

House sewers—State number for each building *one* Diameter *6* inches.

Material *cast iron* Fall per foot *1/4* inch.

Where connected? *To public sewer in Avenue D.*

House traps—Material *cast iron* Diameter *6* inches.

Fresh-air inlets—State number for each building *One* Diameter *6" x 5"* inches.

Material *cast iron* Location of inlet *at curb*.

How will they be protected against obstructions? *By galvanized iron grating bedded into sidewalk*

House drains—State number for each building *One* Diameter *6" x 5"* inches.

Material *cast iron* Fall per foot *1/4* inches.

Area shaft, court and yard drains—Material *cast iron* Diameter *3* inches.

How trapped? *By separate 3" x 1" running & 6" leader trap.*

Cellar drain—Material _____ Diameter _____ inches.

How trapped? _____

How will the yard, area shaft, court and cellar drains be protected against obstructions?

Catch basins—Where located? *In rear court & yard.* Material *Brick*

How will they be made water-tight? *With cement*

Dimensions, *8" x 8" x 12"*

Sub-soil drains—Material _____ Where connected? _____

Floor, stable and stall drains—Material _____ Diameter _____ inches.

How trapped? _____

How arranged to maintain a permanent water seal in sub-soil, floor, stable and stall drain traps? _____

Material of soil, waste and vent pipes *cast iron*

Soil pipes—Number in each building *Four* Diameter *5* inches.

Number extending above roof in each building *Four*

Diameter and material of outlets and branches up to traps *4" and 2" iron lead.*

Waste-pipes—Number in each building *Two* Diameter *2" x 3"* inches.

Number extending above roof in each building *Two*

Diameter and material of outlets and branches up to traps *2" iron lead.*

Vent-pipes—Number in each building *Six* Diameter *2" x 3"* inches.

Number extending above roof in each building *Two*

Diameter and material of outlets and branches up to traps *2" iron x 2" + 1/2" lead.*

Refrigerator waste-pipes—State number in each building _____ Diameter _____ inches.

Material _____

Will they extend through roof? _____

Roof drainage—State number of outside leaders *Three* Material *Galvanized iron*

Diameter *2" x 5"* inches. Diameter of traps *3" x 6"* inches.

State number of inside leaders _____ Material _____

Diameters _____ Diameter of traps _____ inches.

How will all the above soil, waste, vent and other pipes be supported? *By pipe hangers hooks rests, etc.*

How will the floor of water-closet apartment be made waterproof? *slate floor slab and tile floor* base *6* inches high. Material *Slate*
 Safes—Material *Slate* Where located? *Under Water closets*

Diameter and material of safe waste-pipe.....

Drip trays—Material..... Where located? *closets will support seats*

Water-closet cisterns—Material *Good copper lined* Dimension, *12" x 12" x 24" about*

Diameter and material of supply-pipe $\frac{1}{2}$ inch *galv iron*

Diameter and material of flush-pipe $\frac{1}{4}$ inch *lead*

House-tank—Material *Wooden Barrell* Dimensions, *2,500 gallons capacity*

Where located? *On the roof*

Overflow pipe, where discharged? *On the roof*

Emptying pipe, where " *On the roof*

Tell-tale pipe, where " *Over sink in cellar*

Pump—Is a pump necessary? *Yes*

Where will it be located? *In furnace room in cellar*

State character of same? *Gas Engine and pump combined*

OTHER FIXTURES—

What kind and where located:

	Yard.	Cellar.	Basement.	First Story.	Second Story.	Third Story.	Fourth Story.	Fifth Story.	Sixth Story.	Seventh Story.	Eighth Story.	Ninth Story.	Tenth Story.	Eleventh Story.	Twelfth Story.	Thirteenth Story.	Fourteenth Story.	Fifteenth Story.	Sixteenth Story.	Seventeenth Story.	Eighteenth Story.	Nineteenth Story.	Twentieth Story.	
Water-closets (how many)				2	4	4	4	4	4															
Urinals																								
Wash-basins																								
Bath-tubs						4	4	4	4	4														
Wash-tubs						8	8	8	8	8														
Sinks		1		7	4	4	4	4	4															

Describe water-closets *All earthen wash down each set on slate floor slab. Waste through 4" lead bend and heavy brass floor plate.*

Describe urinals *Vent by 2" lead vent.*

Describe wash-basins.....

Describe bath-tubs (State brand of same) *Standard enamelled iron tub. Waste through 5" lead trap. Vent by 1 1/2" lead vent.*

Describe wash-tubs) State brand of same) *Albion Soap Stone Tub. Waste through 1/2" lead branch to sink trap.*

Describe sinks *Galvanized iron sink. Waste through 2" lead trap. Vent by 1 1/2" lead vent*

Water supply Will all fixtures be water supplied? *Yes*

Give general description and character of same *1/2" galv iron mains with 1/4" galv iron risers. 1/2" down supply from tank to distributor on 6th floor. all risers will connect with this. hot water supply for sink & tubs & baths. All with valves etc. complete*

RULES AND REGULATIONS FOR PLUMBING, DRAINAGE, WATER SUPPLY, AND VENTILATION OF BUILDINGS.

