACES OF DETENTION	57.001
APARTMENTS	57.001
APPEALS	50.24
APPLIANCES Chimneys	64.45-64.50 64.09
APPLICATION FOR PERMIT	50.13
APPROVAL (see ADMINISTRATION AND ENFORCEMENT)	
APPROVED, Definition of	51.01
APPROVED TESTING LABORATORIES	51.044
APPROVING OFFICIAL (see BUILDING OFFICIAL)	
ARC WELDS (see WELDING)	
ARCHITECT OR PROFESSIONAL ENGINEER, Services of, required 5	0.07, 50.08, 50.10, 50.12
AREA (GROSS) and (NET), Definitions of	51.01
AREAS, ALLOWABLE Allowable areas* Attic areas	51.02
Existing buildings	50.03 54.01 54.01
AREAWAY, Definition of	51.01
ARENA, HORSE	54.001 or 55.01
ARMORIES	55.01
ARTIFICIAL STONE, Bonding	53.316
ASBESTOS Proscenium curtain	55.32 51.03-A, 51.050
ASPHALT, Roof coverings	51.03-A, 51.050
ASSEMBLY HALLS  Net capacity less than 100 persons	54.001 55.01
ASSEMBLY PLANTS	54.001
ASYLUMS	57.001
ATTIC Access	51.02, 57.25 51.02 51.01
AUDITORIUMS (see ASSEMBLY HALLS)	
AUTOMATIC FIRE SPRINKLER SYSTEM, Definition of	51.01
AUTOMATIC SPRINKLERS (see SPRINKLERS AND STANDPIPES)	

·	
	Ind Section No(s).
AUTOMOBILE	
Garages	54.50 62.20 54.51 54.52
В	
BALCONY (EXTERIOR) and (INTERIOR), Definitions of Exterior balcony, as exit	51.01 54.03, 57.12 51.20
BARRIER-FREE DESIGN	52.04
BARS Concrete, reinforcing	53.316, 53.40 51.15
BASEMENT, Definition of	51.01
BASEMENT ROOMS*	
BATHROOM (see TOILETS)	
BEAMS (also see GIRDERS)  Concrete design	53.40 53.63 ,51.043,51.045 53.61 53.40 53.323 53.50 53.61 53.61 53.61 53.61
BEARING, SOIL CAPACITY	53.21
BEARING WALL (see MASONRY, WOOD CONSTRUCTION) Definition of	51.01
BLEACHERS, Temporary seats	55.56
BLOCKS, CONCRETE MASONRY UNITS	53.311
BOILERS	64.22
BOLTS (see ANCHORAGE AND ANCHORS)	
BOND, MASONRY Masonry, hollow units	53.322 53.322 53.312 53.316, 53.322 53.36
BOWLING ALLEYS	54.001 or 55.01

	Ind Section No(s).	
BRACING Exterior stud walls	53.322	
BRICK-CLAY, CONCRETE, ETC. (see MASONRY CONSTRUCTION)		
BRIDGING Joists, steel		
BUILDING Allowable areas and heights*	50.03 52.04, 63.001	
Definition	50.05 51.01	
Maintenance	5.50, 57.16, 61.21 50.03, 50.07 51.03	
BUILDING CODE Administration (see ADMINISTRATION AND ENFORCEMENT) Scope*	50.02	
BUILDING OFFICIAL OR APPROVING OFFICIAL (referred to in this code the department or as the department of industry, labor and hum relations [superceding the industrial commission])		
Classifies buildings	50.18 50.19	
May order occupancy of building discontinued May require plans and calculations by Wis. registered	50.06	
engineer or architect	53.21 50.15	
BUILDING OFFICIALS AUTHORIZATION REQUIRED  Before changing plans	50.09 50.03 50.03	
BUILDING PLAN APPROVAL	50.12	
BUSINESS OCCUPANCIES	54.001	
BUTTRESS, Definition of	51.01	
C 54 001 on 55 01		
CAISSONS	54.001 or 55.01 53.24	

	Ind Section No(s).
CALCULATIONS REQUIRED	50.12, 51.046
CANOPIES	,
Service stations	54.51
CAST STONE	53.311
CAVITY WALL, Definition of	51.01
CEILING PROTECTION, Definition of	51.01
CEILINGS	51.03, 51.045
CELLAR (see BASEMENT)	
CEMENT (see PORTLAND CEMENT)	
CERTIFICATE OF OCCUPANCY	50.06
CERTIFIED CITIES, PLANS APPROVED BY	50.22
CHANGE OF OCCUPANCY (Change of use)	50.03, 52.04, 63.001
CHILDREN, DAY CARE CENTERS FOR	60.001
CHILDREN, HOMES FOR	57.001
CHIMNEYS	64.45, 64.46, 64.48
CHURCHES (see ASSEMBLY HALLS)	
CIRCULATION, INTERIOR	52.04
CLASSIFICATION OF BUILDINGS	
Construction classification	51.03
CLASSROOMS	76. J.
Mobile training units	56.40 56.30
Mobile training units	56.30
Mobile training units	
Mobile training units	56.30 51.16, 62.25 51.01
Mobile training units	56.30 51.16, 62.25 51.01 54.001 or 55.01
Mobile training units	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001 51.02, 51.03, 51.045 53.11
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001 51.02, 51.03, 51.045 53.11 51.03
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001  51.02, 51.03, 51.045 53.11 51.03 53.322
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001 51.02, 51.03, 51.045 53.11 51.03
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001  51.02, 51.03, 51.045 53.11 51.03 53.322 53.40
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001  51.02, 51.03, 51.045 53.11 51.03 53.322 53.40 53.50
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001  51.02, 51.03, 51.045 53.11 51.03 53.322 53.40 53.50 53.61, 53.63
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001  51.02, 51.03, 51.045 53.11 51.03 53.322 53.40 53.50 53.61, 53.63
Mobile training units Relocatable	56.30 51.16, 62.25 51.01 54.001 or 55.01 50.02 56.001  51.02, 51.03, 51.045 53.11 51.03 53.322 53.40 53.50 53.61, 53.63

