

Gastite Quiz Part 2

Instructions

Fees: 1hr \$15 or 4 hrs. \$40 or 12 hrs. \$100

1. Print these pages and [Click Here](#) for the **necessary** Gastite [reference materials](#).
2. Answer the **Simple questions** that closely follow the reference materials in a **consecutive** order.
3. Circle the correct answers and transfer the answers to [the answer sheets](#) (see last 3 pages).
4. After answering the simple questions you will become familiar with the new code changes.
5. Page down to the last page for the [verification form](#), answer sheets and mailing instructions.

1 hour for: (\$15)

1. Beginner Electrician (1 hour)
2. Commercial Building Inspector (1 hour)
3. Commercial Electrical Inspector (1 hour)
4. Industrial Journeyman Electrician (1 hour)
5. Residential Journeyman Electrician (1 hour)
6. Residential Master Electrician (1 hour)
7. Journeyman Electrician (1 hour)
8. Master Electrician (1 hour)
9. UDC-Electrical Inspector (1 hour)

4 hour for: (\$40)

10. Manufactured Home Installer (4 hour)
11. Dwelling Contractor Qualifier (4 hour)
12. UDC-HVAC Inspector (4 hour)
13. UDC Construction Inspector (4 hour)

12 hour for: (\$100)

14. Boiler-Pressure Vessel Inspector (12 hour)

Questions: call Amy at 920-727-9200 or 920-740-4119 or 920-740-6723 or email aklinka@hotmail.com

Start at page 61 of the [reference materials](#).

4.6 Appliance

1. The Appliance Stub-Out is mounted to a stud face (Fig. 4-53) and provides a fixed point to which a Gastite®/FlashShield mechanical fitting may be attached. The design of this stub-out ensures that the flexible tubing is routed away from any points of constraint that may subject the tubing to potential _____ threats.
 - a. kinking
 - b. bending
 - c. puncture
 - d. none of the above
2. For use with movable appliances, Gastite®/FlashShield must be rigidly terminated before the appliance connection. This fixed connection point allows for the attachment of _____ to moveable appliances such as dryers and ranges
 - a. flexible appliance connectors
 - b. drip legs
 - c. shut off valves
 - d. all of the above
3. The _____ Stub provides a fixed point for the Gastite/FlashShield mechanical fitting and a stable platform for service meter connections.
 - a. angle
 - b. curved
 - c. straight
 - d. all of the above
4. Gastite®/FlashShield™ CSST may be connected directly to non-movable appliances such as water heaters, furnaces, boilers and island cook-tops (Figures 4-57) without the installation of a _____.
 - a. termination outlet
 - b. rigid appliance connector

- c. drip leg
 - d. shut-off valve
5. When appliances such as water heaters, furnaces or fireplaces have metallic vents which extend beyond or protrude through the roof physical contact between the Gastite® CSST and the appliance cabinet or vent is _____.
- a. allowed
 - b. required
 - c. prohibited
 - d. none of the above
6. Gastite recommends that all continuous metallic systems be _____.
- a. earthed
 - b. bonded
 - c. grounded
 - d. both b & c
7. Barbecue Grills – Movable grills shall be connected using an approved outdoor appliance connector which shall be attached to the CSST system either at a _____.
- a. termination fitting
 - b. quick disconnect device
 - c. appliance connector
 - d. both a & b

4.6.4 Special Applications

8. Roof Mounted Equipment (Fig. 4-60) – Gastite®/FlashShield Flexible Gas Piping can be used in an outdoor rooftop application. When used in this application Gastite® is to be supported ____ the surface of the roofing material.
- a. at
 - b. on
 - c. against
 - d. off
9. When Gastite®/FlashShield™ Flexible Gas Piping is installed in an outdoor rooftop application the following requirements must be met:
- a. Support materials will be selected to provide an adequate anchoring point that addresses the lightweight flexible nature of Gastite/FlashShield. This can be accomplished through either the weight of the support or adhering the support to the roof materials. The support materials must also be selected to be non-damaging to the roofing material. (Check with roof material manufacturer for approved adhering methods and non-damaging materials/installations.)
 - b. It is also important to select the appropriate metal pipe clamps or straps to loosely affix the tubing to the support.
 - c. both a & b
 - d. none of the above
10. When Gastite®/FlashShield Flexible Gas Piping is installed in an outdoor rooftop application the following requirements must be met: The supports shall lift the tubing at least ____" from the surface of the roof, higher as required by code or local conditions.
- a. 1
 - b. 2
 - c. 3
 - d. 4
11. Roof-top support spacing maximum support spacing for 1" Gastite would be _____'?
- a. 6
 - b. 8
 - c. 31

