

**FIRST CLASS CITIES, PLUMBERS LICENSED**  
**Act of Jun. 7, 1911, P.L. 680, No. 272**  
AN ACT

Cl. 11

Providing for the examination, licensure, and registration of persons, firms, or corporations engaged or engaging in the business or work of plumbing or house drainage, and prescribing certain rules, regulations, and requirements for the construction of plumbing, house drainage, and cesspools in cities of the first class, and imposing fines, penalties, and forfeitures for violation thereof.

Section 1. Be it enacted, &c., That on and after the first day of January, one thousand nine hundred and thirty-six, it shall be unlawful for any person or persons to carry on the business or work at the trade of plumbing, defined as drainage, water piping, or the construction, alteration, and repairing any drainage, cesspools, trap, waste vent, or water piping, and fixtures attached thereto, directly or indirectly, connected to the city service water supply, or any connection or connections in relation thereto, except gas or electric water heaters in cities of the first class, having a system of sewage and water supply, of this Commonwealth, until a master plumber's license and certificate of registration to engage in or work at said business shall have been granted said persons by the Department of Health of such cities: Provided, That nothing in this act shall be construed to prevent the employment of apprentices, except as hereinafter provided, journeymen and licensed plumbers under the direction of duly certified and licensed master plumbers, or under the direction of registered journeymen plumbers: And provided further, That master plumbers, duly certified and licensed and having a bona fide place of business in said cities of the first class at the time of the passage of this act, and registered journeymen plumbers, shall not be required to undergo an examination, and they shall be entitled to apply for registration annually thereafter; Provided, That the term plumbing shall not be construed to include the laying of sewers and water pipes (including the laterals) by said cities, either directly or by its duly authorized contractors or agents, or constructed under the supervision of said cities, or under the supervision of a registered professional engineer in those cases where a complete set of plans of said sewers to be constructed, and water pipes to be laid, shall have been filed with the appropriate office of said cities.

(1 amended May 15, 1947, P.L.264, No.104)

Section 1.1. All and every person or persons, desiring to engage in the business or trade of plumbing as a master plumber in cities of the first class, shall apply in person, and file an application, in writing, containing the recommendation of two registered master plumbers, certifying to the fact that such applicant has the necessary knowledge and experience and bears a good reputation, and the applicant shall have been a duly registered apprentice plumber for no less than four years, and a registered journeyman plumber for at least one year, prior to the filing of such application for license as master plumber, which application shall be made to the Department of Health, and after proper examination given by the Board of Plumbing Supervision of the Department of Health of said cities, if such person or persons so applying shall be found competent and the fee has been paid as hereinafter provided, the same shall be certified to the Director of Public Health of said cities, who shall, only to those so certified by the Board of Plumbing

Supervision, issue a license and certificate of registration to such persons, certifying that they are registered master plumbers. Such license shall so long exist as such master plumbers shall comply with all the rules and regulations of the Department of Health and obey the provisions of this act, and shall entitle them to annually apply for a certificate permitting them to engage in, or work at, the trade of plumbing.

One desiring to secure the status of an apprentice shall cause his name to be recorded on the register or rolls of the Department of Health, at a cost to be fixed by the Director of the Department of Health, and, if approved, shall receive a card of registration. The employer of the apprentice shall certify on the said register or rolls that he is the certified licensed master plumber employing the apprentice. If the apprentice changes employers, each employer shall certify his employment of the apprentice. The apprentice shall be sixteen years of age or over: Provided, That every certified master plumber may employ one apprentice, and shall be entitled to employ not more than one additional apprentice for every four journeymen plumbers employed.

No one but a qualified plumber, as specified and provided for herein, may do plumbing work, however, a helper or laborer may work under the direction of such a qualified licensed plumber, performing only ordinary unskilled labor, such as: Excavating, drilling, cleaning, and moving.

(1.1 added July 2, 1935, P.L.561, No.207)

Section 1.2. No person, firm, or corporation, not directly engaged in the trade or business of plumbing, shall engage in the said business, trade or work by himself, itself, employe, or by any other means attempt to engage in the said plumbing work, or business of plumbing. No member of a firm of three or more persons or a corporation can engage in or continue in the plumbing trade, unless one member is a certified licensed master plumber and a second member of the said firm or corporation possesses a license as a master plumber.

Should a certified master plumber or a licensed master plumber member of the firm or corporation die, become incapacitated, or sever his connection with the business, the business can be continued during the process of administration for a period of not exceeding one year; providing the necessary steps are taken satisfactory to the Board of Plumbing Supervision of the Department of Health to admit another master plumber, qualified as above provided for, as a member of the said firm or corporation: Provided, That a certified licensed master plumber, approved by the Board of Plumbing Supervision of the Department of Health, during this interim of administration, supervises all work and assumes full responsibility therefor: And provided further, That municipal authorities shall be permitted to employ a licensed plumber for the repairing of plumbing in municipal buildings.

(1.2 added July 2, 1935, P.L.561, No.207)

Section 1.3. In the month of November, the Department of Health shall send to the shop of each licensed master plumber, possessing a certificate of that year, an application for a certificate for the succeeding year, and those desiring to continue in the trade of plumbing may, either deliver in person, or mail into the Department of Health the said application, properly executed and signed, together with the fee prescribed hereinafter, not later than the thirty-first day of December, and the Department of Health shall then mail the certificate to the licensed master plumber, certifying him as a licensed registered master plumber. The cost of securing such certificate

each year shall be three dollars (\$3.00), and no other cost to be imposed by the city.

Upon the failure of a licensed master plumber to make proper application for his certificate, as herein provided, by the thirty-first day of December, he shall pay a penalty of two dollars (\$2.00), and those licensed master plumbers, who fail to secure a certificate for two years, shall take an examination as required of applicants by this act.

