



# MEPFS ENGINEER REVIEW

MECHANICAL. ELECTRICAL. PLUMBING. FIRE PROTECTION. STRUCTURAL  
Unit1 Mezzanine Floor, 160 LL Bldg., Edsa cor. Panay Ave., Quezon City

## FINAL PRE BOARD - PLUMBING CODE & PRACTICAL PROBLEM 1

NAME \_\_\_\_\_

### History

1. Date of Signing of Plumbing Law of the Philippines.  
a. June 18, 1956 b. June 18, 1957 c. June 17, 1955 d. **June 18, 1955**
2. Date of first amendments of National Plumbing Code of the Philippines.  
a. November 28, 1967 b. November 28, 1968 c. November 29, 1967 d. November 29, 1968
3. Date of signing by Pres Joseph Estrada of Revised Plumbing Code of 1999?  
a. December 20, 1999 b. December 22, 1999 c. December 21, 1999 d. December 23, 1999
4. Basic principles listed in Revised Plumbing Code of 1999 was base on what Section of RA 1378?  
a. Section 4 b. Section 3 c. **Section 5** d. None of the Above
5. The Following are author of Plumbing Engineering Bill in Senate And Congress Except:  
a. Sen Antonio Trillanes b. Sen. Chiz Escudero c. Cong Karlo Nograles d. **Cong Carlos Padilla.**

### Code of Ethics

5. To attempt to \_\_\_\_\_ falsely or maliciously, directly or indirectly, the professional reputation, prospects, or business of another Master Plumber.  
a. bolster b. defame c. **injure** d. None of the above

### Basic Principles

6. All premises intended for human use or habitation shall be provided with a supply of pure and wholesome water, neither connected to unsafe water supply nor subject to backflow or \_\_\_\_\_.  
a. reverse flow b. **back-siphonage** c. counterflow d. None of the Above
7. Plumbing shall be designed and adjusted to use the \_\_\_\_\_ quantity of water consistent with proper performance and cleaning.  
a. Maximum b. **Minimum** c. satisfactory d. None of the Above.
- 8.. Devices for heating and storing water shall be so designed and installed as to prevent dangers from \_\_\_\_\_ through overheating.  
a. **Explosion** b. burst c. rupture d. None of the above
- 9.. Each fixture directly connected to the drainage system shall be equipped with a \_\_\_\_\_-sealed trap.  
a. air b. gas c. **water** d. None of the Above



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10. What is the minimum airgap for water distribution for lavatories with effective opening not greater than 13 mm diameter and affected by side walls?  
a. 2" b. 1 1/2" c. 2" d. None of the above

### **CROSS CONNECTION CONTROL**

11. Pressure Vacuum Breaker Backflow Prevention Assembly (PVB)- consists of a loaded \_\_\_\_ inlet valve, an internally load check valve, two properly located test cocks and two isolation gate valves.  
a. water b. vacuum c. air d. None of the above
12. The minimum distance required between a Septic Tank and Water supply wells.  
a. 1.5m b. 15.2 m c. 3 m d. 2.4 e. 3.7 m
13. Where leaching beds are permitted in lieu of trenches, the area of each such bed shall at least \_\_\_\_% greater than the tubular requirements for trenches.  
a. 30 b. 40 c. 50 d. None of the above
14. No excavation for a leach line or leach bed shall extend within \_\_\_\_m of the water table nor to a depth where sewage may contaminate the underground water stratum that is usable for domestic purposes  
a. 2 b. 1.5 c. 1 d. None of the Above
15. For soil having questionable absorption capacity a \_\_\_\_ test is required.  
a. Water b. air c. Percolation d. None of the Above
16. Minimum capacity of digestive chamber of a septic tank as per RPCP.  
a. 250 gallons b. 500 gallons c. 750 gallons d. 1,000 gallons
17. Minimum depth of a septic tank as per Fajardo book.  
a. 4 ft. b. 2 ft c. 6 ft d. 3 ft
18. Maximum depth of a septic tank as per RPCP.  
a. 4 ft. b. 2 ft c. 6 ft d. 3 ft
19. Minimum width of a septic tank as per RPCP.  
a. 4 ft. b. 2 ft c. 6 ft d. 3 ft
20. If septic tank has over 6 cu mts capacity, the secondary compartment must at least \_\_\_\_ft.  
a. 6 b. 5 c. 6" d. 3
21. Minimum dimension of Septic tank manhole.  
a. 20"x20" b. 24"x24" c. 12"x12" d. None of the Above