- d. 47
12. Roof-top support spacing maximum support spacing for 1 1/2" Gastite would be _____'?
- a. 6
 - b. 8
 - c. 31
 - d. 47
13. Moveable gas appliances on concrete pads or blocks, such as heat pumps, air conditioners, pool heaters and NGV refueling systems, shall be connected to the Gastite®/FlashShield™ CSST system at a termination fitting using either an _____.
- a. rigid pipe
 - b. approved outdoor appliance connector
 - c. terminal application
 - d. both a & b
14. Gas Packs and Other Non-Moveable Equipment (Fig. 4-66) – Can be connected to the Gastite/FlashShield CSST system either through a _____ connected to the appliance shut-off valve.
- a. terminating fitting
 - b. rigid pipe
 - c. directly with Gastite/FlashShield CSST
 - d. all of the above
15. Permanently mounted lights located on decks shall be connected to the Gastite®/FlashShield CSST system in the same fashion as permanently mounted grills as shown in the figure and in accordance with the manufacturer's instructions.
- a. true
 - b. false
16. Yard Mounted Lights – Shall not be connected to the Gastite®/FlashShield™ CSST systems.
- a. true
 - b. false
17. Infrared heaters that are mounted to allow movement of the heater must use an appropriate appliance/flex connector between the heater and the properly terminated Gastite®/FlashShield™. _____ fall into this category.
- a. low density heaters
 - b. tube heaters
 - c. heaters hung from chains
 - d. all of the above
18. Flexible Gas Tubing may be used to deliver gas directly to the control valve of a gas fireplace.
- a. true
 - b. false
19. Control valve of a gas fireplace shall be rigidly mounted.
- a. true
 - b. false
20. Brass fittings should not be used inside the firebox for _____ or in any firebox where wood logs will be burned due to the potential for physical harm to the tubing.
- a. log lighters
 - b. gas wands
 - c. both a & b
 - d. none of the above
21. Heaters and installations must comply with _____, "Standard for gas fired infrared heaters."
- a. ASSE Z83.6
 - b. ANSI Z83.6
 - c. both a & b

- d. none of the above
22. Gastite®/FlashShield™ Mechanical Fittings are approved to be concealed and can be connected directly to a valve controlling gas flow to a fireplace appliance. The Gastite/FlashShield CSST and valve connection can be installed _____.
- a. behind the wall
 - b. beneath the floor or hearth
 - c. behind the brickwork of the fireplace
 - d. all of the above
23. Where it is necessary to install Gastite/FlashShield through masonry materials in fireplace construction, the _____ jacket shall remain intact and the tubing should be routed through sleeving that is appropriate for the application.
- a. metal
 - b. copper
 - c. plastic
 - d. all of the above
24. Sleeving is required through ceramic liners in decorative fireplaces and heat generating fireplaces.
- a. true
 - b. false
25. Gastite/FlashShield may not be run above the flue within a masonry chimney.
- a. true
 - b. false
26. Where it is necessary to install Gastite/FlashShield through sheet metal enclosures (such as fireplaces) the tubing should be _____ to prevent physical contact with the enclosure.
- a. routed
 - b. supported
 - c. both a & b
 - d. none of the above
27. If direct contact cannot be avoided a _____ grommet may be used to prevent physical contact with the enclosure.
- a. metal
 - b. rubber
 - c. flexible
 - d. all of the above
28. In certain configurations corrugated tubing or flexible appliance connectors feeding a fireplace or gas log set can whistle due to gas flow velocity. Acoustics can usually be avoided by restricting Gastite/FlashShield CSST sizes to the maximum capacity as shown in Table 4-6. A fireplace drawing up to 80,000 BTUH should use _____ tubing.
- a. ½
 - b. ¾
 - c. 1
 - d. none of the above

4.7 Manifold

29. Manifolds must be rigidly installed. This can be achieved _____.
- a. through the use of a mounted manifold bracket
 - b. by rigidly piping into a movable gas-piping component
 - c. both a & b
 - d. none of the above
30. A manifold assembly a regulator can be concealed.
- a. true

b. false

31. The Gastite/FlashShield CSST Capacity Tables include losses for ____90° bends & ____end fittings.
- a. 2, 2
 - b. 4, 1
 - c. 4, 2
 - d. none of the above

