

Gastite Quiz Part 1

Instructions

Fee \$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 2 pages).
4. Page down to the last page for the [verification form](#), answer sheets and mailing instructions.

12 hour course for:

- | | |
|----------------------------------|----------------------------------|
| 1. Manufactured Home Installer | 3. Dwelling Contractor Qualifier |
| 2. Commercial Building Inspector | 4. UDC-HVAC Inspector |

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

SECTION 1.0 INTRODUCTION

1. Please note that there are specific differences between _____ throughout this Design and Installation Guide. Please take note of these differences as you read through the Guide.
 - a. Gastite and FlashShield
 - b. FlashShield and CSST
 - c. CSST and Black Pipe
 - d. CSST and Copper Tubing
2. Improper installation or operation of a Gastite or FlashShield Flexible Gas Piping system may result in _____.
 - a. fire
 - b. explosion
 - c. asphyxiation
 - d. all of the above
3. In the event that there is a conflict between this Design and Installation guide and local code the _____ requirement will take precedence.
 - a. local code
 - b. Design and Installation guide
 - c. more stringent
 - d. all of the above
4. All installed systems must pass customary installation inspections by the local building official having authority _____ being placed into service.
 - a. after
 - b. during it
 - c. prior to
 - d. all of the above
5. Use of components from other flexible gas piping systems other than those specified as part of the Gastite®/FlashShield™ system is _____.
 - a. seldom compatible
 - b. allowed
 - c. prohibited
 - d. none of the above
6. Where additions, repairs or replacements involve corrugated stainless steel tubing systems from manufacturers other than Gastite Division, the systems should be joined using standard pipe fittings at the _____.

- a. source
 - b. interface
 - c. first available connection
 - d. any available Tee.
7. Gastite/FlashShield's flexibility offers even further safety advantages in geographic areas that are prone to _____ because the tubing is able to move as the ground or the structure shifts.
- a. hurricane activity
 - b. tornado activity
 - c. seismic activity
 - d. none of the above
8. While Gastite®/FlashShield™ provides significant advantages over more rigid gas delivery systems, its flexible design makes it less likely than steel pipe to be punctured by a nail or other sharp objects, or damaged by other extraordinary forces such as lightning strike, depending on the circumstances.
- a. true
 - b. false
9. Properly bonding and grounding the Corrugated Stainless Steel Tubing (CSST) system may reduce the risk of damage and fire from _____.
- a. an electrical ground fault
 - b. short circuiting
 - c. a shock hazard
 - d. a lightning strike
10. Even a nearby lightning strike that does not strike a structure directly can cause systems in the structure to become electrically energized. Differences in _____ between systems may cause the charge to arc between systems.
- a. amperage
 - b. voltage
 - c. potential
 - d. all of the above
11. The building owner should confirm that a qualified contractor has properly bonded the CSST gas system to the _____.
- a. grounding electrode system at the transformer
 - b. grounding electrode system ahead of the service equipment
 - c. grounding electrode system of the premises
 - d. none of the above
12. Refer to Section 4.10 Electrical Bonding/Grounding in the Gastite®/FlashShield™ Design & Installation Guide for details on _____ CSST.
- a. bonding
 - b. protecting
 - c. grounding
 - d. both a & c
13. All owners should consult a lightning safety consultant to determine whether installation of a lightning protection system would be required to achieve sufficient protection for all building components from lightning. Factors to consider include whether the area is prone to _____.
- a. an electrical ground fault
 - b. short circuiting
 - c. a shock hazard
 - d. lightning
14. The owner should confirm with the local gas supply utility company that a suitable _____ union is installed at the service entry of the structure between underground metallic piping and the gas pipes going into the building as required by code.

- a. metallic
- b. non-metallic
- c. dielectric
- d. non-conductive

15. Section _____ of the National Electric Code (NEC) states that “bonding all piping and metal air ducts within the premises will provide additional safety”.

- a. 240.104b
- b. 250.104b
- c. 350.104b
- d. none of the above

16. Gastite _____ that all continuous metallic systems be bonded and grounded.

- a. requires
- b. suggests
- c. recommends
- d. none of the above

17. The _____ should confirm with an electrical or construction specialist that each continuous metallic system in a structure has been bonded and grounded by an electrical professional in accordance with local building codes.

- a. electrician
- b. heating contractor
- c. building contractor
- d. owner

18. This bonding and grounding should include, but is not limited to: metallic chimney liners, metallic appliance vents, metallic ducting and piping, electrical cables, and structural steel.

- a. true
- b. false

19. Care should be taken when installing any type of fuel gas piping including _____ to maintain as much separation as reasonably possible from other electrically conductive systems in the building.

