

Chapter Ind 52

GENERAL REQUIREMENTS

Ind 52.001	Design and supervision	Ind 52.22	Television and radio receiving antenna
Ind 52.01	Height and class of construction	Ind 52.50	Toilet rooms required
Ind 52.02	Windows	Ind 52.51	Toilet rooms for the two sexes
Ind 52.03	Window cleaning	Ind 52.52	Sex designated
Ind 52.04	Definitions of courts	Ind 52.53	Location, light and ventilation
Ind 52.05	Size of courts	Ind 52.54	Location without outside windows; when permitted
Ind 52.06	Ventilation of courts	Ind 52.55	Artificial light
Ind 52.10	Chimneys	Ind 52.56	Size
Ind 52.11	Metal smokestacks	Ind 52.57	Floor and base
Ind 52.12	Smoke pipes	Ind 52.58	Walls and ceilings
Ind 52.13	Steam and hot water pipes	Ind 52.59	Enclosure of fixtures
Ind 52.14	Ducts	Ind 52.60	Fixtures
Ind 52.16	Floor protection	Ind 52.61	Protection from freezing
Ind 52.17	Wall and ceiling protection	Ind 52.62	Disposal of sewage
Ind 52.18	Gas vents	Ind 52.63	Outdoor toilets
Ind 52.19	Gas and oil lamps; gas service	Ind 52.64	Maintenance and housekeeping
Ind 52.20	Electrical work		
Ind 52.21	Location and maintenance of exits		

Ind 52.001 Design and supervision. (1) Every new building containing more than 50,000 cubic feet total volume, or addition to a building which by reason of such addition results in a building containing over 50,000 cubic feet total volume, or structural alteration to a building containing over 50,000 cubic feet total volume shall be designed by an architect or engineer in accordance with the provisions of this code; and shall be constructed under the supervision of an architect or engineer who shall be responsible for its erection in accordance with the plans and specifications of the designer. No change from the original plans and specifications shall be made except with the knowledge and consent of the designer, and as provided in Wis. Adm. Code section Ind 50.10.

(2) On completion of the construction, the supervising architect or engineer shall file a written statement with the industrial commission certifying that, to the best of his knowledge and belief, the construction has been performed in accordance with the plans and specifications approved by the commission.

(3) No owner shall construct or alter any building, or portion of a building, or permit any building to be constructed or altered, except in accordance with the provisions of this section.

Note: By the term "architect" or "engineer" above is meant "registered architect" or "registered professional engineer", as defined in the Architects and Professional Engineers Registration Act, Section 101.31, Wis. Stats.

History: 1-2-56; cr. (2) Register, August, 1957, No. 20, eff. 9-1-57.

Ind 52.01 Height and class of construction. (1) All buildings higher than 75 feet above the adjacent grade shall be of fire-resistive construction.

(2) Buildings of mill construction shall not exceed a height of 75 feet in which height there shall not be more than 7 stories; provided,

that the height of a building erected on sloping ground may be not to exceed 75 feet plus a vertical distance equal to the vertical change in slope along the length of any side of such building, but in no case shall such height exceed 85 feet above the adjacent finished ground level. Towers, other than tanks, spires and steeples erected as a part of the building and not used for habitation or storage may extend not to exceed 20 feet above such height limit.

(3) Buildings of ordinary construction shall not exceed a height of 50 feet in which height there shall be not more than 4 stories; provided, that the height of a building erected on sloping ground may be 50 feet plus a vertical distance equal to the vertical change in slope along and in the length of any side of such building, but in no case shall such height exceed 60 feet above the adjacent finished ground level. Towers, other than tanks, spires and steeples not exceeding 20% of the roof area, erected as a part of such building and not used for habitation or storage may extend not to exceed 15 feet above such height limit.

(4) Buildings of frame construction shall not exceed a height of 35 feet in which height there shall be not more than 2 stories, except as provided in Wis. Adm. Code section Ind 57.01; provided, that the height of a building erected on sloping ground may be 35 feet plus a vertical distance equal to the vertical change in slope along the length of any side of such building, but in no case shall such height exceed 40 feet above the adjacent finished ground level. Spires, towers, other than tanks, or steeples not exceeding 20% of the roof area, erected as a part of such building and not used for habitation or storage may extend not to exceed 20 feet above such height limit.