Once in each year every employing or master plumber carrying on his trade, business or calling in The City of New York shall register his name and address at the Office of the Bureau of Buildings in the Borough in which his place of business is located, under such rules and regulations as the said Bureau shall prescribe, and as provided by section 141 of the Building Code of The City of New York.

I.

Filing of Drawings, Descriptions, etc.

1. Drawings and triplicate descriptions, on forms furnished by the Bureau of Buildings for all plumbing and drainage, shall be filled in with ink and filed by the owner or architect in the said department. The plans must be drawn to scale in ink, on cloth, or they must be cloth prints of such scale drawings, and shall consist of such floor plans and sections as may be necessary to show clearly all plumbing work to be done, and must show partitions and method of ventilating water-closet apartments.

2. The said plumbing and drainage shall not be commenced or proceeded with until said drawings and descriptions shall have been so filed and approved by the Superintendent of Buildings.

3. No modification of the approved drawings and descriptions will be permitted unless either amended drawings and triplicate descriptions, or an amendment to the original drawings and descriptions, covering the proposed change or changes, are so filed and approved by the Superintendent of Buildings.

4. The drainage and plumbing of all buildings, both public and private, shall be executed in accordance with the rules and regulations of the Bureau of Buildings.

5. Repairs or alterations of plumbing or drainage may be made without filing drawings and descriptions in the Bureau of Buildings, but such repairs or alterations shall not be construed to include cases where new vertical or horizontal lines of soil, waste, vent or leader pipes are proposed to be used.

6. Notice of such repairs or alterations shall be given to the said Bureau before the same are commenced in such cases as shall be prescribed by the rules and regulations of the said Bureau, and the work shall be done in accordance with the said rules and regulations.

7. Where repairs or alterations ordered by the Board of Health for sanitary reasons include cases where new vertical and horizontal lines of soil, waste, vent or leader pipes are proposed to be used or old ones replaced, drawings and descriptions must be filed with and approved by the Superintendent of Buildings before the same shall be commenced or proceeded with.

8. Repairs and alterations may comply in all respects with the weight, quality, arrangement and venting of the rest of the work in the building.

9. It shall not be lawful to commence work on said plumbing and drainage, or on any part thereof, until the plumber who is to do the work shall sign the specifications and make affidavit that he is duly authorized to proceed with the work. Affidavit must give the name and address of owner and plumber, etc.

10. One set of specifications will be received for not more than ten houses, and then only when on adjoining lots and houses are exactly alike.

11. Written notices must be given to the Superintendent of Buildings by the plumber when any work is begun, and from time to time when any work is ready for inspection. All notices required must be sent in on blank forms furnished by the Bureau of Buildings.

II.

Definition of Terms.

12. The term "private sewer" is applied to main sewers that are not constructed by and under the supervision of the Department of Sewers.

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

14. 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.

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

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

17. 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.

III.

Materials and Workmanship.

18. All materials must be of the best quality, free from defects, and all work must be executed in a thorough, workmanlike manner.

19. All cast-iron pipes and fittings must be uncoated, sound, cylindrical and smooth, free from cracks, sand holes and other defects, and of uniform thickness, and of the grade known in commerce as "extra heavy."

20. Pipe, including the hub, shall weigh not less than the following average weights per linear foot:

DIAMETERS.	WEIGHTS PER LINEAR FOOT.
2 inches.....	5½ pounds.
3 ".....	9½ " "
4 ".....	13 " "
5 ".....	17 " "
6 ".....	20 " "
7 ".....	27 " "
8 ".....	33½ " "
10 ".....	45 " "
12 ".....	54 " "

21. The size, weight and maker's name must be cast on each length of the pipe.

22. All joints must be made with picked oakum and molten lead and be made gas-tight. Twelve (12) ounces of fine, soft pig lead must be used at each joint for each inch in the diameter of the pipe.

23. All wrought-iron and steel pipes must be equal in quality to "standard," and must be properly tested by the manufacturer. All pipe must be lap-welded. No plain black or uncoated pipe will be permitted.

24. Wrought-iron and steel pipes must be galvanized, and each length must have the weight and maker's name stamped on it.

25. Fittings for vent-pipes on wrought-iron and steel pipes may be the ordinary cast or malleable steam and water fittings.

26. Fittings for waste or soil and refrigerator waste-pipes must be the special extra heavy cast-iron recessed and threaded drainage fittings, with smooth interior water-way, and threads tapered, so as to give a uniform grade to branches of not less than one-fourth of an inch per foot. All fittings for wrought-iron or steel pipe must be galvanized.

27. All joints to be screwed joints made up with red lead, and the burr formed in cutting must be carefully reamed out.

28. Short nipples on wrought-iron or steel pipe, where the unthreaded part of the pipe is less than one and one-half inches long, must be of the thickness and weight known as "extra heavy" or "extra strong."