- a. CSST
- b. iron
- c. copper
- d. all of the above

20. Local building codes are controlling, however, as a general practice, fuel gas piping, including CSST, should not be installed within a chase or enclosure that houses a metallic chimney liner or appliance vent that protrudes through the _____.

- a. floor
- b. wall
- c. roof
- d. all of the above

21. In the event such an installation is necessary and conforms to local building codes, the metallic chimney liner or vent must be _____ by a qualified electrical professional, and a separation distance, as specifically permitted by the applicable local building code between the CSST and the metallic chimney liner or vent, is required.

- a. supported
- b. bonded
- c. grounded
- d. both b & c

22. Physical contact between CSST and the metallic chimney liner and/or vent is prohibited.

- a. true
- b. false

23. Leak test solutions may cause corrosion in some types of material in the gas piping system. Be sure to water rinse after the test and thoroughly dry all contacted material.
- a. true
 - b. false
24. For applications that go beyond the scope of this guideline, the installer should exercise sound engineering principles and practices and/or contact the local authority have jurisdiction for assistance.
- a. true
 - b. false
25. The techniques outlined within this guideline are recommended practice for generic applications. These practices must be reviewed for compliance with all applicable local fuel gas and building codes. In the event that there is a conflict between this guide and local code, _____ will take precedence.
- a. the local building code
 - b. the fuel gas code
 - c. the more stringent requirement
 - d. the less stringent requirement
26. Using components from other flexible gas piping systems other than those specified as part of the Gastite/FlashShield system is _____.
- a. allowed
 - b. not recommended
 - c. prohibited
 - d. none of the above
27. The Gastite®/FlashShield™ corrugated stainless steel tubing system complies with the following standards, listings and model codes:
- a. ANSI LC1-2005
 - b. BOCA 6.26-2006
 - c. Oil Piping Systems Using Corrugated Stainless Steel Tubing
 - d. all of the above

Listing

28. International Association of Plumbing and Mechanical Officials – File Number 3250 defines:
- a. CSA
 - b. ICC
 - c. ANSI
 - d. IAPMO
29. International Code Council – Evaluation Report Number PM6 1019 + PMG 1066 defines:
- a. CSA
 - b. ICC
 - c. ANSI
 - d. IAPMO
30. CSA International - Certificate No. 1009875 defines:
- a. CSA
 - b. ICC
 - c. ANSI
 - d. IAPMO
31. Uniform Plumbing Code (IAPMO) “Alternate Materials & Methods” defines:
- a. UPC
 - b. UMC
 - c. SBCCI
 - d. NFPA
32. Uniform Mechanical Code (IAPMO) “Alternate Materials & Methods” defines:
- a. UPC

- b. UMC
 - c. SBCCI
 - d. NFPA
33. Standard Gas Code defines
- a. UPC
 - b. UMC
 - c. SBCCI
 - d. NFPA
34. National Fuel Gas Code (NFPA 54) defines:
- a. UPC
 - b. UMC
 - c. SBCCI
 - d. NFPA
35. National Gas & Propane Installation Code, CAN/CGA-B149.1 defines:
- a. Nation Standard of Canada
 - b. ICC
 - c. CABO
 - d. BOCA
36. International Code Series defines:
- a. Nation Standard of Canada
 - b. ICC
 - c. CABO
 - d. BOCA
37. 1 & 2 Family Dwelling defines:
- a. Nation Standard of Canada
 - b. ICC
 - c. CABO
 - d. BOCA
38. National Mechanical Code defines:
- a. Nation Standard of Canada
 - b. ICC
 - c. CABO
 - d. BOCA
39. It is the ultimate responsibility of the _____ to determine suitability and acceptance of any building component including gas piping.
- a. builder
 - b. plumber
 - c. installer
 - d. electrician

SECTION 2.0 SYSTEM DESCRIPTIONS & COMPONENTS

40. The Gastite® Flexible Gas Piping System has been tested in accordance with the American National Standard for Fuel Gas Systems Using Corrugated Stainless Steel Tubing, ANSI LC1-2005. This standard lists performance requirements for certification of CSST systems for use with all recognized fuel gases, including _____.
- a. oil
 - b. natural gas
 - c. propane
 - d. both b & c