32. The installation of manifold assemblies using a pounds-to-inches regulator must be in accordance with all local codes, and the following guidelines:

- a. A manifold assembly directly integrating a pounds-to-inches regulator shall be installed in an accessible location so that the regulator can be inspected, maintained and serviced if repair or replacement is required.
- b. For manifold systems that use a pounds-to-inches regulator installed behind an access panel, all tubing penetrations in the cabinet should be sealed, caulked or grommited. The cabinet must be ventilated through the panel/door and not into a wall space.
- c. Open face cabinets (Fig. 4-78), which open on to the normal room environment, may be utilized without the need for ventilation or penetration sealing requirements.
- d. all of the above

4.8 Pressure Regulator

33. A Gastite®/FlashShield™ CSST system using line gas pressures above the maximum appliance input rating shall use a regulator to lower the downstream appliance supply pressure to ____ PSI, or less.

- a. 1/4
- b. 1/3
- c. 1/2
- d. 3/4

34. The above regulator shall have a lock-up feature that will limit the downstream pressure to 1/2 PSI.

- a. 1/4
- b. 1/3
- c. 1/2
- d. 3/4

35. Line gas pressures at or below the maximum appliance input rating does require the use of a line regulator.

- a. true
- b. false

36. A ____ Regulator is defined as a pressure regulator placed in a gas line between the service regulator and the appliance regulator.

- a. Load
- b. Full Flow
- c. Line Gas
- d. none of the above

37. Regulators must be rigidly installed.

- a. true
- b. false

4.8.2 Sizing Instructions

38. Line pressure regulators are typically used in a ____ PSI gas piping installation to reduce supply pressure to the appliance within required operating ranges

- a. 2 or 7
- b. 2 or 6
- c. 2 or 5

- d. none of the above
- 39. For natural gas, the regulator outlet pressure is set to 8"WC and the appliance runs are sized with a 3"WC pressure drop. This will allow for ____"WC inlet pressure at the appliance.
 - a. 3
 - b. 4
 - c. 5
 - d. 8
- 40. For propane gas, the regulator outlet pressure is set to 11"WC and the appliance runs are sized with a 0.5"WC drop. This will allow for a ____"WC inlet pressure at the appliance.
 - a. .5
 - b. 11
 - c. 10.5
 - d. none of the above
- 41. To select the correct regulator for pressure regulation, the following information must be established:
 - a. Available outlet pressure range at the regulator inlet.
 - b. Desired inlet pressure.
 - c. Total minimum flow rate vs. regulator model number (Table 4-7 through Table 4-9).
 - d. Largest single appliance flow rate vs. regulator model number (Table 4-10).

4.8.3 Installation

- 42. The regulator shall be installed in an accessible location with an approved shut-off valve and drip leg on the inlet side and a union (if required by code) on the ____ side so that it may be inspected, maintained and serviced if repair or replacement is required.
 - a. inlet
 - b. outlet
 - c. either
 - d. none of the above
- 43. The regulator must be installed with gas flow as indicated by the arrow on the casting.
 - a. true
 - b. false
- 44. Shut-off valves should be opened and closed slowly. A rapidly opened or closed valve can shock the regulator causing abnormal behavior.
 - a. true
 - b. false
- 45. The regulator is suitable for multi-poise mounting. When using a vent-limiting orifice however, the regulator must be mounted in a _____ position.
 - a. horizontal downright
 - b. vertical upright
 - c. horizontal upright
 - d. vertical downright
- 46. The vent-limiting orifice (Fig. 4-80) is a fail-safe device that permits free air movement _____ the diaphragm during normal operation.
 - a. above
 - b. below
 - c. within
 - d. all of the above
- 47. In the unlikely event of a diaphragm rupture, the vent limiting orifice will limit gas escapement to _____.
 - a. 1.0 CFH natural gas at 2 PSI
 - b. 0.65 CFH LP at 2 PSI
 - c. none of the above

