

Ind 50 to 64

STATE OF WISCONSIN)
)
DEPARTMENT OF INDUSTRY,)
LABOR AND HUMAN RELATIONS)

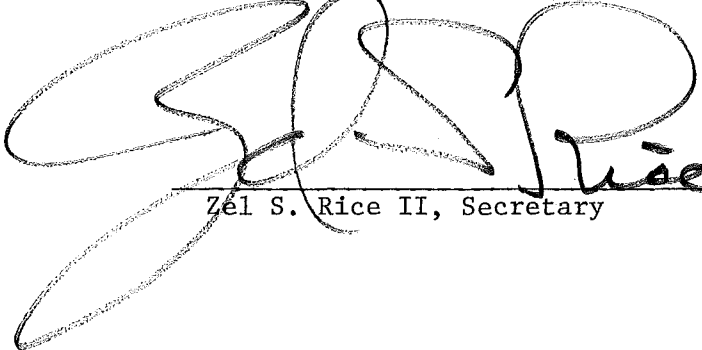
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TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

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 by this department on October 17, 1977.

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 City of Madison, this 17 day of October, A.D., 1977.


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 101.20, Wis. Stats., the Department of Industry, Labor and Human Relations hereby amends, 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, 1977, as provided in chapter 227, Wis. Stats.

Subsection Ind 50.04 (2) is amended to read:

- (2) Buildings used exclusively for farming purposes.

Subsection Ind 50.04 (5) is created to read:

- (5) Buildings located on Indian reservation land held in trust by the United States.

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

1. Department examination and approval is waived for television and radio transmitting and receiving antennas, outdoor theater screens, water tanks, display signs, observation towers, docks, piers, wharves, tents or inflatable structures used temporarily, and other similar structures; however, such structures and temporary tents shall comply with the applicable structural and other requirements of this code.

Subsection Ind 50.17 (1) Note is created to read:

Note: According to section 66.05 (1) (a), Wis. Stats., the local governmental body or building inspector may order the razing of buildings or structures, or portions thereof, where there has been a cessation of normal construction for more than 2 years.

Subsections Ind 51.01 (42a), (42b), (42c) and (42d) are created to read:

- (42a) Farm operation. The farm operation is the planting and cultivating of the soil and growing of farm products substantially all of which have been planted or produced on the farm premises.

Note: The farm operation, according to section 102.04 (3), Wis. Stats., includes: the management, conserving, improving and maintaining of the premises, tools, equipment, improvements and the exchange of labor or services with other farmers; the processing, drying, packing, packaging, freezing, grading, storing, delivery to storage, carrying to market or to a carrier for transportation to market and distributing directly to the consumer; the clearing of such premises and the salvaging of timber and the management and use of wood lots thereon but does not include logging, lumbering and wood-cutting operations unless the operations are conducted as an accessory to other farm operations.

- (42b) Farm premises. The farm premises is defined to be the area which is planted and cultivated. The farm premises does not include greenhouses, structures or other areas unless used principally for the production of food or farm products.
- (42c) Farm products. Farm products are defined as agricultural, horticultural and arboricultural crops. Animals considered within the definition of agricultural include livestock, bees, poultry, fur-bearing animals, and wildlife or aquatic life.
- (42d) Farming. Farming means the operation of a farm premises owned or rented by the operator.

Subsection Ind 51.01 (120a) is created to read:

(120a) Step(s). Step(s) is a unit(s) consisting of one riser of not more than 7-3/4 inches and one tread of not less than 9-1/2 inches, alone or in a series.

Subsection Ind 51.01 (139a) is amended to read:

(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 6 inches below the finished surfaces of the lower floors. The volume of structures without enclosing walls (free-standing canopies, column-supported roofed shelters, etc.) will be computed by projecting imaginary vertical planes at the outer surface of the exterior columns and using such planes as the enclosing walls.

Subsection Ind 51.02 (15) is amended to read:

(15) Decorative combustible materials. Decorative combustible materials may be applied to all required noncombustible exterior surfaces of "0" hourly rated construction or better, up to a limit of 10% of the surface area within any 100 lineal feet of the building.

Subsection Ind 51.02 (19) is created to read:

(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).

Subsection Ind 51.03 (6) (a) 3. is created to read:

3. Panels of combustible materials may be used in exterior walls requiring NC-0 hour rating up to a limit of 10% of the surface area within any 100 lineal feet of the building. The bottom of the panels shall be at least 12 feet above grade.

Subsection Ind 51.044 (1) Table 1 is amended to read:

TABLE 1

Name of Recognized Laboratory	ASTM Standard Tests					
	E-84	E-108	E-119	E-136	E-152	E-163
Forest Products Lab., Madison, Wis. ¹	--	--	X	--	X	--
Natl. Bureau of Stds., Washington, D. C.	--	--	X	X	--	--
Ohio State Univ., Columbus, Ohio	--	--	X	X	X	X
Portland Cement Assoc., Skokie, Ill.	--	--	X	--	--	--
Southwest Research Inst., San Antonio, Tex.	X	--	--	--	--	--
Underwriters' Lab., Inc., Chicago, Ill.	X	X	X	--	X	X
Underwriters' Lab., Inc., Scarborough, Ont., Canada	X	X	X	X	X	X
United States Testing Co., Inc. Hoboken, N. J.	X	--	--	X	--	--
Univ. of Calif., Berkeley, Calif.	--	X	X	--	--	X

¹Reference 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 51.14 (1) (a) 3. is created to read:

3. Exception. Leaded stained glass used in exterior or interior doors or in panels adjacent to exterior or interior doors need not be safety glazing.

Subsection Ind 51.15 (4) is amended to read:

- (4) A standard exit doorway shall be at least 6 feet 4 inches high by 3 feet 4 inches wide, except where especially provided under occupancy classifications and in section Ind 51.20. Where double doors are provided, with or without mullions, the width of each single door may be reduced to 2 feet 6 inches, except double doors utilized to provide accessibility in accordance with section Ind 52.04 shall have the width of at least one single door increased to 2 feet 8 inches.

Subsection Ind 51.16 (4) (a) is amended to read:

- (4) Risers and treads. Risers and treads shall be designed and provided in accordance with the following:

- (a) All stairways and steps shall have a rise of not more than 7-3/4 inches and a tread not less than 9-1/2 inches, measured from tread to tread and from riser to riser. Treads and risers shall be uniform in any one flight. Winders shall not be used.

Note #1: The department recommends that steps be proportioned so the sum of 2 risers and a tread, exclusive of its nosing or projection, should be not less than 24 inches or more than 25 inches.

Note #2: The department may accept nonstandard exit stairways serving unoccupied areas, such as equipment mezzanines or platforms, and similar areas, if approved in writing.

Note #3: Round or smooth nosings are recommended as they are not difficult to negotiate for individuals with restrictions in the knee, ankle or hip, or with artificial legs or long leg braces.

Subsection Ind 51.16 (10) is created to read:

- (10) Spiral stairs. Spiral stairways may be permitted as specifically allowed by the occupancy chapters of this code. Such spiral stairs shall be at least 22 inches in width and shall have treads at least 7 inches in width at a point one foot from the narrow end of the tread, and a uniform riser height of not more than 8 inches.

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

- a. Detectors shall be located in the main return air and supply air ducts of each ventilation system and at each opening into a vertical return air shaft or duct.

Subsection Ind 52.01 (2) (i) is created to read:

- (i) Floor level identification. Each floor level or story shall be identified as to its number or name. Identification signs shall be posted in all elevator lobbies and in all required exit stairways.

Subsections Ind 52.04 (2) (b) and (c) are created to read:

- (b) Primary floor. A primary floor is one intended for use by the employees and/or patrons. A floor used primarily for furnace room and/or storage areas is not considered a primary floor.
- (c) Public entrance. Any major access point to a building used for the purpose of entering the building and gaining access to a primary floor(s) is considered a public access. Entrances used only for service or maintenance purposes, or designated for emergency exit only, are not considered public entrances.

Subsection Ind 52.04 (3) (a) 3. is created to read:

- 3. Curb ramp location. Curb ramps shall be located to provide the shortest line of travel from the accessible parking space(s) to the accessible public entrance.

Subsection Ind 52.04 (3) (b) (intro. par.) is amended to read:

- (b) Exterior walks. Exterior walks leading to accessible entrances shall comply with the following:

Subsection Ind 52.04 (4) Table 52.04 is amended to read: (see following pages)

Subsection Ind 52.04 (4) (b) is amended to read:

- (b)* Interior circulation. Access shall be provided to all public-use areas of the building, both horizontally and vertically. Interior circulation between floor levels shall be accomplished by the use of ramps, elevators, lifts or other means of access approved by the department.

Note: Where elevators are provided, the department recommends that elevator control buttons and emergency call systems be located at a height from 35 inches to 48 inches from the floor. The elevator call buttons in the lobbies should be placed at a height of 42 inches from the floor. Raised lettering is recommended to identify the elevator call buttons and control buttons.

Subsection Ind 52.04 (4) (c) 1. is amended to read:

- 1. Accessible water closets shall be provided at the rate of 10% of the total number of toilet facilities provided on each accessible floor, with a minimum of one for each sex.

Subsection Ind 52.04 (5) is amended to read:

- (5) Buildings with multiple uses. (a) Buildings greater than 20,000 square feet. Multiple-use buildings with a total gross area greater than 20,000 square feet, including all floors, shall comply with the criteria established in Table 52.04 for each specific use. Interior circulation is required to and throughout at least 2/3 of each specific use are.
- (b) Buildings less than 20,000 square feet. Multiple-use buildings with a total gross area less than 20,000 square feet, 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 shall comply with the criteria established in Table 52.04 for each specific use.

Note: Floors used entirely for storage or mechanical purposes need not be included in determining the total gross area.

*See Appendix A for further explanatory material.

TABLE 52.04

REQUIREMENTS FOR NEW CONSTRUCTION

Occupancy and Type of Construction	Access to Primary Floor	Interior Circulation	Toilet Facilities
I. All public buildings and places of employment not listed in categories II-XI.	Yes	Yes ¹	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 ¹	Yes ²
IV. Theaters and assembly halls.	Yes	Yes ¹	Yes
A. Churches (Ch. Ind 54 and 55).	Yes ³	Yes ^{1, 5}	Yes ⁴
B. Auditoriums, theaters, stadiums and permanent bleachers	Yes	Yes ^{1, 5}	Yes
C. Night clubs, bars, restaurants and recreational facilities (Ch. Ind 54 and 55) . . .	Yes	Yes ¹	Yes
V. Schools and other places of instruction.	Yes	Yes ^{1, 6}	Yes
VI. Libraries, museums and art galleries	Yes	Yes ¹	Yes
VII. Places of abode.	Yes	Yes ¹	Yes
A. Residential living units.	Yes ⁷	Yes ⁸	Yes ⁹
B. Hotels and motels	Yes	Yes ^{6, 10}	Yes ¹¹
VIII. Day care centers ¹²	Yes	Yes ¹	Yes
IX. Health care facilities	Yes	Yes	Yes
A. Hospitals	Yes	Yes	Yes ¹³
B. Nursing homes	Yes	Yes	Yes ¹³
C. Group foster homes (community-based residential facilities)	Yes	Yes ¹⁴	Yes
D. Dental and medical clinics and offices. . .	Yes	Yes ^{1, 15}	Yes
X. Places of detention.	Yes	Yes ^{1, 16}	Yes
XI. Garage occupancies	Yes	Yes ¹	Yes
XII. 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

- ¹If 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. If the total gross area of the building, including all floors, is less than 20,000 square feet, 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. 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 employees such as, but not limited to, lunchrooms, change rooms and locker rooms.
- ²In buildings accommodating 15 or less employees and 25 or less patrons, one toilet room, for both sexes, in addition to the required toilet facilities as specified in section Ind 54.12, will be acceptable to accommodate the physically disabled, providing the toilet facility is located on an accessible floor, contains one lavatory and one water closet, and is provided with a privacy lock.
- ³If the remodeling and/or adding involves an entrance or exit and constitutes less than 25% of the total square footage, access is not required to a primary floor.
- ⁴In remodeled churches, a separate accessible toilet room to accommodate both sexes will be acceptable providing the toilet room is located on an accessible floor, contains one lavatory and water closet, and is provided with a privacy lock.
- ⁵Seating spaces shall be an integral part of the seating plan and not segregated. The seating spaces shall be provided at the rate of 5% of the total capacity. The maximum number of seating spaces required shall not exceed 30. One-half of the accessible seating spaces shall be designed for patrons using wheelchairs and shall be located on level grade; the other half of the accessible seating spaces shall be designed for patrons using braces, crutches or similar aids. Ramp details [Ind 52.04 (7)] do not apply to the aisles in theater auditoriums.
- ⁶Interior circulation shall be provided to any level containing the only facility of its kind.
- ⁷Access to the primary floor shall be provided in at least 10% of the living units per building or complex, or fraction thereof. In complexes of buildings, the accessible units shall be integrated throughout. Condominiums, 2 stories or less in height, are exempt from the accessibility requirements relating to parking spaces, ramps and grade-level entrances.
- ⁸All passage doors in all buildings shall be 32 inches in width. All corridors within living units shall be at least 36 inches wide. If laundry and storage facilities are provided, the facilities shall be accessible in buildings with more than 20 living units per building.
- ⁹Grab bars and special lavatories or water closets are not required.
- ¹⁰Accessible sleeping units shall be provided at a rate of 10% of the total number of units, with a minimum of one. Doors 32 inches in width are required throughout the living units. All corridors shall be at least 36 inches wide.
- ¹¹Self-rising toilet seats and sliding-door tub enclosures are prohibited.
- ¹²Access, interior circulation, and toilet facilities do not apply to a change of use.
- ¹³Twenty percent of all rooms designated for patient use, and the toilet rooms provided in or for these rooms, shall be designed to permit unimpeded use by a person using a standard wheelchair, plus ample room for an attendant.
- ¹⁴In group foster homes, common-use areas and 10% of the sleeping rooms shall be accessible.
- ¹⁵If the total gross area of the building, including all floors, is less than 20,000 square feet, interior circulation is required to all the medical and/or dental areas used by the patients. All one-of-a-kind facilities provided for the employees shall be located on an accessible floor.
- ¹⁶In penal institutions, 10% of the total number of required institutional living units shall be accessible. Vertical transportation between tiers of cells is not required.

