

**Chapter 145 Wisconsin Statutes  
State Plumbing Law**

**As Amended in 1943**

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**GENERAL ORDERS  
OF  
WISCONSIN STATE BOARD OF HEALTH  
AND  
INDUSTRIAL COMMISSION OF WISCONSIN**

**As Amended in 1943**

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Issued by the  
**STATE BOARD OF HEALTH**  
Bureau of Plumbing and Domestic Sanitary Engineering  
**MADISON, WISCONSIN**

**1946**

## STATE PLUMBING LAW

Laws relating to the licensing of plumbers, supervision and inspection of plumbing, and adoption and enforcement of minimum, uniform standards as prescribed in the Wisconsin State Plumbing Code.

### CHAPTER 145

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**145.01 Definitions.** (1) Plumbing. In this chapter, "plumbing" means and includes:

(a) All piping, fixtures, appliances and appurtenances in connection with the water supply and drainage systems within a building and to a point from three to five feet outside of the building.

(b) The construction and connection of any drain or waste pipe carrying domestic sewage from a point within three to five feet outside of the foundation walls of any building with the sewer service lateral at the curb or other disposal terminal, including private domestic sewage treatment and disposal systems and the alteration of any such system, drain or waste pipe, except minor repairs to faucets, valves, pipes, appliances and removing of stoppages.

(c) The water service piping from a point within 3 to 5 feet outside of the foundation walls of any building to the mains in the street, alley or other terminal and the connecting of domestic hot water storage tanks, water softeners, and water heaters with the water supply system.

(d) The water pressure system other than municipal systems as provided in Chapter 144.

(e) A plumbing and drainage system so designed and vent piping so installed as to keep the air within the system in free circulation and movement, and to prevent with a margin of safety unequal air pressures of such force as might blow, siphon or affect trap seals or retard the discharge from plumbing fixtures, or permit sewer air to escape into the building.

(2) Master Plumber. A master plumber is any person skilled in the planning, superintending and the practical installation of plumb-

ing and familiar with the laws, rules and regulations governing the same.

(3) A journeyman plumber is any person other than a master plumber, who is engaged in the practical installation of plumbing.

(4) A plumber's apprentice is any person other than a journeyman or master plumber who is engaged in learning and assisting in the installation of plumbing and drainage.

(5) Board. Board means the State Board of Health.

**145.02 Powers of Board.** (1) The construction, installation and maintenance of plumbing in connection with all buildings in this state, including buildings owned by the state or any political subdivision thereof, shall be safe, sanitary and such as to safeguard the public health.

(2) The board shall have general supervision of all such plumbing and shall after ten days notice in the official state paper and public hearing, prescribe, and publish and enforce minimum, reasonable standards therefor which shall be uniform so far as practicable. The state health officer or any employe designated by the board may act for the board in holding such public hearing.

(3) The board may exercise such powers as are reasonably necessary to carry out the provisions of this chapter. It may, among other things:

(a) Employ competent supervisors *who shall be licensed Plumbers*, and other assistants, prescribe their qualifications and assign their duties. Except in the adoption of rules and regulations, the state health officer may act for the board.

(b) Conduct investigations and experiments for the advancement of technical knowledge relating to plumbing and may hold public meetings and attend or be represented at such meetings within or without the state.

(c) Enter and inspect at reasonable hours plumbing installations on private or public property and may disseminate information relative to the provisions of this chapter.

(d) Prepare and cause to be printed such codes, bulletins or other documents as may be necessary and furnish copies thereof to those engaged in the plumbing business and to the public upon request.

(e) Furnish upon request of the owner of the building or of the plumber making the plumbing installation, recommendations or a certificate of inspection.

(4) The board shall prescribe rules and regulations as to the qualifications, examination and licensing of master and journeymen plumbers and for the registration of plumbing apprentices. On March first of each year the board shall prepare a list giving the names and addresses of all licensed plumbers and registered plumbing apprentices.

**Note:** Rule made by board of health under (4), amending rule 8 by extending period of journeymanship from three to five years before applicant is eligible to file application for master plumber's license, is valid and applies to all examinations to be taken for master plumber's license after rule was adopted.

**145.03 Examiners, Terms, Duties, Pay.** The board shall within thirty days after the taking effect of this chapter appoint, and may remove for cause, a committee of examiners consisting of three members, prescribe their qualifications and assign their duties, one of whom shall be a master plumber, one a journeyman plumber and one an employe of the board. The term of office shall be for a term of two years. Such examiners shall be exempt from the provisions of chapter 16. The said committee of examiners and other employes of the board shall when so directed, serve the board in an advisory capacity in the formulating of rules and regulations to be adopted by the board. Each member of the committee of examiners who is not an employe of the board shall be paid a per diem of ten dollars per day for the actual number of days served by such member in the performance of his duties, and in addition thereto shall be reimbursed his actual expenses necessarily incurred in the performance of his duties, such per diem and expenses to be paid from the appropriation to the state board of health in subsection (9) of section 20.43.

(2) Apprenticeship. The Board may determine and prescribe the conditions under which any person may serve a plumbing apprenticeship, as to *preliminary and vocational* school attendance requirements, and the credit for such school attendance in serving such an apprenticeship. *Every person, regardless of age, commencing a plumbing apprenticeship after July 1, 1943, shall be indentured under chapter 106. The term of a plumbing apprentice shall be 5 years, but the industrial commission or the board may upon application of the apprentice or his employer or both extend such term for not to exceed one additional year. After the expiration of an apprenticeship term, no apprentice shall engage in the business of plumbing either as an apprentice or as a journeyman plumber unless after the expiration of the apprenticeship term he secures a journeyman plumber's license. In case of failure to pass the examination for such license he may continue to serve as an apprentice but not beyond the time for re-examination for a journeyman plumber's license as prescribed by the rules and regulations of the state board of health.*

In order that the apprentice may qualify at the end of his apprenticeship as a skilled mechanic in the art of installing plumbing work, the board may prescribe the character of plumbing work that the apprentice may do during the fourth and fifth year under the direction or supervision of a master or journeyman plumber without either such master or journeyman being physically present, provided that the master plumber in charge shall be responsible for all such work.