	Ind Section No(s).
COMMUNITY-BASED RESIDENTIAL FACILITIES (CBRF)	61.001
COMPLIANCE	50.10
COMPOSITE WALLS	53.322
COMPOSITION ROOFING	51.050
CONCRETE	53.40-53.42 51.045
CONCRETE BLOCKS	53.311
CONSERVATION OF ENERGY	63.001
CONSTRUCTION Aluminum. Classes of. Concrete. Definition of Masonry Stage separation. Steel. Temporary Types of. Wood frames	53.54 51.03 53.40 51.01 51.03 55.21 53.50 50.04 51.03 51.03
Wood framing	53.60
CONVALESCENT HOMES	57.001 57.001
CONVENTS	53.34
CORRIDOR, Definition of	51.01
CORRIDORS, AS REQUIRED EXITS	51.03 51.01
COURT WALLS, REQUIRED FIRE-RESISTIVE	51.03
CURB, CUT FOR BARRIER-FREE ACCESS	52.04
CURTAIN, PROSCENIUM	55.23
CURTAIN WALL, Definition of	51.01
CURVED STAIRS	51.16
D	
DAMPERS AND SHUTTERS, FIRE	64.42
DANCE HALLS	54.001 or 55.01
DAY CARE CENTERS	60.001
DEAD LOADS	53.10
DECKS Public parking	62.20 51.03
DECORATIVE FEATURES Fire protective requirements	51.02
Projections	51.03 51.02

	Ind Section No(s).
DEFINITIONS  Certain words and topics	51.01
Occupancies (see OCCUPANCY CHAPTERS) Types of construction	51.03
DEPARTMENT, Definition of	51.01
DEPOTS, FREIGHT	54.001
DEPTH OF FOUNDATIONS	31.00I
Governed by soil conditions	53.21 53.28 53.26
DESIGN AND SUPERVISION OF CONSTRUCTION	50.07, 50.10
DETECTION, SMOKE	57.27, 61.14
DIAPHRAGMS, PLYWOOD	53.61
DINING ROOMS	54.001 or 55.01
DISPERSAL AREA, SAFE	52.21
DISPLAY SIGNS	54.17, 55.06
DISPOSAL, SEWAGE	52.62
DISTANCE BETWEEN BUILDINGS	51.03
DIVISION WALL, Definition of	51.01
DOORS AND DOOR ASSEMBLIES, RATED	51.047 51.03
DORMITORIES	57.001
DRAFT STOPS	53.63
DRAWINGS (see ADMINISTRATION AND ENFORCEMENT)	
DRESSING ROOMS, STAGE	55.28
DRINKING FOUNTAINS*	52.04, 52.60
DRY CLEANING (refer to chapter Ind 7)	
DRY STANDPIPES	51.21
DUCT, Definition of	51.01
DUCT FURNACE, Definition of	51.01
DUCTS	64.31-64.40
DUMB WAITERS (refer to chapter Ind 4)	
DWELLINGS Apartments	
E	
EARTH PRESSURE	53.21, 53.24, 53.28
ECCENTRIC LOADS	53.11
EGRESS (see MEANS OF EGRESS)	

-9-	
	Ind Section No(s).
ELECTRIC WELDING	53.53
ELECTRICAL WORK (see also Wis. Electrical Code)	52.20, 61.25
ELEVATORS (refer to chapter Ind 4)	
ELEVATOR SHAFTS (see VERTICAL OPENINGS)	
ENCLOSURE OF VERTICAL OPENINGS (see STAIRS AND STAIRWAYS and TYPES OF CONSTRUCTION)	
ENERGY CONSERVATION (Chapter Ind 63)	
DESIGN CONDITIONS  Design criteria	63.12 63.11
HEATING AND AIR CONDITIONING EQUIPMENT AND SYSTEMS	
Controls	63.21 63.23
Equipment efficiencies	63.20
Insulation	63.22
Maintenance	63.24
ILLUMINATION	60.40
Controls	63.42 63.40
Lighting	63.41
NONDEPLETABLE ENERGY SOURCES  Documentation	63.51
Solar, wind, geothermal and others	63.50
SCOPE AND PURPOSE	63.001
General	63.01
Purpose	63.002
SYSTEMS ANALYSIS DESIGN	
Annual energy consumption	63.60
Documentation	63.62 63.61
WATER HEATING	
Conservation of hot water	63.32
Insulation	63.33
Purpose	63.30 63.31
ENERGY EFFICIENCY RATIOS	63.20
	03.20
ENGINEER AND ARCHITECT  Design and supervision required	50.07, 50.10 50.12
EQUIPMENT, Definition of	51.01
EXCAVATIONS (also refer to chapter Ind 1070, Safety & Health Code)	53.26, 53.27
EXHAUST VENTILATION SYSTEMS	64.08 51.01
EXHIBITION BUILDINGS	54.001
EXISTING, Definition of	51.01

	Ind Section No(s).
EXISTING BUILDINGS Additions, alterations, repairs	50.03, 50.07 50.03 52.04
EXIT COURT, Definition of	51.01
EXIT DISCHARGE GRADE, Definition of	51.01
EXIT LIGHTS*	51.15
EXIT TRIANGLE	54.02
EXIT, VERTICAL, Definition of	51.01
EXITS (see MEANS OF EGRESS)	
EXPLOSIVES, Storage of (refer to chapter Ind 5)	
EXPOSED EXTERIOR STRUCTURAL COLUMNS AND FRAMING	51.02, 51.03
EXTERIOR MASONRY (ORDINARY) CONSTRUCTION	51.03
EXTERIOR OPENINGS Doors (see DOORS AND DOOR ASSEMBLIES) Ducts Exits Exits Fire protection Framing, wood Horizontal exits Intakes Shutters Vents Windows  EXTERIOR OPENINGS, PROTECTION REQUIRED Because of location on property Because of type of construction  EXTERIOR STAIRWAYS  EXTERIOR WALL Construction Definition of	64.19 51.15, 51.20 51.047, 51.048, 51.049 51.03 51.19 64.19 51.03 64.19, 64.39, 64.40 52.02 51.03, 54.50, 62.22 51.03 51.16, 51.20, 54.03 51.03 51.03
FABRICATOR	53.50
FACTORIES	54.001
FALLOUT SHELTER	50.07
FAMILY, Definition of	51.01
FARM BUILDINGS, exempt	50.04
FEE SCHEDULE (refer to chapter Ind 69)	
FENCES (refer to chapter Ind 35)	
FILLING STATIONS	54.51
FILM, MOTION PICTURE	55.39
FINES (refer to chapter 101, Wis. Stats.)	50.26