Subsections Ind 52.04 (7) (a), (c) and (e) are amended to read:

- (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.
- (c) Ramp handrails. Ramps shall have a handrail on each side which shall be at least 2 feet 6 inches high (preferable height, 2 feet 8 inches). Handrails on unenclosed ramps shall include an intermediate parallel rail at mid height. Handrails are not required on interior ramps where the slope is less than one foot of rise in 20 feet of run.
- (e) Ramp platforms. Ramps having a 1:12 slope shall have a 5-foot long level platform at 30-foot intervals. Ramps shall have a level platform at least 5 feet long where they turn and at least 5 feet of level clearance at the bottom of the ramp. Ramp platforms are not required on interior ramps where the slope is less than one foot of rise in 20 feet of run.

Subsection Ind 52.04 (8) (b) is repealed and recreated to read:

- (b) Water closet compartments. Accessible water closet compartments shall be designed in accordance with the minimum design standards as established in Table 52.04-A, or as approved by the department. Sufficient clearance must be maintained to permit the door to the toilet room compartment to open at least 95 degrees.

Note: The water closet compartment specifications contained in Table 52.04-A do not apply to toilet rooms containing one water closet and one lavatory; or to bathrooms containing a water closet, a lavatory and a bathing facility. See the appendix for examples of accessible toilet room and bathroom arrangements.

TABLE 52.04-A

Compartment Size Width/Length	Door Location	Door Size	Water Closet Location	Grab Bar Location
36" x 72"	Front entrance	32"	Centered	Each side of WC
36" x 78"	Side entrance	36"	Centered	Each side of WC
42" x 78"	Side entrance	32"	Centered	Each side of WC
48" x 57"	Front entrance	32"	Offset ¹	Wall closest to WC and behind the WC
48" x 72"	Side entrance	32"	Offset ¹	Wall closest to WC and behind the WC

¹Offset 16 to 18 inches from center line of water closet to wall.

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

- (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 bar shall be installed 33 inches high and parallel to the floor. 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.

Subsections Ind 52.04 (9) (a) 1. and 2. are amended to read:

- (a) Doors. 1. Door sizes. All accessible entrance doors and passageway doors shall be at least 32 inches in width.
2. Door thresholds. Thresholds at exterior doors shall not extend more than 5/8-inch above the finished floor and exterior platform. Weather-stripped thresholds shall not exceed one inch above the finished floor and exterior platform, including the weather stripping. All exterior thresholds shall be not less than 4 inches in width. Interior thresholds shall extend not more than 1/2-inch above the finished floor or carpeting. All thresholds shall be beveled to provide smooth, unbroken surfaces.

Note: Lever handles or door handles are recommended over conventional door knobs. Kickplates, 16 inches high, are recommended on the accessible side of doors. Automatic power-operated doors are recommended at entrances. Time-delay door closures are recommended at all accessible doors. The manual pull or push of a door is recommended to not exceed 8 pounds.

Section Ind 52.13 is repealed.

Section Ind 52.54 is repealed and recreated to read:

Ind 52.54 LOCATION WITHOUT OUTSIDE WINDOWS; WHEN PERMITTED.

- (1) Single fixture toilet rooms and bathrooms. Windows may be omitted in bathrooms or toilet rooms containing a single fixture (water closet or urinal) and lavatory or bathing facility where artificial light and either mechanical exhaust ventilation or an approved ductless air circulating and treatment device is provided.

Note: The department will accept ductless air circulating and treatment devices conforming to standard C-10 as adopted by the National Sanitation Foundation (NSF).

- (2) Multiple fixture toilet rooms. Toilet rooms with more than one fixture (water closet or urinal) will be permitted without windows if mechanical ventilation, in accordance with the requirements of section Ind 64.65, and artificial light are provided.

Section Ind 52.57 Note is created to read:

Note: This section is also intended to prohibit the use of wall registers within 6 inches of the floor, baseboard registers and floor registers.

Subsection Ind 52.58 (1) is amended to read:

- (1) The walls and ceilings of every toilet room shall be completely covered with smooth, nonabsorbent material.

Subsection Ind 52.59 (1) is amended to read:

- (1) The fixtures (closets and urinals) in every toilet room shall be arranged to ensure privacy. Water closets shall be enclosed with partitions. Urinals shall be placed against walls at least 7 feet 0 inches high.
 - (a) Exception. The above requirements need not apply to toilet rooms accommodating only a single closet or urinal.

Subsection Ind 53.11 (1) Table 53-I (d) 5. b. to be amended to read:

5. Parking decks

- b. Top floors, if open to the sky, shall be designed for 50% of the roof load [Ind 53.11 (4)] in addition to..... 50

Subsection Ind 53.13 (2) to be renumbered Ind 53.14 and heading is amended to read:

Ind 53.14 HORIZONTAL CRANE FORCES.

Section Ind 53.14 is renumbered Ind 53.15.

Ind 53.15* LOAD COMBINATIONS.

Subsection Ind 53.13 (1) is repealed and recreated to read:

Ind 53.13 IMPACT LOADS. Structural elements carrying live loads which induce impact shall have the live loads increased by the following minimum percentages in the structural design consideration of such forces:

For supports of elevators.	100
For traveling crane support girders, monorail supports, and their connections:	
Cab operated cranes.	25
Pendant operated cranes.	10
Monorail cranes.	25
For supports of light machinery.	20
For supports of vibrating machinery or power driven units.	50
For hangers supporting floors and balconies.	33

Subsection Ind 53.28 (2) to be renumbered Ind 53.28 (3) and Note to be amended to read:

Note #1: For first approximation of "d", the following formula may be used:

$$d = \sqrt[3]{\frac{12 h P}{B p}}$$

- B = diameter of concrete casing, ft.; when nonencased in concrete, diameter or diagonal dimension of square or rectangular pole, ft.
- h = height above the ground, in feet, at which the force "P" is applied. If the pole has fixity at the top, such as provided by a knee brace, the force "P" acts at the inflection point. The inflection point may be assumed at 2/3 of the distance from the ground to the knee brace for round poles, or 1/2 of the distance from the ground to the knee brace for square poles.
- p = allowable lateral passive soil pressure, psf.

Note #2: When a frame analysis is used, h = M/P, where M = bending moment on the pole at the ground surface.

* See Appendix A for further explanatory material.

Subsection Ind 53.28 (3) to be renumbered Ind 53.28 (4).

Subsection Ind 53.28 (4) to be renumbered Ind 53.28 (5).

Subsection Ind 53.28 (2) is created to read:

- (2) Allowable lateral soil pressure. In the design of nonrestrained and restrained poles, unless a more exact soil analysis method is used, the allowable passive soil pressure shall be determined in accordance with Table 53-III.

TABLE 53-III
ALLOWABLE LATERAL SOIL PRESSURE

Soil Types (see Table 53-II)	Allowable Passive Soil Pressure (p) ¹ psf per foot of depth below grade ^{2, 3}
1 and 2 (not well drained)	100
2 (well drained)	150
3 (well drained)	200
4 (well drained)	300
5 and 6 (well drained)	400

¹S₁ and S₃ values shall not exceed 12 times the allowable passive soil pressure (p).

²Values may be increased 33-1/3% for wind loads.

³Where 1/2-inch horizontal movement of the pole at ground surface can be tolerated, the values shown in Table 53-III may be increased 100%, provided the individual poles are spaced a minimum distance of 6 times B center to center.

Subsection Ind 53.34 (3) (b) (intro. par.) is amended to read:

- (b) Bearing on masonry. Bearing stresses in masonry shall not exceed those specified in Table 53-IX. Flexural members shall have bearing details that allow rotation at their supports without causing local failures.

Subsection Ind 53.34 (3) (b) 1. b. is amended to read:

- b. Solid masonry. At least 8 inches in height of masonry composed of solid masonry units with all voids and joints completely filled with mortar.

Subsection Ind 53.53 (10) is amended to read:

- (10) Structural welding done outside the state of Wisconsin. All welding shall conform with the requirements of section Ind 53.53 except the requirements of (7). In lieu of operator certification, manufacturers and suppliers of structural steel shall, prior to commencing any welded construction, submit evidence of procedure qualification, if not prequalified, and welder certification that has been approved by an independent testing laboratory which is acceptable to the department. Manufacturers and suppliers are required to keep the welder certification current.

Note: The welder certification requirement may be submitted and kept current by having the approved testing laboratory submit a list of certified welders to the department. The submittal may be a part of the materials approval information submitted for section Ind 50.19 or may be submitted separately for the manufacturers not having a materials approval.

Subsection Ind 54.01 (2) (b) 2. a. is created to read:

- a. Exception: Nonbearing partitions may be of fire-retardant treated wood or combustible one-hour rated materials.

Subsections Ind 54.03 (1) (a), (b) (c) and (d) are created to read:

- (a) Exception. The width of required exit stairways serving unoccupied areas (i.e., storage areas, equipment mezzanines and similar areas) not exceeding 750 square feet may be reduced to 3 feet 0 inches.
- (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.
- (c) Exception. A spiral stairway may be used as a nonrequired convenience stairway in addition to all other required exit stairways in places of employment.
- (d) Exception. A rescue platform (exterior balcony) of combustible construction may be used as a required second exit for 2-story buildings of Type 7 and Type 8 construction, provided the following conditions are satisfied:
 1. The exit serves 8 or less people;
 2. The exit platform is located not more than 10 feet above the adjacent exit discharge grade;
 3. The platform area is at least 14 square feet, with a minimum dimension of 3 feet;
 4. The platform is designed for 80 pounds per square foot live load plus dead load;
 5. Railings are provided in accordance with the provisions of section Ind 51.16 (5);
 6. Platforms having solid floors are provided with a roof equal in area to that of the platform.

Subsection Ind 54.08 (3) is amended to read:

- (3) Exception: Monumental stairs connecting any 2 floor levels used for commercial purposes need not be enclosed, provided they are effectively cut off at the upper and lower floor by partitions having fire resistance as specified above.
[See Ind 51.02 (11).]

Note: Elevators and elevator enclosures: For requirements governing the installation and operation of elevators, and the construction and protection of elevator shaftways, see the elevator code issued by the department of industry, labor and human relations, which code applies to all public buildings and places of employment.

Subsection Ind 54.12 (1) (a) 1. is amended to read:

1. Where not more than 10 employes and 25 patrons are accommodated, one toilet room, shared in common, may be provided if the door of the toilet room is equipped with a lock to ensure privacy.

Subsection Ind 54.12 (1) (b) is amended to read:

- (b) Shopping centers. In shopping centers, separate toilet rooms for each sex shall be provided for use by the general public. The toilet rooms may be located in the public mall or in the individual stores. Separate toilet rooms for each sex shall be provided for the employes in each store. In stores which accommodate not more than 10 employes and 25 patrons, one toilet room to accommodate both sexes will be acceptable. A store which has a net area of 750 square feet or less is not required to be provided with toilet rooms for the employes if the employes have access to the public toilet rooms located in the mall.

Note #1: The department recommends that public toilet rooms in the mall be conveniently located for patron use and that the travel distance between sets of public toilet rooms be less than 400 feet.

Note #2: See sections Ind 54.12 (1) (d) and Ind 55.32 for requirements for toilet rooms for other use groups which may also be included in shopping centers.

Subsection Ind 54.12 (1) (e) 1. is amended to read:

1. Garages. Separate toilet rooms for each sex shall be provided in all service and repair garages, body shops, automobile tire and battery shops, and buildings of similar use, except that a single toilet room, shared in common, may be provided in buildings which accommodate not more than 10 employes and 25 patrons. Separate toilet rooms for employes and patrons need not be provided if toilet rooms are accessible to both employes and patrons.

Subsection Ind 54.12 (1) (e) 3. is repealed.

Subsection Ind 54.12 (2) is repealed and recreated to read:

- (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 ratio of number of employes to number of fixtures 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) Exceptions:
1. Taverns and restaurants shall provide at least one toilet room for each sex.
 - a. Taverns and restaurants accommodating 50 or less total occupants shall provide at least one water closet (WC) and one lavatory (L) for each sex.
 - b. Taverns and restaurants accommodating more than 50 occupants in total shall provide at least 2 water closets (WC) and one lavatory (L) for the females and at least one water closet (WC), one urinal (U) and one lavatory (L) for the males.
 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 employes to number of fixtures be less than those specified in Table 54.12-B.

Table 54.12 is repealed and Tables 54.12-A and 54.12-B are created to read:

TABLE 54.12-A
NUMBER OF FIXTURES REQUIRED FOR OCCUPANTS

Number of Occupants	Type of Fixture					Drinking Facilities (DF)
	Water Closets (WC)		Urinals (U)	Lavatories (L)	Showers (S) ¹	
	Males (M)	Females (F)	Males (M)			
1- 200 occupants	1	1	0	One (L) for each 2 (WC) and/or (U), or fraction	None required	One (DF) for each 150 occupants up to 600
201- 400 occupants	1	2	1			
401- 600 occupants	1	3	2			
601- 800 occupants	2	4	2			
801-1000 occupants	2	5	3			
1001-1200 occupants	2	6	4			
Over 1200 occupants	One (WC) for each additional 600 (M), or fraction	One (WC) for each additional 275 (F), or fraction	One (U) for each additional 500 (M), or fraction			One additional (DF) for each additional 3000 occupants

¹Showers shall be provided in public pool facilities and for occupants exposed to occupational hazards such as poisons, infectious or irritating materials.