(3) **Temporary Permits.** The board may issue temporary revocable permits to master and journeyman plumbers pending examination, and for such purpose may appoint agents without compensation or may authorize one of its examiners or plumbing supervisors to hold a special permit examination, the results to be reported to the board in writing. The board may make rules and prescribe procedure governing the issuance of such permits.

**145.04 Waterworks and Sewerage. Ordinance rules.** (1) A city of the first, second or third class having a system of waterworks or sewerage shall, and a village or city of the fourth class or any township or county or any metropolitan sewerage commission may, by ordinance, prescribe rules and regulations to safeguard the public health, not in conflict with the minimum standards prescribed by the board for the materials, construction, alteration and inspection of pipes, tanks and fixtures by which supply or waste water or sewage is used or carried, and provide that they shall not be placed in any building except in accordance with plans approved by the board of public works, where such board exists, or the board of health or such authority as the board or any metropolitan sewerage commission may designate, and that no plumbing shall be done, except repairing leaks, without permit upon prescribed conditions.

(2) **No Local License.** No city, village, township, county or metropolitan sewerage district commission shall require the licensing of plumbers or prohibit plumbers licensed under this chapter from engaging in or working at the business of plumbing.

(3) **Reports to Board.** The authorities of any such city or metropolitan sewerage district shall report to the state board of health each failure on the part of a state licensed plumber to qualify as a journeyman or master plumber and each wilful violation of any plumbing regulation.

**145.05 (1) Plumbing supervisors, supervision.** The council of a city of the first, second or third class, having a system of waterworks or sewerage, or the officer or board in charge, shall appoint one or more plumbing supervisors, who shall be licensed plumbers, *and unless under civil service shall serve for a term of four years or more subject to removal for just cause except as otherwise provided by ordinance* when first appointed, but need not renew their licenses while they continue in office. The council of a city of the fourth class and the board of a village, township, county or the commissioner in charge of any metropolitan sewerage district may appoint one or more plumbing supervisors who shall be practical plumbers, skilled sanitarians, or competent persons familiar with plumbing *and unless under civil service shall serve for a term of four years or more subject to removal for just cause except as otherwise provided by ordinance.* They shall supervise all plumbing, new or alterations or repairs, and report to the appointing body violations of regulations, and perform such other appropriate duties as may be required. Their compensation shall be fixed by the council, board or commission.

(2) Where a system of waterworks or sewerage has been or shall be established in any city, village, town or metropolitan sewerage district which has not provided for a board or officer to supervise plumbing, drainage and sewerage, the board shall take immediate and entire control of plumbing, drainage and sewerage intended to be connected with public sewer or waterworks, and exercise all the powers

conferred by this section until such municipalities or district provides for such supervision.

**145.06 License required.** (1) No person shall engage in or work at the business of a master plumber or journeyman plumber in any city or village having a system of waterworks and sewerage or in any metropolitan sewerage district unless licensed so to do by the board. A master plumber may also work as a journeyman. No person shall act as a plumber's apprentice in any such city or village or building unless registered with the board.

(2) In such city or village or in any metropolitan sewerage district, no person, firm or corporation shall install plumbing unless at all times a licensed master plumber is in charge, who shall be responsible for proper installation. Licenses shall be issued only to individuals and no license shall be issued to or in the name of any firm or corporation. No such license shall be transferable. It shall be unlawful for any licensed master plumber to allow the use of his license, directly or indirectly for the purpose of obtaining local permits for others. Nor shall he allow the use of his license by others, to install plumbing work.

(3) Each member or employe of a copartnership or each officer or employe of a corporation engaging in the business of superintending plumbing installations shall be required to apply for and obtain a master plumber's license before engaging in the work of superintending plumbing installations.

**145.07 License examinations.** This section became obsolete on Dec. 6, 1931; since then it is no longer permissible to issue licenses without examination. Therefore this section is omitted.

(2) **Semiannual.** Regular examinations shall be held at least twice each year and special examinations may be held at such time and place as may be fixed by the board.

(3) **Application.** Application for a master or journeyman plumber's examination, temporary permit or license shall be made to the board with fees. Unless the applicant is entitled to a renewal of license, a license shall be issued only after the applicant passes a satisfactory examination showing fitness. No such license or permit shall be transferable.

**145.08 Fees; expiration of license; registration.** (1) The fees are as follows:

(a) For master plumber's examination, ten dollars. An applicant who fails upon examination shall be entitled to one re-examination without an additional fee. For each subsequent examination the fee shall be five dollars.

(b) For master plumber's license, fifteen dollars which shall be paid immediately upon notice from the board that the applicant has passed in examination. Upon failure to pay the license fee within thirty days after receiving such notice, no license shall be issued and

the applicant shall again appear for examination and pay the examination fee. For each renewal of license, fifteen dollars, if application is made prior to February first, annually; after that date an additional fee of five dollars.

(c) For journeyman plumber's examination, two dollars. An applicant who fails upon examination shall be entitled to one re-examination without an additional fee. For each subsequent examination the fee shall be two dollars.

(d) For journeyman plumber's license one dollar and one dollar for each renewal of license if application is made prior to February first, annually; after that date an additional fee of one dollar.

(e) For temporary permit pending examination and issuance of license for master plumber, twenty-five dollars; for journeyman three dollars and which shall also cover the examination fee prescribed and the license fee for the year in which issued.

(2) No license shall be issued for longer than one year and all licenses shall expire on December thirty-first in each year and such license may be renewed upon application made within thirty days preceding or following the date of expiration. The board may renew licenses upon application made after February first if it is satisfied that the applicant has good cause for not making application within the months of December or January, and upon payment of the renewal and additional fees prescribed.

(3) Plumber's apprentices shall register with the board without fees within thirty days after this chapter takes effect.