(5) In every building more than 4 stories in height, all doors, windows and other openings in outside walls shall be protected with fire-resistive doors or shutters as specified in Wis. Adm. Code section Ind 51.09 or fire-resistive windows as specified in Wis. Adm. Code section Ind 51.10, unless such openings are on streets or on alleys or outer courts 20 feet or more in width.

Ind 52.02 Windows. (1) Every room in which one or more persons live, sleep, or are employed, (except storage rooms or other rooms where the nature of the occupancy will not permit) shall be lighted by a window or windows opening directly upon a street or alley, or upon a court (as defined in Wis. Adm. Code section Ind 52.04) on the same lot with the building. The windows shall be so constructed and distributed as to afford proper light and ventilation. Every building more than 40 feet deep (measuring at right angles to the windows) shall have windows on at least 2 sides. *Exception:*

(a) The provisions of this rule may be waived for factory, office or mercantile buildings if provisions are made for proper artificial lighting, and if ventilation is provided in accordance with the provisions of the heating, ventilating and air conditioning code.

(b) Every building more than one story in height which does not have windows opening directly upon a street in each story above the first, shall be provided with a suitable access for fire department use. Such access shall be a window or door opening through the wall on each floor above the first story. The opening shall be at least 36 inches in width and not less than 48 inches in height with the sill not more than 32 inches above the floor. The openings shall be so spaced that

there will be one opening in each 100 feet of wall length in any accessible wall of the building. This requirement for access openings for fire department use shall not apply where a building is equipped throughout with an automatic sprinkler system approved for fire protection purposes.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 52.03 Window cleaning. (1) Where the tops of windows to be cleaned are more than 20 feet above the floor, ground, flat roof, balcony, or permanent platform, one of the following means shall be provided to protect the window cleaners.

(a) Approved attachments for window cleaner safety belts to which belts may be fastened at each end. Said attachments shall be permanent devices that shall be firmly attached to the window frame, or to the building proper, and so designed that a standard safety belt may be attached thereto; or

(b) An approved portable platform that is projected through the window or supported from the ground, floor, roof or platform level, for the window cleaner to stand upon and that is designed, constructed, maintained and equipped with handrail and toeboard in compliance with the requirements of chapter Ind 1, rules on Safety.

(c) A suspended scaffold, swinging scaffold, swinging chair scaffold, or boatswain's chair scaffold designed, constructed, equipped and maintained in compliance with the requirements of Wis. Adm. Code chapter Ind 35, rules on Safety in Construction, or

(d) Other equally effective devices.

(e) Where the window consists of a fixed panel not more than 24 inches in width alongside a removable panel, the fixed panel may be cleaned by reaching through the opening of the removable panel. Where the window consists of a fixed panel between 2 removable panels, the fixed panel may be cleaned by reaching through the openings if such fixed panel is not more than 36 inches in width.

(2) For cleaning the insides of skylights (the highest parts of which are more than 20 feet above the floor, ground, balcony or permanent platform), to which access cannot be gained by any of the means described in Wis. Adm. Code subsection Ind 1.16 (1), scaffolds as specified in chapter Ind 35, rules on Safety in Construction, shall be provided.

(3) All equipment, including building parts and attachments, used in connection with window cleaning, shall be maintained in reasonably safe condition while in use and shall be inspected at least once each month while in use, and within 30 days before their use. It shall be the responsibility of the owner of the individual safety devices or equipment to inspect and maintain the devices or equipment belonging to him so that each will comply with the requirements of this section.

(4) Where the attachments specified in subsection (1) (a) are relied upon for compliance with the provisions of this rule, said employer shall furnish or see that there is provided, an approved suitable safety belt for each employe while cleaning windows.

Note: It will be the policy of the industrial commission to accept anchors and safety belts which have been tested and approved by the Underwriters' Laboratories.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 52.04 Definitions of courts. (1) By inner court is meant an open air shaft or court surrounded on all sides by walls.