29. The pipe shall not be less than the following average thickness, and weight per linear foot:

DIAMETERS.	THICKNESSES	WEIGHTS PER LINEAR FOOT.
1½ inches.....	.14 inches.	2.68 pounds.
2 ".....	.15 " "	3.61 " "
2½ ".....	.20 " "	5.74 " "
3 ".....	.21 " "	7.54 " "
3½ ".....	.22 " "	9.00 " "
4 ".....	.23 " "	10.66 " "
4½ ".....	.24 " "	12.34 " "
5 ".....	.25 " "	14.50 " "
6 ".....	.28 " "	18.76 " "
7 ".....	.30 " "	23.27 " "
8 ".....	.32 " "	28.18 " "
9 ".....	.34 " "	33.70 " "
10 ".....	.36 " "	40.06 " "
11 ".....	.37 " "	45.02 " "
12 ".....	.37 " "	48.98 " "

30. All brass pipe for soil, waste and vent pipes and solder nipples must be thoroughly annealed, seamless, drawn, brass tubing, of standard iron-pipe gauge.

31. Connections on brass pipe and between brass pipe and traps on iron pipe must not be made with slip joints or couplings. Threaded connections on brass pipe must be of the same size as iron pipe threads for same size of pipe and be tapered.

32. The following average thicknesses and weights per linear foot will be required:

DIAMETERS.	THICKNESSES.	WEIGHTS PER LINEAR FOOT.
1½ inches.....	.14 inches.	2.84 pounds.
2 ".....	.15 " "	3.82 " "
2½ ".....	.20 " "	6.08 " "
3 ".....	.21 " "	7.92 " "
3½ ".....	.22 " "	9.54 " "
4 ".....	.23 " "	11.29 " "
4½ ".....	.24 " "	13.03 " "
5 ".....	.25 " "	15.37 " "
6 ".....	.28 " "	19.88 " "

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

DIAMETERS.	WEIGHTS.
2½ inches.....	1 pound 0 ounces.
3½ ".....	1 " 12 " "
4½ ".....	2 pounds 8 " "

34. One and one-half inch ferrules are not permitted.

35. Soldering nipples must be heavy cast brass or of brass pipe, iron-pipe size. When cast they must not be less than the following weights:

DIAMETERS.	WEIGHTS.
1½ inches.....	0 pounds 8 ounces.
2 ".....	0 " 14 " "
2½ ".....	1 pound 6 " "
3 ".....	2 pounds 0 " "
4 ".....	3 " 8 " "

36. 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, with a least diameter of one and one-half inches. The body of the cleanout ferrule must be at least equal in weight and thickness to the calking ferrule for the same size of pipe.

37. Where cleanouts are required by rules and by the approved plans, the screw cap must be of brass. The engaging part must have not less than six threads of iron-pipe size and be tapered. Cleanouts must be of full size of trap up to four inches in diameter, and not less than four inches for larger traps.

38. The use of lead pipes is restricted to the short branches of the soil and waste pipes, bends and traps, roof connections of inside leaders. "Short branches" of lead pipe shall be construed to mean not more than:

- 5 feet of 1½-inch pipe.
- 4 " 2-inch " "
- 2 " 3-inch " "
- 2 " 4-inch " "

39. All connections between lead pipes and between lead and brass or copper pipes must be made by means of "wiped" solder-joint.

40. All lead waste, soil, vent and flush pipes must be of the best quality, known in commerce as "D," and of not less than the following weights per lineal foot:

DIAMETERS.	WEIGHTS PER LINEAR FOOT.
1½ inches (for flush pipes only).....	2½ pounds.
1½ ".....	3 " "
2 ".....	4 " "
3 ".....	6 " "
4 and 4½ inches.....	8 " "

41. All lead traps and bends must be of the same weights and thicknesses as their corresponding pipe branches. Sheet lead for roof flashings must be six-pound lead, and must extend not less than six inches from the pipe, and the joint made water-tight.

42. Copper tubing, when used for inside leader roof connections, must be seamless drawn tubing, not less than 22 gauge, and when used for roof flashings must be not less than 18 gauge.

IV.

General Regulations.

43. The entire plumbing and drainage system of each building must be entirely separate and independent of that of any other building.

44. Each building must be separately and independently connected with a public or private sewer, or cesspool.

45. Every building must have its sewer connections directly in front of the building, unless permission is otherwise granted by the Superintendent of Buildings.

46. Where there is no sewer in the street or avenue, and it is possible to construct a private sewer to connect in an adjacent street or avenue, a private sewer must be constructed. It must be laid outside the curb, under the roadway of the street.

47. Cesspools and privy-vaults will be permitted only after it has been shown to the satisfaction of the Superintendent of Buildings that their use is absolutely necessary.

48. When allowed, they must be constructed strictly in accordance with the terms of the permit issued by the Superintendent of Buildings.