TABLE 54.12-B
NUMBER OF FIXTURES REQUIRED FOR EMPLOYES

Number of Employees	Type of Fixture					
	Water Closets (WC)		Urinals (U)	Lavatories (L)	Showers (S) ¹	Drinking Facilities (DF)
	Males (M)	Females (F)	Males (M)			
0- 15 employes of each sex	1	1	0			
16- 35 employes of each sex	1	2	1			
36- 55 employes of each sex	2	3	1			
56- 80 employes of each sex	2	4	2	One (L) for each 2 (WC) and/or (U), or fraction	One (S) for each 10 employes of each sex, or fraction	One (DF) for each 100 employes, or fraction
81-110 employes of each sex	3	5	2			
111-150 employes of each sex	4	6	2			
Over 150 employes of each sex	One additional fixture for each additional 40 employes of each sex; 2/3 of the additional water closets for males may be urinals.					

¹Showers shall be provided in public pool facilities and for employes exposed to occupational hazards such as poisons, infectious or irritating materials.

Note #1: Examples: Example #1: Mercantile building with 300 patrons and 50 employes = 350 total occupants; equally divided between sexes = 175 males, 175 females. From Table 54.12-A, 201-400 total occupants: males require one water closet, one urinal, one lavatory; females require 2 water closets, one lavatory. Check for compliance with Table 54.12-B for employes: 50 employes, equally divided between sexes = 25 males, 25 females; 16-35 employes of each sex, males require one water closet, one urinal, one lavatory; females require 2 water closets, one lavatory. Therefore, the number of fixtures required by Table 54.12-A also satisfies the requirements of Table 54.12-B for employes and governs.

Example #2: Office building with 300 employes and 50 patrons = 350 total occupants; equally divided between sexes = 175 males, 175 females. From Table 54.12-A, 201-400 total occupants: males require one water closet, one urinal, one lavatory; females require 2 water closets, one lavatory. Check for compliance with Table 54.12-B for employes: 300 employes, equally divided between sexes = 150 males, 150 females; 111-150 employes of each sex, males require 4 water closets, 2 urinals, 3 lavatories; females require 6 water closets, 3 lavatories. Therefore, the number of fixtures required by Table 54.12-B for employes is more restrictive and governs.

Note #2: The ratios established in Table 54.12-B for employes are taken directly from the U.S. Department of Labor, Occupational Safety and Health Act (OSHA) regulations. Therefore, section Ind 50.25, petitions for modification, is not applicable to the requirements of this table.

Note #3: See also rules of the department of health and social services for sanitary fixtures for public swimming places, mobile home parks, camping grounds, camping resorts, recreational camps and educational camps.

Note #4: See Wis. Adm. Code Ch. Ind 1000-2000--Wis. Safety and Health Code, for additional washing facilities required in places of employment where environmental hazards are present.

Subsection Ind 54.15 (2) is amended to read:

- (2) First-aid standpipes. First-aid standpipes shall be provided in all buildings 3 stories or more in height in which the floor area of each story is more than 3,000 square feet, unless the floor area is divided with noncombustible 0-hour or 3/4-hour, or better, rated partitions into areas of 3,000 square feet or less, or unless an approved automatic sprinkler system is installed.

Section Ind 54.53 is repealed (see chapter Ind 62)

Subsections Ind 55.02 (2) (d) and (e) are repealed.

Subsection Ind 55.32 (2), including Table 55.32, are amended to read:

- (2) Sanitary fixtures. 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 employees to number of fixtures 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.

TABLE 55.32

NUMBER OF FIXTURES REQUIRED FOR PLACES OF ASSEMBLY

Type of Occupancy	Type of Fixture				
	Water Closets (WC)		Urinals (U)	Lavatories (L)	Drinking Facilities (DF)
	Males (M)	Females (F)	Males (M)		
<u>Places of assembly</u>					
0-100 persons of each sex	1	1	0		One (DF) for each 150 persons up to 600
101-200 persons of each sex	1	2	1		
201-300 persons of each sex	1	3	2		
301-400 persons of each sex	2	4	2		
401-500 persons of each sex	2	5	3		
501-600 persons of each sex	2	6	4		
Over 600 persons of each sex	One (WC) for each additional 600 (M), or fraction	One (WC) for each additional 275 (F), or fraction	One (U) for each additional 500 (M), or fraction	One (L) for each 2 (WC) and/or (U), or fraction	One additional (DF) for each additional 3000 persons
Taverns and restaurants ¹	One (WC) for each 75 (M), or fraction	One (WC) for each 30 (F), or fraction	One (U) ² for each 50 (M), or fraction		0

¹The ratio of the number of fixtures to the number of persons accommodated in excess of 300 need be one-half of the figures shown.

²Urinal may be omitted in restaurants which accommodate less than 25 males and do not serve alcoholic beverages.

Note: See also rules of the department of health and social services for sanitary fixtures for public swimming places, mobile home parks, camping grounds, camping resorts, recreational camps and educational camps.

Subsection Ind 57.07 (3) (a) is created to read:

- (a) Exception. A rescue platform (exterior balcony) of combustible construction may be used as a required second exit for 2-story buildings of type 5 through type 8 construction, provided the following conditions are satisfied:
1. The exit serves a single living unit;
 2. The exit platform is located not more than 10 feet above the adjacent exit discharge grade;
 3. The platform area is at least 14 square feet, with a minimum dimension of 3 feet;
 4. The platform is designed for 80 pounds per square foot live load plus dead load;
 5. Railings are provided in accordance with the provisions of section Ind 51.16 (5);
 6. Platforms having solid floors are provided with a roof equal in area to that of the platform;
 7. The building is not a hospital, nursing home, residential care institution, group foster home or home for the elderly.

Section Ind 57.09 is amended to read:

Ind 57.09 EXIT DOORS. Exit doors shall be as specified in section Ind 51.15, except that a door which is used by not more than 25 persons shall be not less than 3 feet wide and shall not be required to open outward.

Section Ind 57.12 is repealed and recreated to read:

Ind 57.12 STEPS, STAIRS AND SHAFTS.

- (1) Exterior stairs. Exterior stairs shall conform to the requirements of section Ind 51.16, except that less than 3 steps may be provided between exterior platforms and grade for apartments, row houses and town houses, and the platforms or treads between such risers do not exceed 5 feet 0 inches in length in the direction of travel.
- (2) Interior stairs. Interior stairs shall conform to the requirements of section Ind 51.16, except that stairs which are used by not more than 25 persons shall be not less than 3 feet wide.
 - (a) Exception. A spiral stairway, as described in section Ind 51.16 (10), may be used as the only exit from a mezzanine within an individual living unit provided the mezzanine does not exceed 400 square feet in area.
- (3) Changes of elevation within individual living units. Changes in elevation shall be overcome by means of step(s), stairs or ramps.

- (4) Enclosure of interior stairways and shafts. (a) All stairways and shafts shall be enclosed as specified in Table 51.03-A and in section Ind 51.02 (11), except that in all buildings of 3 or more stories, all basement stairways shall be enclosed with 2-hour fire-resistive partitions as specified in section Ind 51.04.
- (b) In buildings of more than 3 stories, all stairways shall be enclosed with 2-hour fire-resistive partitions as specified in section Ind 51.04.
- (c) In all buildings of 3 or more stories in which the first story is used for business purposes, at least one stairway shall be enclosed in the first story with an unpierced wall of 2-hour fire-resistive construction, as specified in section Ind 51.04, and such stairway shall not connect with the basement.
- (d) Every elevator shaft, dumbwaiter shaft, clothes chute, wastepaper chute, pipe shafts and other similar vertical shafts in buildings of 3 or more stories shall be enclosed with at least 2-hour fire-resistive partitions as described in section Ind 51.043.

Note: See section Ind 57.03 for stairs and shafts leading to garage areas.

Subsection Ind 57.13 (4) is amended to read:

- (4) General public. Sanitary facilities for the general public shall be provided in accordance with the requirements of Table 54.12-A or 54.12-B, unless the general public has access to the facilities provided for the residents.

Subsection Ind 60.12 (1) (d) is created to read:

- (d) All such doors in centers serving less than 20 children need not be provided with illuminated exit signs.

Section Ind 60.15 is repealed and recreated to read:

Ind 60.15 SANITARY FACILITIES.

- (1) Fixtures required. Toilet facilities shall be provided in all day care centers.
- (a) One water closet shall be provided for the first 10 children. One water closet shall be provided for each additional 15 children, or fraction.
- (b) Children under the age of 30 months need not be included when determining the required fixtures; however, in all cases, at least one water closet and one lavatory shall be provided in all day care centers.
- (c) Water closets and urinals for the staff, in accordance with section Ind 54.12, shall be provided in addition to those required for the children, in day care centers with 10 or more staff members at any one time.
- (d) Urinals may be substituted for up to 1/3 of the total required water closets.
- (e) Lavatories shall be provided in the ratio of one lavatory for every 2 water closets and urinals, or fraction.

- (2) Privacy. (a) Doors to the toilet rooms and water closet compartments may be omitted for toilet rooms used by children, provided that other toilet facilities, equipped with toilet room doors and water closet compartments, are available for the staff and children 10 years of age and older.
- (b) Sex designated toilet rooms shall be provided, available for staff use, in centers having 10 or more staff members at any one time.

Note #1: The term "staff member," as used in this section, is intended to include all employes, whether on pay status or on a volunteer status.

Note #2: The intent of (2) is to allow toilet rooms used in common by both sexes in day care centers with less than 10 adults, and to omit the privacy requirements of toilet room doors and water closet compartments only for children who have not reached the age of sex awareness.

Subsection Ind 60.21 (1) is amended to read:

- (1) Children under the age of 30 months shall be restricted to the first floor, as determined in section Ind 51.02 (14), or to ground floors provided with 2 means of egress directly to grade.

Subsections Ind 60.31 (4), (5) and (6) are amended to read:

- (4) The travel distances in (3) above shall be reduced by 50% for children under the age of 30 months.
- (5) The travel distances in (3) above may be increased by 50 feet in buildings completely equipped with an automatic sprinkler system. No increase in travel distance is permitted for children under the age of 30 months.
- (6) Children under the age of 30 months shall be restricted to the first floor, as determined in section Ind 51.02 (4), or to ground floors provided with 2 means of egress directly to grade.

Chapter Ind 62--Specialty Occupancies, to be created to read:

CHAPTER IND 62

SPECIALTY OCCUPANCIES

Ind 62.001 SCOPE. This classification includes all specialty occupancies as indicated in the scope of each subpart of this code.

Ind 62.10 DEFINITIONS.

- (1) Enclosed parking structure. Parking structures which do not satisfy the definition of open parking structure [Ind 62.10 (2)] are considered hazardous occupancies (see section Ind 54.50 for specific requirements).

Note: The department is currently working with a project committee to develop rules for enclosed parking structures. Those rules should be in effect by January 1, 1979.

- (2) Open parking structure. An open parking structure is used for the parking of passenger vehicles and has open areas in exterior walls and ventilation shafts, if any, on each level of at least 4% of the total floor area of that level distributed on at least 2 exterior sides. Facilities for repairing or fueling vehicles within the structure are prohibited. One lower level may be partially or fully enclosed if mechanical ventilation is provided at a minimum rate of 1/2 CFM per square foot and exits are so distributed to offer 2 directions of egress. Open parking structures are classified as either ramp access or mechanical access.
 - (a) Ramp access. Ramp access, open parking structures employ a series of continually sloped floors or a series of interconnected ramps between floors permitting the movement of vehicles under their own power between the street level and parking areas.
 - (b) Mechanical access. Mechanical access, open parking structures employ fully automated parking machines, lifts, elevators or other mechanical devices for moving vehicles between the street level and the parking area, and in which public occupancy is prohibited above street level.

PART I--OPEN PARKING STRUCTURES

Ind 62.20 SCOPE. This classification provides the minimum requirements for the design and construction of open parking structures as defined in section Ind 62.10 (2).

Ind 62.21 CONSTRUCTION REQUIREMENTS.

- (1) Materials. All structural elements shall be of noncombustible materials.
- (2) Floors. Floors shall be provided with positive surface drainage.

Note #1: Structural components of open parking structures are subjected to corrosive and deteriorating elements. The designer should consider the

effects of such elements and should consider the use of air-entrained concrete, concrete sealers and coatings, additional cover for reinforcing and other accepted engineering practices to protect the components.

Note #2: The department recommends a minimum slope of 1%.

Ind 62.22 SETBACKS. Open parking structures may be erected without enclosing walls, except that enclosing walls of not less than 2-hour fire-resistive construction, as specified in section Ind 51.04, shall be provided on all sides which are less than 10 feet from a property line between premises or any other building.

Ind 62.23 SEPARATION FROM OTHER OCCUPANCIES. Every open parking structure shall be separated from any other occupancy by noncombustible 2-hour (NC-2) rated construction, or better, except as specified in section Ind 55.05. (With respect to Ind 55.05, open parking structures are considered nonhazardous.) All openings in the wall to adjoining occupancies shall be protected by means of self-closing, fire-resistive doors as specified in section Ind 51.047.

Note: It is also the intent of this section to consider office and building maintenance areas used in conjunction with the operation of the open parking structure as distinct occupancies requiring 2-hour separation.