	Ind Section No(s).
FIRE	
Alarms	51.24 51.049, 64.42 57.27, 61.14 51.047 51.20
Exits* Extinguishers, portable	51.22, 61.20
Protection of misc. heating devices* Protection requirements	51.02, 51.03 51.04 51.23 51.21 53.63 51.02
FIRE DISTRICTS, Establishment of	50.06
FIRE DOOR, Definition of	51.01
FIRE DOOR ASSEMBLY, Definition of	51.01
FIRE DOOR CLOSING DEVICE, Definition of	51.01
FIRE EXTINGUISHING SYSTEMS (see SPRINKLERS and STANDPIPES)	
FIRE PREVENTION, DETECTION AND SUPPRESSION	52.01
FIRE PROTECTED PASSAGEWAYS*	51.02, 51.03
FIRE RESISTANCE AND FIRE RESISTIVE MATERIAL, definition	51.01
FIRE RESISTANCE RATINGS Assemblies	51.045 51.03 51.045 51.02 51.08 51.04
FIRE RESISTIVE Classification, definition of	51.01 51.01 51.01 51.01 51.04
FIRE RETARDANT Roof coverings, definition of	51.01 51.01
FIRESTOPPING  Between wood sleepers	51.03 53.63
FIRE WINDOW ASSEMBLY, Definition of	51.01
FIRE ZONES, local requirement	50.06
FIRST FLOOR, Definition of	51.01
FLAMEPROOFING REQUIRED	55.19, 55.60
FLAME-SPREAD CLASSIFICATION, Definition of	51.01

ET AMMADT EC (COO CEODACE OE ET AMMADT EC)	Ind Section No(s).
FLAMMABLES (see STORAGE OF FLAMMABLES)	50.07
FLOODPLAIN, CONSTRUCTION ON	50.07
FLOOR Area, definition of	51.01
Anchorage (see Anchorage, Anchorage) Definition of	51.01 52.60 52.57 51.03 51.01 53.10, 53.11, 53.13 51.01 54.50 64.41 53.61 54.17 52.16 55.22
FLUES	64.46
FOOTING (see FOUNDATIONS)	53,20
FORMS, CONCRETE	53.40
FOUNDATIONS  Basement wall loads	53.11 53.24 53.40 53.11 53.23 53.322 50.13, 50.14 53.322 53.24 53.28 53.26 53.25 53.21 51.02
Wood and timber, treated	51.02, 53.61, 53.64
FOYER, Definition of	51.01
FRAME BUILDINGS	51.03
FRAMING At chimneys Floor Steel Vertical Wood	53.63, 64.46, 64.49 51.02, 51.03 53.50, 53.52 51.02, 51.03 53.61-53.63
FREEZING Concrete	53.40 52.61 53.23 53.33 51.01

	Ind Section No(s).
FROST, DEPTH OF FOUNDATION FOR	53.23
FUEL CONTRIBUTED CLASSIFICATION (FCC), Definition of	51.01
FURNACE  Definition of	51.01 51.01 64.21, 64.22 51.03
FUSIBLE LINKS REQUIRED	
For fire doors	54.02 51.19 55.43, 55.44 55.24
GALLERYGALLERIES	56.001
GALVANIZED  Ducts	64.34 51.050 51.03
GARAGES	54.50 54.22
GASOLINE SERVICE STATIONS	54.51
GIRDERS	51.03
GLASS Block assemblies	51.048 51.048 51.03, 51.048 51.048
GLAZING, SAFETY (refer to CPSC Standard for Architectural Glazing Material)	
GRADE At building, definition of	51.01 51.01 53.61 53.61
GRADING LUMBER (see GRADE)	
GRAIN ELEVATORS, combined with place of employment	54.001
GRANDSTANDS	55.51-55.57
GRAVITY EXHAUST VENTILATION, Definition of	51.01
GREENHOUSE  As place of employment	54.001 54.001 53.11
GROSS AREA, Definition of	51.01
GROUND FLOOR, Definition of	51.01

<del>- ·</del>	
	Ind Section No(s).
GROUP OCCUPANCY Assembly	54.001 or 55.01 54.001 60.001 61.001 54.50-54.52
Industrial. Institutional Outdoor assembly. Residential Schools Specialty Storage Theaters.	54.001 57.001 55.58-55.68 57.001 56.001 62.001 54.001 55.001
GROUT, MASONRY	53.313, 53.321
GUARDRAILS Grandstands	55.55 62.28
GUNNITE	53.42
GYMNASIUMS	53.41 51.045 53.41 51.045
HABITABLE ROOM  Definition of	51.01, 61.01 57.18
HALLS Assembly	54.001 or 55.01 54.001 or 55.01 54.001 or 55.01
HANDRAILS  Balconies	51.16 51.20 62.28 52.04 51.16
HANGARS, AIRPLANE	54.50
HAZARDOUS OCCUPANCIES Automobile filling stations	54.51 54.50 62.20 54.52
HAZARDOUS PIPING, Definition of	51.01
HAZARDS, ISOLATION OF*	
HEADROOM	51.16, 62.25