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22. When the length of first compartment exceed \_\_\_\_\_ft. additional manhole must be provided over the wall of baffles.  
a.9 b. 8 **c. 12** d. 10
23. What is the difference in invert elevation between inlet and out pipe of a Septic Tank?  
a. 1" **b.2"** c. 1" b.2" c. 3" d. 4"
24. Structural Design capacity of Septic tank cover as per RPCP.  
**a. 500 psi** b. 600 psi c. 400 psi d. None of the Above
25. The minimum wall thickness of any steel tank shall be No.\_\_\_\_\_ U.S. gauge and each such tank shall be protected from corrosion, both externally and internally, by an approved bituminous coating or by other acceptable means.  
a. 10 b. 11 **c. 12** d.15
26. What type of Cast Iron Pipe generally used for underground installation and considered extra duty pipe?  
a. **XV** b.SV c. TV d. None of the Above
27. Which of the following not part Cast Iron varieties?  
a.Standard Pipe b. Single Hub Pipe c. Double Hub Pipe d. Hubless Pipe **e. None**
28. Limit of the used of Cast iron Pipe.  
a.10 storeys b. 15 storey **c. 25 storeys** d. 30 storeys
29. Acid resistance Cast Iron is made of what metal?  
a.tin b. silicon c. cast iron d. b & c
30. Composition of Asbestos Pipe.  
a.Solvent cement b. Cement c.Asbestos Fiber **d. B & C**
31. Where can asbestos pipe can be used?  
a.Water line b. Drainage line c. Ventilation d. downspout **e. all of the above**
32. In what type of structure Asbestor Pipe best suited?  
a.Steel b. Wooden **c. Concrete** d. Composite
33. The cheapest among sewer type pipes?  
a.Cast Iron Pipe b. Vitrified Clay Pipe c. Screwed Pipe **d. Bituminous Fiber Sewer Pipe**
34. Material used in Galvanized Steel pipe.  
a. Medium Steel b. Hard Steel **c. Mild Steel** d. Hard Steel
35. Galvanized Steel pipe deteriorate faster when used as \_\_\_\_\_supply line.  
a.Cold Water **b. Hot Water** c. a & b. d. None of the Above
36. Galvanized Steel pipe easily corroded by \_\_\_\_\_and acid water.  
a.carbon b. iron **c. alkaline** d. None of the Above



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37. Galvanized Wrought Iron is more resistant to \_\_\_\_waste than the steel pipe.  
a.Chemical b. Liquid c. acid d. None of the Above
38. Most expensive type of pipe.  
a.PVC b. Galvanized Steel Pipe c. Brass d, Copper
39. Brass is compose of \_\_%zinc and \_\_\_\_%copper.  
a.16,86 b. 15,86 b. 15,85 d. None of the Above
40. Upon completion of a section or of the entire hot and cold water supply systems, it shall be tested and proved tight under a water pressure not less than the working pressure under which it is to be used plus \_\_\_\_%.  
a. 30 b. 50 c. 40 d. 60
41. All shower receptors shall be tested for \_\_\_\_\_by filling with water to the level of the rough threshold.The test plug shall be so placed that both upper and under sides of the sub-pan shall be subjected to the test at the point where it is clamped to the drain.  
a. water-tightness b. air-tightness c. a & b d. None of the above

**HANGERS AND SUPPORT**

Vertical Support

42. Vertical Cast Iron Pipe shall be supported in every\_\_\_\_or closer  
a. 3 storey b. 2 storey c. storey d, None of the above
43. Copper Tubing - shall be supported at each storey or at maximum intervals of \_\_\_\_ meters on center.  
a. 5 b. 6 c. 3 d. 4
44. Plastic Pipe shall be supported at every \_\_\_\_\_meter interval  
a. 2 b. 1 c. 3 d. 4
45. Lead Pipe shall be supported at an interval not exceeding\_\_\_\_mts at the center with rigid Vertical back up.  
a. 2.2 b. 1.2 c. 3.2 d. 4.2

**Horizontal Support**

46. Cast Iron pipe in horizontal position must be supported not more than \_\_\_\_ mts interval.  
a. 2.2 b. 1.5 c. 3 d. 4
47. For Cast iron pipe exceed 1.5 mts length, it may be supported at not more than \_\_\_\_\_meters interval.  
a. 2.2 b. 1.5 c. 3 d. 4
48. Horizontal support for within Hub or joint of Cast iron pipe must be place at\_\_\_\_mts to maintain alignment and sagging.  
a. 0.50 b. 0.45 c. 0.40 d. 0.55