**145.09 State comity.** The board may, without examination and upon payment of the required fee, license an applicant to whom license was issued under the laws of any other state having provisions governing the licensing of plumbers which in the opinion of the board are substantially equivalent to the requirements of this chapter.

**145.10 Investigations, hearings; suspension, revocation.** (1) The board may on its own motion make investigations and conduct hearings and may, on its own motion or upon complaint in writing duly signed and verified by the complainant, and upon not less than ten days' notice to the licensee, suspend any plumber's license or temporary permit if it has reason to believe, and may revoke such license or permit in the manner hereinafter provided, if it finds that the holder of such license or permit has:

(a) Made a material misstatement in the application for license or renewal thereof or for temporary permit;

(b) Demonstrated incompetency to act as a plumber; or

(c) Has wilfully violated a second time any provisions of this chapter or any rule, regulation or order prescribed by the board.

(2) A copy of the complaint with notice of the suspension of license or permit, if ordered by the board, shall be served on the person complained against, and his answer thereto shall be filed, in the manner and within the time provided in subsection (3) of sec-

tion 136.08, and the provisions of said subsection shall govern so far as applicable.

(3) No order revoking a license or permit shall be made until after a public hearing to be held before the board at the place, time and in the manner provided in section 136.09; and the procedure provided in said section for notice, conduct of hearing and determination by the board shall govern so far as applicable. One year after the date of revocation, application may be made for a new license.

**145.11 Plumbers sign.** (1) Repealed by Chapter 100, Laws of 1943.

(2) No person other than a licensed master plumber shall use or display the title "Master Plumber" or append his name to or in connection with such title or any other title or words which represent or may tend to represent him as a licensed master plumber. *Every holder of such license shall promptly notify the board of any change of his business address.*

**145.12 Prohibitions and penalties.** (1) Any person, firm or corporation who engages in or follows the business or occupation of, or advertises or holds himself or itself out as or acts temporarily or otherwise as a master plumber without first having secured the required license or permit, or who otherwise violates any provisions of this chapter, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not less than ten dollars nor more than one hundred dollars or by imprisonment in the county jail for not less than thirty days, or by both such fine and imprisonment. Each day during which a violation continues shall be a separate offense.

(2) Any person who shall do any act prohibited in this chapter or fail to obey a lawful order of the board, or a judgment or decree of a court in connection with this chapter, shall be punished by imprisonment in the county jail for not more than three months or by a fine not exceeding one hundred dollars.

(3) Any master plumber who shall employ an apprentice on plumbing representing him to be a journeyman, or who shall charge for an apprentice a journeyman's wage, shall be punished by a fine of not more than twenty-dollars, or by imprisonment in the county jail for not more than thirty days. Each day of violation shall be a separate offense.

**145.13 Licensing; exceptions to section 145.06; promulgation of plumbers' code.** (1) The provisions of section 145.06 shall not apply:

(a) To plumbing work done by a property owner in a building owned and occupied by him as his home, except where such license is required by local ordinance.

(b) To private residences and farm buildings located outside the incorporated limits of any city or village having either a public water or sewer system.

(c) To state owned buildings except when the governing body having jurisdiction of any such state owned buildings shall so provide in

its plan and specifications, or in its contracts for plumbing installations in either new or existing buildings.

(2) **Scope of Code.** The provisions of the state plumbing code and amendments thereto as adopted by the board defining plumbing work, prescribing minimum requirements for design, materials, appliances, workmanship and methods of installation shall after publication in the official state paper have the effect and force of law in the form of minimum standards state wide in application and shall apply to all types of buildings, private or public, rural or urban, including buildings owned by the state or any political subdivision thereof. All plumbing installations shall so far as practicable be made to conform with such code. Cities and villages may make additional regulations not in conflict with such code.

Section 3. It is the intent of the legislature that the provisions of this act are separable; and if any provisions are unconstitutional, such shall not affect the remainder of this act.

**20.43—3. Appropriation from Receipts, Nonlapsible.** All moneys received by the state board of health under the provisions of chapters 145 \* \* \* shall be paid into the state treasury, and ninety-five per cent thereof is hereby appropriated therefrom as a nonlapsible appropriation to said board to carry out the provisions of said chapters. Of the net receipts herein appropriated there is allotted to the board a sum sufficient for administrative overhead charges, but not in excess of seven per cent of the total net receipts.

## GENERAL ORDERS OF THE INDUSTRIAL COMMISSION AND STATE BOARD OF HEALTH

ON

### SANITATION, LOCATION, CONSTRUCTION AND CARE OF TOILET ROOMS FOR PUBLIC BUILDINGS AND PLACES OF EMPLOYMENT

These orders, rules and regulations were originally adopted by the Industrial Commission on October 9, 1914, adopted by the State Board of Health as amended on June 27, 1917, and the amendments adopted by the Industrial Commission on June 30, 1917, and published in the official state paper as required by law on July 5, 1917.

Further amendments were adopted by the State Board of Health on June 28, 1921, and by the Industrial Commission on August 13, 1921, and published in the official state paper on August 31, 1931; further amended by the Industrial Commission on Feb. 19, 1931 published on March 17, 1931. Further amended by the Industrial Commission on June 17, 1933 and published on June 30. Further amended by the Industrial Commission, effective July 29, 1942; Repealed and readopted as amended by the State Board of Health on Jan. 29, 1932, July 28, 1933 and Sept. 11, 1943.

Under the provisions of Chapters 101 and 145, Wis. Stats. these orders and regulations have full force of law and will be administered and enforced by the Industrial Commission and State Board of Health jointly as provided herein.

These orders, rules and regulations of the Industrial Commission and the State Board of Health are identical. (For further particulars relating to building construction, including definitions, supervision, etc., see Wisconsin State Building Code issued by the Industrial Commission of Wisconsin; also local regulations where such exist.)

For plumbing installation see (State Plumbing Code issued by the State Board of Health, Bureau of Plumbing and Domestic Sanitary Engineering, also local ordinance regulations where such are in force.)

**Authority to Adopt and Enforce Regulations.** The building code and other regulations have been adopted by the Industrial Commission in discharge of its duties under Sec. 101.01 to 101.28 inclusive, Statutes of Wisconsin.