(1.3 added July 2, 1935, P.L.561, No.207)

Section 1.4. Those desiring to become journeymen plumbers shall apply to the Department of Health, and be given an examination by the Board of Plumbing Supervision of the Department of Health, for the privilege of which examination, they shall pay five dollars (\$5.00). The names of those persons found competent, shall be certified to the director of health of said cities, who shall thereupon issue a certificate of registration to the applicant. Registered journeymen plumbers, who have been registered for four years, shall be entitled to take the examination and qualify for a license as a master plumber. The journeyman plumber shall register each year in the month of January with the Department of Health, and receive a certificate of registration at the cost of fifty cents (50¢).

Those applying for a license as a master plumber shall pay, for the privilege of examination, the sum of twenty-five dollars (\$25.00), and those, who shall fail to pass an examination, shall be permitted to retake the examination after the lapse of three months, for which he shall pay five dollars (\$5.00). Should the applicant again fail, he may retake the examination at intervals of one year at the cost of twenty-five dollars (\$25.00).

If the applicant for registration as a journeyman plumber fails, he may retake the examination, after three months, at the cost of one dollar (\$1.00), and if he fails again, he may retake the examination, at intervals of three months, at the cost of five dollars (\$5.00). All fees for examinations and registration, as herein provided for, shall be paid into the city treasury.

A register or roll of all master plumbers and journeymen and apprentices, who shall secure their certification each year, shall be kept in the said department, which register or roll shall be open to the inspection of all persons interested therein.

(1.4 added July 2, 1935, P.L.561, No.207)

Section 1.5. Every certified licensed master plumber shall have a bona fide place of business in said cities, and shall display on the front of his or their place of business, the word "Registered" and the name or names of the person, firm, or corporation in letters not less than three inches high.

No person, other than a certified licensed master plumber, shall be allowed to display the sign of plumbing or plumbing repair or house drainage or water piping, or any advertisement pertaining thereto, and the same shall apply to a firm or corporation.

Every registered master plumber, firm, or corporation shall give immediate notice of any change in his, their, or its place of business, and upon his, their, or its retirement from business shall surrender his, their, or its certificate to the Department of Health.

(1.5 added July 2, 1935, P.L.561, No.207)

Section 2. The Director of the Department of Health shall appoint a board, to be known as the Board of Plumbing Supervision of the Department of Health. It shall consist of

the Director of the Department of Health, one representative of the House Drainage Division of the Division of Housing and Sanitation, four certified licensed master plumbers, and one licensed journeyman plumber. A master plumber, who may qualify as an appointee, must conduct a bona fide shop and be actively engaged in the trade of plumbing, and those qualifying must not hold a position with the city or in any other manner be connected with the city, or be an officer of a political party. Three members of the board shall be appointed for a term of three years, and two for a term of two years.

(2 amended July 2, 1935, P.L.561, No.207)

Section 2.1. This board shall examine all applicants for licenses as master plumbers, as provided for under the provisions of this act, and, upon finding the applicant competent, shall certify his name to the Director of Health as qualified to be licensed and registered.

(2.1 added July 2, 1935, P.L.561, No.207)

Section 2.2. The said board shall have the power to hear complaints, made by licensed plumbers, of irregularities committed by licensed and licensed certified master plumbers, and irregularities committed by registered journeymen plumbers and apprentices, and the said board of the Department of Health shall have the power to suspend or revoke the certificate or the license of the master plumber, and also suspending or revoking the certificate of registered journeyman plumber, upon cause shown. The aggrieved respondent shall have the privilege of appeal from the action of the Board of Plumbing Supervision of the Department of Health to the court of common pleas, as in all other appeals made and provided for under the laws of the Commonwealth of Pennsylvania from executive bodies.

The said board shall make all rules and regulations for the conducting of its business. The board shall further have the power to hear complaints of licensed certified plumbers and of registered journeymen plumbers against employes of the Department of Health connected with the plumbing division.

In furtherance thereof, the Board of Plumbing Supervision of the Department of Health may recommend to the Director of the Department of Health the punishment or dismissal of said employe of the house drainage division of the division of housing and sanitation.

The proper officers of the said cities shall pay the plumbers, acting on said board, the sum of ten dollars (\$10.00) for each day or session thus actually employed in carrying out the duties provided for by the provisions of this act. The Board of Plumbing Supervision shall be convened for the purposes of carrying out the provisions of this act as frequently as they deem necessary. Such meetings shall be held in a fixed centrally located headquarters provided by the Department of Health.

(2.2 added July 2, 1935, P.L.561, No.207)

Section 2.3. That person holding the position of supervising plumbing inspector, and that person holding the position of assistant supervisor of plumbing, and those persons holding the positions of plumbing inspectors, must successfully have passed the examination of licensed master plumber as given by the Board of Plumbing Supervision: Provided, however, That those men holding those positions, upon the passage of this act, shall not be affected thereby, so long as they shall continue in their employment.

(2.3 added July 2, 1935, P.L.561, No.207)

Section 2.4. The Department of Health shall issue to each master plumber, who reregisters as a master plumber for the year one thousand nine hundred and thirty-six, and to every

master plumber, who is granted a license thereafter, a license and a permanent license number, stating that the applicant has successfully passed the examination for a master plumber and is entitled to apply for reregistration annually thereafter; provided he has established a place of business. After this place of business has been approved by the Department of Health, he shall be granted a certificate of registration, and the Department of Health shall furnish one metal plate bearing the words "Registered Master Plumber," Philadelphia, and his permanent license number. If additional metal plates are required, they shall, upon written application, be furnished by the department at a cost to be set by the Department of Health: And provided further, That each and every vehicle used by master plumbers and equipped for trade of plumbing, or used for the regular transportation of tools and equipment used for plumbing, must have attached thereto, on its exterior, in a plainly visible position, the herein described metal plate.