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49. Horizontal support for hubless or compression gasket joints must be in every \_\_\_\_\_.  
a. middle b. joint c. near joint d. none of the above
50. Horizontal support for Copper tubing shall be supported at approximately \_\_\_\_\_mts interval for piping 38mm diameter & smaller and \_\_\_\_\_mts for piping larger than 51mm diameter..  
a. 1.8, 3 b. 1.9, 3 c. 1.8, 4 d. 1.7, 3
51. Horizontal support for Plastic Pipe shall be supported stiff metal or wood backing for plastic pipe \_\_\_\_ mm and smaller diameter.  
a. 25 b. 38 c. 50 d. 75
52. Copper tube shall not be used for piping carrying chemical or industrial .  
a. False b. True c. Maybe d. None of the Above
53. Type of Copper Pipe that can be use in water piping when installed above the ground or atop the building or underground outside the structures with outside protective coating.  
a. Type K b. Type M c. Type L d. Type DWV
54. Width of Color Code marking for copper tubing  
a. 6.3 mm b. 6.4 mm c. 6.5 mm d. 6.0 mm
55. Mark color for Type DWV Copper tubing.  
a. red b. blue c. yellow d. None of the above
56. Lead use for For flashings or vent terminals- not less than \_\_\_\_\_ kg. per sq. meter and 1.2 mm thick.  
a. 14.50 b. 14.63 c. 14.53 d. None of the above
57. Caulking Ferrule materials shall be of the best quality  
a. red cast brass b. bronze c. copper d. All of the Above

**PHILIPPINE NATIONAL STANDARD FOR DRINKING WATER OF 2007**

58. What is the mercury limits(mg/L) in potable water according to PNSDW of 2007?  
a. 0.01 b. 0.02 c. 0.07 d. 0.001
59. What is the benzene limits(mg/L) in potable water according to PNSDW of 2007?  
a. 0.01 b. 0.02 c. 0.07 d. 0.001
60. What is the lead limits(mg/L) in potable water according to PNSDW of 2007?  
a. 0.01 b. 0.02 c. 0.07 d. 0.001
61. What is the cyanide limits(mg/L) in potable water according to PNSDW of 2007?  
a. 0.01 b. 0.02 c. 0.07 d. 0.001
62. What is the nickel limits(mg/L) in potable water according to PNSDW of 2007?  
a. 0.01 b. 0.02 c. 0.07 d. 0.001
63. Minimum volume of water sample for testing as per PNSDW of 2007  
a. 120 ml b. 200 ml c. 100 ml d. 80 ml



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64. Minimum number of hours sample of water be process as per PNSDW of 2007.  
a. 2 hrs b. 3 hrs **c. 4 hrs** d. None of the Above
65. Maximum number of hours sample of water be process as per PNSDW of 2007.  
b. 12 hrs b. 13 hrs **c. 24 hrs** d. None of the Above
66. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Microbiological Examination for level I(90-150 population served).  
a. 2 months b. **3 months** c. 6 months d. Monthly
67. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Microbiological Examination for level II (600 population served).  
**a. 2 months** b. 3 months c. 6 months d. Monthly
68. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Microbiological Examination for level III(less 5,000 population served).  
a. 2 months b. 3 months c. 6 months **d. Monthly**
69. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Microbiological Examination for level III(5,000 – 100,000 population served).  
**a.1 sample per 5,000 population monthly** b. 1 sample per 5,000 population bi-monthly  
a.2 sample per 5,000 population monthly b. 2 sample per 5,000 population bi-monthly
70. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Microbiological Examination for level III(more than 100,000 population served).  
a. 30 samples and additional one (1) sample per 10,000 population monthly  
b. 25 samples and additional one (1) sample per 10,000 population monthly  
c. 10 samples and additional one (1) sample per 10,000 population monthly  
**d. 20 samples and additional one (1) sample per 10,000 population monthly**
71. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Microbiological Examination for Water refilling station  
a. 2 months b. 3 months c. 6 months **d. Monthly**
72. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Microbiological Examination for Water vending machine  
b. 2 months b. 3 months c. 6 months **d. Monthly**
73. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Physical and Chemical Analysis for Level I  
a. **Once a year** b. Twice a year c. Every four months d. Monthly
74. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Physical and Chemical Analysis for Level II  
b. Once a year b. **Twice a year** c. Every four months d. Monthly