Authority to adopt rules and regulations governing building sanitation and safety is given the State Board of Health under Chapters 140, 145 and 160, Wisconsin Statutes.

## SCOPE OF WISCONSIN STATE BUILDING CODE

### Order 5000. New Buildings and Additions

This code shall apply to all new buildings, structures, and also to additions to existing buildings and structures, except as in Order 5003.

(a) Existing Buildings. Buildings and structures erected prior to the effective date of the first Building Code (October 9, 1914) shall comply with the General Orders on Existing Buildings, issued by the Industrial Commission.

### Order 5001. Alterations

This code shall also apply to all alterations in any building or structure which affects the structural strength, fire hazard, exits, lighting or sanitary condition of any new or existing building or structure. This code does not apply to ordinary nonstructural changes or minor repairs necessary for the maintenance of any building or structure.

### Order 5002. Change of Use

When the use of a building or structure is changed and the requirements for the new use are more stringent than those for the previous use then such building or structure shall be made to comply with the requirements for the new use as provided in this code.

If, upon an inspection of a building or structure, it is found that its use was changed since the effective date of the first Building Code (October 9, 1914) and that it does not comply with the requirements of the Building Code in effect at the time of such change, it shall then be made to comply with the code requirements in effect at the time of change in use.

### Order 5003. Exemption From Code Requirements

This code does not apply to the following buildings:

- (1) Dwellings, and outbuildings in connection therewith, such as barns and private garages.
- (2) Apartment buildings used exclusively as the residence of not more than two families.
- (3) Buildings used exclusively for agricultural purposes which are not within the limits of a city or an incorporated village.
- (4) Temporary buildings or sheds used exclusively for construction purposes, not exceeding two stories in height, and not used for living quarters.

### Order 5004. Local Regulations

This code shall not limit the power of cities, villages and towns to make, or enforce, additional or more stringent regulations, provided the same do not conflict with this code or with any other order of the Industrial Commission.

## ENFORCEMENT OF WISCONSIN STATE BUILDING CODE

### Order 5010. Approval of Plans and Specifications

Complete plans and specifications for all buildings and structures in the following classifications shall be submitted to the Industrial Commission for approval before letting contracts or commencing work.

Theaters and assembly halls.

Schools and other places of instruction.

Apartment buildings, hotels and places of detention.

Hazardous occupancies.

Factories, office and mercantile buildings.

The submission of plans and specifications for factories, office and mercantile buildings containing less than 50,000 net cubic feet of space is waived, providing they have no floor or roof spans greater than 30 feet and are not more than 2 stories high. Buildings, however, for which submission of plans and specifications are waived shall comply with the requirements of this code.

All plans shall be submitted in triplicate and work shall not be started until plans are approved. The following data shall be a part of, or shall accompany, all plans submitted for approval.

- (a) The location and grades of adjoining streets, alleys, lot lines and any other buildings on the same lot or property.
- (b) Name of owner.
- (c) Intended use or uses of all rooms, and the number of persons to be accommodated therein.
- (d) Assumed bearing value of soil.
- (e) Assumed live loads.
- (f) Assumed dead loads, itemized.
- (g) Assumed unit stresses for structural materials.
- (h) Stress diagrams for all trusses.
- (i) Typical calculations for slabs, beams, girders and columns.

Complete structural calculations shall be furnished upon request of the Industrial Commission or other authorized approving official. All plans and specifications shall be sealed or stamped by a registered architect or professional engineer, or signed by any other designer.

This order shall apply to additions and alterations, as well as to new buildings, and shall also apply to all cases where there is a change of occupancy or use of a building.

In cities where plans are examined, and building permits are issued, by a city building official in a manner approved by the Industrial Commission, additional approval by the Industrial Commission is not required.

This order shall not apply to sanitary appliances, such as water supply and sewage disposal systems, chemical and septic toilets, and similar equipment, which shall be submitted for approval, and installed, in accordance with the regulations of the State Board of Health.

After being approved, plans and specifications shall not be changed in any respect which may involve any provisions of this code, except with the written consent of the approving official.

**Note:** The approval of a plan or specification is not to be construed as the assumption of any responsibility for the design.

**Note:** "Section" refers to Plumbing Code, "order" to Building Code.

For detailed requirements regarding fixtures, piping, etc., see State Plumbing Code, issued by the State Board of Health.

"Approval by an authorized agent" means:

1. By a deputy of the Industrial Commission or plumbing supervisor of the State Board of Health; or
2. By the city building department or city health department where such department acting under the provisions of a city ordinance issues an order or a permit for the work in question; or
3. By the city plumbing supervisor in cases not covered by 2.

## GENERAL ORDERS

### GENERAL SANITATION REQUIREMENTS

#### Section (Order) 5250. Toilet Rooms Required

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.

#### Section (Order) 5251. Toilet Rooms for the Two Sexes

Where the two sexes are accommodated, separate toilet rooms shall be provided except

(1) In apartment houses;

(2) 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.

Entrances to toilet rooms for the two sexes shall be properly separated by screens or otherwise, and shall, wherever possible, be at least 20 feet apart.

#### Section (Order) 5252. 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 Section (Order) 5251. The door or room labels shall be the words MEN, or WOMEN, respectively, in letters not less than one inch in height.

#### Section (Order) 5253. Location, Light and Ventilation

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 Section (Order) 5254.

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.

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

Every toilet room having more than one fixture (closets and urinals) shall be ventilated in accordance with the provisions of Section (Order) 5848 of the Heating, Ventilation 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. See page 25.

**Note:** 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.

The following are minimum vents as calculated for toilet rooms of average size:

| Number of fixtures | Diameter round pipe duct |
|--------------------|--------------------------|
| One or two         | 6 inches                 |
| Three or four      | 8 inches                 |
| Five or six        | 9 inches                 |
| Seven              | 10 inches                |
| Eight to ten       | 12 inches                |

#### Section (Order) 5254. Location Without Outside Windows; When Permitted

Toilet rooms will be permitted without windows if they are ventilated in accordance with the requirements of Section (Order) 5848 of the Heating, Ventilation and Air Conditioning Code issued by the Industrial Commission. See page 25.