(2.4 added July 2, 1935, P.L.561, No.207)

Section 2.5. Any person, firm, or corporation holding a license or certificate, granted by any city of this Commonwealth, to engage in or work at the trade of plumbing, house drainage, and water piping, desiring to do plumbing, house drainage, or water piping in a city of the first class shall, without examination, be registered before entering upon said work: Provided, however, That such person or persons shall, prior to such registration, post a surety bond in the sum of five hundred dollars (\$500), in such form and with such surety as is approved by the city solicitor, for use of the parties interested, conditioned to indemnify the city and property owners against loss by reason of the said master plumber, firm, or corporation failing to comply with the acts of Assembly and the rules and regulations of the Department of Health in the performance of work done by such master plumber, firm, or corporation, and pay the sum of fifteen dollars, which sum shall be paid into the city treasury: And provided further, That such registration shall be restricted and limited to such plumbing, repair, drainage work, or water piping as he, they, or it shall have contracted for at the time of registry. On the completion of such contract or contracts, the registration of such person, firm, or corporation shall be null and void, and no further permit shall be issued to such person, firm, or corporation until he, they, or it shall have first registered his, their, or its name or names and addresses, as hereinbefore provided.

(2.5 added July 2, 1935, P.L.561, No.207)

Section 3. From and after the passage of this act, the construction of plumbing, house drainage, and cesspools shall be conducted only under and in accordance with the following rules, regulations, and requirements, namely:--

Section 4. There shall be a separate plan for each building, public or private, or any addition thereto or alterations thereof, accompanied by specifications showing the location, size and kind of pipe, traps, closets, and fixtures to be used, which plans and specifications shall be filed with the Board or Bureau of Health. The said plans and specifications shall be furnished by the architect, plumber, or owner, and filed by the plumber. All applications for change in plans must be made in writing.

Section 5. Plumbers before commencing the construction of plumbing work in any building in the said cities (except in case of repairs, which are here defined to relate to the mending of leaks in soil-, vent-, or waste-pipes, faucets, valves, and water-supply pipes, and shall not be construed to admit of the

replacing of any fixture, such as water-closet, bath-tubs, wash-stands, sinks, et cetera, or the respective traps for such fixtures), shall submit to the Board or Bureau of Health plans and specifications, legibly drawn in ink, on blanks to be furnished by said board or bureau. Where two or more buildings are located together and on the same street, and the plumbing work is identical in each, one plan will be sufficient. Plans will be approved or rejected within twenty-four hours after their receipt.

Section 6. It shall be the duty of every person constructing or owning any drain, soil-pipe, passage or connection, between a sewer and any ground, building, erection, or place of business, and in like manner the duty of the owners of all grounds, buildings, erections, and of all parties interested therein or thereat, to cause and require that such drain, soil-pipe, passage, or connection shall be adequate for its purpose, and shall at all times allow to pass freely all material that enters or should enter the same; and no change of drainage, sewerage, or the sewer connections of any house shall be permitted, unless notice thereof shall have been given the Board or Bureau of Health and assent thereto obtained in writing.

Section 7. Drainage, sewerage, or plumbing work must not be covered or concealed in any manner until after it is inspected and approved by the Board or Bureau of Health. Notice must be given said board or bureau, upon blanks to be furnished by it, when the work is sufficiently advanced for such inspection; when it shall be the duty of the proper officers to inspect the same within three days after receipt of said notice.

Section 8. The main drainage system of every house or building shall be separately and independently connected with the street sewer, where such sewer exists; but where there is no sewer in the street, and it is necessary to construct a private sewer to connect with sewer on adjacent street, such plans may be used as may be approved by the Department or Board or Bureau of Health, but in no case shall joint drains be laid in cellars, parallel with the street or alley.

House drains or soil-pipes, laid beneath floors, must be of extra heavy cast-iron pipe (as per table in lower section sixteen), with leaded and caulked joints, and carried five feet outside cellar wall. All drains or soil-pipes connected with main drain where it is above the cellar floor shall be of extra heavy cast-iron pipe, with leaded and caulked joints, or of heavy wrought-iron pipe, with screw joints properly secured, and carried five feet outside cellar wall; and all arrangements of soil- or waste-pipes shall be as direct as possible. Wrought-iron pipes shall be asphalted, galvanized, or otherwise made rustless. Changes of direction on pipes shall be made with "Y" branches, both above and below the ground, and where such pipes pass through a new foundation wall, a relieving arch shall be built over it, with a two-inch space on either side of main pipe.

The size of the main house drain shall be determined by the total area of the buildings and paved surfaces to be drained, according to the following table, if iron pipe is used. If the pipe is terra cotta, the diameter shall be one size larger for the same amount of area drainage:

Diameter in inches	Fall 1/4 inch Per Foot	Fall 1/2 inch Per Foot
-----------------------	---------------------------	---------------------------

4	1,800	2,500	square feet drainage area
---	-------	-------	---------------------------

5	3,000	4,500	square feet drainage area
6	5,000	7,500	square feet drainage area
8	9,100	13,600	square feet drainage area
10	14,000	20,000	square feet drainage area

The main house drains may be decreased in diameter beyond a rain-water conductor or surface inlet by permission of the Department or Board or Bureau of Health, when the plans show that conditions are such as to warrant such decrease; but in no case shall the main house drain be less than four (4) inches in diameter.

The walls for pit where one closet is installed may be four inches in thickness, or salt-glazed sewer-pipe, thirty-six inches in diameter, may be used. Where pit is for more than one closet, the walls shall be nine inches in thickness. The soil-pipe and traps used inside pit must be extra heavy cast-iron, and the trap to have a hand-hole for cleanout purposes, with cleanout caulked in. If the closet is located in the rear of a soil- or vent-pipe, the drain on which it is located shall be vented with a four-inch pipe, carried above roof of closet, away from any opening or window. All outside closets shall be of the tank pattern. The water to be supplied to tank through automatic seat-action valve. The waste from valve may be permitted to discharge on cement floor of pit, which shall be provided with four-inch trap and strainer. The enclosure of yard water-closets shall be ventilated by slatted openings, and there shall be a trap-door of sufficient size to permit of convenient access to the hopper-pit.

Section 9. The house drain must be provided with a horizontal trap, placed immediately inside the cellar wall. The trap must be provided with a hand-hole for convenience in cleaning, the cover of which must be properly fitted and made gas- and air-tight, with heavy brass screw-cap ferrule, caulked in. This class of traps shall be subject to the approval of the Board or Bureau of Health.