(2) By inner lot line court is meant a court bounded on one side and both ends by walls and on the remaining side by a lot line.

(3) By outer court is meant a court bounded on 3 sides with walls and on the remaining side by a street, alley or other open space not less than 15 feet wide.

(4) By outer lot line court is meant a court with one side on a lot line and opening to a street or open space not less than 15 feet wide.

Ind 52.05 Size of courts. (1) In applying the following requirements, a building from 30 to 43 feet high shall be considered as having at least 3 stories, and each additional 13 feet shall be considered an additional story.

(2) Outer lot line courts shall be not less than 3 feet wide for a court 2 stories or less in height and 40 feet or less in length, measured from the lot line to the wall of the building. For each additional story in height, the width of such court shall be increased one foot; and for each additional 15 feet or fraction thereof in length, the width of such court shall be further increased one foot.

(3) Outer courts between wings or parts of the same building, or between different buildings on the same lot, shall be not less than 6 feet wide for a court 2 stories or less in height and 40 feet or less in length. For each additional story in height, the width of such court shall be increased one foot, and for each additional 10 feet or fraction thereof in length, the width of such court shall be further increased one foot.

(4) Where outer courts or outer lot line courts open at each end to a street or other open space not less than 15 feet wide, the above lengths may be doubled.

(5) Inner lot line courts one story high shall be not less than 4 feet wide and not less than 40 square feet in area. Inner lot line courts two stories high shall be not less than 6 feet wide and not less than 60 square feet in area. For every additional story every such inner lot line court shall be increased by at least one lineal foot in length and one lineal foot in its width.

(6) Inner courts shall be not less than 10 feet in width nor less than 150 square feet in area for courts two stories or less in height; and for every additional story every such inner court shall be increased by at least one lineal foot in its length and one lineal foot in its width.

(7) Courts shall not be covered by a roof or skylight but the entire required area shall be open and unobstructed from the bottom thereof to the sky. No fire escape or stairway shall be constructed in any court unless the court be enlarged proportionately.

(8) Walls of inner courts whose least horizontal dimension is less than one-fourth the height, shall be faced with material with a permanent white surface or shall be painted white at least every 2 years.

(9) No buildings shall be altered or enlarged to encroach upon space reserved under this code for light and air on the lots or parcels of ground on which such building is erected.

Ind 52.06 Ventilation of courts. At the bottom of every shaft or inner court there shall be sufficient access to such shaft or court to enable it to be properly cleaned out. Every inner court which is re-

quired under Wis. Adm. Code section Ind 52.02 and which is more than one story in height shall have an intake for fresh air, leading from the street or other open space. The area of such intake in square feet shall equal at least .002 of the number of cubic feet contained in said court, but such area need not be more than 50 square feet. Every intake shall be of not less than 2-hour fire-resistive construction and unless said intake is used as a passageway for persons, there shall be no openings into the same other than the inlet and outlet.

Ind 52.10 Chimneys. (1) The walls of all chimneys shall be built of brick or other approved fire-resistive material, except that a metal smokestack may be provided as specified in Wis. Adm. Code section Ind 52.11. No chimney shall rest upon a flooring of wood nor shall any wood be built into, or in contact with any chimney. Headers, beams, joists and studs shall not be less than 2 inches from the outside face of a chimney. The foundation of every chimney, flue, or stack, shall be designed and built in conformity with the requirements for foundations for buildings. In no case shall a chimney be corbeled out more than 8 inches from the wall and in every case the corbeling shall consist of at least 5 courses of brick. Chimneys shall extend at least 3 feet above flat roofs and not less than 2 feet above the ridge of gable and hip roofs, and lime-cement or cement mortar shall be used in the laying of chimney masonry above the roof line.

(2) Every masonry chimney shall have walls at least 8 inches in solid thickness, except that in a chimney with a flue not larger than 260 square inches where a fire clay or other suitable refractory clay flue lining is used for the full height of the chimney the walls shall not be less than 4 inches in solid thickness. No smoke flue shall have a cross sectional area less than 64 square inches, except that flue linings 7 inches by 7 inches inside, or 8 inches in diameter inside, may be used.