Ind 62.24 CONSTRUCTION, HEIGHT AND ALLOWABLE AREA.

- (1) Construction and height. Open parking structures shall be of the type of construction and shall not exceed the height as specified in this section. The maximum floor area, per level, of any such structure shall not exceed that permitted for the corresponding type of construction and height as follows:
 - (a) Open parking structures of noncombustible zero-hour (NC-0) rating shall not exceed 70 feet in height or 700,000 square feet in total area.
 - (b) Open parking structures of noncombustible 2-hour rating or better shall not be limited in height or area per floor level. Exterior walls need not be rated, except as provided in section Ind 62.22.

Note: Open parking structures in excess of 60 feet in height are currently required to be protected by an automatic fire sprinkler system. However, legislation is being introduced to exempt open parking structures from the applicable portions of this Wisconsin statute.

Ind 62.25 CLEARANCE LIMITATIONS.

- (1)* Principal vehicle and pedestrian traffic areas. The clear height of each floor level in principal vehicle and pedestrian traffic areas shall be not less than 7 feet 0 inches.
- (2) Clearance signs. Clearance limitation signs shall be prominently posted at all vehicle entrances.

Note: A lesser clear height may be permitted in mechanical-access open parking structures when approved by the department.

*See Appendix A for further explanatory material.

Ind 62.26 NUMBER, LOCATION AND TYPE OF PEDESTRIAN EXITS.

- (1) Number of exits. Every open parking structure and every floor level thereof shall have at least 2 exits.
- (2) Distance to exits. Additional exits shall be provided so that no part of the open parking structure will be more than 200 feet distant to the exit discharge grade or to a stair enclosure if the walls separating the stair from the open parking structure are of at least noncombustible one-hour (NC-1) rating or better and the enclosure is continuous to an outside exit.
- (3) Location of exits. Exits in all open parking structures shall be placed as far apart as practicable and so located that if any exit is blocked, some other exit will still be available from every part of the structure.
- (4) Type of exits. At least one-half of the exits required in this section shall be stairways or standard exits to grade as specified in sections Ind 51.15-51.16. The other exits may be non-parking access ramps with a maximum slope of 1:6.

Ind 62.27 STAIRWAY ENCLOSURES. Stair enclosures of NC-0 hour rating, or better, shall be provided for all required exit stairways, unless otherwise required to be rated.

Ind 62.28 HANDRAILS AND GUARDRAILS.

- (1) Handrails. (a) Handrails, or equivalent, not less than 3 feet 6 inches in height, conforming to the requirements of section Ind 51.16 (5) (b), shall be provided on all open sides of the structure on each level.
 - (b) Handrails as specified in Ind 62.28 (1) (a) shall be provided at changes of elevation within the structure when the clear vertical opening at the elevation change is one foot 6 inches or greater.
- (2) Perimeter guardrails. (a) Perimeter guardrails shall be installed at the end of drive lanes and shall be designed for a minimum horizontal live load of 1000 pounds per lineal foot acting at 18 inches above the floor level.
 - (b) Perimeter guardrails shall be installed at the end of parking stalls and shall be designed for a minimum horizontal live load of 500 pounds per lineal foot acting at 18 inches above the floor.

Ind 62.29 ILLUMINATION AND EXIT LIGHTS.

- (1) Illumination levels. Minimum illumination levels at a horizontal plane 30 inches above the floor shall conform to the requirements of Table 62-I.
- (2) Exit lights. Every required exit from each floor shall be indicated by an approved illuminated exit sign bearing the word EXIT or OUT in plain letters not less than 5 inches in height.

TABLE 62-I
MINIMUM ILLUMINATION LEVELS

Area	Intensity (in footcandles)
Stairways and exits	10
Parking areas	2

Ind 62.30 FIRE PROTECTION.

- (1) Standpipes. Fire department standpipes shall be provided in all open parking structures more than 2 levels in height.
 - (a) Such standpipes shall be dry standpipes and are not required to be interconnected.
 1. Exception. Standpipes which are not accessible to the fire department at grade level shall be interconnected to an accessible standpipe.
 - (b) Standpipes shall be provided in each stair enclosure and shall be provided with a siamese connection at each floor level with one connection in the stair towers and one immediately outside.
 - (c) Such standpipes shall conform to the requirements outlined in section Ind 51.21 (3) (e) through (i).
 - (d) Exceptions:
 1. The department will recognize special considerations in lieu of standpipes in structures up to 60 feet in height.
 2. The department will accept open parking structures without standpipes if clearances are provided to allow fire-fighting equipment access in the structure.

Ind 62.31 SANITARY FACILITIES.

- (1) Unattended parking structures. Sanitary facilities need not be provided in unattended parking structures.
- (2) Attended parking structures. Sanitary facilities for employes shall be provided in accordance with section Ind 54.12 in attended parking structures.

Note: Sanitary facilities for patrons need not be provided.

Ind 62.32 ISOLATION OF HAZARDS.

- (1) Fire protection. Boilers, furnaces and all open-flame equipment within parking structures shall be isolated from the rest of the parking structure by at least a 2-hour fire-resistive enclosure as specified in section Ind 51.04.
- (2) Protection of openings. All openings in such enclosure shall be protected with self-closing fire-resistive doors as specified in section Ind 51.047.
- (3) Suspended equipment. Space heaters, suspended furnaces, and direct-fired unit heaters, fired with various fuels, may be used without an enclosure where approved by the department. Where such equipment is used without an enclosure, they shall be located at least 8 feet above the floor.

Ind 62.33 EXCEPTIONS FOR MECHANICAL ACCESS OPEN PARKING STRUCTURES. Mechanical access open parking structures need not comply with sections Ind 62.25 - 62.29, inclusive.

Subsection Ind 64.09 (1) (b) to be renumbered Ind 64.09 (1) (c).

Subsection Ind 64.09 (1) (c) to be renumbered Ind 64.09 (1) (d).

Subsection Ind 64.09 (1) (b) is created to read:

- (b) Combustion air for power burners. The minimum free area for combustion air intakes for power burners shall be at least .5 square feet per 1,000,000 Btu per hour fuel input with a minimum free area of 10 square inches.

Subsection Ind 64.09 (7) is amended to read:

- (7) Air-handling equipment located in a boiler or furnace room. If the fuel input to the burner exceeds 400,000 Btu per hour, the air-handling equipment and the burner shall be interlocked to shut off the burner and the blower when any service door to the air-handling equipment is opened, unless an air barrier separation is provided between the burner and the air-handling equipment.

Subsection Ind 64.20 (5) is amended to read:

- (5) Equipment approval. Equipment approval may be obtained from the department upon submission of a technical report, based on the test required in (4) (b) above, together with the fee as specified in Wis. Adm. Code Chapter Ind 69, Fee Schedule, for equipment approval.

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

Subsection Ind 64.22 (4) (d) to be repealed.

Subsection Ind 64.22 (4) (e) to be renumbered Ind 64.22 (4) (d).

Section Ind 64.41 Note is amended to read:

Note: 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 plastic wire sheathing, plastic thermal insulation, plastic pipe, intumescent paint and other organic materials which do 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.

Subsection Ind 64.42 (2) (c) is amended to read:

- (c) Combustion air ducts which extend from the exterior of the building and terminate at 2-hour rated enclosures and which do not pierce any other fire-rated assembly in other areas of the building.

TABLE 64.21--LOCATION OF EQUIPMENT

Location and Type of Occupancy	VENTED UNITS				UNVENTED UNITS		ELECTRIC	WATER-LOW PRES. STEAM	
	Gas or Oil Furnace		Gas or Oil Unit Heater	Gas or Oil Infrared	Gas or Oil Space Heater	Gas Dir. Fired Makeup Air ¹	Gas Infrared	Furnaces, Unit Heaters, Heat Pumps, Basebrd Heaters, etc.	Unit Ventilators, Heaters, Makeup Air Units, Baseboard Heaters, etc.
	Central	Suspended	7' above floor	7' above floor	7' above floor	7' above floor	7' above floor		
Location	Rated Enclosure	7' above floor	7' above floor	7' above floor		7' above floor	7' above floor		
Type of occupancy									
Factories, office & mercantile bldgs.								PERMITTED IN ALL OCCUPANCIES	PERMITTED IN ALL OCCUPANCIES
Factories	Yes	Yes	Yes	Yes	N.P.	Yes	Yes		
Mercantile	Yes	Yes	Yes	N.P.	N.P. ²	N.P.	N.P.		
Offices	Yes	Yes	Yes	N.P.	Yes	N.P.	N.P.		
Places of assembly, entertainment, recreation and dining (less than 100 persons)	Yes	Yes	Yes	Yes	N.P.	N.P. ³	N.P.		
Tennis facilities	Yes	Yes	Yes	Yes	N.P.	N.P.	N.P.		
Theaters and places of assembly, entertainment, and worship (100 persons or more)	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.		
Restaurants	Yes	N.P.	N.P.	N.P.	N.P.	N.P. ³	N.P.		
Tennis facilities (court areas only)	Yes	Yes ⁸	Yes ⁸	Yes	N.P.	N.P.	N.P.		
Tennis facilities (all other areas)	Yes	N.P. ⁸	N.P. ⁸	N.P.	N.P.	N.P.	N.P.		
Schools & other places of instruction	Yes	N.P. ⁴	N.P. ⁴	N.P.	N.P.	N.P.	N.P.		
Hospitals, nursing homes & penal insts.	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.		
Residential occupancies (apartments, hotels, motels, etc.)	Yes	N.P.	N.P.	N.P.	N.P. ⁵	N.P.	N.P.		
Hazardous occupancies									
Garages	Yes	Yes ⁶	Yes ⁶	Yes ⁶	N.P.	Yes ⁶	Yes ⁶		
Aircraft hangars	Yes	Yes ⁷	Yes ⁷	Yes ⁷	N.P.	Yes ⁷	Yes ⁷		
Day care centers	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.		

N.P. = Not permitted.

¹Direct-fired makeup air units shall be mechanically exhausted in the range of 90% to 110% of the air supplied.

²Permitted in retail stores less than 1500 square feet gross area with combustion air ducted to unit.

³Permitted in kitchens to provide makeup air for kitchen exhaust systems if located outside building or in a rated enclosure.

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

⁵Gas-fired, direct-vent wall furnaces are permitted in apartments and motels.

⁶Suspend heating units in garages at least 8 feet off the floor.

⁷Suspend unit 10 feet above the upper surface of the wings or engine enclosure of the aircraft.

⁸Spectator areas in tennis facilities may be served by suspended equipment located in court areas.

Unlisted occupancies - 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 64.65 (1) Note #4 is created to read:

Note #4: The use of wall registers within 6 inches of the floor, baseboard registers, and floor registers is prohibited in these areas. (See section Ind 52.57, Note.)

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

1. Exception. Mechanical exhaust ventilation may be omitted from toilet rooms or bathrooms having one water closet or urinal, or from janitor closets having one service sink or receptor, where an approved ductless air circulating and treatment device is provided.

Note: The department will accept ductless air circulating and treatment devices conforming to standard C-10 as adopted by the National Sanitation Foundation (NSF).

Pursuant to authority vested in the Department of Industry, Labor and Human Relations by section 227.02 (1) (b), Wis. Stats., the Department of Industry, Labor and Human Relations hereby amends as follows, which amendments do not require notice or hearing:

Subsection Ind 50.12 (1) (e) is amended to read:

- (e) Hazardous occupancies and specialty occupancies (sections Ind 54.50-54.52 and chapter Ind 62, respectively). Plan submission for hangars storing one airplane is waived.

Section Ind 50.20 Note is amended to read:

Note: See Appendix A, reprint of section Ind 69.09, for determination of fees.

Subsection Ind 51.02 (2) (c) Note is amended to read:

Note: The department will accept fire-retardant treated lumber and plywood which meet the standards of the American Wood Preservers Association, "Fire-Retardant Treatment by Pressure Processes," and ASTM D 2898, "Standard Methods of Test for Durability of Fire-Retardant Treatment of Wood."

Note to Revisor: Please relocate Table 51.03-A as close to section 51.03 as possible.

Subsection Ind 51.23 (4) is amended to read:

- (4) Fire department connection. Every sprinkler system shall have an approved siamese connection. The siamese connection shall be marked and readily accessible to the fire department and shall conform to the requirements of section Ind 51.21 (3) (i).

Subsection Ind 52.03 (4) Note is repealed.

Subsection Ind 52.62 (1) (b) is amended to read:

- (b) Where the local conditions make it impractical to install such system, outdoor toilets, as described in section Ind 52.63, or other facilities, such as septic toilets installed in accordance with the provisions of the septic toilet code issued by the department of health and social services, may be used; provided that in the case of places of employment for more than 10 persons, schools larger than 2 rooms, and apartment houses, water-flush toilets as herein described shall be provided, unless outdoor toilets or other facilities are permitted in writing by the department of industry, labor and human relations or the department of health and social services. In every case where chemical or septic toilets are installed, the approval of plans and specifications therefor by the department of health and social services shall be secured before work is started.

Subsection Ind 53.53 (4) (a) Note is repealed.

Subsection Ind 54.50 (4) (intro. par.) is amended to read:

- (4) Floor pits. There shall be no pits or other depressions in the floor of any garage area, except that this requirement shall not apply to the shallow depressions formed to secure floor drainage, nor to catch basins installed in compliance with the provisions of the plumbing code issued by the department of health and social services nor to floor openings for access to regular basements.

Section Ind 56.001 is amended to read:

Ind 56.001 SCOPE. The requirements of this chapter, sections Ind 56.001 to Ind 51.20 inclusive, shall apply to 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.