- d. both a & b
48. The vent-limiting orifice does not allow gas to escape to the environment during operation.
- a. true
 - b. false
49. Always leak test the vent orifice with liquid leak test solution. This action will not contaminate the internal check ball mechanism or plug the breathing hole resulting in erratic regulator performance.
- a. true
 - b. false
50. When using a vent-limiting orifice, the maximum inlet pressure is 5 PSI for Propane and 2 PSI for Natural Gas.
- a. true
 - b. false
51. When using a vent line, the line must be at least the same size as the regulator vent connection for all runs up to ___ feet.
- a. 10
 - b. 20
 - c. 30
 - d. 40
52. When using a vent line, the line shall be increased one pipe size over its entirety for every additional ___ feet that the vent runs.
- a. 10
 - b. 20
 - c. 30
 - d. 40
53. Vent lines may be constructed of any approved fuel gas piping, including Gastite®/FlashShield™ CSST.
- a. true
 - b. false
54. The vent shall be designed to prevent entry of water, insects or other foreign materials that could cause blockage of the line.
- a. true
 - b. false
55. Always vent to appliance flue, pilot light or building exhaust system.
- a. true
 - b. false
56. The regulators supplied by Gastite Division have a temperature range limit of _____ degrees F.
- a. 40 to 240
 - b. -40 to 240
 - c. -30 to 230
 - d. -40 to 200
57. The lower temperature limit and rust proof construction design enables the regulator to be used for outdoor installations. To minimize the potential for moisture condensation and freezing problems in or around the vent port, the vent-limiting orifice must be _____ for outdoor installations.
- a. install downward
 - b. protected
 - c. removed
 - d. none of the above

58. The regulator may be mounted upside down with the open vent port facing down. Consideration must be taken to ensure there is adequate clearance for _____ buildup.
- a. grass
 - b. dirt
 - c. snow
 - d. all of the above
59. The regulator may be mounted horizontally, with a vent tube installed in the venting port. The end of the tube must be facing upward, and should not be designed to prevent water and foreign material from causing a blockage.
- a. true
 - b. false

4.8.4 Performance

60. A performance test should be conducted while operating all appliances at _____. This will test if adequate pressure is reaching each appliance under full-load conditions. To accomplish this, measure the line pressure at the appliance connection while operating the appliance.
- a. half load
 - b. 3/4 load
 - c. full load
 - d. no load
61. The inlet pressure for typical gas appliances under _____ conditions should be equal to but not exceeding the appliance's recommended inlet pressure range. If these pressure ranges cannot be obtained, a slight adjustment to the service regulator or the pounds-to-inches regulator may be necessary to increase line pressure.
- a. half load
 - b. 3/4 load
 - c. full load
 - d. no load

4.8.5 Regulator Outlet Pressure Adjustment

62. Adjustment can be accomplished by first removing the regulator seal cap to expose the adjusting screw. Turning the screw _____ will increase outlet pressure.
- a. clockwise
 - b. counter clockwise
 - c. none of the above
 - d. both a or b
63. Adjustment can be accomplished by first removing the regulator seal cap to expose the adjusting screw. Turning the screw _____ will increase decrease pressure.
- a. clockwise
 - b. counter clockwise
 - c. none of the above
 - d. both a or b
64. If spring adjustment will not produce the desired outlet pressure, check to make sure the _____ supply pressure is adequate.
- a. main
 - b. secondary
 - c. street
 - d. all of the above
65. The line regulators can be adjusted with an outlet pressure ranging between 7 and 11 _____.
- a. PSI

- b. inches water column
- c. none of the above
- d. both a & b

4.8.6 Over-Pressurization Protection

66. Downstream over-pressure protection must be provided in any gas piping installation where a line-pressure regulator is utilized for pressures in excess of ___ PSI to supply appliances rated for 1/2 PSI or less inlet pressure.

- a. 1
- b. 2
- c. 3
- d. 1/2

67. Special line regulators of suitable control and capacity may be installed in place of the standard line regulator.

- a. true
- b. false

4.9 Underground Installations

68. Gastite/FlashShield CSST can be buried directly in the ground or directly embedded in concrete (e.g. slab on grade construction, patio slabs, foundations and walkways).

- a. true
- b. false

69. When it is necessary to bury or embed Gastite®/FlashShield™ CSST, the tubing shall be routed inside a non-metallic, watertight conduit that has an inside diameter at least ___ inch larger than the O.D. of the tubing

- a. 1/4
- b. 1/3
- c. 1/2
- d. 3/4

70. For ends of the conduit installed _____, the conduit shall be sealed at any exposed end to prevent water from entering.

- a. indoors
- b. outdoors
- c. both a & b
- d. none of the above

71. Unlike rigid pipe however, Gastite/FlashShield CSST is continuous with only one fitting at each end of the run, and up to two fittings inside the conduit. As a result, the possibility of gas build-up due to fitting leaks has been eliminated. Therefore, Gastite Division does not require the sleeving to be vented to the outside of the structure.