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75. Minimum Frequency of Sampling for Drinking-Water Supply Systems for Physical and Chemical Analysis for Water refilling station or vending machine.  
c. Once a year b. **Twice a year** c. Every four months d. Monthly
76. Volume of samples for Physical and Chemical Analysis of drinking-Water supply system.  
a. 1 liters b. 2 liters **c. 3 liters** d. 4 liters

**DENR ADMINISTRATIVE ORDER NO. 34 Series of 1990**

77. Sampling time of potable water.  
a. **9am -4pm** b. 8am – 3pm c. 10am – 5pm d. None of the Above
78. Approved method of testing arsenic content for potable water.  
a. **Silver Diethyldithiocarbomate Method (Colorimetric)**  
b. Dillution Technique  
c. Colometric Method  
d. Atomic Absorption Spectrophometry
79. Approved method of testing BOD for potable water.  
a. Silver Diethyldithiocarbomate Method (Colorimetric)  
b. **Dillution Technique**  
c. Colometric Method  
d. Atomic Absorption Spectrophometry
80. Approved method of testing boron content for potable water.  
a. Silver Diethyldithiocarbomate Method (Colorimetric)  
b. Dillution Technique  
c. **Colometric Method**  
d. Atomic Absorption Spectrophometry
81. Approved method of testing lead content for potable water.  
a. Silver Diethyldithiocarbomate Method (Colorimetric)  
b. Dillution Technique  
c. Colometric Method  
d. **Atomic Absorption Spectrophometry**
82. Approved method of testing TSS content for potable water.  
a. Silver Diethyldithiocarbomate Method (Colorimetric)  
b. Dillution Technique  
c. Colometric Method  
d. **Gravametric Method**



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**RA 1378**

83. Minimum number of Years Experience for None Architects, CEME & SE  
a. 3 b. 2 **c. 5** d. 4

84. Minimum educational qualification for taking Master Plumber exam  
a.. **Is at least a high school graduate**; b. .. Is at least a college graduate

85. How many sets of construction documents must be provided during the application for a plumbing permit?  
a. 1 b. 2 **c. 6** d. 4

86. Exception to 2% slope for Drainage line installation

- a. excessive depth of the proposed drainage line
- b. structural and/or geological features of the terrain;
- c. existing adverse in arrangements of building or structure any such pipe or piping 102 mm or larger in diameter may have a slope of 10 mm/m or 1% provided it is first approved by the Administrative Authority.
- d. All of the Above**

87. Changes in direction of drainage piping shall be made by the use of approved pipe fittings and shall be of the angles presented by

- a. 22 1/2° bend,
- b. 45° bend
- c. 60° bend or other approved fittings of longer sweeps.
- d. All of the Above**

88. In accordance to Table 4-1 of Revised Plumbing code how many patients in ward section of an hospital can one water closet served.

- a. 10 b. 9 **c. 8** d. 7

89. WATER TASTE. In testing successive sections at least the upper 3 meters height of the preceding section previously tested shall be tested again so that no joint or pipe in the building (except the uppermost 3 meter of the system) shall have been submitted to a test of not less than \_\_\_ meters head of water. The water shall be kept in the pilesystem or in the portion under test, for at least \_\_\_\_\_ minutes before inspection starts. The system shall be tight at all joints.



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a. 3, 14 b. 3, 15 c, 3, 16 d. None of the above.

90. No water piping supplied by any \_\_\_\_\_ water supply system shall be interconnected to an approved city water supply system or any other source of supply without the approval of the Administrative Authority, Health Department, or other agencies.

a. individual b. private c. None of the above

91. Direct connections between potable water pipings and sewer-connected wastes shall not exist under any condition with or without backflow protection. Where potable water is discharged to the drainage system, it shall be by means of an approved airgap of two (2) pipe diameters from the supply outlet and the top surface of the drainage inlet, but in no case shall the gap be less than \_\_\_\_ mm. Connection may be made to the inlet side of a trap provided that an approved atmospheric vacuum breaker is installed no less than \_\_\_\_\_mm above the flood level rim of such trapped fixture, so that at no time will any such device be subjected to any back-pressure.

a. 20, 150 b. 25, 152 c. 30, 151 d. None of the above

92. Elevated or gravity storage tank for potable water supply shall be tightly covered to keep out unauthorized persons, dirt and vermin. The louvers of gravity tanks shall be vented with a return-bend vent pipe having an area not less than the area of the down-feed riser pipe, and the vent shall be screened with a fine corrosion-resistant screen with openings not less than 14 not more than \_\_\_\_\_.

a. 20 mesh per 25 mm. b. 18 mesh per 25 mm. c. 17 mesh per 25 mm. d. 21 mesh per 25 mm.