#### Section (Order) 5255. 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.

#### Section (Order) 5256. 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.

#### Section (Order) 5257. 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.

#### Section (Order) 5258. Walls and Ceilings

The walls and ceilings of every toilet room shall be completely covered with smooth plaster, glazed brick or tile, galvanized or enameled metal, or other equivalent smooth, non-absorbent material. Wood may be used only if it is smooth and well covered with two coats of body paint and one coat of enamel paint or spar varnish. But 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.

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

#### Section (Order) 5259. Enclosure of Fixtures

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

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 5½ to 6 feet above the floor. Doors with the top 5½ 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 Order 5258.

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 of the Wisconsin Statutes provides that not more than 50 per cent of the toilet compartments of any public toilet room of any public building, other than licensed hotels and resorts, shall be kept locked.

#### Section (Order) 5260. Fixtures

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 be finished with varnish or other substance so as to be impervious to water. In public buildings, places of employment and all other public places except apartments, the water-closets shall have projecting lips, or elongated bowls, and open front seats.

Only individual urinals of porcelain or vitreous china shall be used. Such individual 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.

#### Section (Order) 5261. 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.

**Note:** Toilet rooms should be adequately heated in cold weather. Heating equipment should be arranged to permit cleaning of floors and walls.

#### Section (Order) 5262. Disposal of Sewage

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:

- (1) Sewage treatment tank and disposal system.

**Note:** For detailed requirements on such systems see State Plumbing Code.

- (2) Where the local conditions make it impractical to install such system, outdoor toilets, as described in Section (Order) 5263, or other facilities, such as chemical or septic toilets installed in accordance with the provisions of the Chemical Toilet Code or 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 ten persons, schools larger than two 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.

#### Section (Order) 5263. Outdoor Toilets

Outdoor toilets shall comply with Sections (Orders) 5250 to 5259, inclusive, and in addition:

- (1) 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.

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

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

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

- (5) 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

Platting Code

Section 18 (b) of the Wisconsin Platting and Sanitation Code  
adopted by the State Board of Health. Page 17)

" ~~and~~ Location of Privies. No privy with or without a leaching pit shall be erected or maintained within 50 feet of any well, 10 feet of the line of any road or street, 5 feet of the party line of an adjacent lot or 25 feet of the door or window of a dwelling, or other building used for human occupancy.

Section (Order) 5263 Outdoor Toilets of General Orders of SB of H.  
and Ind. Com. on Sanitation

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.

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.

(6) 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.

(7) 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 quantities, 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.

#### Section (Order) 5264. 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.

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.

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

2. 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.

### FACTORIES, OFFICE AND MERCANTILE BUILDINGS

#### Section (Order) 5400. Scope

This classification includes all factories and workshops (including all places where manual labor is employed), office buildings, telegraph and telephone offices, mercantile establishments where commodities are bought or sold, taverns, warehouses, railroad stations, exhibition buildings, and places where not more than 100 persons assemble for recreation, entertainment, worship, or dining purposes.

#### Section (Order) 5412. Sanitary Equipment

##### 1. Toilets.

(a) Toilets Required. Toilet facilities shall be provided and maintained in connection with every public building and place of employment under this classification.

(b) Toilets in Public Buildings. In all public buildings under this classification, separate toilet rooms shall be provided for males and

females, except as in Section (Order) 5251 and as otherwise provided hereunder.

In public places where stimulating drinks, such as beer, wines and other alcoholic beverages, are served for consumption on the premises, except in dining rooms, restaurants and similar places where the serving of drinks is only incidental to the regular food service, and where no public bar is provided, toilet fixtures shall be provided in connection with the area served, for the sex (or sexes) served, as follows:

One water-closet for every 40 females, or fraction;

One water-closet for every 75 males, or fraction, and

Where there are more than 25 males accommodated there shall be one urinal for every 50 males, or fraction thereof, in excess of 25.

The numbers indicated above refer to the number of persons that can be accommodated at the same time, and shall be determined on the basis specified in Order 5405.

**Note:** To determine the capacity of dining rooms, cafes, taverns, etc. allow 10 square feet of clear floor space per person.

In toilet rooms used by males, all water-closets shall have an elongated bowl or projecting lip and open front self-rising seat without cover. In toilet rooms used by females, all water-closets shall have open front seat, without cover. All urinals shall be of the type and construction as specified in Section (Order) 5260.

In public occupancies other than those where stimulating drinks (as defined above) are served for consumption on the premises, one water-closet of the type described above shall be provided in connection therewith for each sex accommodated. Except that a small mercantile establishment where normally not more than 25 patrons are expected to be on the premises at the same time, need have in connection therewith only one toilet room to accommodate both the public and employees.

(c) Toilets in Places of Employment. See Section (Order) 2203, page 26.

(d) General Requirements. For general toilet room requirements in regard to location, construction, ventilation, fixtures, etc., see Sections (Orders) 5250 to 5264, inclusive.

Where toilet rooms used by males and females adjoin, the walls between such toilet rooms, if of studding with lath and plaster, the lath shall be of metal.

2. Drinking Water. Sufficient pure drinking water piped from mains, or in sanitary containers, shall be provided in connection with every public building under this classification. Drinking fountains separate from other fixtures and constructed as provided in Section 53 (c) of the State Plumbing Code, or individual drinking cups of a type approved by the State Board of Health, shall be provided, except in places where food or drink is served and in public buildings where normally not more than 25 patrons are expected to be on the premises at the same time. Drinking fountains shall not be placed in toilet rooms.

For drinking water requirements in places of employment see Section (Order) 2217. Page 30.

See also Section 146.07 of the Statutes of Wisconsin which prohibits the use of common drinking cups.