(3) All flue linings shall be adapted to withstand reasonably high temperatures and flue gases and shall have a softening point not lower than 1800° F. Flue linings shall be not less than $\frac{5}{8}$ inch in thickness and shall be built in as outer walls of the chimney are constructed. Flue linings shall start from a point not less than 8 inches below the bottom of the smokepipe intake and shall be continuous to a point not less than 4 inches above the enclosing walls.

(4) Where there is more than one smokepipe connected to a flue, the connections shall be at different levels. Two or more heating units or appliances may be connected to a common smokepipe or breeching if joined by Y fittings as close as practicable to the flue. In all such cases, the size of the breeching and the flue shall be sufficient to accommodate the total volume of flue gases.

(a) *Cleanout opening.* Every chimney shall be provided with a cleanout opening at the base. Such openings shall be equipped with metal doors and frames arranged to remain closed when not in use.

(5) Every chimney shall be designed to withstand the following wind pressure in pounds per square foot over the diametrical area:

(a) Square chimneys -----	30
(b) Polygonal chimneys -----	25
(c) Round chimneys -----	20

(6) Prefabricated chimneys complying with the requirements of Wis. Adm. Code section Ind 58.67 of the Heating, Ventilating and Air Conditioning Code may be used in lieu of masonry chimneys if approved by the industrial commission and are provided with foundations as specified for masonry chimneys, or metal smokestacks or as otherwise approved.

History: 1-2-56; am. (1) r. and recr. (4) Register, August, 1957, No. 20, eff. 9-1-57; am. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 52.11 Metal smokestacks. (1) Steel or iron smokestacks may be used in place of masonry chimneys specified in Wis. Adm. Code section Ind 52.10, in which case the thickness of the metal shall be not less than 3/16 inch for heights up to 40 feet and 1/4 inch for greater heights. Such stacks when used for manufacturing, for high pressure boilers, furnaces or other similar heating or manufacturing appliances shall be lined with fire brick for a distance of not less than 25 feet from the place where the smoke pipe enters and shall be protected on the outside up to and through the roof of the building with 8 inches of masonry, or a metal shield which provides an 8 inch ventilated air space between such shield and the stack. All stacks shall be properly guyed when the height of the stack exceeds 15 times its least diameter.

Exception:

(a) Public utility or industrial power plants are exempted from the protection requirements of this paragraph if they are of fire-resistive construction.

(2) Smokestacks under 80 feet in height may be constructed of not less than No. 10 U. S. Gauge steel, with either welded or riveted joints, and may be mounted directly upon masonry chimneys or foundations or upon industrial heating or power boilers provided all of which are designed to support the stack load. A clearance of not less than 6 inches shall be maintained at all times around such smokestack and any inflammable material within 12 inches of such smokestack shall be protected by 1/4 inch of asbestos covered by sheet metal.

Ind 52.12 Smoke pipes. (1) No smoke pipe or breeching serving boilers, furnaces or other similar heating appliances shall pass through any floor, outside window or door, nor through any combustible roof or combustible outside wall, nor through any closet, attic or similarly concealed space.

(2) Where necessary to pass through any partition of non-fire-resistive construction, every smoke pipe shall be encased with incombustible material at least 4 inches thick or with a double safety thimble made of two concentric rings of sheet metal with at least one inch open air space between and with the outer ring covered with at least 1/4 inch asbestos.

(3) No part of any smoke pipe shall be placed nearer to any non-fire-resistive partition or wall than the diameter of the pipe, nor nearer to any non-fire-resistive ceiling than 1 1/2 times the diameter; but the above distances may be reduced by one-half, if the wall or ceiling is covered with not less than 1/4 inch asbestos board covered with sheet metal, or with equivalent protection.