Section 10. A fresh air inlet must be connected with the house drain just inside of the house trap. Where underground, it must be of extra heavy cast-iron. Said inlet must lead to the outer air, and finish with an automatic device approved by the Board or Bureau of Health, at a point just outside the front wall of building. The fresh air inlet must be of the same size as the drain, up to four inches. For five and six inch drains it must not be less than four inches in diameter; for seven and eight inch drains, not less than six inches in diameter, or its equivalent; and for larger drains, not less than eight inches in diameter, or its equivalent.

Section 11. House sewers and house drains must, where possible, be given an even grade to the main sewer of not less than one-quarter of an inch per foot.

Section 12. When main sewer is not located on street, house sewers must be constructed on outside of buildings, and branch into each house separately, and in no case will the sewer from one house to another be permitted to run through cellars.

Section 13. Where the ground is of sufficient solidity for a proper foundation, cylindrical terra-cotta pipe of the best quality, free from flaws, splits, or cracks, perfectly burned, and well glazed over the entire inner and outer surfaces, may be used, if laid on a smooth bottom, with a special groove cut in the bottom of the trench for each hub, in order to give the pipe a solid bearing on its entire length, and the soil well rammed on each side of the pipe. The spigot and hub ends shall be connected. The space between the hub and pipe must be thoroughly filled with cement mortar, made of equal parts of

the best American natural cement and bar sand, thoroughly mixed dry, and enough water afterwards added to give proper consistency. The mortar must be mixed in small quantities, and used as soon as made. The joints must be carefully wiped out and pointed, and all mortar that may be left inside removed, and the pipe left clean and smooth throughout, for which purpose a swab may be used. It must not be laid closer than five feet to any exterior wall of a building, or less than three and one-half feet below the surface of the ground, or when the sewer passes near a well, nor will it be allowed in bad or made ground.

Section 14. Where a sewer is laid between buildings, in a passageway, alley, or courtyard, at a less distance than five feet from the buildings, it must be constructed of extra heavy cast-iron pipe, for a distance corresponding to the length of the foundation of said buildings.

Section 15. Floor or other drains will only be permitted when it can be shown, to the satisfaction of the Board or Bureau of Health, that their use is absolutely necessary, and arrangements made to maintain a permanent water-seal in the traps, and be provided with check- or back-water valves.

Section 16. All cast-iron pipes must be sound, free from holes, and of a uniform thickness, known as "extra heavy" pipe, and corresponding fittings will be required. The pipe must be tested to fifty pounds water pressure, and marked with the maker's name.

Pipes shall weigh as follows, namely:

Two-inch pipe, five and one-half pounds per lineal foot.

Three-inch pipe, nine and one-half pounds per lineal foot.

Four-inch pipe, thirteen pounds per lineal foot.

Five-inch pipe, seventeen pounds per lineal foot.

Six-inch pipe, twenty pounds per lineal foot.

Seven-inch pipe, twenty-seven pounds per lineal foot.

Eight-inch pipe, thirty-three and one-half pounds per lineal foot.

Ten-inch pipe, forty-five pounds per lineal foot.

Twelve-inch pipe, fifty-four pounds per lineal foot.

Section 17. Subsoil drains must discharge into a sump or receiving tank, the contents of which must be lifted and discharged into the drainage system above the cellar floor by some approved method. When directly sewer connected, they must be cut off from the rest of the plumbing system by a brass flap-valve on the inlet to the catch-basin, and the trap on the drain from the catch-basin must be water supplied, as required for cellar drain.

Section 18. All yards, areas, and courts must be drained. Tenement-houses and lodging-houses must have the yards, areas, and courts drained into the sewer. These drains, when sewer connected, must have connection not less than four inches in diameter. They should be controlled by one trap,--the leader trap, if possible.

Section 19. Old house drains and sewers may be used, in connection with new buildings or new plumbing, only when they are found, on examination by the Board or Bureau of Health, to conform in all respects to the requirements governing new sewers and drains. All extensions to old house drains must be of extra heavy cast-iron pipe.

Section 20. All buildings shall be kept provided with proper metallic leaders, for conducting water from the roofs in such manner as shall protect the walls and foundations of said building from injury. In no case shall the water from said leaders be allowed to flow upon the sidewalk, but the same shall

be conducted by a pipe or pipes to the sewer. If there be no sewer in the street upon which such buildings front, then the water from said leaders shall be conducted, by proper pipe or pipes below the surface of the sidewalk, to the street gutter.

Section 21. Inside leaders must be constructed of cast-iron, wrought-iron, or steel, with roof connections made gas- and water-tight by means of a heavy lead or copper-drawn tubing, wiped or soldered to a brass ferrule, or nipple caulked, or screwed into the pipe. The tubing must extend at least seven (7) inches into iron leader pipe. Outside leaders may be sheet metal, but they must connect with the house drain by means of a cast-iron pipe extending vertically five (5) feet above the grade level.

Section 22. All leaders must be trapped with cast-iron running traps, so placed as to prevent freezing.

Section 23. Rain-water leaders must not be used as soil-, waste- or vent-pipes, nor shall such pipes be used as a leader.

Section 24. No steam exhaust, blow-off, or drip-pipe shall connect with a sewer or house drain, leader, soil-pipe, waste- or vent-pipe. Such pipes must discharge into a tank or condenser, from which suitable outlet to the sewer shall be made. Such condensers shall be water supplied, to help condensation and protect the sewer, and shall also be supplied with relief vent to carry off dry steam.

Section 25. The smallest diameter of any soil-pipe permitted to be used shall be four-inch. The size of soil-pipes must be not less than those set forth in the following tables:

Maximum number of fixtures connected to--

Size of pipe.	Soil and Waste Combined.	
	Branch.	Main.
4 in.	48 fixtures,--	96 fixtures
5 in.	96 fixtures,--	192 fixtures
6 in.	298 fixtures,--	336 fixtures

Size of pipe	Soil-Pipe Alone.	
	Branch.	Main.
4 in.	8 waterclosets,----	16 waterclosets.
5 in.	16 waterclosets,----	32 waterclosets.
6 in.	34 waterclosets,----	68 waterclosets.