3. Washing Facilities. In every public building and in every place of employment, except as provided in Section (Order) 2213, wash bowls shall be provided in connection with toilet rooms, one for every 2 water-closets or urinals, or fraction. Clean individual cloth or paper towels and soap shall be provided in connection with every lavatory installation. The installation of a towel for common use, or the use of any common towel is not permissible.

See also Sections (Orders) 2200 to 2215, inclusive. Pages 26-30.

## THEATERS AND ASSEMBLY HALLS

### SCOPE AND CLASSIFICATION

#### Section (Order) 5500. Theaters

In the theater classification, are included all buildings or parts of buildings, containing an assembly hall, having a stage which may be equipped with curtains or permanent or movable scenery, or which is otherwise adaptable to the showing of plays, operas, motion pictures or similar forms of entertainment.

#### Section (Order) 5501. Assembly Halls

In the assembly hall classification, are included all buildings, or parts of buildings, other than theaters, which will accommodate more than 100 persons for entertainment, recreation, instruction, worship or dining purposes.

**Note:** Every assembly hall which will accommodate not more than 100 persons shall conform to the requirements of Chapter 6, covering factories, office and mercantile buildings.

#### Section (Order) 5532. Sanitary Equipment

1. Toilets and Urinals. Separate toilet rooms in connection with the auditorium shall be provided for males and females. One water-closet shall be installed for each 200 females or fraction, and one water-closet and one urinal for each 300 males or fraction, assuming the audience to be equally divided between males and females; except that in dance halls there shall be provided one water-closet for each 100 females or fraction, one water-closet for each 300 males or fraction and one urinal for each 150 males or fraction.

**Note:** To determine the capacity of theaters and assembly halls allow 7 square feet of clear floor space per person; for dance halls allow 10 square feet.

Where stimulating drinks, such as beer, wines and other alcoholic beverages, are served for consumption on the premises, there shall be provided one water-closet for every 40 females, or fraction, one

water-closet for every 150 males, or fraction, and one urinal for every 50 males, or fraction; except that where the capacity in such places exceeds 300 persons, the ratio of the number of fixtures to the number of persons accommodated in excess of 300 need be only one-half of the above.

There shall be separate water-closets provided for males and females in connection with the stage of every theater and assembly hall which is equipped for the showing of stage productions.

In theaters where motion picture machines are run continuously for a period of more than 2 hours without at least 10 minutes intermission for the motion picture machine operator for each 2 hour period, toilets shall be provided in direct connection with the motion picture booth.

For general toilet room requirements see Sections (Orders) 5250 to 5264, inclusive. Pages 16-20.

2. Drinking Water. Separate drinking fountains of a type approved by the State Board or Health shall be provided for the stage and auditorium where water supply is available. Drinking fountains shall not be placed in toilet rooms.

3. Washing Facilities. Washbowls shall be provided in connection with toilet rooms, one for every two closets and urinals, or fraction.

## SCHOOLS AND OTHER PLACES OF INSTRUCTION

### Section (Order) 5600. Scope

The requirements of this chapter, shall apply to all public, parochial and private schools, universities, colleges, academies, seminaries, libraries, museums and art galleries; including all buildings or parts of buildings used for the purpose of acquiring knowledge.

### Section (Order) 5611. Floor Space and Height of Ceiling

All class and recitation rooms shall have a minimum floor space of 18 square feet per person. Rooms used only for study purposes shall have a minimum floor space of 15 square feet per person.

All rooms used for educational purposes shall be not less than 12 feet high in the clear. Toilet rooms, service rooms, store rooms and similar spaces shall be not less than 8 feet high in the clear.

### Section (Order) 5612. Basement Rooms

No class, recitation, study, laboratory, domestic science or library room shall have its floor more than 2 feet below the adjoining grade. Industrial arts rooms, shops, toilet rooms and other rooms used by pupils (not including play rooms) shall have floors not more than 4 feet below grade. The walls and floor where exposed to soil shall be water-proof and damp-proof.

## SCHOOLS AND OTHER PLACES OF INSTRUCTION

### Section (Order) 5616. Sanitary Equipment

1. Toilets. School buildings shall have the following toilet equipment:

(a) In high schools, one water-closet for every 30 females or fraction.

One water-closet for every 60 males or fraction and one urinal for every 30 males or fraction.

(b) In junior high and elementary schools, one water-closet for every 25 females or fraction, one water-closet for every 50 males or fraction and one urinal for every 25 males or fraction.

2. Drinking Water. One drinking fountain shall be installed in each story and basement, for each 6000 square feet of floor area, or fraction. Drinking fountains shall not be installed in toilet rooms.

3. Washing Facilities. Lavatories shall be provided in connection with toilet rooms in the ratio of one lavatory for every two toilet fixtures (closets and urinals).

4. Cloakrooms and Wardrobes. In every school building, there shall be provision for the placing and storage of the wraps of occupants. Such provision shall consist of wardrobes, lockers, or cloakrooms, constructed and arranged in a manner to insure and facilitate the ventilation and sanitation of contents. Ventilation shall conform to the provisions of Order 5847 of the Heating, Ventilation and Air Conditioning Code.

**Note:** This prohibits the use of corridors, vestibules, etc., for cloakroom purposes, unless ventilated lockers are provided. Open hooks and hangers will not be approved.

**Note on Heating and Ventilation:** For heating and ventilation in schools, libraries, etc., see the Heating, Ventilation and Air Conditioning Code issued by the Industrial Commission, which code applies to all public buildings and places of employment.

## APARTMENT BUILDINGS, HOTELS AND PLACES OF DETENTION

### Section (Order) 5700. Scope

The requirements of this chapter shall apply to all apartment buildings, rooming houses, hotels, dormitories, convents, hospitals, asylums, jails and other places of abode or detention.

### Section (Order) 5713. Toilet Rooms

Every apartment shall have a water-closet in a bathroom or separate compartment; except that where there are apartments consisting of not more than 3 rooms, there shall be at least one water-closet for every 2 such apartments. All other buildings in this classification shall have at least one water-closet for every 15 rooms or fraction thereof.