93. Unions - unions shall be installed in the water supply piping within \_\_\_\_\_ meter away from regulating equipment, water heater, conditioning tank and similar equipment which require removal for servicing or replacement.

a. 0.2 b. 0.4 c. 0.5 d. 0.30

94. No building water service pipe shall be less than \_\_\_\_\_ in diameter.

a. 19mm b. 20 mm c. 18mm d. None of the above



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95. Which of the following elements is a substantial part of the construction documents required in order to obtain plumbing permit?
- Floor plans
  - riser diagrams
  - both a & b**
  - neither a nor b
96. Construction documents presented with a permit application may be required to provide information on \_\_\_\_\_.
- The direction of flow
  - The quantity of flow at a specific time of the day
  - The individual plumber who will install the plumbing system**
  - None of the above
97. Construction documents presented with a permit application may be required to provide information on \_\_\_\_\_.
- The grade of the horizontal piping
  - The elevations relevant to the proposed building
  - Both a & b**
  - None of the above
98. Construction documents presented with a permit application may be required to provide information on \_\_\_\_\_.
- The drainage fixture unit load on the system
  - The supply fixture unit load on the system
  - Both a & b**
  - None of the above
99. A site plan will normally show the location of \_\_\_\_\_.
- The proposed water service
  - The proposed sewer connection
  - Both a & b**
  - None of the above
100. Vent stack termination should be shown on a site plan with respect to \_\_\_\_\_.
- The number of plumbing fixtures installed
  - The type of plumbing fixtures installed
  - Building ventilation openings**
  - None of the above
101. Zero gauge pressure is also known as atmospheric pressure and is
- 14.7 psi**
  - 29 inch mercury
  - both a & b
  - None of the above



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102. The recovery rate of water heater is also referred to us:
- a. gpm
  - b. **gph**
  - c. gpd
  - d. None of the above
103. A solar water heater panel is also known as a:
- a. roof heater
  - b. circulator
  - c. **collector**
  - d. pump collector
104. Regardless of the type of heater all energy source must be turn off before attempting to;
- a. **drain a water heater**
  - b. check the temperature of the water
  - c. do pressure check of the water system
  - d. None of the above
  - e.
105. A device with at least a 750 gallon capacity that is meant to serve one or more fixtures in preventing grease from entering the building drain and which is remotely located is called a:
- a. Grease trap
  - b. **Grease Interceptor**
  - c. Grease diverter
106. A house sewer is:
- a. located outside the house
  - b. both a & b
  - c. **inside the house**
  - d. None of the above
107. Sizing of gas system begins with:
- a. the first piece of pipe from delivery point
  - b. **the farthest appliance from the delivery point**
  - c. the middle of the system
  - d. none of the above
108. The use of a circuit vent and a loop vent eliminates the need for:
- a. a vent stack
  - b. **p-traps**
  - c. a stack vent
  - d. **multiple individual vents**
109. The base of a waste stack connects with the:
- a. stack vent
  - b. **building drain**
  - c. building sewer
  - d. none of the above



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110. A hanger used to support a vertical pipe that penetrates a floor is called a:

- a. vertical pipe supporter
- b. riser clamp
- c. clevis hanger
- d. split ring hanger

111. A clevis hanger uses threaded rod along with:

- a. wood screws c. hex nuts and possibly washer
- b. anchor bolts d. a threaded thimble

112. The most common distance between the hot and cold roughing in on a sink is:

- a. 4" b. 6" c. 8" d. 3"

113. To minimize water hammer:

- a. a quick closing valve is installed c. a shock absorber is installed
- b. all water hammer arrestors are removed d. None of the above

114. To minimize water retention in Whirlpool bathtubs pump and circulating piping must be:

- a. have a p-trap b. self draining c. both a & b d. None of the above

115. What is the minimum number of pump required in in a sump pit?

- a. 1 b. 2 c. 3 d. None of the above

116. What is the minimum clearance from invert elevation of inlet pipe to a sump pit from the starting level of pumping operation of sump pit?