- a. true
- b. false

72. If, however, venting is still required, Figure 4-86 below depicts gas piping installed within plastic sleeving that is vented to the outdoors. Other possible venting routes, such as the attic and roof, may also be considered but must be reviewed with the local administrative authority, and must prevent the entry of _____.

- a. water
- b. foreign objects
- c. both a & b
- d. none of the above

4.10 Electrical Bonding of Gastite®/FlashShield™ CSST

73. Unlike FlashShield, there are no additional bonding requirements for Gastite imposed by the manufacturer's installation instructions. FlashShield™ is to be bonded in accordance with the National Electrical Code NFPA 70 Article 250.104 in the same manner as the minimum requirements for rigid metal piping. However, installers must always adhere to any local requirements that may conflict with these instructions.
- true
 - false
74. Direct bonding of Gastite CSST is not required for all gas-piping systems incorporating Gastite CSST when not the connected gas equipment is electrically powered.
- true
 - false
75. Gastite® CSST installed _____ to a building or structure shall be electrically continuous and direct bonded to the electrical ground system of the premise in which it is installed.
- inside
 - attached
 - both a & b
 - none of the above
76. The gas piping system shall be considered to be direct bonded when installed in accordance with the following: The piping is permanently and directly connected to the electrical service equipment enclosure, the grounded conductor at the electrical service, the grounding electrode conductor (where of sufficient size) or to one or more of the _____ used.
- bonding methods
 - grounding electrodes
 - lighting protection
 - lighting arrestor
77. For single and multi-family structures, a single bond connection shall be made _____ of the individual gas meter for each housing unit.
- upstream
 - downstream
 - both a & b
 - none of the above
78. For single and multi-family structures, a single bond connection shall be made _____ of any CSST connection.
- upstream
 - downstream
 - both a & b
 - none of the above
79. The bonding conductor shall be no smaller than a _____ AWG copper wire or equivalent.
- 8
 - 6
 - 4
 - all of the above
80. The bonding jumper shall be attached in an approved manner in accordance with NEC Article 250.70 and the point of attachment for the bonding jumper may be accessible.
- true
 - false
81. Bonding/grounding clamps shall be installed in accordance with its listing per UL 467 and shall make _____ contact with the piping. This bond is in addition to any other bonding requirements as specified by local codes.
- metal-to-plastic

- b. plastic-to-metal
 - c. metal-to-metal
 - d. all of the above
82. For attachment to the CSST gas piping system, a single bonding clamp must be attached to_____.
- a. either a segment of steel or plastic pipe
 - b. either a rigid plastic pipe component
 - c. either a Gastite brass hex fitting
 - d. all of the above
83. For attachment to a segment of steel pipe or a rigid pipe component **any** bonding clamp listed to _____ may be used.
- a. UV467
 - b. UL479
 - c. UL467
 - d. none of the above
84. The corrugated stainless steel tubing portion of the gas piping system shall not be used as the point of attachment of the bonding conductor at any location along its length under any circumstances.
- a. true
 - b. false
85. Proper _____ will reduce the risk of damage and fire from a lightning strike.
- a. bonding
 - b. grounding
 - c. connections
 - d. both a & b
86. If these systems are not adequately bonded, the difference in electrical _____ between the systems may cause the charge to arc from one system to another.
- a. materials
 - b. connections
 - c. potential
 - d. all of the above

5.2 Installation Checklist Description

87. Gastite®/FlashShield™ CSST has been tested per ANSI LC1 as required for approval and as an approved gas piping material in the _____.
- a. National Fuel Gas Code-NFPA 54
 - b. National Fuel Gas Code-NFPA 58
 - c. International Fuel Gas Code-ICC
 - d. all of the above
88. Gastite®/FlashShield™ flexible gas piping may only be installed by a qualified installer who has successfully completed the manufacturer's certification training program. A manufacturer's certification card is required to _____ Gastite/FlashShield flexible gas piping.
- a. purchase
 - b. repair
 - c. install
 - d. both a & c
89. Only the components _____ by the Gastite Division (including strike protection) as part of the piping system are to be used in the installation.
- a. provided
 - b. specified
 - c. both a & b
 - d. none of the above