Rooms with private water-closets shall not be considered in counting either the number of rooms or the number of fixtures.

Water-closets and urinals, and the pipes connected therewith, shall be protected against freezing as provided in Section (Order) 5261.

### Section (Order) 5714. Washing Facilities

In every building of this classification where water supply is available or can be made available, there shall be at least one sink or wash bowl in connection with each toilet fixture. In apartment houses there shall be such a sink or wash bowl in each apartment.

### Section (Order) 5715. Repairs

Every building of this classification, and all parts thereof, shall be kept in good repair and the roof shall be maintained to prevent leakage. All rainwater shall be so drained and conveyed therefrom to prevent dampness in the walls and ceilings.

### Section (Order) 5716. Cleanliness

Every building shall be kept clean, and shall also be kept free from any accumulation of dirt, filth, rubbish, garbage, or other matter in or on the same or in the yards, courts, passages, areas or alleys connected with or belonging to the same.

### Section (Order) 5848 of the Heating, Ventilation and Air Conditioning Code

#### Section (Order) 5848. Toilet, Bath and Swimming Rooms

1. Scope. This classification shall be understood to include all toilet, bath and swimming pool rooms, and other similar occupied areas, in all buildings within the scope of this code.

2. Ventilation Required. Ventilation shall be provided and maintained for all areas of this class. Such ventilation shall be accomplished by exhaust methods with the effectiveness of the outlets greater than that of the inlets. For all swimming pool rooms and for multiple toilet and bath installations, mechanical exhaust shall be provided.

3. Minimum Air Movement. The air movement provided and maintained in occupied areas of this class shall be not less than 2 cubic feet per minute per square foot of floor area.

4. Separate Exhaust Systems. Exhaust systems serving this class of occupied areas shall be separate from, and independent of, all other services and systems in the building except in places of industrial employment.

**Note:** See Sections (Orders) 5250 to 5262 inclusive. Pages 16-20.

## GENERAL ORDERS ON SANITATION

### TOILET ROOMS FOR ALL PLACES OF EMPLOYMENT

#### Section (Order) 2200. Toilet Rooms Required

Every place of employment, whether heretofore or hereafter constructed, shall have adequate toilet rooms, completely enclosed and so arranged as to insure privacy.

See Section (Orders) 5256 to 5259, inclusive, for size of rooms, construction of floors, walls and ceilings and for enclosure of fixtures. Pages 17-18.

**Note:** Toilet rooms should, if possible, be placed on each occupied floor, especially in factories. Much time may thus be saved.

#### Section (Order) 2201. Toilet Rooms for the Two Sexes

Where the two sexes are employed or accommodated, separate toilet rooms shall be provided, except (if approved in writing by the Industrial Commission or the State Board of Health or their authorized agents) in buildings employing or 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.

Entrances to toilet rooms for the two sexes shall be properly separated, by screens or otherwise, and shall, wherever possible, be at least 20 feet apart.

Separate toilet rooms shall be provided for employees and the general public wherever deemed necessary by the Industrial Commission or the State Board of Health.

All fixtures shall be located or the entrance so screened that privacy is assured.

#### Section (Order) 2202. Sex Designated

Wherever both sexes 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 Section (Order) 2201. The door or room labels shall be the words MEN or WOMEN, respectively, in letters not less than one inch in height.

#### Section (Order) 2203. Number of Closets and Urinals

In every place of employment, whether heretofore or hereafter constructed, one water-closet shall be provided for every 20 persons, or fraction thereof, of either sex.

In addition thereto, where more than 10 males are employed, one urinal shall be provided for every 40 males, or fraction. Where not more than 10 males are employed, either a urinal shall be provided or the water-closet shall have a projecting lip and self-rising seat.

The above requirements shall be computed on the basis of the maximum number of employees on any one shift.

In all new installations only individual urinals shall be used. Such individual urinals shall be of porcelain or vitreous china, set into the floor, the floor graded to the urinal, and shall be equipped with an effective automatic tank or valve or satisfactory foot operating flushing device.

All water-closets hereafter installed shall be of the individual type having projecting lips and open front seats.

#### Section (Order) 2204. Existing Water-Closets

Each water-closet at present installed shall be provided with a flushing appliance, which will be as effective in its operation as the type of closet requires.

Each water-closet shall be kept clean and in good repair and obstructions shall be removed at once.

All pan, plunger, and offset types of water-closets at present installed will be condemned when found in foul condition, or without adequate flush. Overhead tanks at present installed will be condemned when the interior surface becomes so rusted or corroded that it cannot be kept sanitary. No such fixture shall be replaced except with the approved type specified for new installations.

Existing range closets shall be replaced by individual water-closets of an approved type.

#### Section (Order) 2205. Cleanliness

Every toilet room and every part thereof, including walls, floors and ceiling, and all fixtures therein, must be kept clean, efficient and in good repair.

In each toilet room sufficient toilet paper shall be provided, and it shall be made of material which will not interfere with the operation of the system, or obstruct the fixtures.

A service closet conforming with requirements for construction of toilet rooms, or a substitute satisfactory to the Industrial Commission or the State Board of Health, shall be provided and supplied with mop, broom, bucket, soap, toilet paper and toweling necessary for sanitary upkeep of toilet rooms.

**Note:** It is recommended that a closed metal waste disposal container be provided in each women's toilet room.

#### Section (Order) 2206. Indecent Pictures

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

#### Section (Order) 2207. Existing Toilet Rooms—Walls

In toilet rooms at present installed, the walls must not be covered with paper. If the walls and ceiling are constructed of wood, they shall be covered with two coats of body paint and one coat of enamel paint or spar varnish.

#### Section (Order) 2208. Existing Toilet Rooms—Ventilation

Every toilet room shall be so located as to open to outside light and air, by windows or skylights opening directly upon a street, alley or court, unless otherwise approved in writing by the Industrial Commission or the State Board of Health, or their authorized agents.

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.

Every toilet room having more than one fixture (closets and urinals) shall be vented in accordance with the provisions of Section (Order) 5848. Page 25.