- a. 4" b. 6" c. 2" d. None of the above

117. Drainage piping serving fixtures located below the crown level of the main sewer shall discharge into an approved water tight

A. cesspool B. septic tank C. leaching tank D. sump

118. In the water test of the entire plumbing system all openings should be tightly closed except at

A. producing cleanouts B. highest opening  
C. stack vent D. bleeders



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119. Where practical, all pipes from fixtures shall be run in what direction with respect to the nearest wall or building line?

- A.perpendicular B.across C.offset **D.parallel**

120. What installation standard is followed in joining plastic pipe and fittings by solvent cement?

- A.ANSI B.ASHRAE **C.IAPMO** D.ISO

121. Which of the following is the primary basics for sizing vertical rainwater piping in the Revised National Plumbing Code?

- A.roof area B.wind direction C.slope of roof **D.intensity of rainfall**



Symbols/Abbreviations	Meaning	Illustration
	125. _____	
	126. _____	
	127. _____	
	128. _____	
	129. _____	
	130. _____	

- 122.
- 123.
- 124.
- 125.
- 126.
- 127.
- 128.
- 129.
- 130.





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- 136.
- 137.
- 138.
- 139.
- 140.
- 141.
- 142.
- 143.

- 144.
- 145.
- 146.
- 147.
- 148.



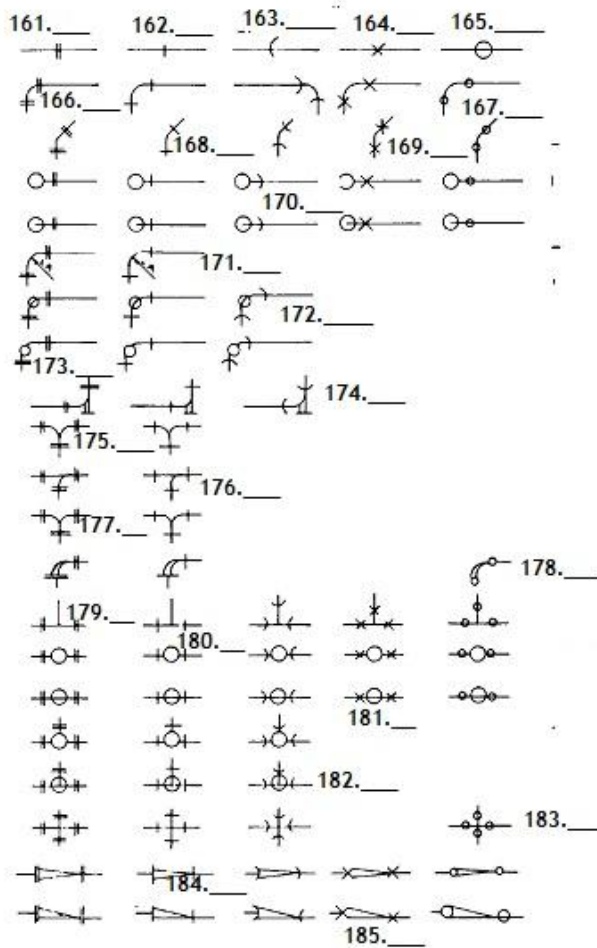
- 149.**
- 150.**
- 151.**
- 152.**
- 153.**
- 154.**
- 155.**

- 156.**
- 157.**
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- 159.**
- 160.**



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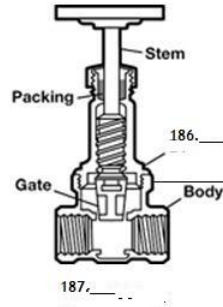


- 161.
- 162.
- 163.
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- 172.
- 173.

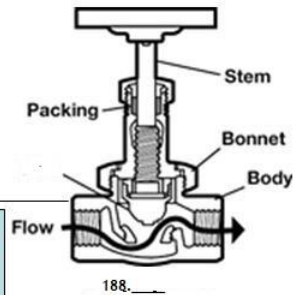
- 174.
- 175.
- 176.
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- 182.
- 183.
- 184.
- 185.