90. Gastite/FlashShield CSST routed in a location which is _____ must be protected against damage using protection devices listed in the manufacturer's Design and Installation Guide.
- concealed
 - constrained
 - within 6 inches of a potential threat
 - both a & b
91. Gastite/FlashShield CSST can be connected to moveable appliances similar to a flexible appliance connector.
- true
 - false
92. The Gastite/FlashShield flexible gas piping system must be pressure tested for leaks during rough construction in accordance with all local codes. In the absence of local requirements, test in accordance with NFPA 54, National Fuel Gas Code, which is 1-1/2 times the maximum working pressure but not less than ____ PSI.
- 2
 - 3
 - 4
 - 5
93. Regulators are suitable for multi-poise mounting. When using a vent-limiting device however, the regulator must be mounted in a _____ upright position.
- vertical
 - horizontal
 - horizontal or vertical
 - all of the above
94. A manifold assembly utilizing a pounds-to-inches regulator shall include a _____ ahead of the regulator and installed in an accessible location so that the regulator can be inspected, maintained and serviced if repair or replacement is required.
- gate valve
 - ball valve
 - both a & b
 - none of the above
95. When installed _____, the external jacket shall remain intact as much as possible. Exposed portions of the stainless steel tubing shall be wrapped to provide protection from corrosive threats.
- indoors
 - outdoors
 - both a & b
 - none of the above
96. For installations buried underground, under concrete/asphalt or embedded in concrete, Gastite/FlashShield CSST must be routed in a metallic watertight conduit which has an inside diameter at least 1/2 in. larger than the inside diameter of the tubing. Under concrete/asphalt slab, sleeved CSST must be buried in accordance with all local codes. Mechanical joints are permitted within the conduit.
- true
 - false
97. Installation must be properly supported to not only keep the job professional and organized but also to prevent excess strain on the _____.
- bends
 - fittings
 - both a & b
 - none of the above

98. Gas piping systems must be properly bonded to the structure's _____. A qualified professional following the NEC approved methods as outlined in section 4.10 shall perform the bonding installation.
- plumbing system
 - heating system
 - electrical service
 - all of the above
99. Gastite CSST must be physically _____ from other continuous metallic systems in accordance with section 4.3 of this guide.
- connected
 - separated
 - both a & b
 - none of the above

5.3.1 Determine Damage

100. No repairs or replacement of the tubing is necessary if the Gastite®/FlashShield™ CSST tubing is only slightly dented due to impact or crushing and the overall crush depth is less than ____ the diameter of the tubing.
- 1/4
 - 1/3
 - 1/2
 - 1/8
101. Where _____ involve only the Gastite®/FlashShield™ CSST, the tubing can be joined with standard pipe couplings or Gastite/FlashShield CSST coupling.
- repairs
 - replacements
 - both a & b
 - none of the above
102. Where repairs or replacements involve CSST systems of different manufacturers, the systems can be joined through standard pipe couplings and any manufacturer's recommended CSST fitting
- true
 - false

6.1 General Guidelines for Pressure Testing

103. PRESSURE/LEAKAGE TESTING include:
- Pressure testing must be performed during final inspection of the facility (after interior walls are finished). This will permit a more complete inspection of the piping system during the pressure testing.
 - Do not connect appliances or pressurize with fuel gas until after the pressure test has been passed.
 - All gas outlets for appliance connections should not be capped during pressure testing.
 - all of the above

Section 8: Definitions

104. A device used in piping to control the gas supply to any section of the piping system or to an appliance defines:
- REGULATOR, PRESSURE
 - SHIELDING DEVICE
 - STRIKER PLATE
 - VALVE, SHUTOFF