Ind 52.13 Steam and hot water pipes. No steam pipe or pipe carrying hot water at a temperature exceeding 180 degrees shall be placed within one inch of any woodwork. Every such steam or hot water

pipe passing through a combustible floor, ceiling or partition, shall be protected by a metal tube one inch larger in diameter than the pipe and shall be provided with a metal cap. All wooden boxes or casings enclosing steam or hot water pipes, or wooden covers to recesses in walls in which steam pipes are placed, shall be lined with metal.

Ind 52.14 Ducts. Every vertical shaft housing air ducts or a group of ducts in buildings in the theater, school, or hotel classification, shall be enclosed with incombustible material smoothly finished on the inside and having a fire-resistive rating as required for each specific situation.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 52.15. History: 1-2-56; r. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 52.16 Floor protection. (1) All stoves and ranges used for cooking, heating or laundry purposes using solid or liquid fuel, and which are more than 16 square feet in horizontal area or which have a flame at the bottom shall be placed on a fire-resistive floor projecting at least 2 feet on each side. If such floor rests on or is in contact with any combustible material, then the fire-resistive floor layer shall be at least 5 inches thick and shall be hollow, with air spaces running horizontally through the same. The air spaces shall be open at both ends and shall be so placed that air can circulate through them; the horizontal area of the air spaces shall equal at least one-half the horizontal area of the slab.

(2) The air spaces may be secured by using hollow tile placed end to end, or by embedding wrought or sheet iron pipes in a layer of concrete. The air spaces should parallel the short dimension of the slab.

(3) If the stove or range is raised at least 6 inches above the floor and such air space is not enclosed, then the fire-resistant floor layer may be reduced to not less than 2 inch solid thickness, without air spaces, provided it is covered with sheet metal.

(4) All stoves and ranges using solid or liquid fuel and which are not more than 16 square feet in horizontal area and not having a flame at the bottom shall, if placed on a combustible floor, be raised at least 6 inches above the floor, and such air space shall not be enclosed. Such floor shall be protected with a stove board of sheet metal or asbestos, projecting at least one foot on all sides.

(5) Gas ranges, domestic hot water heaters and hot plates shall be supported at least 6 inches above any wood floor or other combustible material and, if less than 12 inches above the floor, the wood shall be protected by a metal shield, or such equipment may rest on a masonry support.

(a) The above dimension of 6 inches may be reduced to 3½ inches if the bottom is suitably protected with a metal shield.

Ind 52.17 Wall and ceiling protection. (1) All stoves and ranges used for cooking or laundry purposes and all domestic hot water heaters shall be placed at least 24 inches away from any combustible wall, partition or ceiling, except that such distance may be reduced to 12 inches if the wall, partition or ceiling is protected with at least ¼ inch asbestos board covered with sheet metal, or with an equivalent protection.

(2) The above distances may be reduced one-half in the case of stoves and ranges less than 16 square feet in area, and also in the case of gas ranges of greater area if proper insulation is incorporated in the back of the range.

Ind 52.18 Gas vents. All gas ranges, except those for domestic use, hot water heaters, and other gas fired equipment shall be provided with vent pipes conforming to the requirements for smoke pipes as specified in Wis. Adm. Code section Ind 52.12.

Ind 52.19 Gas and oil lamps; gas service. (1) Gas and oil lamps shall not be used where electricity is available, except in private apartments.

(2) Gas and oil lamps shall be placed at least 6 feet above the floor level, at least 6 inches from any combustible partition or wall, and at least 2 feet (measured from top of flame) below any combustible ceiling unless properly protected by a metal shield with at least 2 inches of air space above. Swinging brackets shall be provided with a guard or stop so that the light cannot come nearer to the partition or wall than one foot. In aisles and public passageways, every such light shall be protected by an incombustible guard unless the light is at least 7 feet above the floor. Gas and oil lights shall be kept at least 2 feet from any drape or window curtain.

(3) Every gas supply main shall have a service cock outside of the building, so placed and maintained that it can be shut off at any time without entering the building.

Ind 52.20 Electrical work. All electrical work shall conform to the requirements of the Wisconsin state electrical code of the industrial commission.

Note: For the design requirements for transformer vaults, see chapter E 450 of the Wisconsin state electrical code.