	Ind Section No(s).
HEATING, VENTILATING AND AIR CONDITIONING (Chapter Ind 64)	
Air cleansing devices	64.16
Air movement and distribution	64.06
Air velocities	64.31
Approval of drawings and specifications	50.07, 50.12, 64.02
Automatic controls	64.17
Chimneys, Factory built	64.48
Chimneys, Masonry	64.46
	64.09
Contamination of air	64.18
Dampers and damper controls	64.09, 64.42
Design	50.07
Duct connectors	64.35
Duct construction	64.34
Duct design	64.31
Duct use	64.32
Equipment installations	64.21
Equipment ratings and safety controls	64.20
Exhaust ventilation system	64.08
Fans and blowers	64.44
Fire dampers and fire doors	64.42
Gas vents	64.50
Gravity ventilation ducts	64.38
Heat loss and capacity	64.03
Inside design temperatures and ventilation	64.05
Insulation	64.37
Location of outside air intakes or exhausts	64.19
Mechanical ventilation systems	64.06
Natural ventilation systems	64.07
Occupancy requirements	64.54-64.68
Outside temperature design conditions	64.04
Piping	64.23
Relief vents	64.40
Smoke pipes	64.49
Smokestacks, Metal	64.47
Special equipment requirements	64.22
Suspended ceiling plenum	64.41
Tempered air requirements	64.13
Tempered outside air requirements	64.14
Underground duct construction and installation	64.33
Ventilation discharge	64.39
Vertical shafts	64.36
HEAVY TIMBER CONSTRUCTION	51.03
HEIGHT AND AREAS*	
Affect stairways	51.15
Affect windloads	53.12
Chimneys	64.45
Classification of construction	51.03
Masonry walls (also see MASONRY CONSTRUCTION)	53.322
Parapet walls	51.02, 53.322
Raising adjoining chimneys and vents	64.45
Restrictions	51.03
Towers, spires, poles	53.61, 62.35
Types of construction	51.03

	Ind Section No(s).
HEIGHT OF BUILDINGS* Classes of construction	51.03 51.01 51.01
HOLLOW BONDED WALL, Definition of	51.01
HOLLOW MASONRY Units	53.311 53.322, 53.34
HOMES FOR AGED AND INFIRM	57.001
HOODS, KITCHEN EXHAUST	64.67
HORIZONTAL EXITS	51.19
HORSE ARENA	54.001 or 55.01
HOSE Sprinklers	51.23 51.21
HOSPITALS	57.001
HOTELS	57.001
HOUSE LODGING OCCUPANCY	57.001

-1/-	
	Ind Section No(s).
I .	
ICE PLANTS	54.001
ILLUMINATION OF EXITS*	
INCREASE IN AREAS ALLOWED	54.01
INDOOR PROJECTION BOOTHS	55.40-55.48
INDUSTRIAL BOILERS	64.22
INDUSTRIAL OCCUPANCY	54.001
INFILTRATION, CONTROL OF	51.02, 64.03
	·
INNER LOT LINE COURT, Definition of	51.01
INSPECTIONS (also see chapter 101, Wis. Stats.)	50.18
INSTITUTIONAL OCCUPANCY	57.001
INSULATING	
Ducts	63.22, 64.37
Linings, duct	64.36 63.22, 64.23
	51.01
INTAKE, OUTSIDE AIR, Definition of	DI.OI
INTERIOR BALCONY (see MEZZANINE)  Definition of	51.01
INTERIOR FINISHES	
General	51.03 52.57
Walls, toilet rooms	52.58
INTERIOR PARTITIONS	51.02
INTERIOR STAIRWAYS, ENCLOSED	51.18
т	
JAILS	57.001
	37.00T
JOISTS Anchorage (see ANCHORAGE, ANCHORS)	
Bridging (see BRIDGING)	F2 /0
Concrete	53.40 53.63
Fastenings (see ANCHORAGE, ANCHORS)	55.05
Fire cuts	53.63
Fire resistance ratings	51.045
Fire stopping	53.63
Floor framing	53.63 53.50 53.52
Steel	53.50, 53.52 53.60-53.63
L	JJ. 00-JJ. 0J
LABELS	
Exit door bolts	51.15
Fire doors	51.047
Roofing	51.050
Windows	51.048

	Ind Section No(s).
LADDERS, ACCESS TO ATTIC OR ROOF	51.02
LAMINATED MATERIALS	53.60
LATERAL BRACING	53.50
LAUNDRY ROOMS, Protection for	57.20, 60.37
LAVATORIES*	52.60
LIBRARIES	56.001
LIGHT For exit signs	51.15
LIME, For masonry construction	53.314
LINTEL	51.03
LIQUEFIED PETROLEUM GAS (refer to chapter Ind 9)	
LIQUIDS, FLAMMABLE (refer to chapter Ind 8)	
LIVING UNIT, Definition of	51.01
LOADS, DEAD	53.10
	53.15
LOADS, DESIGN COMBINATIONS	
LOADS, FOOTINGS AND FOUNDATIONS	53.20
Concentrated. Cranes. Floor loads, occupancy. Footings. Impact. Items not covered Occupancy loads Posting loads Reduction of loads. Roof. Sidewalks Soil. Tests	53.11 53.13 53.11 53.13 53.11 53.11 54.17 53.11 53.11 53.11 53.21 53.21
Wind	53.12
LOADS, PILES	53.24
LOADS, RAILINGS	51.16, 62.28
LOADS, WIND	53.12
LOBBY Definition of	51.01 55.15
LOCAL REGULATIONS	50.06
LOCKS ON DOORS, Prohibited	51,15
LODGES	55.01
LODGING HOUSES	57.001