If the building is six (6), and less than twelve (12), stories in height, the diameter shall be not less than five (5) inches; if more than twelve (12) stories, it shall be six (6) inches in diameter. A building six or more stories in height, with fixtures located below the sixth floor, soil-pipe four (4) inches in diameter will be allowed to extend through the roof; provided the number of fixtures does not exceed the number given in the table.

All soil-pipes must extend at least two feet above the highest window, and must not be reduced in size. Traps will not be permitted on main, vertical, soil, or waste lines. Each house must have a separate line of soil- and vent-pipes. No soil or waste line shall be constructed on the outside of a building.

Fixtures with--

One and one-quarter traps, count as one fixture;

Two-inch traps, count as two fixtures;

Two and one-half traps, count as three fixtures;

Three-inch traps (water-closets), count as four fixtures;

Four-inch traps, count as five fixtures.

Section 26. All sewer-, soil-, and waste-pipes must be as direct as possible. Changes in direction must be made with "Y" or half "Y" branches, or one-eighth bends. Offsets in soil- or waste-pipes will not be permitted when they can be avoided; nor, in any case, unless suitable provision is made to prevent accumulation of rust or other obstruction. Offsets shall be made with forty-five degree bends, or similar fittings. The use of T-"Ys" (sanitary T's) will be permitted on upright lines only.

Section 27. Joints in cast-iron pipes and soil- and waste-pipes must be so filled with oakum and lead, and hand caulked, as to make them gas-tight. Connections of lead and cast-iron pipes must be made with brass sleeve or ferrule, of the same size as the lead pipe inserted in the hub of the iron pipe, and caulked with lead. The lead pipe must be attached to the ferrule by wiped joint. Joints between lead and wrought-iron pipes must be made with brass nipple, of same size as lead pipe. The lead pipe must be attached to the nipple by wiped joint. All connections of lead waste-pipe must be made by means of wiped joints.

Section 28. Every sink, bath-tub, basin, water-closet, slop-hopper, or fixtures having a waste-pipe, must be furnished with a trap, which shall be placed as close as practicable to the fixture that it serves, and in no case shall they be more than one foot from said fixture. The waste-pipe from the bath-tub or other fixtures must not be connected with a water-closet trap.

Size of Horizontal and Vertical Waste-pipe Traps and Branches:

	Horizontal and Vertical.	Number of Small Fixtures.
1 1/4	inches,-----	1.
1 1/2	inches,-----	2.
2	inches,-----	3 to 8.
2 1/2	inches,-----	9 to 20.
3	inches,-----	21 to 44.

If building is ten (10) or more stories in height, the vertical waste-pipe shall not be less than three (3) inches in diameter. The use of wrought-iron pipe for waste-pipe two inches or less in diameter is prohibited.

The size of traps and waste branches, for a given fixture, shall be as follows:

Kind of Fixtures.	Size in Inches.	
	Trap.	Branch.
Water-closet, -----	3	4
Slop sink with trap combined, -----	3	3
Slop sink, ordinary, -----	2	2
Pedestal urinal, -----	3	3
Floor drain, or wash, -----	4	4
Yard drain, or catch basin, -----	4	4
Urinal trough, -----	2	2
Laundry traps (2 or 5), -----	2	2
Combination sink and tray (for each fixture)--	1 1/2	2
Kitchen sinks (small) for dwellings, -----	1 1/2	1 1/2
Kitchen sinks (large) hotels, restaurants, grease trap, -----		2
Pantry sinks, -----	1 1/2	1 1/2
Wash basin, one only, -----	1 1/4	1 1/4
Bath-tubs, 4x10 inches drum trap, -----		1 1/2
Shower baths, -----	1 1/2	1 1/2
Shower baths (floor), -----	2	2

Sitz baths, -----1 1/2 1 1/2  
 Drinking fountains, -----1 1/4 1 1/4

Section 29. Overflow pipes from fixtures must, in all cases, be connected on the inlet side of traps.

Section 30. Sediment pipes from kitchen boilers must not be connected on the outlet side of traps.

Section 31. All traps must be well supported, and set true with respect to their water levels. The size for traps must not be less than those given in the following:

Traps for water-closets, four inches in diameter.

Traps for slop-sinks, one and one-half inches to three inches in diameter.

Traps for kitchen sinks, one and one-half inches in diameter.

Traps for wash-trays, two inches in diameter.

Traps for (bowl) urinals, one and one-half inches in diameter.

Traps for washstands, one and one-fourth inches in diameter.

All bath-tubs shall be supplied with drumtrap, not less than three inches in diameter, with three-inch trap-screws on floor line. In case where an additional fixture is required in a building, and it is impossible to get re-vent pipes for the trap, the Board or Bureau of Health shall designate the kind of trap to be used. This shall not be construed to allow traps without re-vents in new buildings.

Section 32. Safe waste-pipes must not connect directly with any part of the plumbing system. Safe waste-pipes must discharge over an open, water supplied, publicly placed, ordinarily used sink, placed not more than three and one-half feet above the cellar floor. The safe waste from a refrigerator must be trapped at the bottom of the line only, and must not discharge upon the ground floor, but over an ordinary portable pan, or some properly trapped, water supplied sink, as above. In no case shall the refrigerator waste-pipe discharge over a sink located in a room used for living purposes.

The branches on vertical lines must be made by "Y" fittings, and be carried to the safe with as much pitch as possible. Where there is an offset on a refrigerator waste-pipe in cellar, there must be clean-outs to control the horizontal part of the pipe.

In tenement- and lodging-houses the refrigerator waste-pipes must extend above the roof, and not be larger than one and one-half inches, nor the branches less than one and one-quarter inches. Refrigerator waste-pipes, except in tenement-houses, and all safe waste-pipes, must have brass flap-valves at their lower ends. Lead safes must be graded, and neatly turned over beveled strips at their edges.