History: 1-2-56; am. Register, January, 1961, No. 61, eff. 2-1-61.

Ind 52.21 Location and maintenance of exits. Every exit mentioned in Wis. Adm. Code sections Ind 51.14 to Ind 51.19, inclusive, shall lead to a street, alley or open court connected with a street. All such exits and all passageways leading to and from the same, shall be kept in good repair and unobstructed at all times.

Ind 52.22 Television and radio receiving antenna. (1) The requirements of this section shall apply to the outdoor portion of all apparatus, more than 12 feet in height, used for receiving television or radio waves.

(2) All television and radio antenna systems, including the supporting tower or mast, shall be constructed of galvanized steel or other corrosive-resistant incombustible material. Where approved by the industrial commission, towers constructed of wood or wood poles set in the ground may be used to support antenna systems but no wood tower or wood pole may be mounted on the roof of any building or structure.

(3) The antenna and tower shall be designed to support the dead load of the structure plus an ice load at least $\frac{1}{2}$ inch in radial thickness. The ice load shall be computed only upon the wires, cables, messengers and antenna.

(a) The tower or mast shall be braced or guyed and anchored to resist a horizontal wind pressure of not less than 30 pounds for every square foot (net area) of exposed surface. Guy wires shall not be anchored to a chimney or to any roof ventilator or vent pipe.

(4) Antenna systems installed on the roof of a building shall not be supported by or attached to a chimney. All such installations shall be mounted on an independent platform or base and anchored in place. The platform or base of the tower shall be large enough to distribute the weight of the structure over sufficient roof area so the roof construction will safely support the weight of the structure in addition to the required live and dead roof loads.

(5) All antenna systems shall be so installed that no part of the structure will be nearer to a street, or other public thoroughfare, than the height of the antenna as measured from its platform or base to the topmost point. No wires, cables, or guy wires shall extend over any street or other public thoroughfare or over any electric power or communication lines.

(6) Poles used for electric power or for communication lines shall not be used for supporting or for guying any antenna system. Where antenna installations are so located that damage will be caused to adjacent power or communication lines by the falling of the antenna structure, a separate safety wire shall be attached to top of the tower and secured in a direction away from the power or communication line.

(7) Electrical installations in connection with antenna systems, including the grounding of the tower or mast, shall comply in all respects with the requirements of the Wisconsin state electrical code.

GENERAL SANITATION REQUIREMENTS

Ind 52.50 Toilet rooms required. (1) Every place of employment and public building shall have adequate toilet rooms as provided in the occupancy classifications of this code, completely enclosed and so arranged as to insure privacy.

(2) Separate toilet rooms shall be provided for employes and the general public where deemed necessary by the industrial commission or by the state board of health.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 52.51 Toilet rooms for the two sexes. (1) Where the 2 sexes are accommodated, separate toilet rooms shall be provided except

(a) In apartment houses;

(b) If approved in writing by the industrial commission or the state board of health, or their authorized agents, in buildings accommodating not more than 5 persons of both sexes, provided the door of such toilet room is kept locked and the key is kept in a place accessible to all such persons. But whenever the number of such persons shall exceed 5, separate toilet rooms shall be provided.

(2) Entrances to toilet rooms for the 2 sexes shall be properly separated, by screens or otherwise, and shall, wherever possible, be at least 20 feet apart; except this requirement does not apply where the entrance doors to toilet rooms used by the 2 sexes are located in an exterior wall of the building.

Ind 52.52 Sex designated. Wherever women are employed or accommodated, each toilet room shall be distinctly marked with regard to the sex which uses it, and no person shall be allowed to use a toilet room assigned to the other sex, except as provided in Wis. Adm. Code section Ind 52.51. The door or room labels shall be the words MEN, or WOMEN, respectively, in letters not less than one inch in height.

Ind 52.53 Location, light and ventilation. (1) Every toilet or bathroom shall be so located as to open to outside light and air, by windows or skylights opening directly upon a street, alley or court, except as provided in Wis. Adm. Code section Ind 52.54.