49. Cesspools must not be used as privy-vaults. Cesspools and privy-vaults must be at least twenty-five feet from any building, and should be on the same lot with the building for which their use is intended. Cesspools and privy-vaults when constructed of brick must be eight inches thick; of stone, twenty inches thick.

50. All cesspools and privy-vaults must be made water-tight.

51. As soon as it is possible to connect with a public sewer, the owner must have the cesspool and privy-vault emptied, cleaned and disinfected, and filled with fresh earth, and have a sewer connection made in the manner herewith prescribed.

52. All pipe-lines must be supported at the base on brick piers or by heavy iron hangers from the cellar-ceiling beams, and along the line by heavy iron hangers at intervals of not more than ten feet.

53. All pipes issuing from extension or elsewhere, which would otherwise open within thirty feet of the window of any building, must be extended above the highest roof and well away and above all windows.

54. The arrangement of all pipes must be as straight and direct as possible. Offsets will be permitted only when unavoidable.

55. All pipes and traps should, where possible, be exposed to view. They should always be readily accessible for inspection and repairing.

56. In every building where there is a leader connected to the drain, if there are any plumbing fixtures, there must be at least one four (4) inch pipe extending above the roof for ventilation.

V.

Yard, Area and Other Drains.

57. All yards, areas and courts must be drained.

58. Lodging houses must have their yards, areas and courts drained into the sewer.

59. These drains, when sewer-connected, must have connections not less than three inches in diameter. They should be controlled by one trap—the leader trap if possible.

60. Cellar drains will be permitted only where they can be connected to a trap with a permanent water seal.

61. Subsoil drains should discharge into a sump or receiving tank, the contents of which must be lifted and discharged into the drainage system above the cellar bottom by some approved method. Where 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 drains.

62. Floor or other drains will only be permitted when it can be shown to the satisfaction of the Superintendent of Buildings that their use is absolutely necessary and arrangements made to maintain a permanent water seal in the traps.

VI.

Leaders.

63. 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 buildings 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 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.

64. Inside leaders must be made 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.

65. Outside leaders may be of sheet metal, but they must connect with the house drain by means of a cast-iron pipe extending vertically five feet above the grade level.

66. Leaders must be trapped with cast-iron running traps so placed as to prevent freezing.

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

VII.

The House Sewer, House Drain, House Trap and Fresh-air Inlet.

68. Old house sewers can be used in connection with the new buildings or new plumbing only when they are found, on examination by the plumbing inspector, to conform in all respects to the requirements governing new sewers.

69. When a proper foundation, consisting of a natural bed of earth, rock, etc., can be obtained, the house sewer can be of earthenware pipe.

70. Where the ground is made or filled in, or where the pipes are less than three feet deep, or in any case where there is danger of settlement by frost or from any cause, and when cesspools are used, the house sewer must be of extra heavy cast-iron pipe, with lead-caulked joints.

71. The house drain and its branches must be of extra heavy cast iron, when underground, and of extra heavy cast iron or galvanized wrought iron or steel when above ground.

72. The house drain must properly connect with the house sewer at a point two feet outside of the outer front vault or area wall of the building. An arched or other proper opening must be provided for the drain in the wall to prevent damage by settlement.

73. If possible, the house drain must be above the cellar floor. The house drain must be supported at intervals of ten feet by eight-inch brick piers or suspended from the floor beams, or be otherwise properly supported by heavy iron pipe hangers at intervals of not more than ten feet. The use of pipe-hooks for supporting drains is prohibited.

74. No steam-exhaust, boiler blow-off or drip-pipe shall be connected with the house drain or sewer. Such pipes must first discharge into a proper condensing tank, and from this a proper outlet to the house sewer outside of the building must be provided. In low-pressure steam systems the condensing tank may be omitted, but the waste connection must be otherwise as above required.

75. The house drain and house sewer must be run as direct as possible, with a fall of at least one-quarter inch per foot, all changes in direction made with proper fittings, and all connections made with Y branches and one-eighth and one-sixteenth bends.

76. The house sewer and house drain must be at least four inches in diameter where water closets discharge into them. Where rain water discharges into them, the house sewer and house drain up to the leader connections must be in accordance with the following table:

DIAMETER.	FALL 1/4-INCH PER FOOT.	FALL 1/2-INCH PER FOOT.
6 inches ..	5,000 square feet.	7,500 square feet of drainage of area.
7 " ..	6,900 " "	10,300 " " "
8 " ..	9,100 " "	13,600 " " "
9 " ..	11,600 " "	17,400 " " "

77. Full size Y and T branch fittings for handhole cleanouts must be provided where required on house drain and its branches.

78. An iron running trap must be placed on the house drain near the wall of the house, and on the sewer side of all connections, except a drip-pipe where one is used. If placed outside the house or below the cellar floor, it must be made accessible in a brick manhole, the walls of which must be eight inches thick, with an iron or flagstone cover. When outside the house it must never be less than three feet below the surface of the ground.

The house trap must have two cleanouts with brass screw cap ferrules calked in.