Section 33. All vent-pipes must be either of lead, brass, loricated porcelain, enameled iron, or galvanized iron pipe.

Section 34. All traps shall be protected from siphonage or air pressure by special vent-pipes, of a size not less than the following tables:

Size of Pipe.	Maximum Developed Length in Feet.		Number of Traps Vented.	
	Mains.	Branch	Main	Vertical.
1 1/4 inch vent,	-- 20,	-----	1.	
1 1/2 inch vent,	-- 40,	-----	2	or less.
2 inch vent,	-- 65,	-----	10	or less, 20 or less.
2 1/2 inch vent,	--100,	-----	20	or less, 40 or less.
3 inch vent,	-- 10 or more		60	or less, 100 or less.

stories

The branch vent-pipes shall be not less than the following sizes: One and one-fourth inches in diameter, for one and one-fourth inch traps. One and one-half inches in diameter, for one and one-half inch to two and one-half inch traps. Two inches in diameter, for three-inch to four-inch traps. One-half their diameter, for traps five inches and over.

Where two (2) or more water-closets are placed side by side on a horizontal branch, the branch line shall have a relief extended as a loop vent. A pipe two (2) inches in diameter will be sufficient as a loop vent for two (2) closets. A pipe three (3) inches in diameter shall be used as a relief for three (3) or four (4) closets; and where more than four (4) closets are located on the same branch the relief shall not be less than (4) inches in diameter. All house drains and soil lines on which a water-closet is located must have a four-inch main vent line. Where an additional closet is located in the cellar or basement, and within ten feet of main soil or vent line no relief vent will be required for said closet; but where it is more than ten (10) feet, a two-inch vent line will be required. Relief vent pipes for water-closets must not be less than two inches in diameter, for a length of forty-feet, and not less than three inches in diameter for more than forty feet.

No revent from traps under bell-traps will be required.

Any building having a sewer connection with a public or private sewer used for bell-trap connections or floor drainage only, a two-inch relief line must be extended to the roof of building from rear end of main drain. House drains constructed for roof drainage only, will not require a relief vent.

A floor-trap for a shower shall be vented, unless located in cellar or ground floor, the paving of which renders the trap inaccessible. If the number of these fixtures on a branch is two (2) or more, the waste line shall be extended as a loop vent, instead of back venting the separate traps; and when located in basement floor, they shall be provided with a removable strainer or cleanout. Back-vent pipes, from traps above the floor, must either be connected with crown of trap with ground-in brass coupling, or, if connected solidly to trap, must have a ground-in brass coupling at wall.

Section 35. Where rows of fixtures are placed in a line, fittings of not less than forty-five (45) degrees to the horizontal must be used on vent lines to prevent filling with rust or condensations; except on brick or tile walls, where it is necessary to channel same for pipes, ninety (90) degree fittings will be allowed. Trapped vent-pipes are strictly prohibited. No vent-pipe from house side of any trap shall connect with ventilation pipe, or with sewer-, soil-, or waste-pipe. Vent-pipes from several traps may be connected together, or may be carried into the main vent line above the highest fixture. Where one vertical vent line connects with another, a "Y" fitting must be used. Branch vent-pipes must be connected as near to crown of the trap as possible.

Section 36. All offsets on vent lines must be made at an angle of not less than forty-five degrees to the horizontal, and all lines must be connected at the bottom with a soil- or waste-pipe, or the drain, in such manner as to prevent the accumulation of rust, scale, or condensation.

Section 37. Rubber connections for back vents will not be permitted, without double coupling and thimble inside.

Section 38. No brick, sheet metal, or earthen ware flue, or chimney flue, shall be used as a sewer ventilator, or to ventilate any trap, drain, soil, or waste-pipe.

Section 39. Soldering nipples must be extra heavy brass, or brass pipe, iron pipe size.

Section 40. Brass screw-caps for cleanouts must be extra heavy, not less than one-eighth of an inch thick. The screw-cap must have a solid square or hexagonal nut, not less than one inch high. The body of cleanout ferrule must at least equal in weight and thickness the caulking ferrule for the same size pipe.

Section 41. Brass ferrules must be of best quality, bell shaped, extra heavy cast-brass, not less than four inches long, and two and one-quarter inches, three and one-half inches thick, and four and one-half inches in diameter, and not less than the following weights:

Diameter two and one-fourth inches, weight one pound.

Diameter three and one-half inches, weight one pound twelve ounces.

Diameter four and one-half inches, weight two pounds eight ounces.

Section 42. The closet and all other fixtures must be set open, and free from all inclosing wood or other work. Where water-closets will not support a rim seat, the seat must be supported on galvanized iron legs, and a drip tray must be used, which tray must be porcelain, enameled on both sides and secured in place. In tenement-houses and lodging-houses, sinks must be entirely open, set on iron legs or brackets, without any inclosing wood or other work.

Section 43. Pan, plunger, or hopper closets will not be permitted in any building. No range closet, either wet or dry, nor an evaporating system of closets, shall be constructed or allowed inside of any building. A separate building, constructed especially for the purpose, must be provided in which such range closets shall be set.

Section 44. All earthenware traps must have heavy brass floor-plates, soldered to the lead bends and bolted to the trap flange, and the joint made permanently secure and gas-tight.

Section 45. Water-closets must not be located in sleeping apartments, nor in any room or compartment which has not direct communication with external air, either by window or air-shaft of at least four square feet.

Section 46. No water-closets, except those placed in yards, and flushometer, volumeters, or similar devices shall be supplied directly from the supply pipes.

Section 47. All water closets must have flushing rim-bowls. Water-closets to be supplied from flushing tanks.