(2) The glass area for a toilet room containing one closet or urinal shall be at least 4 square feet, with 2 square feet additional for each additional closet or urinal.

(3) No toilet room shall have a movable window or ventilator opening on any elevator shaft, or on any court which contains windows of sleeping rooms above.

(4) Every toilet room having more than one fixture (closets and urinals) shall be ventilated in accordance with the provisions of Wis. Adm. Code section Ind 58.48 of the heating, ventilating and air conditioning code issued by the industrial commission, except that this requirement shall not apply to chemical or septic toilets which are installed in accordance with the provisions of the chemical toilet code or the septic toilet code issued by the state board of health.

(a) The size of gravity vent ducts, if surmounted with effective siphon type hoods, may be determined as follows: $\frac{A \times 2}{300}$ = net cross sectional area of vent duct in square feet.

Where A = floor area in the toilet room in square feet.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 52.54 Location without outside windows; when permitted. Toilet rooms will be permitted without windows if they are ventilated in accordance with the requirements of Wis. Adm. Code section Ind 58.48 of the heating, ventilating and air conditioning code issued by the industrial commission.

Ind 52.55 Artificial light. Every toilet room, except in connection with private rooms or apartments, shall be artificially lighted during the entire period that the building is occupied, wherever and whenever adequate natural light is not available, so that all parts of the room, especially the toilet compartments shall be provided with artificial light intensity of not less than 2.5 foot candles at the floor level.

Ind 52.56 Size. Every toilet room shall have at least 14 square feet of floor area with a minimum width of 3 feet, and at least 100 cubic feet of air space for each water-closet and each urinal in addition to the space required for lavatories if installed within the toilet room.

Ind 52.57 Floor and base. Every toilet room, except those installed and used only in connection with private apartments, shall have the entire floor and the side walls to a height of not less than 6 inches made waterproof with ceramic tile, terrazzo, painted concrete, marble, slate, monolithic asphalt or other approved material impervious to water.

Ind 52.58 Walls and ceilings. (1) The walls and ceilings of every toilet room shall be completely covered with smooth plaster, galvanized or enameled metal, gypsum wallboard $\frac{5}{8}$ inch in thickness with taped joints, or constructed of brick, tile or other masonry units with flush joints or other equivalent smooth, non-absorbent material. Wood may be used only if it is smooth and well covered with 2 coats of body paint and one coat of enamel paint or spar varnish. Wood shall not be used for partitions between toilet rooms nor for partitions which separate a toilet room from any room used by the opposite sex. All such partitions shall be made soundproof. This is not intended to prohibit the use of wood stud partitions between rooms if partitions are lathed and plastered on both sides.

(2) The interior surface of walls and partitions shall be of light color to improve illumination and facilitate cleaning.

History: 1-2-56; r. and recr. Register, September, 1959, No. 45, eff. 10-1-59.

Ind 52.59 Enclosure of fixtures. (1) The fixtures (closets and urinals) in every toilet room shall be arranged to secure privacy in use. Water-closets shall be enclosed with partitions. Urinals shall be placed against walls and arranged individually. Individual floor type urinals shall be placed not less than 24 inches center to center and the space between urinals shall be filled flush with the front and top with non-absorbent material. *Exception:*

(a) The above requirements need not apply to toilet rooms accommodating only a single closet or urinal.

(2) A space of 6 to 12 inches shall be left between the floor and the bottom of each partition. The top of the partition shall be from $5\frac{1}{2}$ to 6 feet above the floor. Doors with the top $5\frac{1}{2}$ to 6 feet above the floor, and the bottom 6 to 12 inches above the floor, shall be provided for all water-closet compartments. All partitions and doors shall be of material and finish required for walls and ceilings under Wis. Adm. Code section Ind 52.58.

(3) The water-closet compartments in toilet rooms shall be not less than 30 inches in width, and shall be not less than 54 inches in depth with a clearance of not less than 24 inches between the fixture and the compartment door when closed. Compartment doors which are hung to swing inward shall clear the fixture not less than 2 inches.