79. A fresh-air inlet must be connected with the house-drain just inside of the house trap; where under ground it will be of extra heavy cast iron. It must extend to the outer air and finish with a return bend at least one foot above the grade and ten feet away from any window or cold-air box. When this arrangement is not possible, the fresh-air inlet must open into the side of a box not less than eighteen inches square, placed below the sidewalk at the curb. The bottom of the box must be eighteen inches below the under side of the fresh-air inlet pipe. The box may be of cast iron, or it may be constructed with eight-inch walls of brick, or flagstone laid in hydraulic cement. The box must be covered by a flagstone fitted with removable metal grating, leaded into the stone, having openings equal in area to the area of the fresh-air inlet, and not less than one-half inch in their least dimension. The fresh-air inlet must be of the same size as the drain up to four inches; for five-inch and six-inch drains it must not be less than four inches in diameter; for seven-inch and eight-inch drains not less than six inches in diameter; and for larger drains not less than eight inches in diameter; the removable portion of grate to be at least eight by twelve inches in area.

An automatic device, approved by the Superintendent of Buildings, may be used, when set in a manner satisfactory to the said Superintendent.

VIII.

Soil and Waste Pipes.

80. All main, soil, waste or vent pipes must be of iron, steel or brass.

81. When they receive the discharge of fixtures on any floor above the first they must be extended in full calibre at least one foot above the roof coping, and well away from all shafts, windows, chimneys or other ventilating openings. When less than four inches in diameter, they must be enlarged to four inches at a point not less than one foot below the roof surface by an increaser not less than nine (9) inches long.

82. No caps, cowls or bends shall be affixed to the top of such pipe. In lodging houses wire baskets must be securely fastened into the opening of each pipe that is in an accessible position.

83. Necessary offsets above the highest fixture branch must not be made at an angle of less than 45 degrees to the horizontal.

84. Soil and waste pipes must have proper Y branches for all fixture connections.

85. No connection to lead branches for water closets or slop sinks will be permitted, except the required branch vent.

86. Branch soil and waste pipe must have a fall of at least one-quarter inch per foot.

87. Short TY branches will be permitted on vertical lines only. Long one-quarter bends and long TYs are permitted. Short one-quarter bends and double hubs, short roof increasers and common offsets, and bands and saddles are prohibited.

88. The diameters of soil and waste pipes must not be less than those given in the following table:

Main soil-pipes	4 inches.
Main soil-pipes for water closets on five or more floors	5 " "
Branch soil-pipes	4 " "
Main waste-pipes	2 " "
Main waste-pipes for kitchen sinks on five or more floors	3 " "
Branch waste-pipes for laundry tubs	1 1/2 " "
When set in ranges of three or more	2 " "
Branch waste for kitchen sinks	2 " "
Branch waste for urinals	2 " "
Branch waste for other fixtures	1 1/2 " "

IX.

Vent-pipes.

90. All traps must be protected from syphonage and back-pressure, and the drainage system ventilated by special lines of vent-pipes.

91. All vent-pipe lines and main branches must be of iron, steel or brass. They must be increased in diameter and extended above the roof as required for waste-pipes. They may be connected with the adjoining soil or waste line well above the highest fixture, but this will not be permitted when there are fixtures on more than six floors.

92. All offsets 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 a manner as to prevent the accumulation of rust scale.

93. Branch vent-pipes should be kept above the top of all connecting fixtures to prevent the use of vent-pipes as soil or waste pipes. Branch vent-pipes should be connected as near to the crown of the trap as possible.

94. Earthenware traps for water closets and slop sinks must be ventilated from the branch soil or waste pipe just below the trap, and this branch vent-pipe must be so connected as to prevent obstruction, and no waste-pipe connected between it and the fixture. Earthenware traps must have no vent-horns.

95. No sheet metal, brick or other flue shall be used as a vent-pipe.

96. The sizes of vent-pipes throughout must not be less than the following:

For main vents and long branches, two inches in diameter for water-closets on four or more floors, three inches in diameter; for other fixtures on less than seven floors, two inches in diameter; three-inch vent-pipe will be permitted for less than nine stories; for more than eight and less than sixteen stories, four inches in diameter; for more than fifteen and less than twenty-two stories, five inches in diameter; for more than twenty-one stories, six inches in diameter; branch vents for traps larger than two inches, two inches in diameter; branch vents for traps two inches or less, one and one-half inches in diameter.

For fixtures other than water closets and slop sinks and for more than eight (8) stories, vent-pipes may be one (1) inch smaller than a above stated.

X.

Traps.

97. No form of trap will be permitted to be used unless it has been approved by the Bureau of Buildings, and no masons' cess-pool, bell, pot, bottle or D-trap will be permitted, nor any form of trap that is not self-cleaning or has interior chamber or mechanism, nor any trap, except earthenware ones that depend upon interior partitions for a seal.

98. Every fixture must be separately trapped by a water-sealing trap placed as close to the fixture outlet as possible.

99. A set of wash trays may connect with a single trap, or into the trap of an adjoining sink, provided both sink and tub waste outlets are on the same side of the waste line, and the sink is nearest the line. When so connected the waste pipe from the wash trays must be branched in below the water seal.