Section 48. Water-closets within buildings shall be supplied with water from special tanks or cisterns, which shall hold not less than six gallons, when filled to the level of the overflow pipe, for each closet supplied, excepting automatic or siphon-tanks, which shall hold not less than five gallons for each closet supplied. A group of closets may be flushed from one tank, but water-closets on different floors must not be flushed from the same tank, except flushometers, volumeters, or similar devices. The water in said tanks must not be used for any other purpose.

Section 49. In no case will the water-closet system of tenement or lodging-houses be permitted in cellars, basements, or under sidewalks.

Section 50. In all sewer connected, occupied buildings there must be at least one water-closet, and there must be additional closets so as there will never be more than fifteen persons per closet. In lodging-houses, where there are more than fifteen persons on any floor, there must be an additional water-closet

on that floor for every fifteen additional persons, or fraction thereof.

Section 51. In tenement-houses, lodging-houses, factories, work-shops, and all public buildings, the entire water-closet apartments and side walls, to a height of sixteen inches from the floor, except at the door, must be made water-proof with asphalt, cement, tile, or other water-proof material, as approved by the Board or Bureau of Health. In tenement-houses and lodging-houses, the watercloset and urinal apartments must have a window or windows opening into the outer air, of sufficient size, all of which shall be shown on plans, and shall be subject to the approval of the Board or Bureau of Health. Except that tenement or lodging-houses, three stories or less in height, may have such window opening on a ventilating-shaft, not less than ten feet square in area. In all buildings, the outer partition of such apartments must extend to the ceiling, or be independently ceiled over, and these partitions must be air-tight. The outside partitions must include a window opening to outer air on the lot whereon the building is situated; or some other approved means of ventilation must be provided. When necessary to properly light such apartments, the upper part of the partitions must be of glass. The interior partitions of such apartments must be dwarf partitions.

Section 52. All urinals must be constructed of materials impervious to moisture and that will not corrode under the action of urine. The floor and walls of urinal apartments must be lined with similar non-absorbent and non-corrosive material.

Section 53. The platforms or treads of urinal stalls must not be connected independently to the plumbing system, nor can they be connected to any safe waste-pipe.

Section 54. Iron trough water-closets and trough urinals must be porcelain, enameled, or galvanized cast-iron.

Section 55. All water-closets and other fixtures must be provided with a sufficient supply of water for flushing, to keep in a proper and cleanly condition.

Section 56. Water-closet flush pipes must not be less than one and one-quarter inches, and urinal flush pipes one-half inch in diameter.

Section 57. The copper lining of water-closet and urinal cisterns must not be lighter than twelve ounce copper, and must be stamped on lining with maker's name. Where lead is used for lining it must not weigh less than four pounds to the square foot. All other materials are prohibited.

Section 58. Wooden wash-trays, sinks, or bath tubs are prohibited inside of buildings. Such fixtures must be constructed of non-absorbent material. Cement or artificial tubs will not be permitted, unless approved by the Board or Bureau of Health.

Section 59. Water-closets when located in yard must be arranged as to be conveniently and adequately flushed, and the water-supply pipes and traps protected from freezing by being placed in a hopper-pit, at least four feet below the surface of the ground, the walls of which pit shall be constructed of hard burned brick or stone laid in cement or mortar, or of concrete, and traps used inside pit must be extra heavy cast-iron, and the trap to have a hand-hole for cleanout purposes. The closet drain to be vented, with a four-inch pipe and carried up above the roof of closet, away from any opening or window. The water shall be supplied through an automatic seat-action valve. The waste water from valve shall be conveyed to the sewer through a half-inch lead pipe, properly connected. The enclosures of yard water-closets shall be ventilated by

slatted openings, and there shall be a trap-door in floor of sufficient size to permit of convenient access to the hopper-pit.

Section 60. No privy vault or cesspools for sewage shall hereafter be constructed in any part of the city where a sewer is at all accessible, which shall be determined by the Department, Board or Bureau of Health; nor shall it be lawful to continue a privy vault or cesspool on any lot, piece, or parcel of ground abutting on or contiguous to any public sewer within the city limits. The Department or Board or Bureau of Health shall have the power to issue notice, giving at least three months' time to discontinue the use of any cesspool and have it cleaned and filled up. No connection from any cesspool or privy vault shall be made with any sewer; nor shall any water-closet or house drain empty into a cesspool or privy vault.

Section 61. In rural districts, or districts where no sewer exists, privy vaults shall not be located within two feet of party or street line, nor within twenty feet of any building. Before any privy vault shall be constructed, application for permission shall be made to the Department or Board or Bureau of Health, and such privy vault shall have nine-inch walls, constructed of hard burned brick, or stone, laid in cement mortar, or of concrete, with bottom and sides cemented so as to be water-tight; size to be not less than four feet in diameter and six feet deep.

Section 62. All material used in the work of plumbing and drainage must be of good quality and free from defects. The work must be executed in a thorough and workmanlike manner.

Section 63. No person, firm, or corporation carrying on the business of plumbing and house drainage shall allow his or their name to be used by any person, directly or indirectly, either to obtain a permit or permits, or to do any work under his or their license.

Section 64. The term "private sewer" is applied to main sewers that are not constructed by and under the supervision of the department of public works.

The term "house sewer" is applied to that part of the main drain or sewer extending from a point five feet outside of the outer wall of a building, vault, or area to its connection with public sewer, private sewer, or cesspool.

The term "house drain" is applied to that part of the main horizontal drain and its branches inside the walls of the building, vault or area, and extending to and connecting with the house sewer.

The term "soil-pipe" is applied to any vertical line of pipe extending through the roof, receiving the discharge of one or more water-closets, with or without other fixtures.

The term "waste-pipe" is applied to any pipe extending through roof, receiving the discharge from any fixtures except water-closets.

The term "vent-pipe" is applied to any special pipe provided to ventilate the system of piping, and to prevent trap siphonage and back pressure.