Subsection Ind 64.34 (1) Note is created to read:

Note: The department will accept the standards for ducts in the ASHRAE Handbook of Fundamentals, published by the American Society of Heating, Refrigerating and Air Conditioning Engineers, or as illustrated in the Low Velocity or High Velocity Duct Construction Standards published by the Sheet Metal and Air Conditioning Contractors National Association, Inc.

Subsection Ind 64.34 (2) Note is repealed.

Subsection Ind 64.59 (3) is amended to read:

- (3) Return air ducts. Unlined wood joists and stud spaces will be permitted to be used as return air ducts in individual living units provided with individual heating and ventilating systems.

Subsections Ind 64.67 (f) and (g) are amended to read:

- (f) Exposed hood surfaces. Hood surfaces and exposed exhaust ducts within 18 inches of combustible material shall be protected in accordance with the requirements of subsection Ind 64.67 (6) (f).
- (g) Concealed hood surfaces. Hood surfaces that are concealed by or recessed into adjoining construction shall be protected in accordance with the requirements of subsection Ind 64.67 (6) (f).

APPENDIX

Department of Industry, Labor and Human Relations

Inspection Report and Orders

INSPECTION DATE			FILE NO. E --		
OWNERS NAME			OCCUPANCY INSPECTED		
MAILING ADDRESS			LOCATED AT (STREET ADDRESS)		
CITY	STATE	ZIP CODE	CITY	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.

SEE REVERSE SIDE FOR APPLICABLE WISCONSIN STATUTES

NOTE	ITEM	ORDER	REQUIREMENTS:	<input type="checkbox"/> Building	<input type="checkbox"/> Safety

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 employees 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.

COMPLIANCE DATE	VIOLATIONS EXPLAINED TO:	TITLE
by _____ Deputy	DISTRICT NO. _____ Safety & Buildings Division	

PETITION REVIEW FEE – \$75.00

Name of Owner	Building Occupancy or Use	Agent, Architect or Engineering Firm
Company	Tenant Name, if any	Street & No.
Street & No.	Building Location, Street & No.	City State & Zip
City State & Zip	City County	Phone

1. Rule Ind. _____ of the Wisconsin Administrative code cannot be entirely satisfied because:

2. In lieu of complying exactly with the rule, the following alternative is proposed as a means of providing an equivalent degree of safety:

3. Supporting arguments are:

Verification by owner

_____, being duly sworn, says he is the petitioner herein, thus he has read the foregoing petition and that the same is true, as he verily believes.

 signature of owner

subscribed and sworn to me this ____ day of _____, 19____, in _____ County, Wisconsin.

 Notary Public

My commission expires: _____

Commission Action	
Secretary	Date

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 7946 MADISON WI 53707**

Name of Owner	Building Occupancy or Use	Agent, Architect or Engineering Firm
Company	Tenant Name, if any	Street & No.
Street & No.	Building Location, Street & No.	City State & Zip
City State & Zip	City County	Phone

1. I have read the petition for modification of rule: Ind

2. I recommend (Check appropriate box)	Denial	Approval	Conditional Approval	No Comment*
---	--------	----------	----------------------	-------------

3. Explanation for Recommendation:

* If desired, Fire Departments may indicate "No Comment" on non-fire safety issues such as sanitary, energy conservation, structural, barrier free environments, etc.

4. I find no conflict with local rules and regulations
 I find that the petition is in conflict with local rules and regulations

Explanation

Signature of Fire Chief	Date
-------------------------	------

PLEASE COMPLETE AND SUBMIT PROMPTLY TO DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS AT THE ADDRESS SHOWN ABOVE.

PLANS APPROVAL APPLICATION
 B-118 (Rev. 6/77)

Department of
INDUSTRY, LABOR AND HUMAN RELATIONS

Safety & Building Division
 Box 7946
 201 E. Washington Avenue
 Madison, Wisconsin 53707

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

THIS APPLICATION IS FOR: Building Plan Approval Heating Plan Approval Other _____

PLANS FOR: New Building Addition Alteration Structural Footing & Foundation
 Revision to previously approved plans Other _____

PROJECT INFORMATION

Name of Owner		Building Occupancy or Use		Designer or Design Firm	
Company		Tenant Name, if any		Street & No.	
Street & No.		Building Location, Street & No.		City State & Zip	
City State & Zip		City <input type="checkbox"/> Village <input type="checkbox"/> Town <input type="checkbox"/>		County Phone	
Previous Owner if any		Return Plans to <input type="checkbox"/> Owner <input type="checkbox"/> Designer			

DETERMINATION OF FEES SEE CHAP. IND. 69 FOR FULL SCHEDULE
 SEE BACK OF PAGE FOR FEE CALCULATION AND ABBREVIATED FEE SCHEDULE

FOR OFFICE USE ONLY

Total Volume _____	4a Building Plan Fee	\$ _____
	4b Heating-Ventilation Fee	\$ _____
	4c Other	\$ _____
	4d Inspection	\$ _____
	4e TOTAL	\$ _____

Amount Rec'd _____
 Date Rec'd _____
 Receipt No. _____

OTHER INFORMATION

5a Type of Construction
 Fire Resistive-Type A Metal Frame Protected Exterior Masonry Wood Frame Protected
 Fire Resistive-Type B Heavy Timber Metal Frame Unprotected Wood Frame Unprotected

5b Mechanical Information: Type of Heating _____ Net Rating of Heating Units _____

5c SOIL BEARING CAPACITY (See Ind. 53.21)

Method used to determine capacity:	Yes	No
Check One- Verified <input type="checkbox"/> Presumptive <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Sprinkler System Provided?
Check Value Used- PSF 2000 <input type="checkbox"/> , 3000 <input type="checkbox"/> , 4000 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Fire Alarm Provided?
6000 <input type="checkbox"/> 12000 <input type="checkbox"/> , Other _____	<input type="checkbox"/>	<input type="checkbox"/> Other Detection System Provided?
	<input type="checkbox"/>	<input type="checkbox"/> Emergency Power Provided?

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.

Signature of designer	Registration Number	Date
-----------------------	---------------------	------

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
----------------------------------	---------------------

NOTE: The supervising professional shall file a written report with the Department upon completion of construction. [Ind 50.13 (3) (c)]

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).
4. 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.

*The "total volume" is determined by the overall outside dimensions of length, width and height.

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	x	Exam Fee	Building Plan Fee	
Basement/Ground	x	=	cu. ft.		x	.60	\$	
1st Floor	x	=	cu. ft.	Total Vol./1000	x	Exam Fee	Heating Ventilating Fee	
2nd	x	=	cu. ft.		x	.40	\$	
3rd	x	=	cu. ft.	<input type="checkbox"/> Structural \$25.00 <input type="checkbox"/> Alteration \$1.50/1000 <input type="checkbox"/> Permit to start \$35.00 <input type="checkbox"/> Exhaust \$25.00 <input type="checkbox"/> Ftg. & Found \$25.00 <input type="checkbox"/> Revision \$25.00	Other			
4th & 5th attic & etc.	x	=	cu. ft.		\$			
Total Volume or Total Cost of Alteration			=			Inspection Fee	\$	
TRANSFER ALL DOLLAR AMOUNTS AND VOLUME TO FRONT PAGE -----							Total	\$



DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS
SAFETY & BUILDINGS DIVISION
P.O. BOX 7946
MADISON, WISCONSIN 53707

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

Location of Project:

Owner: _____ E. _____

Street: _____ Plan File Number _____

City: _____ Date Plans Rec'd _____

County: _____

Occupancy: _____

We, the undersigned, request to begin footing and foundation work prior to approval of the plans.

Complete plans have been submitted to the Department of Industry, Labor & Human Relations, Division of Industrial Safety and Buildings, and all information requested by Code Ind. 50.12 has been included with the submittal.

We have reviewed the specific code requirements for the building or structure including, but not limited to, Ind. 54.01, Ind. 55.02, Ind. 56.02, Ind. 57.01 (construction, height and allowable area), Ind. 50.12, Ind. 51.03, Ind. 53, Ind. 55.05 and Ind. 54.50, when applicable, and have shown compliance on the drawings.

We agree to make any changes required after the plans have been reviewed and to remove or replace noncode complying parts of the foundation and/or footings.

We agree to proceed with the footings and foundation only and will not continue with the remainder of the building or structure until approval has been received.

Owner's Signature _____ Date _____

Name: _____

Address: _____

Designer's Signature _____ Date _____

Name: _____

Address: _____

Accepted By _____ Date _____

Dept. of Ind., Labor & Human Relations
Div. of Industrial Safety & Buildings

Not Accepted Because _____

Plans will be examined within the next _____ days.

NOTE: Footing and foundation plans submitted prior to final building plans will not be accepted for this permit.

INSPECTION PROGRESS REPORT

SB-224B
Rev. 7/75

Wisconsin Department of Industry, Labor & Human Relations
DIVISION OF SAFETY AND BUILDINGS
P.O. Box 7946 - Madison, Wisconsin 53707

S.101.102(2). Wisconsin Statutes, requires a \$15 inspection fee for each building inspection conducted, payable at time of plan review. Owner will be billed \$15 for each inspection required to obtain compliance after the final inspection. Failure to comply with safety code provisions may result in issuing formal charges against the owner.

Designer will be notified of time of final inspection so he may accompany safety specialist on inspection and make corrections necessary before building is turned over to owner.

E NO. _____ PLAN FILE NO. _____		OCCUPANCY _____ BUILDING ADDRESS _____ CITY _____ ZIP CODE _____ COUNTY _____		
TO: OWNER <input type="checkbox"/> DESIGNER <input type="checkbox"/> NAME _____ ADDRESS _____ CITY _____ STATE _____ ZIP _____	DATE INSPECTED _____ 1 _____ 2 _____ 3 _____ 4 _____ FINAL _____ H & V _____ OTHER	CHECK ONE <input type="checkbox"/> SB-191 <input type="checkbox"/> TYPE ORDERS _____ COMPLIANCE DATE		

(X) NOT DONE (✓) DONE

INSP.						ORDER NUMBER	FINDINGS
	1	2	3	4	Final		

PERSON CONTACTED _____	TITLE _____	DEPUTY SIGNATURE _____	REG. NO. _____
OWNERS NAME (IF DIFFERENT FROM ABOVE) _____ ADDRESS _____ CITY _____ STATE _____ ZIP _____		IF YOU HAVE ANY QUESTIONS I WILL BE IN MY OFFICE on: _____ TELEPHONE _____	

CERTIFICATE OF COMPLETION

Date _____

TO: Department of Industry, Labor and Human Relations
Safety and Buildings Division
P. O. Box 7946
201 E. Washington Avenue
Madison, WI 53707

Gentlemen:

RE: File Number: _____
Plan Number: _____
Owner: _____
Occupancy: _____
Building Street Address: _____
City: _____ County: _____

This is to certify that construction of the referenced project was under my supervision, in accordance with Ind 50.10, and that to the best of my knowledge and belief it has been completed in substantial compliance with the approved plans and specifications with the following exceptions: (IF NONE, STATE NONE)

This certificate covers: Building
Heating & Ventilation
Structural
Other (Specify) _____

Name: _____
Registration Number: _____
Address: _____

A-50.20 FEES. The following reprint of section Ind 69.09 may be used to determine the amount of fee required for building-related services offered by the department:

Ind 69.09 Buildings, structures, heating and ventilating. (1) PLAN EXAMINATION AND APPROVAL FEES. Fees for the examination and approval of all plans submitted in accordance with the requirements of Wis. Adm. Code chapters Ind 50-64 will be determined in accordance with the following schedules.

(a) *Building; heating and ventilating.* Fees for the examination and approval of all building and heating and ventilating plans will be

computed on the basis of the total volume of the building and at the following rates:

Note: For the purpose of determining fees, the volume is determined by the overall outside dimensions of length, width and height.

<u>Total volume</u>	<u>Building plans</u>	<u>Heat & vent plans</u>
0-1,000,000 cubic feet	\$0.60 per 1000 cubic feet. Minimum fee-\$25.00 per plan.	\$0.40 per 1000 cubic feet. Minimum fee-\$25.00 per plan.
Over 1,000,000 cubic feet	\$600 plus \$0.40 per 1000 cubic feet in excess of 1,000,000 cubic feet.	\$400 plus \$0.25 per 1000 cubic feet in excess of 1,000,000 cubic feet.

1. Exceptions.

a. *Warehouses.* The fees for plan examination and approval of warehouses shall be determined in accordance with Ind 69.09 (1) (a) except that the fee may be reduced by 30%. Minimum fee—\$25.00.

b. *Replacement of heating equipment.* The replacement of a boiler or a furnace in an existing heating system with no alterations to the heating system requires no fee. See Ind 69.03 (5) for registration fee for boilers and pressure vessels.

(b) Permit to start.....\$35.00 per permit.

(c) Alteration plans for buildings and structures and heating and ventilating may be determined in accordance with (1) (a), based on total building volume affected by such alteration, or the following:

\$1.50 for every \$1000 or fraction of \$1000 estimated cost.
Minimum fee— \$25.00 per plan.

(Estimated fee need not include cost of razing, piping, electrical, painting or decorating.)

(d) Revisions to previously examined plans.....\$25.00 per plan.

(Applies when plans are revised, for reasons other than those that were requested by the department, before construction of the specific item commences.)

(e) Footing and foundation plans submitted separately.....\$25.00 per plan.

(f) Structures.....\$25.00 per plan.

(Applies when submitted separately and not included with general building plans, such as trusses, precast concrete and other structures.)

(g) Fire escapes.....\$25.00 per plan.

(h) Stadia, grandstands and bleachers.....\$10.00 per 1000 seats or fraction of 1000 seats.
Minimum fee—\$25.00.

(i) Industrial exhaust systems for dusts, fumes, vapors and gases (government owned only).....\$25.00 per plan.