100. The discharge from any fixture must not pass through more than one trap before reaching the house drain.

101. All traps must be well supported and set true with respect to their water levels.

102. All fixtures other than water closets and urinals must have strong metallic strainers or bars over the outlets to prevent obstruction of the waste-pipe.

103. All exposed or accessible traps, except water-closet traps, must have brass trap screws for cleaning the trap placed on the inlet side, or below the water level.

104. All iron traps for house drain, yard and other drains and leaders must be running traps with handhole cleanouts of full size of the traps when same are less than five (5) inches. All traps under ground must be made accessible by brick manholes with proper covers.

- 105. Overflow pipes from fixtures must in all cases be connected on the inlet side of traps.
 - 106. All earthenware traps must have heavy brass floor plates soldered to the lead bends and bolted to the trap flange, and the joint made gas tight with red or white lead. The use of rubber washers for floor connections is prohibited.
 - 107. No trap shall be placed at the foot of main soil and waste pipe lines.
 - 108. The sizes for traps must not be less than those given in the following table:
- | | |
|-------------------------------|-----------------------|
| Traps for water closets..... | 4 inches in diameter. |
| Traps for slop sinks..... | 3 " " |
| Traps for kitchen sinks..... | 2 " " |
| Traps for wash trays..... | 2 " " |
| Traps for urinals..... | 2 " " |
| Traps for other fixtures..... | 1 1/2 " " |
- Traps for leaders, areas, floor and other drains must be at least 3 inches in diameter.

XI.

Safe and Refrigerator Waste Pipes.

- 109. Safe and refrigerator waste-pipes must be of galvanized iron and be not less than one and one-quarter (1 1/4) inches in diameter with lead branches of the same size, with strainers over the inlet secured by a bar soldered to the lead branch.
- 110. Safe waste pipes must not connect directly with any part of the plumbing system.
- 111. 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.
- 112. The safe waste-pipe from a refrigerator must be trapped at the bottom of the line only, and cannot discharge upon the ground or floor. It must discharge over an ordinary portable pan, or over 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.
- 113. The branches on vertical lines must be made by Y fittings, and be carried up to the safe with as much pitch as possible.
- 114. Lead safes must be graded and neatly turned over bevel strips at their edges.
- 115. Where there is an offset on a refrigerator waste-pipe in the cellar, there must be cleanouts to control the horizontal part of the pipe.
- 116. In tenement houses the refrigerator waste-pipes must extend above the roof, and must not be larger than one and one-half inches, nor the branches smaller than one and one-quarter inches.
- 117. Refrigerator waste-pipes, except in tenement houses, and all safe waste-pipes must have brass flap-valves at their lower ends.

XII.

- 118. In lodging houses, factories, workshops and all public buildings the entire water-closet apartment and side walls to a height of six inches from the floor, except at the door, must be made waterproof with asphalt, cement, tile, metal or other waterproof material as approved by the Bureau of Buildings.
- 119. In lodging-houses the water-closet and urinal apartments must have a window opening to the outer air; if three stories or less in height they may have such window opening on a ventilating shaft not less than ten square feet in area.
- 120. In all buildings the outside partition of such apartment 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 made of glass. The interior partitions of such apartments must be dwarfed partitions.
- 121. The general water-closet accommodations for a lodging house cannot be placed in the cellar.
- 122. No water closet can be placed outside of a building.
- 123. The closets must be set open and free from all inclosing woodwork.
- 124. 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.
- 125. Every earthenware closet in all new work and in all alterations where it is not impossible to use it because of water pipes or other obstructions, must be set on a natural stone slab. Sand or artificial stone or tile will not be allowed.
- 126. All water closets must have earthenware flushing rim bowls. "Pipe-wash" bowls or hoppers will not be permitted.
- 127. Pan, valve, plunger, offset-washout and other water closets having an unventilated space, or whose walls are not thoroughly washed at each discharge, will not be permitted.
- 128. Long hoppers will not be permitted, except where there is an exposure to frost.
- 129. The connections of traps must be made to main soil, waste or vent pipe by means of lead caulked or screwed joints. Drip-trays must be enameled on both sides and secured in place.
- 130. In all sewer-connected occupied buildings there must be at least one water closet, and there must be additional closets so that there will never be more than 15 persons per closet.
- 131. In lodging-houses there must be one water-closet on each floor, and 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.
- 132. Water closets and urinals must never be connected directly with or flushed from the water-supply pipes.
- 133. Water-closets and urinals must be flushed from separate cisterns on each floor, the water from which is used for no other purpose; where flushometers are used they must be supplied from sep-

