

Chapter H 62

DESIGN, CONSTRUCTION, INSTALLATION, SUPERVISION AND INSPECTION OF PLUMBING

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H 62.01 Basic plumbing principles. (1) The basic principles of this code are enunciated as basic goals in environmental sanitation and safety worthy of accomplishment through properly designed, acceptably installed, and adequately maintained plumbing systems. Some of the details of plumbing construction must vary, but the basic sanitary and safety principles are the same. The results necessary to obtain the desired protection for the health of the people are the same everywhere. As unforeseen situations arise which are not specifically covered in the body of this code, the following principles shall serve to define the intent.

(2) Plumbing in all buildings, public and private, intended for human occupation or occupancy, shall at all times be installed in such manner so as to protect the health, safety and welfare of the public or occupants.

(3) Every building intended for human habitation or occupancy shall be provided with a supply of potable water; such supply shall not be cross connected with an unsafe water supply or with a waste pipe nor be subjected to any hazards of backflow or back-siphonage. When the premises abut on a street in which there is a public water-main, there shall be an individual connection to the public system.

(4) Buildings in which water closets and other plumbing fixtures, devices and appurtenances exist or are to be installed shall be provided with a supply of water adequate in volume and pressure by means of proper pipe sizing to insure that efficient use of the fixture is possible at all times.

(5) Devices for heating water and storing it in pressure vessels or tanks shall be so designed and installed as to prevent dangers of explosion or overheating.

(6) Every building intended for human habitation or occupancy on premises abutting on a street in which there is a public sewer shall have an individual connection with the public sewer.

(7) Each family dwelling unit provided with a drainage system shall have at least one water closet, one wash basin, one kitchen sink and one bathtub or shower to meet the basic requirements of sanitation and personal hygiene. All other structures for human occupancy or use shall be equipped with sufficient sanitary facilities as prescribed in this chapter or other applicable Wis. Adm. Code chapters and in no case no less than one water closet and one wash basin shall be provided.

(8) The entire building drainage system shall be so designed, constructed, and maintained as to conduct the waste water or sewage quickly from the fixture to the place of disposal, with velocities which will prevent clogging, fouling and the depositing of solids and shall have adequate cleanouts so arranged that the pipes may be readily cleaned.

(9) The drainage pipes should be so designed and constructed as to be proof for a reasonable life of the building against leakage of water or sewer drain air and offensive odors due to defective materials, imperfect connections, corrosion, settlements or vibrations of the ground or building, temperature changes, freezing or other causes.

(10) The drainage system shall be so designed that there will be an adequate circulation of air in all pipes, no danger of siphonage, aspiration or forcing of trap seals under conditions of ordinary use.

(11) All rooms in which water closets, urinals or similar fixtures are installed shall have adequate lighting and have proper ventilation to the outer air.

(12) Hot water shall be supplied to all plumbing fixtures which normally need or require hot water for their proper use and function.

(13) Plumbing fixtures shall be made of durable, smooth, non-absorbent and corrosion resistant material and shall be free from concealed fouling surfaces.

(14) If water closets or other plumbing fixtures exist in buildings where there is no sewer within a reasonable distance, suitable provision shall be made for disposing of the building sewage by some method of sewage treatment or disposal satisfactory to the department and local health authority having jurisdiction.

(15) Plumbing systems shall be maintained in a sanitary condition.

(16) Proper protection shall be provided to prevent contamination of food, water, sterile goods and similar materials by backflow of sewage.

(17) Plumbing shall be designed and adjusted to use the minimum quantity of water consistent with proper performance and cleaning.

(18) Fixtures, devices, appliances and appurtenances shall be supplied with water sufficient in volume and at pressures adequate to enable them to function satisfactorily and without undue noise under all normal conditions of use.

(19) All plumbing fixtures shall be so installed as to provide adequate spacing and shall be reasonably accessible for their intended use and for cleansing.

(20) Sewage or other wastes shall not discharge into water surface or sub-surface soil unless it has first been subjected to some acceptable form of treatment.

History: 1-2-56; r. and rec. Register, October, 1970, No. 178, eff. 11-1-70; r. and rec. (7), Register, November, 1972, No. 203, eff. 12-1-72

Register, October, 1974, No. 226
Health

Note: Copies of standards promulgated by the following technical societies referred to above are on file in the offices of the secretary of state, health and social services, and revisor of statutes and may be obtained for personal use from the following addresses:

American Water Works Association
2 Park Avenue, New York, New York 10016
American Society for Testing and Material
1916 Race St., Philadelphia, Pa. 19103
Cast Iron Soil Pipe Inst.
2029 K St. NW
Washington, D. C. 20006
National Sanitation Foundation
Testing Laboratory, Inc., P. O. Box 1468
Ann Arbor, Michigan 48106

History: Cr. Register, November, 1972, No. 203, eff. 12-1-72.

H 62.25 Examination of plans and specifications. (1) **PLAN EXAMINATION REQUIRED.** Plans and specifications for plumbing to be installed in and/or outside of all buildings, structures, parks, areas or complexes in the following classifications shall be submitted to the department and written approval received before commencing work. The department shall immediately acknowledge receipt of all plans and specifications. The department may issue a permit to commence work provided plan review is not completed within 30 days. The issuance of a permit shall not be construed as plan approval or approval for non-code complying designs or installations. All non-code complying portions of the plumbing system installed prior to complete plan review under this permit shall be removed or replaced.

(a) *Health care and related facilities.* See Wis. Adm. Code section H 62.15 (1) and (2).

(b) *Theaters and assembly halls.*

(c) *Schools and other places of instruction.*

(d) *Apartment buildings, hotels, motels, resorts and places of detention.*

(e) *State or municipally owned buildings.*

(f) *Reduced pressure zone principle type backflow preventers.* See Wis. Adm. Code section H 62.24 (2) (a).