(j) Spray booth plans (government owned only)\$25.00 per plan.

(2) APPROVAL NUMBERS. The fee for approval numbers issued by the department for the approval of materials, equipment and devices.....\$200.00 per approval.

(3) INSPECTION FEES. Field inspection fees shall be remitted for each building or structure in accordance with the following:

(a) *General building, heating and ventilating inspection fees.* When plans for the building and the heating and ventilating system are submitted together, inspection fees shall be determined in accordance with the following:

<u>New building construction (cubic feet)</u>	<u>Fee</u>
Up to 25,000 cubic feet.....	\$50.00
25,001 - 100,000 cubic feet.....	75.00
100,001 - 500,000 cubic feet.....	100.00
500,001 - 1,000,000 cubic feet.....	125.00
1,000,001 cubic feet and over.....	150.00

(b) *Heating and ventilating inspection fees.* Heating and ventilating inspection fee, when plans are submitted separately from building plans.....\$44.00.

(c) *Inspection fees for alterations to existing buildings.* Inspection fees for alterations to existing buildings shall be determined in accordance with (3) (a) or the following:

<u>Alteration or repair (dollar amount)</u>	<u>Fee</u>
Up to \$25,000.....	\$50.00
\$25,001 - \$100,000.....	75.00
\$100,001 - \$500,000.....	100.00
\$500,001 - \$1,000,000.....	125.00
\$1,000,001 and over.....	150.00

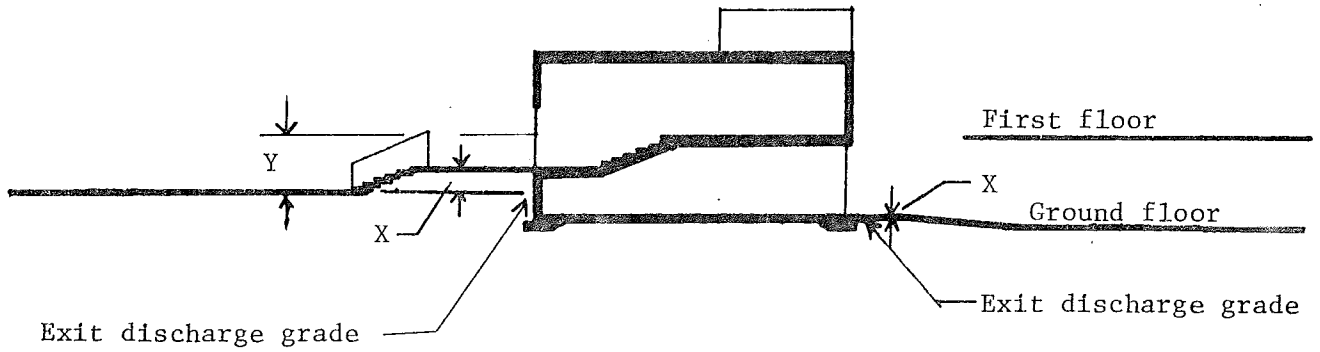
(d) *Miscellaneous inspection fees.* Miscellaneous inspection fees include fire escapes, stadia and grandstands, exhaust systems, spray booths and other structures for which plan submission is required.....\$25.00.

(4) COLLECTION OF FEES. All fees shall be remitted at the time the plans are submitted. No plan examinations, approvals or inspections will be made until the fees are received.

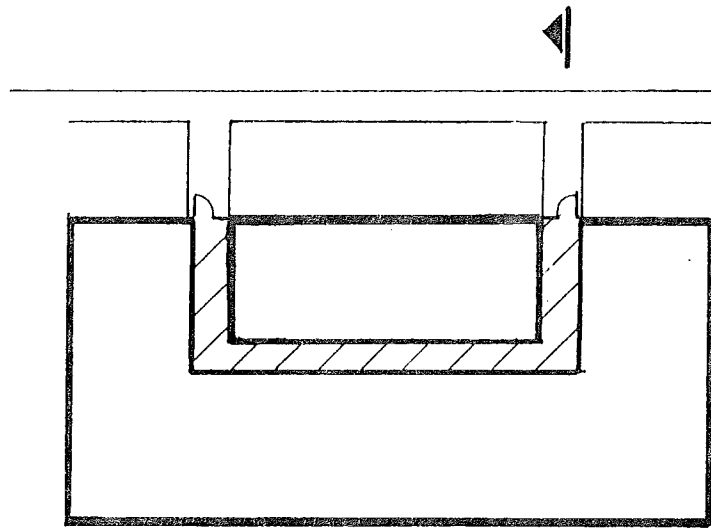
(5) MICROFILM FEES. Microfilm prints of approved plans for the years 1967-1972 are available at a nominal cost upon approval of the original designer.

(6) PETITIONS FOR MODIFICATION. The department will consider and may grant modification to an administrative rule upon receipt of a fee of \$75.00, 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.

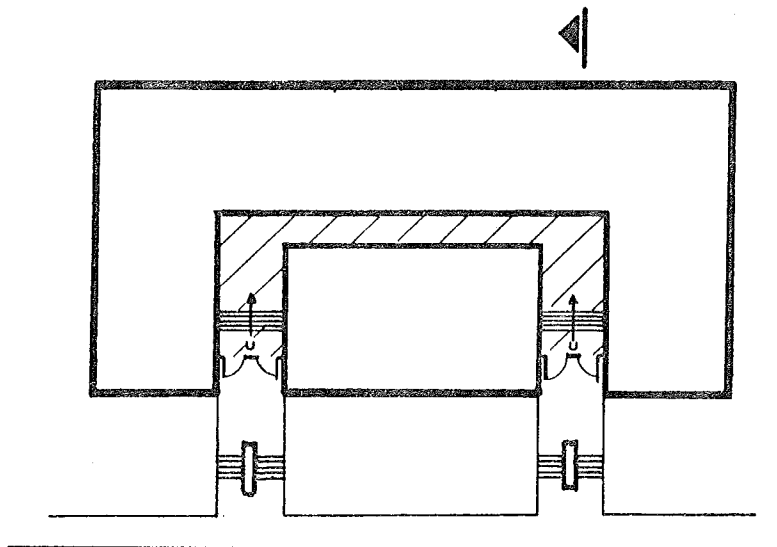
A-51.02 (14) DETERMINATION OF NUMBER OF STORIES. The following illustrations are provided to give visual aid to this rule and the definition of Ind 51.01 (121) Stories, Number of.



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



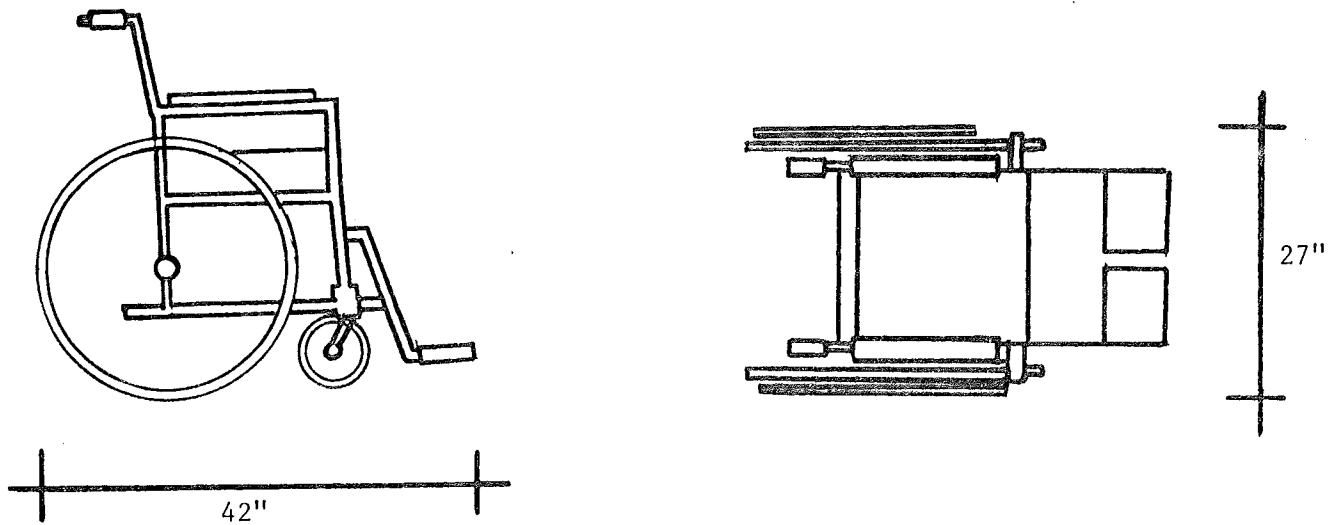
Ground floor



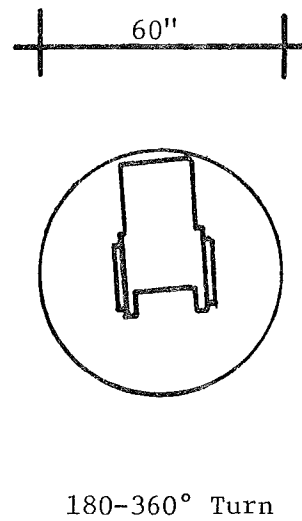
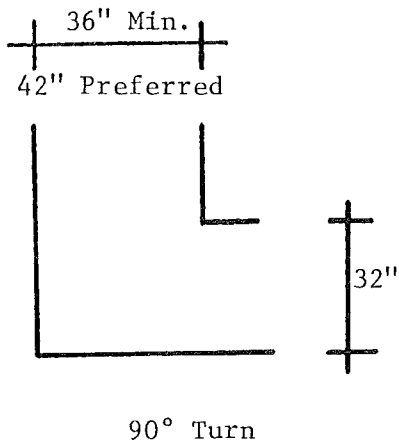
First floor

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

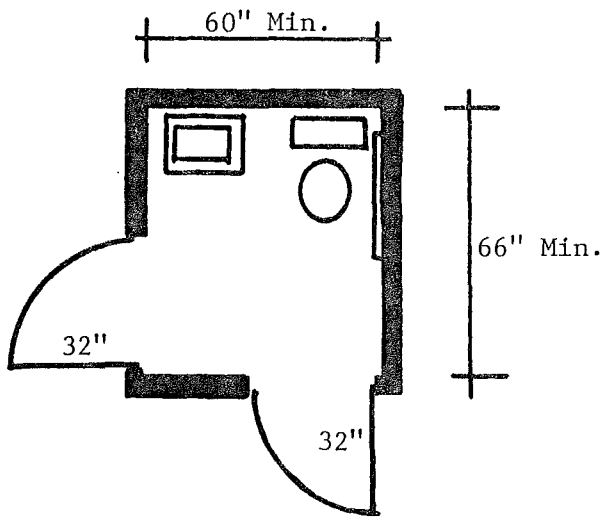
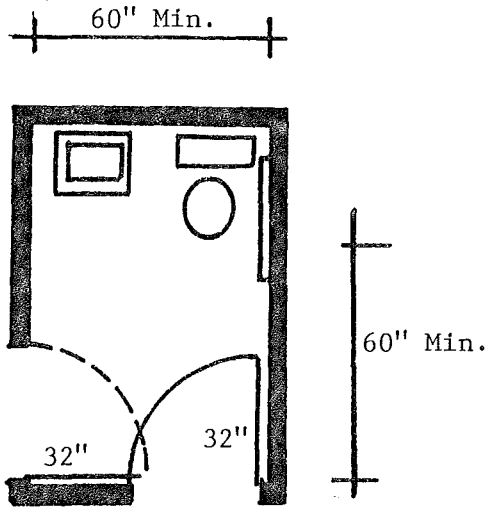
WHEELCHAIR DIMENSIONS