- arate tanks provided for that purpose, and in no case are connections to be made direct with the water service pipe.
- 131. The overflow of cisterns may discharge into the bowls of the closet, but in no case connect with any part of the drainage system.
- 135. Iron water-closet and urinal cisterns and automatic water-closet and urinal cisterns are prohibited.
- 136. The copper lining of water-closet and urinal cisterns must not be lighter than ten (10) ounce copper.
- 137. Water-closet flush-pipes must not be less than one and one-fourth inches and urinal flush-pipes one (1) inch in diameter, and if of lead must not weigh less than two and one-half pounds and two pounds per linear foot. Flush couplings must be of full size of the pipe.
- 138. Latrine's trough water closets and similar appliances may be used only on written permit from the Superintendent of Buildings, and must be set and arranged as may be required by the terms of the permit.
- 139. All urinals must be constructed of materials impervious to moisture and that will not corrode under the action of urine. The floor and wall of the urinal apartments must be lined with similar non-absorbent and non-corrosive material.
- 140. The platforms or treads of urinal stalls must never be connected independently to the plumbing system, nor can they be connected to any safe waste-pipe.
- 141. Iron trough water closets and trough urinals must be enameled or galvanized.
- 142. In lodging houses sinks must be entirely open, on iron legs or brackets, without any inclosing woodwork.
- 143. Wooden washtubs are prohibited. Cement or artificial stone tubs will not be permitted unless approved by the Bureau of Buildings.

XIII.

Water Supply for Fixtures.

- 144. All water closets and other plumbing fixtures must be provided with a sufficient supply of water for flushing to keep them in a proper and cleanly condition.
- 145. When the water pressure is not sufficient to supply freely and continuously all fixtures, a house supply-tank must be provided, of sufficient size to afford an ample supply of water to all fixtures at all times. Such tanks must be supplied from the pressure or by pumps, as may be necessary; when from the pressure, ball-cocks must be provided.
- 146. If water pressure is not sufficient to fill house-tank, power pumps must be provided for filling them in lodging houses, factories and workshops.
- 147. Tanks must be covered so as to exclude dust, and must be so located as to prevent water contamination by gas and odors from plumbing fixtures.
- 148. House supply-tanks must be of wood or iron, or of wood lined with tinned and planished copper.
- 149. House tanks must be supported on iron beams.
- 150. The overflow pipe should discharge upon the roof, where possible, and in such cases should be brought down to within six (6) inches of the roof, or it must be trapped and discharged over an open and water-supplied sink not in the same room, not over 3 1/2 feet above the floor. In no case shall the overflow be connected with any part of the plumbing system.
- 151. Emptying pipes for such tanks must be provided, and be discharged in the manner required for overflow pipes, and may be branched into overflow pipes.
- 152. No service pipes or supplying pipes should be run, and no tanks, flushing cisterns or water-supplied fixtures should be placed where they will be exposed to frost.
- 153. Where so placed they shall be properly packed and boxed in such a manner as to prevent freezing.

XIV.

Testing the Plumbing System.

- 154. The entire plumbing and drainage system within the building must be tested by the plumber, in the presence of a plumbing inspector, under a water or air test, as directed. All pipes must remain uncovered in every part until they have successfully passed the test. The plumber must securely close all openings as directed by the Inspector of Plumbing. The use of wooden plugs for this purpose is prohibited.
- 155. The water test will be applied by closing the lower end of the main house drain and filling the pipes to the highest opening above the roof with water. The water test shall include at one time the house drain and branches, all vertical and horizontal soil, waste and vent and leader lines and all branches therefrom to a point above the surface of the finished floor and beyond the finished face of walls and partitions. Deviation from the above rule will not be permitted unless upon written application to and approval by the Superintendent of Buildings. If the drain or any part of the system is to be tested separately, there must be a head of water at least six (6) feet above all parts of the work so tested, and special provision must be made for including all joints and connections in at least one test.
- 156. The air test will be applied with a force pump and mercury columns under ten pounds pressure, equal to twenty inches of mercury. The use of spring gauges is prohibited.
- 157. After the completion of the work, when the water has been turned on and the traps filled, the plumber must make a peppermint or smoke test in the presence of a Plumbing Inspector and as directed by him.
- 158. The material and labor for the tests must be furnished by the plumber. Where the peppermint test is used, two ounces of oil of peppermint must be provided for each line up to five stories and basement in height, and for each additional five stories or fraction thereof one additional ounce of peppermint must be provided for each line.

Samuel Gruenstein Owner.

Alfred E. Badt. Architect.

George Pellou Plumber.

 Dated *March 11th* 190*2*

These plans and specifications were referred to Inspector.....

.....District, on the.....day of....., 190.....

MAR 20 1903

Clerk.

2
TENEMENT HOUSE DEPARTMENT

OF
THE CITY OF NEW YORK, WWC/MEL.

44 E. 23d STREET,
BOROUGH OF MANHATTAN.

NEW YORK, 5/26/10 190

To the Superintendent of Buildings,
Borough of Manhattan.