	Ind Section No(s).
LOT LINE, Definition of	51.01
LOT LINES, Plot plan required	50.12
LOTS, PARKING, Considerations for physically disabled	52.04
LUMBER	53.61
M	
MAINTENANCE	, 52.64, 61.21, 64.52
MAJOR APPARATUS, Definition of	51.01
MANSARDS	51.03
MANUFACTURING PLANT, Occupancy	54.001
MARKETS, Business occupancy	54.001
MASONRY CONSTRUCTION	
Aggregate	53.312
Basement walls	53.322
Block	53.311
Brick	53.311
Cast stone	53.311
Cavity walls	53.321, 53.322
Cementitious materials	53.314
Ceramic	53.36
Ceramic veneer	53.36
Change in thickness	53.34
Chases	53.34
Chimney walls	53.321
Clay or shale units	53.311
Composite	53.322
Concrete units	53.311
Construction	53.33
Corbeling	53.34
Definition of	51.01 53.32
Design	53.322
Design, engineered	53.323
Details, construction	53.34
Erection, general	53.01
Fire resistance materials	51.043-51.045
Fire resistance ratings	51.043
Glass blocks	51.048
Grout	53.313
Gypsum, mortar	53.312
Gypsum units	53.311
Hollow units	53.311
Jointing	53.322, 53.36
Lateral support	53,322
Materials	53.31
Mortar	53.312
Piers	53.322
Protection against freezing	53.33
Reinforced, ties and anchors	53.316
Stone	53.311
Terra cotta	53.36
Tests	53.35

	Ind Section No(s).
Types	53.321 53.311 53.36 53.322 53.315 53.311, 53.312
MATERIALS, METHODS AND DEVICES, Approval of	50.19
MEANS OF EGRESS* Aisles* Arrangement of exits* Balconies, exterior	51.02
Capacity of exits	51.15
Courts	52.05 51.15
Doors, exit*	51.15
Enclosure of exits*	51.02
Fire alarms	51.24
Fire escapes	51.20
Foyer	55.15
General provisions*	
Hardware	51.15
Horizontal exits	51.19
Illumination (refer to chapter Ind 19) Monumental stairs	54.08
Number of persons*	F0 04
Outlets, exits	52.21
Panic hardware	51.15
Rescue platforms	54.03, 57.12
Signs*	51.15
Sliding glazed patio type	57.09
Stairway, construction	51.16
Units of width	51.15
MECHANICAL VENTILATION (see VENTILATION)	
MENTAL HOSPITALS	57.001
MERCANTILE, Occupancy	54.001
METAL Anchors (see ANCHORAGE - ANCHORS) Ducts (see DUCTS)	
Fire escapes	51.20
Roof covering	51.050
Smoke pipes	64.49
Smokestacks	64.47
Veneers	53.56 51.048
METAL FRAME BUILDINGS, Protected and unprotected	51.03
METHODS OF CONSTRUCTION	50.19
MEZZANINE, MEZZANINE FLOOR	51.01, 51.02
MILL CONSTRUCTION (Heavy timber)	51.03

	Ind Section No(s).
MINI-GARAGES AND WAREHOUSES	54.22
MINIMUM DESIGN LOADS	53.11
MOBILE TRAINING CLASSROOMS	56.40-56.46
MONASTERIES	56.001
MONITORS, ROOF	51.02, 51.14
MONUMENTAL STAIRS	54.08
MORTAR	53.312
MOTELS	57.001
MOTION PICTURE THEATERS	55.001
MOTOR, AUTO GARAGES Private garages	54.50 54.50 54.51 54.001 54.51
MOVING STAIRWAYS, ESCALATORS (refer to chapter Ind 4)	
MULTIPLE DWELLING (APARTMENT HOUSE)  Definition	57.001 50.04
MUSEUMS	56.001
И	
NAILS	53.63
"NATIONAL" PREFIX STANDARDS (see STANDARDS)	
NET AREA, Definition of	51.01
NEW MATERIALS OR METHODS OF CONSTRUCTION	50.19
NONBEARING PARTITIONS OF WALLS	51.02 51.01 51.03 51.03 53.322
NONCOMBUSTIBLE CONSTRUCTION, Definition of	51.01
NURSERIES (HOSPITAL)	57.001
NURSING HOMES	57.001
0	
OBSTRUCTION - PROHIBITED* Aisles	52.21 51.15 51.19 51.16 51.01
OCCUPANCY OR USE, Definition of	T+OT

OCCUPANCY CHAPTERS  APARTMENT BUILDINGS, HOTELS AND PLACES OF DETENTION  (including all apartment buildings, row houses, rooming houses, hotels, dormitories, convents, monasteries, hospitals, children's homes, homes for the aged and infirm, nursing homes, convalescent hospitals, convalescent homes, mental hospitals, jails, and other places of abode or detention)	Chapter Ind 57
CHILD DAY CARE FACILITIES (including all public and private day care centers accommodating children, including all buildings, or parts of buildings, used as child day care facilities)	Chapter Ind 60
COMMUNITY-BASED RESIDENTIAL FACILITIES (CBRF) (including facilities providing care, treatment and services to 9 through 20 unrelated adults located in existing buildings)	Chapter Ind 61
FACTORIES, OFFICE AND MERCANTILE BUILDINGS (including all factories and workshops, office buildings, telegraph and telephone offices, mercantile establishments where commodities are bought or sold, taverns, warehouses, railroad stations, exhibition buildings, and places where not more than 100 persons assemble for recreation, entertainment, worship or dining purposes)	Chapter Ind 54
HAZARDOUS OCCUPANCIES (including all garages [except private garages], filling stations and related buildings and structures, automobile tire or battery shops, and other occupancies where flammable or combustible liquids or other hazardous materials are manufactured, processed, stored, or otherwise handled)	54.50-54.52
SCHOOLS AND OTHER PLACES OF INSTRUCTION (including all public and private schools, universities, colleges, academies, seminaries, libraries, museums and art galleries, including all buildings or parts of buildings used primarily for instructional purposes)	Chapter Ind 56
SPECIALTY OCCUPANCIES (including open parking structures and radio and television transmitting and receiving antenna)	Chapter Ind 62
THEATERS AND ASSEMBLY HALLS (including all buildings, or parts of buildings, containing an assembly hall having a stage which may be equipped with curtains or permanent or movable scenery, or which is otherwise adaptable to the showing of plays, operas, motion pictures or similar forms of entertainment; and all buildings, or parts of buildings, other than theaters, which will accommodate more than 100 persons for entertainment, recreation, worship or dining purposes)	Chapter Ind 55
OCCUPANT LOAD	51.15
OCCUPIED, Definition of	51.01
OFFICE BUILDINGS	54.001
OFFICIAL, BUILDING (see ADMINISTRATION AND ENFORCEMENT)	