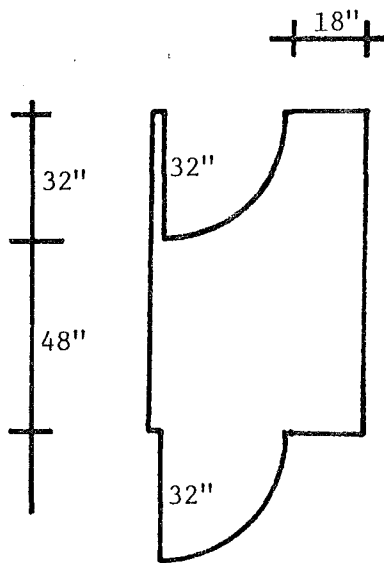
TURNING SPACE



EXAMPLES OF ACCESSIBLE TOILET ROOMS
CONTAINING ONE LAVATORY AND ONE WATER CLOSET

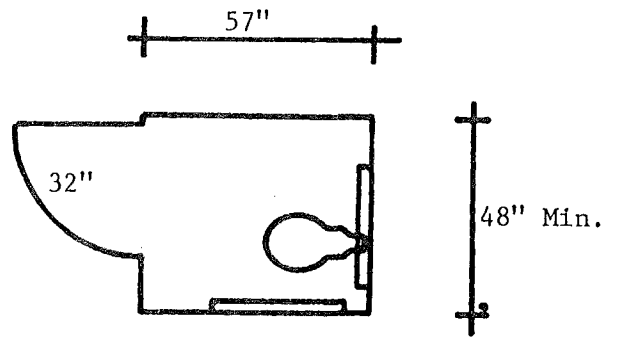
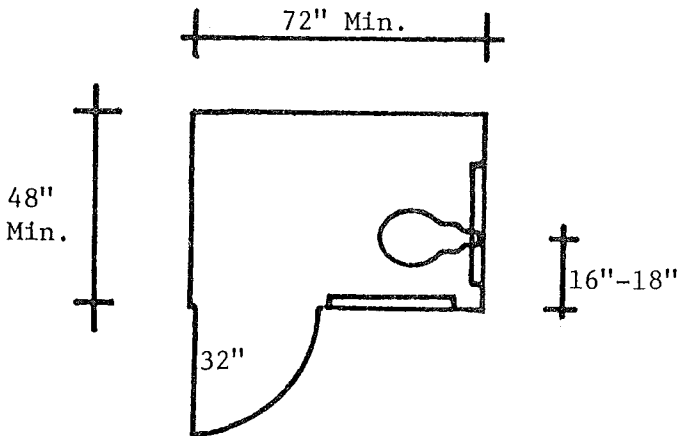
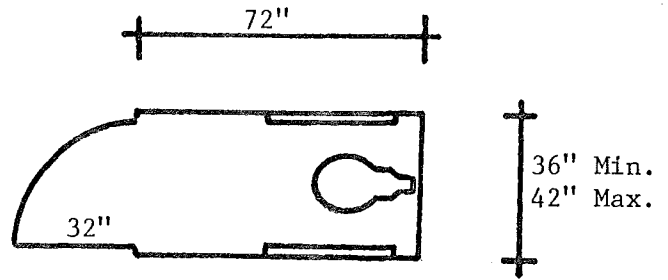
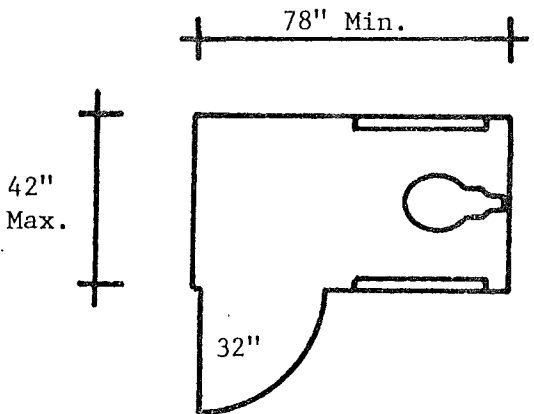
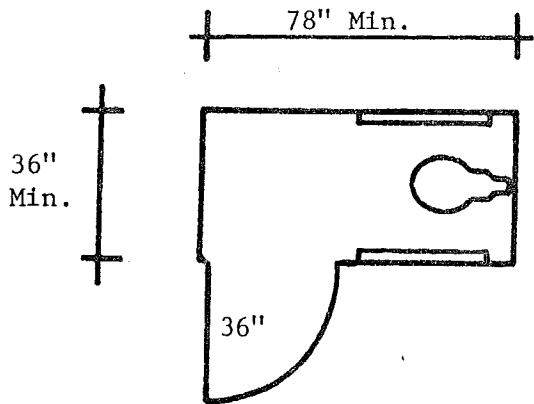


DOORS IN SERIES



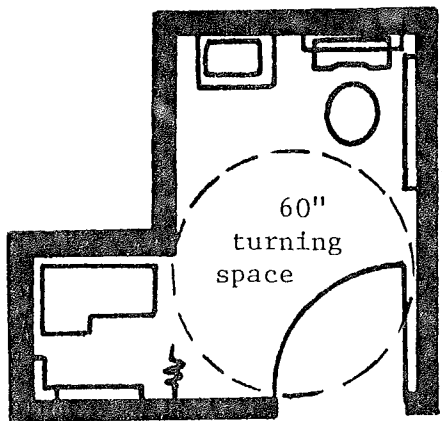
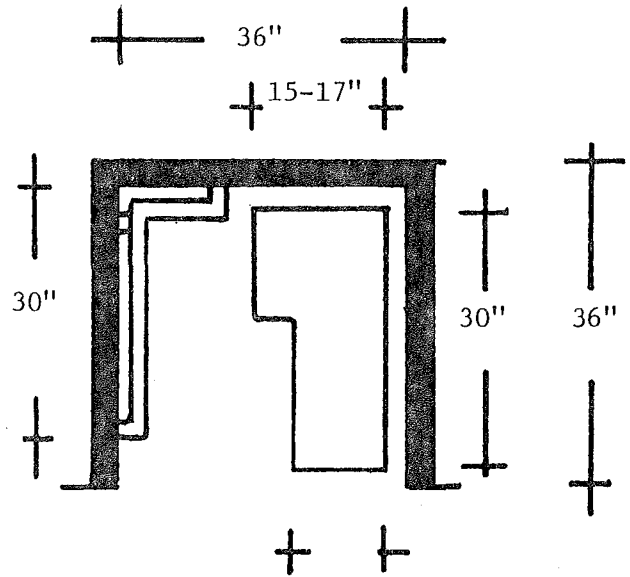
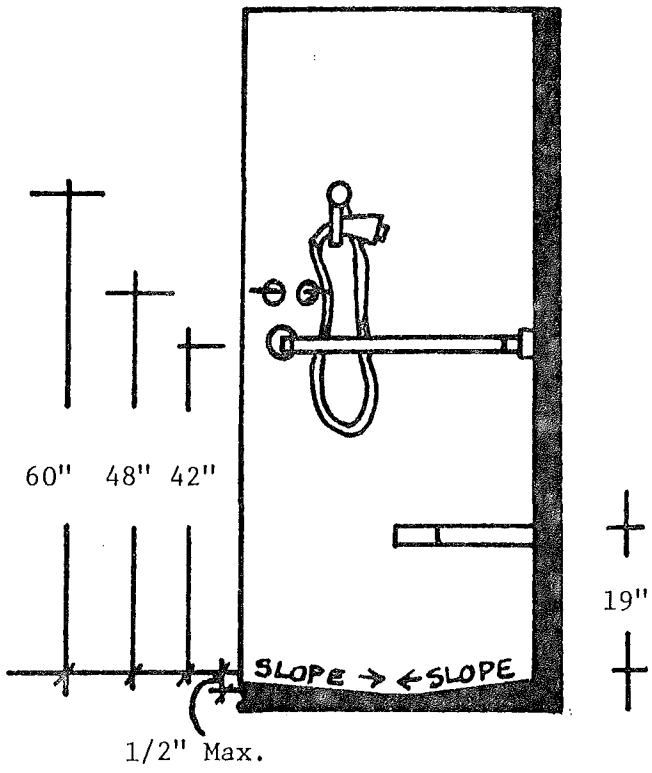
Doors in series should be hinged on the same side and should swing in the same direction. A minimum of 18 inches of clear space should be provided on the door knob side of the door. The length of the vestibule should be a minimum of 48 inches plus the width of the door in the open position (i.e., 32-inch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

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

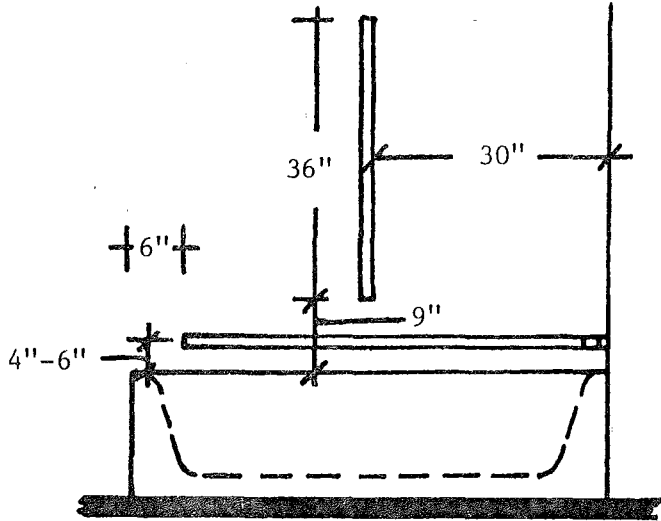


The door of the 48" x 57" water closet compartment having a frontal approach should not align with the placement of the water closet.

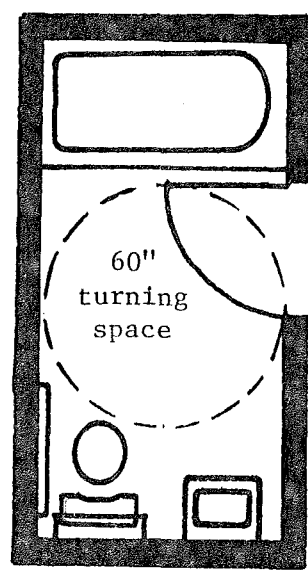
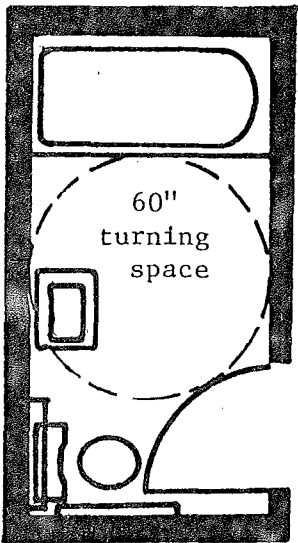
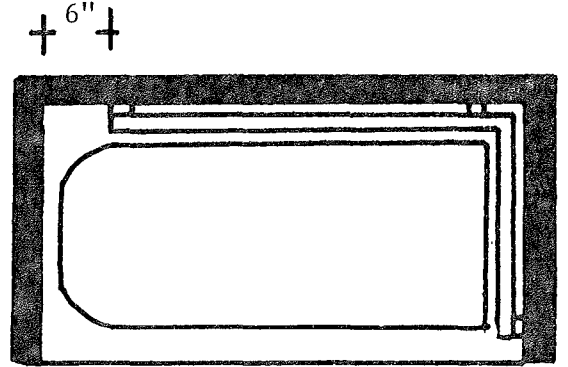
ACCESSIBLE BATHING FACILITIES



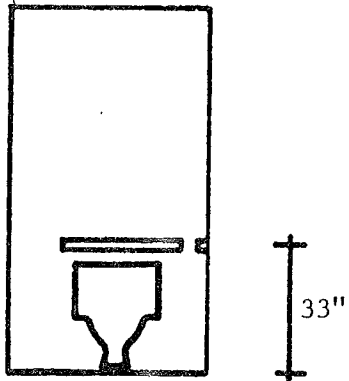
ACCESSIBLE BATHING FACILITIES



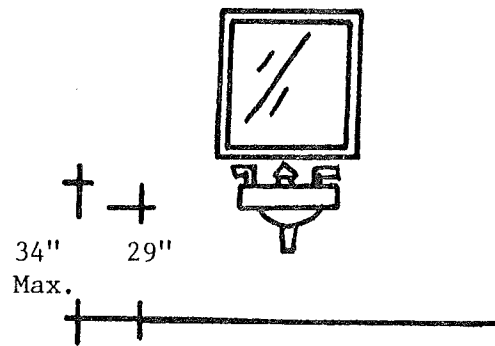
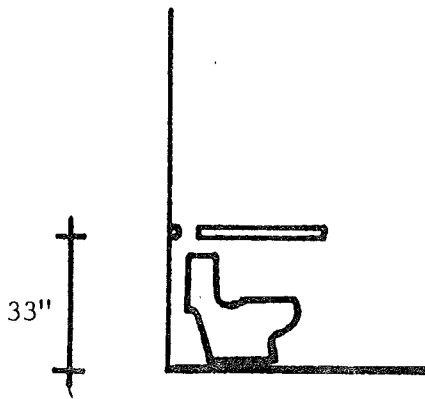
Grab bar location is measured from the rim of the tub.