**FINAL PRE BOARD - PLUMBING CODE & PRACTICAL PROBLEM 1**

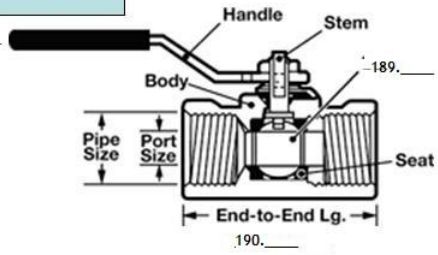


This type valve, if old can have a problem. The gate may break off from the stem especially if closed or opened too hard (far).



This type valve if old may not shut off depending on the condition of the disc and seat but is better than the gate valve

This type valve has very few problems and is the recommended upgrade for the above valves. Use full port valves.



- 186.
- 187.
- 188.
- 189.
- 190.



**MEPFS ENGINEER REVIEW**  
 MECHANICAL. ELECTRICAL. PLUMBING. FIRE PROTECTION. STRUCTURAL  
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**FINAL PRE BOARD - PLUMBING CODE & PRACTICAL PROBLEM 1**

SYMBOLS FOR PLUMBING, PIPING AND VALVES

SYMBOLS AND LEGENDS

PIPES		SERVICES	
SS	SOIL STACK	SW	COLD WATER
WS	WASTE STACK	SCW	SOFT COLD WATER
191. <u>    </u>	VENT STACK	PW	POTABLE WATER
V	VENT	HW	HOT WATER
SV	STACK VENT	HWR	HOT WATER RETURN
RW	RAIN WATER	TS	TANK SUPPLY
192. <u>    </u>	RAIN WATER STACK	WTR	WATER
		DR	DRAINAGE
		FF	FIREFIGHTING
		G	GAS
		A	COMPRESSED AIR
		V	VACUUM
		193. <u>    </u>	FUEL OIL SUPPLY

PIPE MATERIAL	
194. <u>    </u>	CAST IRON PIPE
GS	GALVANIZED STEEL PIPE (SEAMLESS & WELDED)
BS	BLACK STEEL PIPE (SEAMLESS)
PVC	POLYVINYL CHLORIDE PIPE
195. <u>    </u>	CHLORINATED POLYVINYL CHLORIDE PIPE
	UNPLASTICIZED POLYVINYL CHLORIDE PIPE
PP	POLYPROPYLENE PIPE
	POLYPROPYLENE RANDOM PIPE (WATER)
196. <u>    </u>	CROSS LINKED POLYETHYLENE PIPE
PE-X	PE-X, ALUMINUM, PE-X (TRIPPLE LAYER) PIPE
PE-X / AL / PE-X	COPPER PIPE
CU	POLYETHYLENE PIPE
197. <u>    </u>	HIGH DENSITY POLYETHYLENE PIPE

- 191.
- 192.
- 193.
- 194.
- 195.
- 196.
- 197.



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## FINAL PRE BOARD - PLUMBING CODE & PRACTICAL PROBLEM 1

PLUMBING FIXTURES	
TE	BIDET
LAV	200
S	SINK
SH	SHOWER
KS	KITCHEN SINK
BT	BATHTUB
DF	DRINKING FOUNTAIN
HB	HOSE BIBB
FT	FLUSH TANK
FV	FLUSH VALVE

MISCELLANEOUS	
CO	CLEANOUT
CCO	CEILING CLEANOUT
FCO	FLOOR CLEANOUT
J.B	JUNCTION BOX
RVC	ROOF VENT CAP
MH	MANHOLE
FHC	198.
WS	WATER SUPPLY
WH	WATER HEATER

DRAINS	
FDH	FLOOR DRAIN HORIZONTAL OUTLET
FDO	FLOOR DRAIN VERTICAL OUTLET
FD	FLOOR DRAIN
RD	ROOF DRAIN
GD	GARAGE DRAIN
AD	AREA DRAIN

SERVICE LINE	
	SOIL, WASTE OR LEADER (ABOVE GRADE)
	SOIL, WASTE OR LEADER (BELOW GRADE)
	199.
SV	ACID WASTE
AW	ACID WASTE
AV	ACID VENT
S	STORM DRAIN
	COLD WATER
SW	SOFT COLD WATER
ICW	INDUSTRIALIZED COLD WATER
DWS	CHILLED DRINKING WATER SUPPLY
DWR	CHILLED DRINKING WATER RETURN
	HOT WATER

198.

199.

200.

*"Intellect is not found in the answer, but in the question. Those who can question things themselves are those who will be able to find answers"*



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## **FINAL PRE BOARD - PLUMBING CODE & PRACTICAL PROBLEM 1**