	Ind Section No(s).
OIL STORAGE	64.23
OLD PEOPLES HOMES	57.001
OPENINGS	
Combustion air	64.09 51.02, 51.03
Exterior walls	51.03
Exterior walls for fire department	52.02
Horizontal protection	51.03 55.39
Protected with fire doors or windows	51.047, 51.048
Rated construction	51.045 51.02, 51.03
OPEN PARKING STRUCTURES	62.20
OPEN SPACES, Definition of	51.01
OPEN WEB STEEL JOIST	53.52
ORDINARY MASONRY BUILDINGS	51.03
ORIEL WINDOWS (Bay)	51.03
ORPHANAGES	57.001
OUTDOOR OPENINGS, Definition of	51.01
OUTDOOR PLACES OF ASSEMBLY	55.58-55.68
OUTDOOR THEATERS	55.68
OUTLET (SUPPLY OPENING), Definition of	51.01
OUTSIDE AIR, OUTSIDE AIR INTAKE, Definition of	51.01
OUTSIDE STAIRS	51.16, 51.20
OVERCROWDED PROHIBITED (Posted)	54.05, 55.06
OVERLOAD OF FLOORSNot permitted (Posted)	54.17
OVERTURNING MOMENTSFor wind calculations	53.12
OWNER	50.10
Application for permit	50.12
Maintenance of buildings	52.64
Responsibility	50.11
P	
PANEL WALL, Definition of	51.01
PANIC HARDWARE	51.15
PARAPET WALL	51.02, 53.34
PARKING GARAGE, OPEN DECK	62.20
PARKING SPACES, Reserved for physically disabled	52.04
PARTITION	51.02
Definition of	51.01
PARTY WALL, Definition of	51.01
PASSAGEWAYS*	52.21
PATENT CHIMNEYS	64.48

	Ind Section No(s).
PENALTIES AND VIOLATIONS	50.26
PENTHOUSE	51.02, 51.03 51.01
PERMISSIBLE TEMPERATURE ON COMBUSTIBLE MATERIALS	51.042
PERMITS, BUILDING	50.06 50.14
PETROLEUM STORAGE (refer to chapter Ind 8)	
PEWS, Width	55.13
PHYSICALLY DISABLED, General requirements	52.04
PICTURE PROJECTION BOOTH	55.39
PIERS  Definition of	51.01 53.322
PILASTERS, Masonry	53.322
PILES	53.24
PIPE Duct	64.33 64.49 64.23
PIPING, HAZARDOUS, Definition of	51.01
PLACE OF EMPLOYMENT, Definition of	51.01
PLACES OF OUTDOOR ASSEMBLY	55.68
PLANS Examination and approval	50.12 50.20 50.12 50.08 50.14 50.12
PLANT, MANUFACTURING, Occupancy	54.001
PLATFORMS	51.16 54.03, 57.12
PLENUM, SUSPENDED CEILING	64.41
PLOT DIAGRAM OR PLAN, Required	50.12
PLYWOOD	53.61
POLE BUILDING	51.03
POLE FOUNDATIONS	53.28
POLICE STATION, Occupancy	57,001
PORCH, Definition of	51.01
PORTLAND CEMENT, Masonry mortar	53,35
POSTING Floor loads	54.17 54.18, 55.06 50.06
POWER AND DUTY OF BUILDING OFFICIAL	50.06, 50.12

	Ind Section No(s).
POWER PLANT, Occupancy	54.001
PRESSURE TANKS	51.21, 51.23
PRESSURE TREATED WOOD  Fire retardant, Definition of	51.01 53.63
PRESTRESSED CONCRETE	53.40
PRINTING PLANT, Occupancy	54.001
PRISON, Occupancy	57.001
PRIVATE, Exempt from code	50.04, 54.50, 57.001
PRIVATE GARAGES	54.50
PRIVATE SCHOOLS	56.001
PROCEDURE, Appeals	50.24
PROJECTION FROM BUILDINGS	51.03
PROPERTY, ADJOINING, Protection of	53.26
PROPERTY LINE, Definition of	51.01
PROSCENIUM, STAGE AND APPURTENANT ROOMS (see chapter Ind 55)	
PROTECTION AGAINST DECAY AND TERMITES	53.63
PROTECTION OF DOOR OPENINGS IN WALLS AND PARTITIONS	51.047
PROTECTION OF VERTICAL OPENINGS, STAIRS AND ELEVATORS*	51.02, 51.03
PROTECTION OF WALL OPENINGS	51.047, 51.048, 51.049
PUBLIC BUILDING, Definition of	51.01
PUBLIC GARAGES	54.50
PUBLIC SCHOOLS	56.001
PUBLIC SEWERS, Connection with	52.62
PUBLIC THOROUGHFARE, Definition of	51.01
PUMPS, FIRE	51.21, 51.23
R	
RADIATION AND CONVECTION EQUIPMENT	64.21
RADIO RECEIVING ANTENNA	62.35
RAIL AROUND OPENINGS	51.16, 54.10, 62.28
RAILING (see HANDRAILS)	
Apartment buildings, hotels and places of detention Barrier-free environments	57.07 52.04 54.03 62.26 56.06 55.08
RANGE HOODS, Ventilating	64.67
RANGES, Clearances	52.17
RECEIVING ANTENNAE, Television and radio	62.35