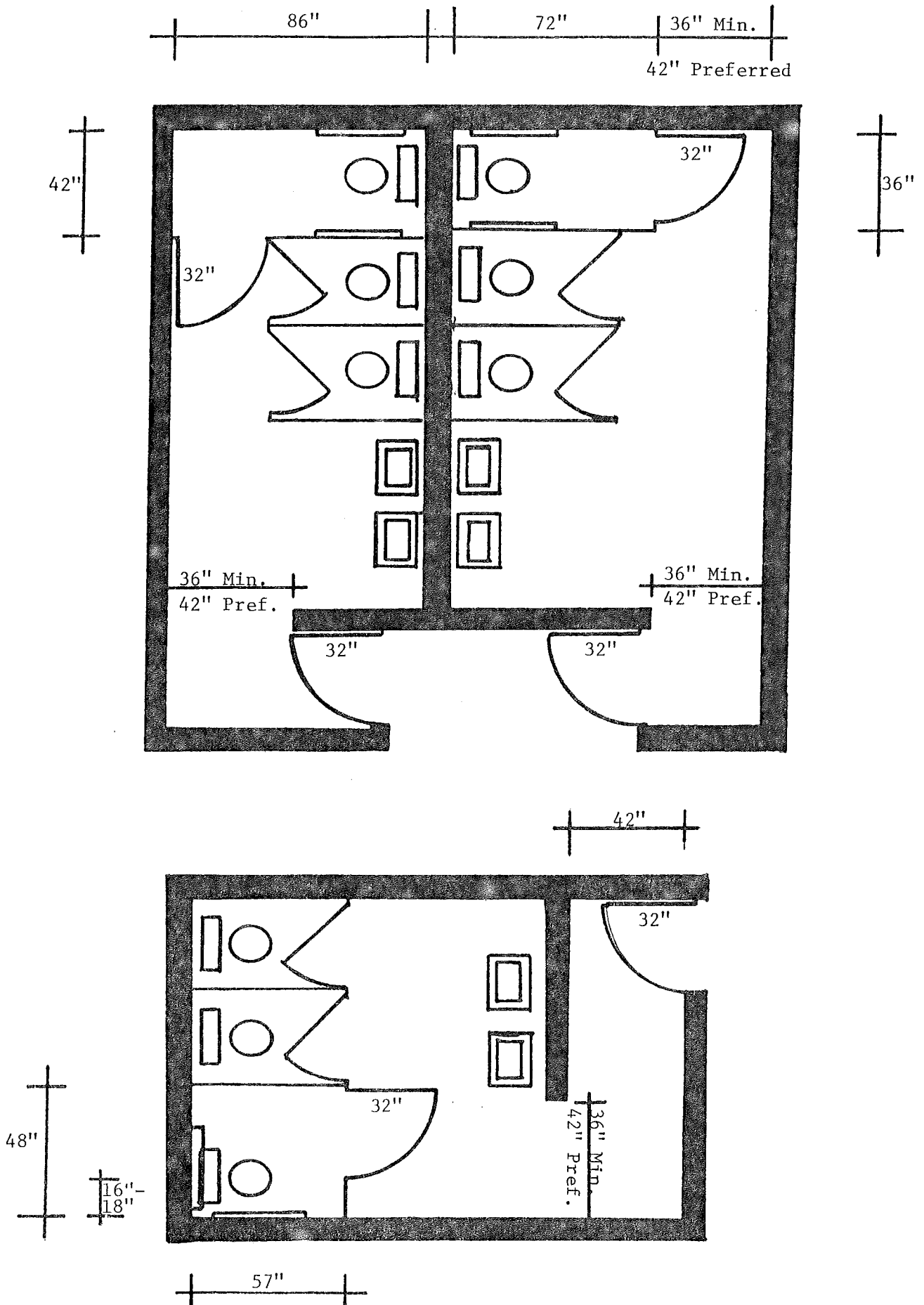
ACCESSIBLE TOILET ROOMS



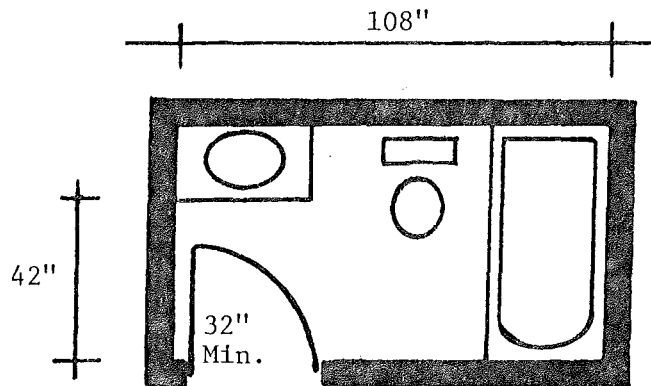
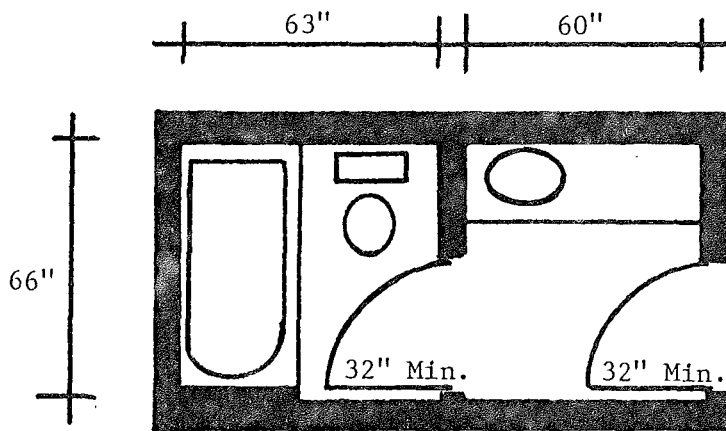
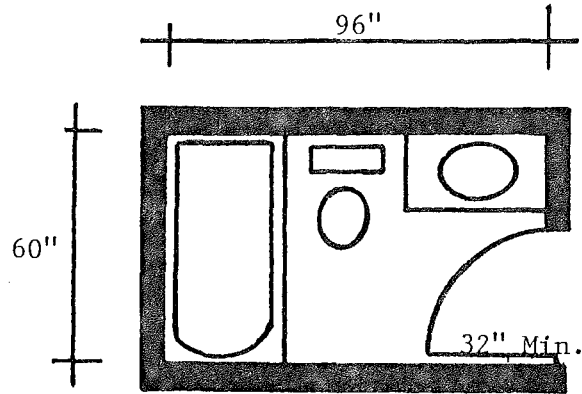
It is recommended that grab bars be from 30 to 42 inches in length and located no more than 12 inches from the back wall.



EXAMPLES OF ACCESSIBLE TOILET ROOMS



EXAMPLES OF ACCESSIBLE BATHROOM LAYOUTS
FOR RESIDENTIAL LIVING UNITS



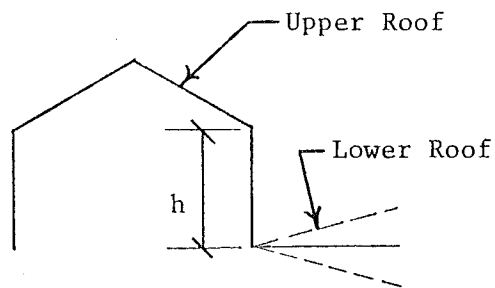


INTERNATIONAL SYMBOL FOR BARRIER-FREE ENVIRONMENTS

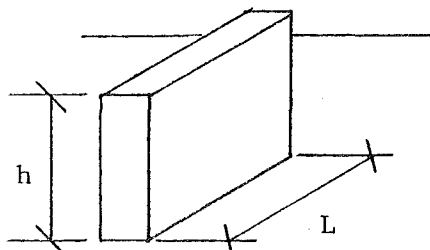
A-53.11 (4) (b) Increase in roof loads. The following design provisions may be used to determine the increase in roof loads as required by this section.

SNOW LOAD DISTRIBUTIONS AND COEFFICIENTS

ROOF SHAPES

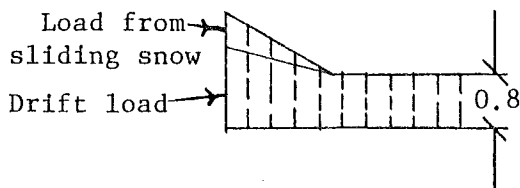


Lower of multi-level roofs with upper roof sloped towards lower roof



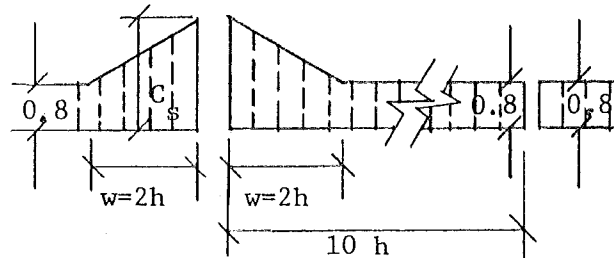
Roof areas adjacent to projections and obstructions on roofs

SNOW LOAD DISTRIBUTIONS AND COEFFICIENTS. LIMITATIONS



Design lower roof for loads applicable to multi-level roofs plus a portion of the sliding snow from the upper roof

Design upper roof for loads applicable to single-level roofs



$$C_s = 10 \frac{h}{g}$$

When $10 \frac{h}{g} < 0.8$ use $C_s = 0.8$

When $10 \frac{h}{g} > 2.0$ use $C_s = 2.0$

When $L < \frac{g}{6}$ use $C_s = 0.8$

$$w = 2 h$$

When $h < 5$ ft use $w = 10$ ft

When $h > 15$ ft, use $w = 30$ ft

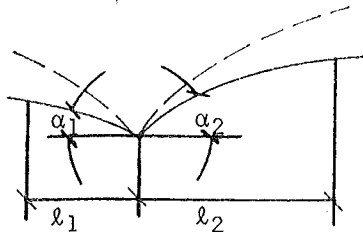
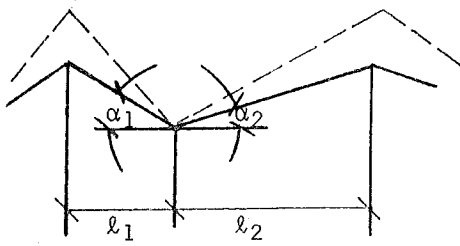
h = height of projection in ft

g = roof live load in psf [53.11 (4)]

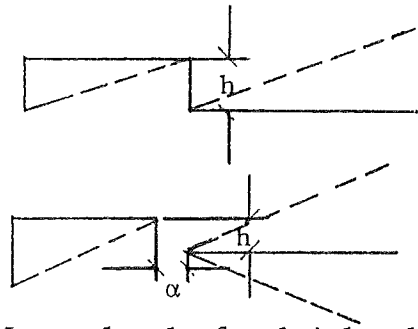
w = width of snow drift in ft

L = length of projection in ft

ROOF SHAPES

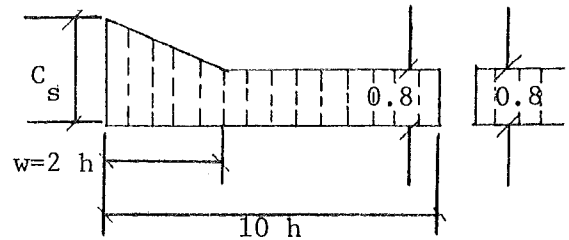
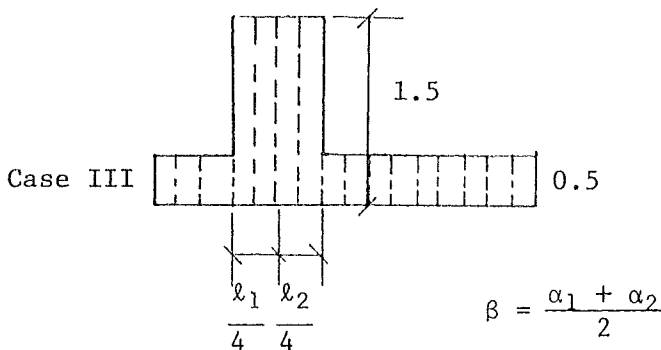
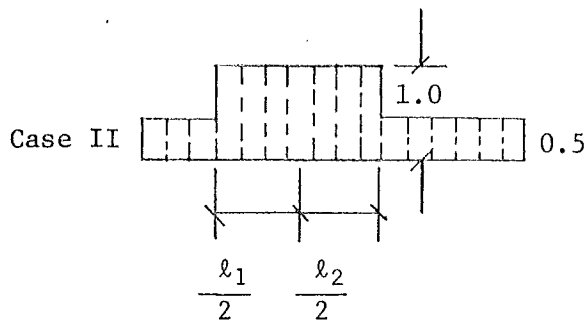
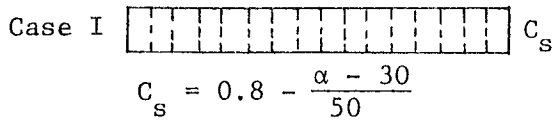


Valley areas of two-span and multiple series sloped or curved roofs



Lower level of multi-level roofs (when upper roof is part of the same building or on an adjacent building not more than 15 ft. away)

SNOW LOAD DISTRIBUTIONS AND COEFFICIENTS LIMITATIONS



$$C_s = 15 \frac{h}{g}$$

when $15 \frac{h}{g} < 0.8$ use $C_s = 0.8$

when $15 \frac{h}{g} > 3.0$ use $C_s = 3.0$

$$w = 2h$$

when $h < 5$ ft use $w = 10$ ft
 when $h > 15$ ft use $w = 30$ ft

h = difference of roof heights in ft
 g = roof live load in PSF [Ind 53.11(f)]
 w = width of drift from higher bldg. in ft
 α = distance between buildings < 15 ft

Design upper roof for loads applicable to single-level roofs

- For $\beta < 10^\circ$ use Case I only
- For $10^\circ < \beta < 20^\circ$ use Case I and II
- For $\beta \geq 20^\circ$ use Case I, II and III

A-52.04 (4) (b) Lifts for the physically disabled. The stair-mounted lifting devices, providing interior circulation for the physically disabled, are either of a platform type accommodating the wheelchair and its user or a seat type which requires the person to transfer from the wheelchair.

In new construction, the seat-type lifting device will be acceptable only in private group type occupancies such as, but not limited to, senior citizen centers, fraternal organizations, small churches with less than 100 occupants, and private residences. In remodeled situations where adequate space for other lifting devices is not available, a seat-type lifting device will be acceptable.

The following guidelines should be used for lifting devices provided for interior circulation:

1. If the lifting device is to be located in a required exit stairway, the lifting device, in its open position, cannot infringe upon the required exit width for the floor the stairway serves. To determine the required exit width, refer to the specific occupancy chapters of this code.
2. The department recommends that the building plans submitted for approval indicate the type of lifting device to be used, the location, and the width of the lifting device in its open position.
3. The guidelines of the elevator section of this department require platform lifts to be designed with proper safety devices such as 42-inch high sides and gates, gate locks and contacts, guarding of space under the lift, etc., to provide safety for the public and persons using the lift with aids such as wheelchairs, crutches, braces or canes.
4. Vertical lifts having a travel distance in excess of 56 inches are considered to be elevators and must comply with the requirements for passenger elevators, Wis. Adm. Code chapter Ind 4, Elevator Code.
5. After the building plans are approved for the location and use, 3 sets of mechanical drawings for the lifting device must be submitted to the elevator section in accordance with chapter Ind 4, Elevator Code.
 - a. Two copies of the elevator application form are required to be submitted along with an examination fee and an inspection fee.
 - b. A copy of the building approval letter should accompany the mechanical drawings.

A-53.15 LOAD COMBINATIONS. It is the intent of this section that the loads specified in sections Ind 53.10 through Ind 53.13 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. Alternate span loading need not be considered in the application of roof loads.

A-62.25 (1) Clearance limitations. The intent is to require the minimum 7 feet 0 inches clearance only in traffic lanes and in all areas normally used by the public to leave and return to their vehicles.

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