105. A special type of shielding device used when concealed tubing is run through wall studs, floor and ceiling joists or other structural members where tubing movement is restricted defines:
- REGULATOR, PRESSURE
 - SHIELDING DEVICE
 - STRIKER PLATE
 - VALVE, SHUTOFF
106. A component of the piping system used to protect the installed corrugated tubing from accidental puncture by nails, screws or similar hardware at concealed tubing support points defines:
- REGULATOR, PRESSURE
 - SHIELDING DEVICE
 - STRIKER PLATE
 - VALVE, SHUTOFF
107. A device placed in a gas line for reducing, controlling and maintaining the pressure in that portion of the piping system downstream of the device defines:
- REGULATOR, PRESSURE
 - SHIELDING DEVICE
 - STRIKER PLATE
 - VALVE, SHUTOFF
108. A hand-operated device which provides a means for connecting and disconnecting an appliance or an appliance connector to a gas supply, and which is equipped with an automatic means to shut off the gas supply when the device is disconnected defines:
- QUICK-DISCONNECT DEVICE
 - QUALIFIED INSTALLER
 - PRESSURE DROP
 - PLENUM
109. Any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for the installation or replacement of building gas piping systems, who is experienced in such work, familiar with all precautions required, and has complied with all the requirements of the authority having jurisdiction defines:
- QUICK-DISCONNECT DEVICE
 - QUALIFIED INSTALLER
 - PRESSURE DROP
 - PLENUM
110. The loss in static pressure of flowing fuel gas due to friction or other flow resistance in tubing, fittings, valves, regulators, or other devices in the piping system defines:
- QUICK-DISCONNECT DEVICE
 - QUALIFIED INSTALLER
 - PRESSURE DROP
 - PLENUM
111. _____ is an enclosed portion of the building structure that is designed to allow air movement, and thereby serve as part of an air distribution system.
- QUICK-DISCONNECT DEVICE
 - QUALIFIED INSTALLER
 - PRESSURE DROP
 - PLENUM
112. The system pressure, immediately downstream of the regulator, at which the regulator valve will completely close (leak tight) under no-flow conditions to prevent the downstream pressure from exceeding a predetermined level defines:
- PIPING SYSTEM

- b. MAXIMUM ACTUAL OPERATING PRESSURE
- c. OVER-PRESSURE PROTECTION DEVICE
- d. LOCKUP PRESSURE, REGULATOR

113. The maximum pressure existing in a piping system during a normal annual operating cycle defines:

- a. LOCKUP PRESSURE, REGULATOR
- b. MAXIMUM ACTUAL OPERATING PRESSURE
- c. OVER-PRESSURE PROTECTION DEVICE
- d. PIPING SYSTEM

114. System component that is intended to protect all downstream components from high pressures in the event of a system failure. OPDs are required in gas systems using more than 2psi line pressure defines:

- a. LOCKUP PRESSURE, REGULATOR
- b. MAXIMUM ACTUAL OPERATING PRESSURE
- c. OVER-PRESSURE PROTECTION DEVICE
- d. PIPING SYSTEM

115. As used in this standard, an assembly of corrugated stainless steel tubing and tubing connection fittings, intended for field assembly and installation in residential or commercial buildings to distribute fuel gas to gas utilization equipment within the building. The piping system may also include a gas pressure regulator(s), a shutoff valve(s), tube shielding devices, distribution manifold(s), and other approved devices or component defines:

- a. LOCKUP PRESSURE, REGULATOR
- b. MAXIMUM ACTUAL OPERATING PRESSURE
- c. OVER-PRESSURE PROTECTION DEVICE
- d. PIPING SYSTEM

116. Equipment or materials including a list published by an organization acceptable to the authority having jurisdiction and concerned with product evaluation that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or materials meets appropriate standards or has been tested and found suitable for use in a specified manner defines:

- a. LISTED
- b. LEAK TEST SOLUTION
- c. INCHES OF WATER COLUMN
- d. GAS UTILIZATION EQUIPMENT
- e. EQUIVALENT HYDRAULIC DIAMETER

117. A solution of commercial leak-testing fluids may be used. The use of soap buds or household detergents and water is not considered a satisfactory leak-test fluid for a bubble test, because of a lack of sensitivity due to masking by foam. The fluid should be capable of being applied free of bubbles so that a bubble appears only at a leak. The fluid selected should not bubble except in response to a leak defines:

- a. LISTED
- b. LEAK TEST SOLUTION
- c. INCHES OF WATER COLUMN
- d. GAS UTILIZATION EQUIPMENT
- e. EQUIVALENT HYDRAULIC DIAMETER

118. Any device that utilizes gas as a fuel or raw material or both defines:

- a. LISTED
- b. LEAK TEST SOLUTION
- c. INCHES OF WATER COLUMN
- d. GAS UTILIZATION EQUIPMENT
- e. EQUIVALENT HYDRAULIC DIAMETER

119. A theoretical size, which reflects the hydraulic performance of the tubing. It is not true physical measurement defines:

- a. LISTED

- b. LEAK TEST SOLUTION
- c. INCHES OF WATER COLUMN
- d. GAS UTILIZATION EQUIPMENT
- e. EQUIVALENT HYDRAULIC DIAMETER

120. Method of pressure measured in inches of water column by a manometer or pressure gauge.

Commonly used in the gas industry when the pressure is less than 1 PSI defines:

- a. LISTED
- b. LEAK TEST SOLUTION
- c. INCHES OF WATER COLUMN
- d. GAS UTILIZATION EQUIPMENT
- e. EQUIVALENT HYDRAULIC DIAMETER

Gastite Quiz Part 2-Answer Sheet

- | | | | | | |
|-----------|---------|-----------|---------|------------|-----------|
| <u>1</u> | a b c d | <u>41</u> | a b c d | <u>81</u> | a b c d |
| <u>2</u> | a b c d | <u>42</u> | a b c d | <u>82</u> | a b c d |
| <u>3</u> | a b c d | <u>43</u> | a b c d | <u>83</u> | a b c d |
| <u>4</u> | a b c d | <u>44</u> | a b c d | <u>84</u> | a b c d |
| <u>5</u> | a b c d | <u>45</u> | a b c d | <u>85</u> | a b c d |
| <u>6</u> | a b c d | <u>46</u> | a b c d | <u>86</u> | a b c d |
| <u>7</u> | a b c d | <u>47</u> | a b c d | <u>87</u> | a b c d |
| <u>8</u> | a b c d | <u>48</u> | a b c d | <u>88</u> | a b c d |
| <u>9</u> | a b c d | <u>49</u> | a b c d | <u>89</u> | a b c d |
| <u>10</u> | a b c d | <u>50</u> | a b c d | <u>90</u> | a b c d |
| <u>11</u> | a b c d | <u>51</u> | a b c d | <u>91</u> | a b c d |
| <u>12</u> | a b c d | <u>52</u> | a b c d | <u>92</u> | a b c d |
| <u>13</u> | a b c d | <u>53</u> | a b c d | <u>93</u> | a b c d |
| <u>14</u> | a b c d | <u>54</u> | a b c d | <u>94</u> | a b c d |
| <u>15</u> | a b c d | <u>55</u> | a b c d | <u>95</u> | a b c d |
| <u>16</u> | a b c d | <u>56</u> | a b c d | <u>96</u> | a b c d |
| <u>17</u> | a b c d | <u>57</u> | a b c d | <u>97</u> | a b c d |
| <u>18</u> | a b c d | <u>58</u> | a b c d | <u>98</u> | a b c d |
| <u>19</u> | a b c d | <u>59</u> | a b c d | <u>99</u> | a b c d |
| <u>20</u> | a b c d | <u>60</u> | a b c d | <u>100</u> | a b c d |
| <u>21</u> | a b c d | <u>61</u> | a b c d | <u>101</u> | a b c d |
| <u>22</u> | a b c d | <u>62</u> | a b c d | <u>102</u> | a b c d |
| <u>23</u> | a b c d | <u>63</u> | a b c d | <u>103</u> | a b c d |
| <u>24</u> | a b c d | <u>64</u> | a b c d | <u>104</u> | a b c d |
| <u>25</u> | a b c d | <u>65</u> | a b c d | <u>105</u> | a b c d |
| <u>26</u> | a b c d | <u>66</u> | a b c d | <u>106</u> | a b c d |
| <u>27</u> | a b c d | <u>67</u> | a b c d | <u>107</u> | a b c d |
| <u>28</u> | a b c d | <u>68</u> | a b c d | <u>108</u> | a b c d |
| <u>29</u> | a b c d | <u>69</u> | a b c d | <u>109</u> | a b c d |
| <u>30</u> | a b c d | <u>70</u> | a b c d | <u>110</u> | a b c d |
| <u>31</u> | a b c d | <u>71</u> | a b c d | <u>111</u> | a b c d |
| <u>32</u> | a b c d | <u>72</u> | a b c d | <u>112</u> | a b c d |
| <u>33</u> | a b c d | <u>73</u> | a b c d | <u>113</u> | a b c d |
| <u>34</u> | a b c d | <u>74</u> | a b c d | <u>114</u> | a b c d |
| <u>35</u> | a b c d | <u>75</u> | a b c d | <u>115</u> | a b c d |
| <u>36</u> | a b c d | <u>76</u> | a b c d | <u>116</u> | a b c d |
| <u>37</u> | a b c d | <u>77</u> | a b c d | <u>117</u> | a b c d e |
| <u>38</u> | a b c d | <u>78</u> | a b c d | <u>118</u> | a b c d e |
| <u>39</u> | a b c d | <u>79</u> | a b c d | <u>119</u> | a b c d e |
| <u>40</u> | a b c d | <u>80</u> | a b c d | <u>120</u> | a b c d e |

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