DEAR SIR:

Plans and specifications
have been submitted to the Tenement House Department for
the alteration of one tenement house located at
93-95 Ave D
Borough of Manhattan, by
Architect Gross & Kleinberger Address Bible House
Owner D. Moskowitz, ; Address 60 Camden St
and have been MAY 26 1910 approved by the Tenement House
Department on 5/26/10 copy of the approved
plans is herewith forwarded to your department.

Yours respectfully,

1888 Act 10
By *[Signature]*
Tenement House Commissioner.
1st Deputy
CHIEF INSPECTOR
Plan No. 748 1910

ORIGINAL 348

TENEMENT HOUSE DEPARTMENT

OF

THE CITY OF NEW YORK

MANHATTAN OFFICE,
No. 44 EAST 23d STREET,
S. W. Cor. 4th Avenue.

BRONX OFFICE,
Nos. 2806-8 THIRD AVENUE
Near 148th Street.

BROOKLYN OFFICE,
No. 44 COURT STREET,
Cor. Joralemon Street.

Received

APR 27 1910

City of New York

PLAN No. SLIP ALT.

190

FILED

190

APPLICATION FOR SLIGHT ALTERATIONS AND REPAIRS.

APPLICATION is hereby made to the Tenement House Commissioner of The City of New York for the approval of the detailed statement of the specifications and plans herewith submitted for the alteration of the Tenement House herein described. THE APPLICANT AGREES TO COMPLY WITH ALL PROVISIONS OF LAW AND ORDINANCES IN THE ALTERATION OF SAID BUILDING, WHETHER SPECIFIED HEREIN OR NOT.

(Sign here)

Cross Kleiberger

Address

Bible House, Astor Pl.

NOTE.—The above signature to be that of the owner or of the person authorized by him to make application.

WARNING.—The approval of plans, procured by misrepresentation of facts or conditions, mis-statements in applications, or through improper action by any officer or employee of this Department, does not legalize an illegal construction, arrangement or condition.

INSTRUCTIONS.

VERY IMPORTANT THAT SAME BE CAREFULLY READ.

Four sets of Applications and three sets of Drawings must be filed.

NOTE.—One approved set of drawings and one approved copy of application must be kept at the premises and accessible to the Inspector, not for use as working drawings but solely for purposes of reference. This reference set of plans and application must be returned to the Department with all applications for amendment, so that the same may be recorded thereon, or new drawings showing such proposed changes must be filed.

All plans must be drawn to a uniform scale, not less than one-quarter inch to the foot, and be on linen tracing cloth or be cloth prints, and the proposed new work must be clearly distinguished from the old work by dotted lines or by other conventional methods.

After approval by the Tenement House Department, one set of plans and a certificate of approval will be at once forwarded to the Bureau of Buildings by the Department.

The reference set of drawings and application, above referred to, will be delivered to the person recorded as superintending the construction of the building, and the fourth copy of the application to the architect. The dimensions and boundaries of each lot must be clearly marked on plans, as must the clear measurements of all courts, yards, shafts, rooms, stairs and halls, the location of all fire-escapes, and the use to which each room and the several portions of the cellar are to be put. With each application, not personally signed by the owner, must be filed a written statement (see page 3), authorizing the person signing this application to make such application. Thereafter no person other than the owner whose signature appears in the papers, or the person authorized by him as above explained, will be recognized by the Department. A new owner or a new architect may be substituted during the progress of the work only after filing a new authorization on Form 103.

With each application shall also be filed a block plan, on sheet 8 1/2 x 13 1/2 in. (on linen tracing cloth or cloth print), giving dimensions and boundaries of each lot, distance of same from adjacent streets, the size of the building, with general dimensions, including dimensions of all courts, yards, areas, shafts and offsets from the same.

All amendments to plans and applications must be made on a separate blank provided for that purpose, and where changes affecting the sizes of lots, buildings, courts, rooms, or halls are made, separate drawings showing such changes must be filed, if required by the Department. Amendments must be typewritten. All changes made in drawings or applications, after the date of original filing, must be made in red ink, and each change or correction dated and initialed or signed by the person making the same. Corrected drawings will be required if changes made, in the opinion of the Department, make same necessary. If alterations to plumbing are proposed form 121 a must also be filed.

NOTE.—Where it is proposed to convert or alter to the purposes of a tenement house a building not erected for such purpose, the form of application used for the erection of a new tenement house must be filed in the Department and must be completely filled out.

Borough of Manhattan Date April 18 1910

- ✓ 1. No. of tenement houses to be altered one
- ✓ 2. Location U. W. cor. Ave. D. and 7th St. # 93-95 Ave. D.
- ✓ 3. Owner David Markovitz Address 49 Cannon St.
- ✓ 4. Architect Cross Kleiberger Address Bible House, Astor Pl.
- 5. Estimated cost of alterations or repairs \$125
- ✓ 6. Size of each lot? 36-6 front; 77-0 deep.
- ✓ 7. Size of each building? 36-6 front; 69-3 deep.
- 8. Material of building? Brick
- 9. Is the building that is to be altered on the front or rear of the lot? front
- 10. Is there any other building on the lot? None For what purpose will it be used? _____