#### Section (Order) 2209. Artificial Light

Every toilet room 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 0.5 foot candles.

#### Section (Order) 2210. Partitions Between Fixtures

Adjoining water-closets shall be separated by partitions of not less than 5 feet in height and equipped with doors which may conform to the size and material of the partition.

Each individual urinal or existing urinal trough shall be provided with a partition at each end and at the back to give privacy. Where individual urinals are arranged in batteries, a partition shall be placed at each end and at the back of the battery.

For new installations, see Section (Order) 5259. Page 18.

#### Section (Order) 2211. Outdoor Toilets

Outdoor toilets will be permitted until public water and sewer systems are available, if they comply with Sections (Orders) 2200 to 2210, inclusive, and in addition:

(1) No privy, with or without a leaching pit or other container, shall be located 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.

(2) Completely enclosed and separate from any other building.

(3) Advantageously located from the standpoint of convenience, privacy and sanitation.

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

(5) Provided with suitable approach such as concrete, gravel or cinder walks.

(6) All windows, ventilators and other openings shall be screened to exclude 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.

(7) The vault shall extend at least 6 inches above the ground, be as dark as possible, and be proof against entrance of 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 of brick, or stone, laid in cement mortar.

(8) 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 quantities 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.

**Exception:** For construction work, toilet facilities shall be provided. Where same are not available through toilets open to the public, portable or temporary toilets shall be provided but need not conform to the construction provisions of this order.

#### Section (Order) 2212. Replacement of Outdoor Toilets When Water and Sewer Become Available

Within one year after water and sewer systems become available, water-closets, urinals and lavatories shall be provided.

#### Section (Order) 2213. Lavatories Near Toilet Rooms

Adequate washing facilities shall be provided in or adjacent to every toilet room. In new installations there shall be at least one lavatory for every five fixtures (closets and urinals) or fraction.

**Note:** (1) One lavatory for every 2 or 3 fixtures is recommended.

(2) See Section (Order) 2214 on material from which lavatories shall be made and for allowable types of installations.

### GENERAL SANITATION IN ALL PLACES OF EMPLOYMENT

#### Section (Order) 2214. Washing Facilities

1. Lavatories. Adequate washing facilities shall be provided, (1) in all places of employment where lead, arsenic, or other poisonous or injurious materials are handled by the employees, and, (2) in places of employment where food is prepared or manufactured, and, (3) in glue factories, foundries, machine shops and other places of employment where the employees' hands become dirty or greasy, except that in industries of the last mentioned class, located in small towns, where the employees go home at noon, this requirement may be waived by the Industrial Commission. In the above places of employment there shall be at least one lavatory for every 10 employees, or fraction, and hot water shall be provided.

Twenty inches of trough wash sink, or of the edge of a circular wash fountain shall be considered the equivalent of one lavatory. The trough wash sink or circular wash fountain shall not be equipped with a plug or other stopper. Each lavatory and each 20 inches of trough

wash sink shall be equipped with either a faucet or spray pipe, so connected as to supply water of the desired temperature.

**Note:** (1) Washing facilities where the employee must necessarily wash in running water are recommended. A large trough without stopper, where each person washes from an individual faucet, is generally better than separate bowls.

(2) One lavatory or faucet for every 5 employees is recommended.

(3) Adequate washing facilities are recommended for all places of employment.

(4) Wash rooms should be constructed according to the requirements for toilet rooms, as far as possible.

All lavatories shall be made of porcelain, enameled iron, or other similar impervious material.

2. Showers. Adequate shower facilities shall be provided in accordance with the following requirements:

(1) In all places of employment where lead, arsenic, or other poisonous or injurious materials are handled by the employees, at least one shower shall be provided for every 10 employees, or fraction, who handle or come in contact with such materials.

(2) In glue factories, foundries, mines, and other places of employment where the employees become dirty or greasy, at least one shower for every 20 such employees, or fraction, shall be provided.

(3) Showers shall be provided with hot and cold water and be equipped with a hot and cold regulating valve to prevent scalding. The regulating device shall be so located that it can be operated without standing under the shower. Supply or feed pipes to showers shall be placed overhead or protected, to avoid the possibility of a person coming in contact with the hot water pipes.

(4) Each shower room or compartment shall be constructed of material impervious to moisture, and the floor under each shower head shall be of such construction, or be provided with a suitable sanitary device, so as to prevent slipping.

3. Soap. Where hand washing facilities are provided in places of employment, there shall be provided an adequate quantity of bland, non-irritating, non-abrasive soap which shall effectively cleanse the skin.

#### Section (Order) 2215. Towels

In all places of employment the use of towels in common is prohibited. Where hand washing facilities are required, individual cloth towels or paper towels shall be furnished by the employer.

#### Section (Order) 2217. Drinking Water

Each place of employment shall be supplied with sufficient pure drinking water and the faucets or outlets for the same shall be placed convenient to the employees, but not in toilet rooms. Common drinking cups are prohibited. Sanitary drinking fountains shall be installed or individual cups shall be provided by the employers.

See Section 53 (c) of the State Plumbing Code for required construction of sanitary drinking fountains.

Where running water is not available, a covered drinking water container shall be provided. The container shall be cleaned and sterilized at frequent intervals and kept in a sanitary condition and in good repair.

#### PIPES, ETC. IN ELEVATOR SHAFTWAYS (ELEVATOR CODE)

##### Section (Order 420) Shaftways and Pits Unobstructed. New and Existing Installations

(a) No elevator machine or other machinery shall be located in the pit, except that this requirement need not apply to machinery used in connection with sidewalk type elevators. No ropes, wires or pipes other than those needed to serve the elevator machinery and for heating and lighting the car or the shaftway, and except branch water pipes with sprinkler heads, shall be installed in any elevator shaftway.

**Exception:** In existing installations, pipes in a shaftway may remain unless carrying steam with pressure exceeding 15 pounds, and wires may remain if placed in conduit.

(b) No elevator shaftway or pit shall be designed or used as a passageway, or for the storage of material.