	Ind Section No(s).
RECORD CARD  Fire alarm tests	51.24 60.19
RECREATION HALLS	54.001 or 55.01
REDUCTIONS, Live loads	53.11
REFINERIES, Flammable liquids	54.001
REFORMATORIES	57.001
REFRIGERATION	64.10
REGISTERED ARCHITECT OR ENGINEER, Services required	50.07, 50.10, 50.12
REGISTERS (see FIRE DAMPERS)	
REINFORCED CONCRETE	53,40
REINFORCED GYPSUM CONCRETE	53.41
REINFORCED MASONRY	53.323
REINFORCEMENT (see REINFORCED CONCRETE and MASONRY)	
RELOCATABLE CLASSROOMS	56.30
REMODELING AND ALTERATIONS 50.03, 50.07, Definition of	50.12, 52.04 51.01
REPAIR	55.50, 57.15, 60.19
REPAIR SHOPS, AUTO	54.52, 64.61
REQUIRED, Definition of	51.01
REQUIRED EXIT CORRIDOR, Definition of	51.01
REQUIREMENTS BASED ON OCCUPANCY (see chapters Ind 54-62)	
REQUIREMENTS BASED ON TYPES OF CONSTRUCTION	51.03
RESCUE PLATFORMS	54.03, 57.12
RESIDENCES, One- and two-family exempt	50.04
RESIDENTIAL HEALTH CARE FACILITIES	57.26
REST ROOMS*	52.50, 54.12
RESTAURANTS	55.01
RESTRAINED SUPPORT, Definition of	51.01
RETAIL STORES, BUSINESS	54.001 54.51, 54.52 54.02, 54.03 51.03
RETAINING WALL	53.27, 53.34 51.01
RETROACTIVITY	1.26, 63.001
RETURN (or EXHAUST OPENING), Definition of	51.01
REVIEWING STANDS	55.51
REVOLVING DOORS, at nonrequired exit	51.15
RISERS, for stairways	51,16

	Ind Section No(s).
ROADWAY, Definition of	51.01
ROOF, ROOF CONSTRUCTION Access to attic or roof Anchorage (see also ANCHORAGE, ANCHORS) Coverings Definition Drainage. Fire-resistance ratings Fire resistive construction Heavy timber.	51.02, 51.20, 57.25 53.12 51.02, 51.050 51.01 53.11 51.043 51.03 51.03
Joists (see JOISTS) Live loads	53.11 51.03 51.02, 51.050 53.63 55.24 51.02, 53.34 51.03, 53.26 51.02 53.61 51.02 62.36 53.12 53.60-53.63
ROOF COVERING, Definition of	51.01
ROOF COVERINGS	51.02, 51.050 53.11 53.61
ROOFING (see ROOF, ROOF CONSTRUCTION and ROOF COVERINGS)	51.01
ROOM, Definition of	64.22
RÓOMING HOUSE	57.001
ROW HOUSE	57.25
RUBBLE MASONRY	53.322
RUNNING TRACKS	56.13
S	
SAFE PLACE Defined (refer to chapter 101, Wis. Stats.) Exit to	52.21
SAFEGUARDS, for physically disabled	52.04
SAND Bearing soil capacity	53.21 53.40 53.12
SANITARIUM, Occupancy	57.001
SANITATION (See also rules of department of health and social services)	52.50-52.64
SCHOOLS	56.001

	Ind section No(s).
SCOPE OF CODE (see also chapters Ind 51-64)	50.02
SCUTTLE	51.02, 57.25
SEATS, SEATING Grandstands, bleachers, places of outdoor assembly Physically disabled	55.54 52.04 56.13, 56.14 55.13
SELF-CLOSING DOORS  Normally closed (furnace rooms, shaft enclosures, etc.)*  Normally open (sliding, horizontal exit)	54.01
SEMINARIES	56.001
SEPARATION, CLASS OF CONSTRUCTION	51.02
SEPTIC TOILETS	52.62
SERVICE STATIONS, AUTO	54.52
SETBACK, Definition of	51.01
·	J1.01
SHAFT Definition of	51.01 51.02, 51.03
SHALL, Definition of	51.01
SHORING, Adjoining foundations	53.26
SHUTTERS, FIRE	51.03
SIAMESE CONNECTIONS	51.21, 51.23
SIGNS Capacity of occupancy	54.18, 55.06 62.25 51.01 51.15 52.04 51.15 54.17 52.52
SIMPLE SUPPORT, Definition of	51.01
SINKS (see LAVATORIES)	
SKATING RINKS (Indoor)	54.001 or 55.01
SKYLIGHTS, DOMES	51.02
SLAB  Minimum thickness, for fire-resistive purposes  Minimum thickness, for floors	51.043 51.043 51.043 53.40
SLATE, ROOFING	51.050
SLEEPERS	51.03
SMOKE DETECTION	57.27, 61.14

	Ind section No(s).
SMOKE PIPES, SMOKESTACKS AND BREECHING	64.45-64.50
SMOKEPROOF STAIR ENCLOSURE	51.18
SMOKE VENTS, STAGE	55.24
SOIL	53.20
SPACE HEATERS	64.22 51.01
Airplane hangars.  Amusement park buildings.  Assembly occupancies.  Auto service stations  Bowling alleys.  Churches.  Day care centers.  Dry cleaning establishments  Farm buildings.  Garages (public and private)  Grandstands  Greenhouses  Hazardous  Stadiums.  Temporary structures.  Tents  SPECIALTY OCCUPANCIES  Open parking structures	54.50 54.001 55.01 54.51, 54.52 54.001 or 55.01 54.001 or 55.01 60.001 54.001 50.04 54.50 55.50 54.001, 53.11 54.50-54.52 55.50 50.04 55.58 62.001 62.20
Television and radio transmitting and receiving antenna	62.35
SPECIFICATIONS ADOPTED (see STANDARDS)	
SPECIFICATIONS, Required for plan approval	50.12
SPIRAL STAIRS	51.16
SPLICES	53.50, 53.51
SPRAY PAINTING (refer to chapter Ind 1910, Safety & Health Code)	
SPRINKLERS Area increase permitted	54.01 55.35 51.23 51.23 52.01
Hose threads.  Maintenance  Materials  Requirements  School occupancy  Standards  Supervisory facilities.	51.23 51.23 51.23 51.23 56.05 51.23 51.23
Tests, water supply	51.23 55.50