(g) *Controlled roof drainage systems.* See Wis. Adm. Code section H 62.05 (4).

(h) *Factories, offices and mercantile buildings.*

(i) *Mobile and manufactured homes.*

(j) *Mobile home parks, water and sewerage systems.* See Wis. Adm. Code section H 62.17 (1) (a).

(k) *Private interceptor main sewers.* See Wis. Adm. Code section H 62.02 (90) (b).

(l) *Private domestic sewage treatment and disposal systems serving public buildings and experimental systems serving all buildings.* See Wis. Adm. Code section H 62.20 (1) (c).

(2) **PLAN SUBMISSION.** (a) *Stamping and signing plans.* All plans and specifications shall be sealed or stamped in accord with Ch. A-E 1, Wis. Adm. Code by a registered architect, engineer or registered plumbing designer. A master plumber may design and submit for approval plumbing plans and specifications for a plumbing system which he is to install. Each sheet of plans and specifications the master plumber submits shall be signed, dated and include his Wisconsin master plumber license number. Where more than one sheet is bound together into one volume, only the title sheet or index sheet

need be signed and dated by the master plumber responsible for their preparation, provided the signed sheet clearly identifies all of the other sheets comprising the bound volume.

(b) *Submission data.* All plans, preliminary or complete, shall be submitted in duplicate with the exception of plans relating to private sewage disposal systems serving public buildings which shall be submitted in triplicate. Work shall not commence until written approval for the preliminary or complete plans is received from the department. The plans submitted shall be prints that are clear, legible and permanent. All pertinent data shall be a part of or shall accompany all plans submitted for review. Plans will be examined in the order of receipt.

(c) *Additions and alterations.* This section shall apply to all additions and alterations exceeding 3 plumbing fixtures as well as to all new buildings and shall also apply to all cases where there is a change of the type of occupancy or use of a building which requires changes to or intended use of the plumbing so as to comply with this chapter for that occupancy or use.

(d) *Agent municipalities.* Examination of plans, specifications and calculations for the following type buildings and alterations to these buildings located in those municipalities shall be submitted to the municipality designated in (c) 1. below for plan examination and approval according to requirements of Wis. Adm. Code chapter H 62. Municipalities designated to perform plan examinations may set, by ordinance, plan examination fees. All other plans and specifications as listed in Wis. Adm. Code section H 62.25 (1) shall be submitted to the department for examination.

1. Milwaukee.

a. Theaters and assembly halls.

b. Schools and other places of instruction except state-owned schools.

c. Apartment buildings, hotels, motels, resorts and places of detention.

d. Factories, offices and mercantile buildings.

e. Private interceptor main sewers.

(3) **PLAN EXAMINATION FEES.** (a) *Applicability.* 1. Fees. Plan examination fees for preliminary or complete plans shall accompany the plans and specifications when submitted. If the department determines upon review of the plans that inadequate fees were provided, the necessary additional fee shall be provided prior to departmental approval. Written approval shall not be granted until all applicable fees have been paid.

2. Fee adjustment. Examination fees may be adjusted biennially commencing on July 1, 1975 in direct proportion with the salary increases granted staff review personnel.

(b) *Examination fees.* The plan examination fee shall be:

1. Plan examination fees for public buildings will be determined by the size of building sewers, \$15 per inch diameter of each building sewer.

2. Mobile home parks and private subdivisions, water distribution system. See Wis. Adm. Code section H 62.25 (3) (b) 7. and 8. for applicable sewerage collection and/or private domestic sewage treatment and disposal system.

a. 1-25 sites—\$25.

- b. 26-50 sites—\$50.
- c. 51-125 sites—\$75.
- d. Over 125 sites—\$100.
- 3. Mobile and manufactured homes, each model, \$35.
- 4. Controlled roof drainage systems.
 - a. If included in general plumbing plans, \$15.
 - b. If submitted separately, \$20.
- 5. Acid waste piping systems.
 - a. If submitted in general plumbing plans, \$15.
 - b. If submitted separately, \$20.
- 6. Reduced pressure zone principle type backflow preventers, \$20.
- 7. Private domestic sewage treatment and disposal systems.
 - a. 500-1500 gallon septic tank—\$15.
 - b. 1501-2500 gallon septic tank—\$20.
 - c. 2501-4000 gallon septic tank—\$25.
 - d. 4001-8000 gallon septic tank—\$35.
 - e. 8001-12,000 gallon septic tank—\$40.
 - f. Over 12,000 gallon septic tank—\$50.
 - g. 500-5000 gallon holding tank—\$10.
 - h. 5001-10,000 gallon holding tank—\$15.
 - i. Over 10,000 gallon holding tank—\$20.
- 8. Private interceptor main sewers, sanitary and/or storm, \$5 per inch diameter, the fee being determined on the largest diameter of each interceptor main sewer.

(c) *Reproduction fee.* If the correct number of plans or specifications have not been submitted, a minimum reproduction fee of \$5 per set will be charged except that reproductions exceeding \$5 per set will be charged actual costs. Reproduction fees will be charged to the party submitting the plans.

(4) **REVISIONS.** After written approval is granted, plans and specifications of plumbing systems shall not be changed without written consent of the department and the architect, engineer, designer or master plumber responsible for the design.

(5) **LIMITATIONS.** In granting approval of plans, specifications, products, devices or materials, the department does not hold itself liable for any defects in construction, nor for any damages that may result from the specific installation.

(6) **PLAN AVAILABILITY.** The architect, professional engineer, registered designer, owner or plumbing contractor shall keep at the construction site one set of plans bearing the stamp of approval of the department.

History: Cr. Register, October, 1974, No. 226, eff. 11-1-74.