Section 65. Whenever it shall come to the knowledge of the Department or Board or Bureau of Health, or complaint in writing shall be made by any citizen, that the plumbing or drainage in any building has become a nuisance or is contrary to the provisions and requirements of this act or the ordinances of the city, or is of faulty construction and liable to breed disease or endanger the health of the occupants, or upon the request of any owner or occupant of any building fitted with

plumbing or drainage prior to the passage of this act, then the Department or Board or Bureau of Health shall direct the proper officer to examine the plumbing or drainage in any such building, and the said officer shall make a drawing of the plan of said plumbing, drainage, and sewer and ventilating-shaft connections. He shall report his findings, in writing, to the Department or Board or Bureau of Health, and suggest such changes as are necessary to make the same conform to the rules governing such matters.

The Department or Board or Bureau of Health shall thereupon notify the owner or agent of any such building of the changes which are necessary to be made in said plumbing or drainage. Said changes shall be made within the time fixed by the Department or Board or Bureau of Health; and upon refusal or neglect to obey such orders, the Department or Board or Bureau of Health shall institute legal proceedings to have such changes made and said nuisance abated, by action before a justice of the peace or court of record; in which said action the owner or agent of said building may show in defense that the plumbing or drainage was not a nuisance, or was not of faulty construction or out of repair, and in case of a building constructed subsequent to the passage of this act, said plumbing or drainage was not contrary to the provisions and requirements of this act or the ordinances of the city.

**Compiler's Note:** Section 28 of Act 207 of 2004 provided that any and all references in any other law to a "district justice" or "justice of the peace" shall be deemed to be references to a magisterial district judge.

Section 66. When drain, soil, waste, vent, and other pipes in the building, connected or to be connected with the sewer, have been placed in position, a preliminary water or air test of the same shall be applied, in the presence of an officer of the Board or Bureau of Health.

Section 67. When the work have been completed, a final notice shall be filed with the Board or Bureau of Health, when a final air or peppermint test shall be made in presence of said officer; when, if found satisfactory, a certificate of approval of the work will be issued; but no such plumbing or drainage work or system shall be used until said test has been made and certificate issued.

Section 68. When work is ready for inspection the plumbing contractor shall make such arrangements as will enable the proper officer to reach all parts of the building easily and readily, and also have present the proper apparatus and appliances for making said tests, and furnish such assistance as may be necessary to a proper application of the same.

Section 69. (69 repealed July 2, 1935, P.L.561, No.207)

Section 70. Any person or persons, who shall fail to comply with any of the provisions of this act, regarding the procuring of a license or certificate to engage in or work at the business of plumbing or house drainage, cesspools, water piping, and fixtures attached thereto, directly or indirectly connected to the city service water supply, additions, alterations, and repairs to plumbing, house drainage, water piping, cesspools, wastes, traps or vents, shall, upon summary conviction before a magistrate, or upon conviction in a court of record, for the first offense committed by such person or persons pay the cost of prosecution and enter a bond of two years' duration of an approved surety company, approved by the court of common pleas of the county, in the sum of five hundred dollars (\$500), to the city in which said offense shall have been committed,

conditioned that he will not violate any of the provisions of said acts of Assembly thereafter, if the violator shall fail to procure a bond, he shall be committed to the county jail for thirty days, and, upon any subsequent violation of any provision of this act, the magistrate must hold the person or persons for the next term of court, and, upon conviction, the said bond shall be forfeited to said city: Provided, That such person or persons shall be liable to a fine of fifty dollars for each and every day he or they shall engage in or work at said business, without having first obtained the certificate and license, as herein set forth, and at the discretion of the court shall be imprisoned for a period not exceeding twelve months.

(70 amended July 2, 1935, P.L.561, No.207)

Section 70.1. Licensed plumbers, who shall violate any of the rules, regulations, or requirements made by the Board of Plumbing Supervision of the Department of Health, in accordance with the provisions of said act as amended, regarding the construction, reconstruction, additions, alteration, repairing, or testing of plumbing, house drainage, water piping, and fixtures attached thereto, directly or indirectly connected to the city service water supply, cesspools and wastes traps or vents, shall be liable for every such offense to a fine of not less than five dollars (\$5.00), nor more than fifty dollars (\$50.00). All fines and penalties, imposed by this act, shall be recoverable by summary proceedings, before any police magistrate or justice of the peace or court of record in said cities; and all suits or actions at law may be instituted by any individual for the recovery thereof; and shall be in the name and for the use of the city within or against which offense is committed; and, upon recovery thereof, all such fines and penalties shall be paid to the city treasurer thereof.

(70.1 added July 2, 1935, P.L.561, No.207)

**Compiler's Note:** Section 28 of Act 207 of 2004 provided that any and all references in any other law to a "district justice" or "justice of the peace" shall be deemed to be references to a magisterial district judge.

Section 70.2. At the instance of the Director of Health, the city solicitor shall institute all legal proceedings for violations of the provisions of this act.

(70.2 added July 2, 1935, P.L.561, No.207)

Section 70.3. All permits secured for the doing of any plumbing, house drainage, cesspools, water piping, and fixtures attached thereto, directly or indirectly connected to the city service water supply, cesspools, wastes, traps or vents, shall be conspicuously posted upon the front of the premises where the work is being done. Any police official or inspector of the Department of Health of the said cities shall immediately order such work discontinued until a permit is produced: Provided, That if said work be nevertheless continued without placing said permit in a conspicuous place, said person or persons shall be guilty of a violation, and punished as set forth herein.

(70.3 added July 2, 1935, P.L.561, No.207)

Section 71. The Board of Plumbing Supervision of the Department of Health shall have power to make such rules, regulations, and changes in the foregoing specifications relative to the construction of the plumbing or house drainage as said board or bureau may, from time to time, determine to be necessary or advisable for the better protection of the safety or health of the occupants of any house, or the community.

(71 amended July 2, 1935, P.L.561, No.207)

Section 72. All acts or parts of acts inconsistent with the provisions of this act or supplied thereby are hereby repealed.

Section 73. Wherever it does appear in the act, to which this is an amendment, the phrase "Board or Bureau of Health," the same shall be taken to mean the Board of Plumbing Supervision of the Department of Health.

(73 added July 2, 1935, P.L.561, No.207)