Note: Section 146.085, Wis. Stats., provides that not more than 50% of the toilet compartments of any public toilet room of any public building, other than licensed hotels and resorts, shall be kept locked.

Ind 52.60 Fixtures. (1) Only individual water-closets of porcelain or vitreous china shall be used. Water-closet seats shall be of wood or other non-heat absorbing material, and shall have a finished surface that is impervious to water or cleaning agents. In public buildings, places of employment, and all other public places except apartments, and guest rooms in hotels and motels, the water-closets shall have elongated bowls. All water-closets except in apartments shall have open front seats without cover.

(2) Only individual urinals of porcelain, vitreous china, or stainless steel shall be used. Such urinals shall be set into the floor, the floor graded to the urinal and the urinals shall be equipped with an effective automatic or foot operated flushing device.

History: 1-2-56; r. and recr. Register, September, 1959, No. 45, eff. 10-1-59.

Ind 52.61 Protection from freezing. All water-closets and urinals and the pipes connecting therewith shall be properly protected against freezing, so that such water-closets and urinals will be in proper condition for use at all times.

Ind 52.62 Disposal of sewage. (1) Each water-closet and urinal, and each lavatory or slop sink, located in a toilet room shall be connected with a sewer and water system, where such systems are available. In locations where a sewer system is not available, or cannot be made available, the disposal of human waste may be accomplished as follows:

(a) Sewage treatment tank and disposal system.

Note: For detailed requirements on such systems see state plumbing code.

(b) Where the local conditions make it impractical to install such system, outdoor toilets, as described in Wis. Adm. Code 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 state board of health, 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 industrial commission or the state board of health. In every case where chemical or septic toilets are installed, the approval of plans and specifications therefor by the state board of health shall be secured before work is started.

Ind 52.63 Outdoor toilets. (1) Outdoor toilets shall comply with Wis. Adm. Code sections Ind 52.50 to Ind 52.59, inclusive, and in addition:

(a) No privy, with or without a leaching pit or other container, shall be erected or maintained within 50 feet of any well, 10 feet of the line of any street or other public thoroughfare, 5 feet of the property line between premises or 25 feet of the door or window of any building.

(b) Located on ground that is well drained, and where there is no possibility of contaminating any drinking water supply.

(c) Provided with suitable approach, such as concrete, gravel or cinder walk.

(d) The foundations shall be of concrete or other masonry.

(e) The vault shall extend at least 6 inches above ground, be as dark as possible, and be proof against entrance by flies, rats, or other vermin. The upper portion shall be of concrete, or of brick or stone laid in cement mortar. If in poorly drained soil, the entire vault shall be of concrete, or brick, or stone, laid in cement mortar.

(f) All windows, ventilators and other openings shall be screened to prevent the entrance of flies, and all doors shall be self-closing. A separate ventilator shall be provided for the vault and shall extend from the vault to not less than one foot above the roof and be provided with an effective ventilating hood.

(g) The entire installation shall be kept clean and sanitary. Milk of lime (freshly slaked lime) or other equally effective disinfectant shall be used in the vault and in the urinal trough in sufficient quanti-

ties, and at frequent intervals. The floors, seats and urinals shall be scrubbed as often as necessary. The vault shall be cleaned out at proper intervals.

Note: See the Wisconsin code for rural school privies issued by the state board of health.

Ind 52.64 Maintenance and housekeeping. (1) **MAINTENANCE OF TOILETS.** Every toilet room, and every part thereof, including walls, floor, ceiling and fixture therein, shall be kept clean, efficient, and in good repair.

(2) **PAPER.** In every toilet room, sufficient toilet paper made of material which will not interfere with the operation of the system or obstruct the fixtures, shall be provided.

(3) **DEFAACEMENT.** Indecent or suggestive marks, pictures, or words are forbidden in toilet rooms, and such defacement when found shall be removed at once.

(4) **SERVICE CLOSET.** A service closet conforming with requirements for construction of toilet rooms shall be provided and supplied with mop, broom, bucket, soap, toilet paper, and toweling necessary for sanitary upkeep of toilet rooms.