	Ind Section No(s)
STAGE (see chapter Ind 55)	
STAIRS AND STAIRWAYS  Design features	51.16 51.02, 51.03 54.03, 54.08 51.20 51.17 51.16 51.18
American Iron and Steel Institute	51.27 51.26 51.27 51.27 51.27 51.25 51.27 51.27 51.27 51.27 51.27 51.27 51.27 51.27 64.03
STANDPIPES	51.21 64.23
Caissons. Certification and identification. Fabrication Fire resistance ratings Fire resistive construction, type 1 and type 2. Joists, open web construction Marking Metal frame protected construction, type 3. Metal frame unprotected construction, type 6. Piles, steel. Reinforcing Stainless steel Structural steel. Veneered walls. Welding	53.54 53.24 53.50 53.50 51.043 51.03 53.52 53.50 51.03 51.03 53.24 53.316 53.55 53.50 53.55
STEPS	53.24 54.03, 55.09 53.311, 53.322

	Ind Section No(s)
STORAGE OF FLAMMABLES (also refer to chapter Ind 8)	60.19
STORES	54.001
STORIES  Definition of	51.01 51.02
STORY, Definition of	51.01
STOVES (see RANGES)	
STREET  Definition of	51.01 54.01
STRUCTURAL REQUIREMENTS (Chapter Ind 53)	
Concrete	53.40 53.20 53.10 53.30 53.50 53.60
STRUCTURE, Definition of	51.01
STUDS	53.63
SUPERVISION (of construction)	50.10
SUPPORT (RESTRAINED and SIMPLE), definitions of	51.01
T .	
TAVERNS	54.001 or 55.01
TELEGRAPH AND TELEPHONE OFFICES	54.001
TEMPERATURE DESIGN	64.04, 64.05
TEMPERED AIR, Definition of	51.01
TEMPERED OUTSIDE AIR, Definition of	51.01
TEMPORARY BUILDINGS OR STRUCTURES	50.04
TENTS AND PLACES OF OUTDOOR ASSEMBLY	55.58-55.68
TERRACE, Definition of	51.01
TESTING LABORATORIES, Approved	51.044
TESTS Fire alarm. Fire doors. Fire resistance ratings of assemblies Heating equipment Load. Noncombustible material Rating methods. Soil bearing. Sprinkler Standpipes.	51.24 51.047 51.043 64.20 53.23 51.01 51.043 53.21 51.23 51.21
THEATERS AND ASSEMBLY HALLS (Chapter Ind 55)	-,·-
THREADS, HOSE	51.21, 51.23
TILE (Veneers)	53.36
	-

-32-	
	Ind Section No(s).
TIMBER Glued-laminated structural	53.61 51.03
TIRE SHOPS	54.52
TITLE AND SCOPE*	
TOILET COMPARTMENTS	
Floors	52.57 52.58 52.04, 52.59
TOILETS Chemical	52.62 52.04, 52.59 52.04, 52.60 52.63 52.50, 52.56
TOWERS	62.35
TREADS, STAIRS	51.16
TREATED WOOD (Fire Retardant), Definition of	51.01
TRIANGLE, EXIT	54.02
TRIM, WOOD	51.02, 51.03
TRUSSES	53.62
TYPES OF CONSTRUCTION, Features summarized	51.03
U	
UNDERPINNING	53.26
UNDERTAKING PARLORS	54.001
UNENCLOSED Ramps	52.04 51.16
UNIFORM TREADS AND RISERS	51.16
UNIT HEATERS	64.21 51.01
UNIVERSITIES	56.001
UNLAWFUL To change	50.09 50.12
UNLIMITED AREA	54.01
URINALS*	52.60
USE, Definition of	51.01
v ·	
VENEERED WALL Anchorage masonry units	53.36 51.01 53.36

	Ind Section No(s).
VENTILATION	
Air-cleansing devices	64.16
Air for combustion	64.09
Air movement and distribution	64.15
Automatic controls	64.17
Contamination of air	64.18
Definitions	51.01, 64.12 64.08
Gravity exhaust ventilation, definition of	51.01
Location of intakes	64.19
Mechanical ventilation, definition of	51.01
Mechanical ventilation systems	64.06
Natural ventilation systems	64.07
Occupancy requirements	64.05
Tempered air	64.13 64.14
Tempered outside air	
VENTS	64.45-64.50
VENT SHAFTS*	51.02, 51.03
VERTICAL EXIT, Definition of	51.01
VERTICAL FRAMING, WOOD	53.63
VERTICAL OPENINGS, ENCLOSURES*	51.02, 51.03
VIOLATIONS AND PENALTIES	50.26
VOLUME (TOTAL), Definition of	51.01
WALKWAYS	
From parking facilities, required	52.04
Live loads	53.11
WALLS AND PARTITIONS	51.02
Anchorage (see ANCHORAGES-ANCHORS)	51.043
Assemblies, fire resistance ratings and standards Definitions	51.045
Elevator enclosures	51.02, 51.03
Exterior	51.03
Fire division	51.02
Fire protective requirements	51.03
Fire resistance rating for assemblies	51.045
Foundation	53.322
Furnace and boiler rooms* Glass block	51.048
Masonry (see MASONRY CONSTRUCTION)	71.040
Materials, fire resistance ratings and standards	51.043
Noncombustible	51.01
Openings, fire protections 51.047	, 51.048, 51.049
Parapets	51.02
Party wall, definition of	51.01
Stairways and exit enclosures	51.03 53.63
Wood stud	
WAREHOUSES	54.001
Mini-warehouses	54.22
WATER CLOSETS	52.60
WELDER, Certification of	53.53
WELDING	53.53

	Ind Section No(s).
WHOLESALE STORES	54.001
WIDTH, Aggregate exit	51.15
WIND LOADS DESIGN	53.12
WINDOWS  Area limitation at rated wall	51.03 51.048 64.07 52.03
WIRED GLASS Fire-resistive doors and windows	51.047, 51.048
WIRING, ELECTRICAL (see also Wis. State Electrical Code)	52.20, 61.25
WOOD AND WOOD FIBER CONSTRUCTION	53.60-53.63
WOOD FOUNDATIONS	51.02, 53.61, 53.64
WOOD FRAME CONSTRUCTION	51.03
WOODWORKING FACTORIES	54.001
WORK Footing and foundation	50.13 50.14
Y	
YARD Definition of	51.01 57.06