41. Gastite® Flexible Gas Piping is suitable for use with elevated pressure systems. The ANSI LC1 standard rates CSST for use at pressures up to ___PSI.
- 3
 - 4
 - 5
 - 10
42. The tubing is connected using special mechanical _____ fittings designed specifically for Gastite® CSST.
- copper
 - stainless steel
 - brass
 - all of the above
43. Corrosion resistant fittings incorporate the Gastite® patented “_____” feature. The polyethylene jacket is clamped by the fitting thereby minimizing the risk of contact with corrosives and foreign material.
- Jam Nut
 - Fused Link
 - Jacket Lock
 - none of the above
44. Gastite® fittings have _____ threads and may be used in combination with all approved fuel gas piping materials with the pipe threads as the interface.
- standard American
 - metric
 - standard PTN
 - none of the above
45. System components such as _____ may be fabricated from other approved materials to be used with Gastite® flexible gas piping.
- manifolds
 - tees
 - stub-outs
 - all of the above
46. The self-flaring fitting creates a one step, _____, metal on metal seal.
- one time use
 - two time use
 - reusable
 - none of the above
47. The polyethylene jacket is extruded over the stainless steel tubing creating a flexible, protective covering. The jacket is an added feature of the tubing and _____ affect the flaring/sealing process.
- does
 - does not
 - could have an
 - all of the above
48. The polyethylene jacket is engineered with _____ material making it suitable for outdoor use.
- thermal
 - UV resistant
 - rustproof
 - both a & b
49. The polyethylene jacket is allowed to remain intact throughout a building as a fire rated material, it meets the requirements for_____.
- flame density
 - smoke spread
 - none of the above

d. both a & b

50. The corrugated stainless steel tubing system has a number of essential hardware and design differences from conventional gas piping using rigid steel pipe and copper tubing. These differences are described as follows:

- a. Rigid termination of the tube ends is required.
- b. Flexibility and strike plates protect the CSST allowing it to be run in concealed spaces.
- c. both a & b
- d. none of the above

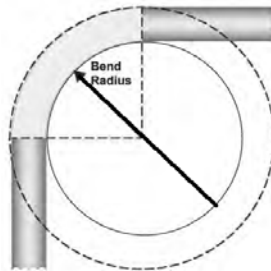
SECTION 4.0 INSTALLATION PRACTICES

51. The protective plastic jacketing should be kept in place as much as possible to protect the tubing from corrosive threats. Contact with chemicals containing chlorides must be followed by a thorough rinse and wipe dry. This includes _____.

- a. fluxes used to solder copper tubing
- b. acid based cleaners used to wash masonry
- c. cleaner for PVC
- d. both a & b

52. Open ends of the tubing are to be temporarily _____ prior to installation to prevent entrance of dirt, dust or other debris.

- a. plugged
- b. taped closed
- c. both a & b
- d. none of the above



53. The above diagram represents the minimum bending radius.

- a. true
- b. false

54. The absolute Minimum bend radius for 1/2" FlashShield would be _____ inch?

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

55. A proper support is one which is designed as a pipe hanger, does not damage the tubing during installation, and provides full support. Primary supports include _____.

- a. "J" hooks
- b. zip ties
- c. cable ties
- d. none of the above

56. When supporting Gastite CSST tubing runs, the use of other conductive metallic systems such as metallic appliance vents, metallic ducting and piping, and electrical cables _____ be avoided.

- a. should
- b. may
- c. must

- d. don't have to
57. When supporting FlashShield tubing runs, the use of other conductive metallic systems such as metallic appliance vents, metallic ducting and piping, and electrical cables _____ be avoided.
- a. should
 - b. may
 - c. must
 - d. don't have to
58. Gastite/FlashShield CSST must be rigidly terminated with only a Gastite® or FlashShield™ fitting.
- a. true
 - b. false

4.2.1 Gastite Field Fitting Assembly

59. Cut tubing to the desired length leaving approximately one inch for fitting attachment. Cut should be centered between _____ corrugations. Use light roller pressure with extra rotations in one direction to leave tubing round and free of burrs.
- a. a single
 - b. two
 - c. three
 - d. none of the above
60. Using a utility knife, strip jacket back to the valley of the _____ corrugation.
- a. first
 - b. second
 - c. third
 - d. fourth
61. Capturing the jacket for a contaminant resistant seal with the bushing is required for a gas-tight seal.
- a. true
 - b. false
62. Pipe dope or sealant must not be used inside the fitting prior to assembly.
- a. true
 - b. false
63. The _____ feature of the bushings ensures the tubing is aligned properly with the fitting body for a uniform flare and a gas tight seal.
- a. alignment
 - b. piloting
 - c. configuration
 - d. orientation
64. During the tightening process rotate the fitting body only. Do not rotate the nut.
- a. true
 - b. false
65. Any portions of the exposed stainless steel tubing _____ be wrapped with tape or sleeved to prevent threats by acids or chloride based cleaning solutions for masonry.
- a. should
 - b. shall
 - c. may
 - d. all of the above
66. Self-bonding _____ tape is recommended here for durability for exposed stainless steel tubing.
- a. duct
 - b. black
 - c. silicone
 - d. metal

4.2.2 FlashShield Field Fitting Assembly

67. Cut tubing to the desired length leaving approximately _____ inch for fitting attachment and cuts should be centered between two corrugations.
- a. 1/2
 - b. 3/4
 - c. 1
 - d. all of the above
68. Using a utility knife, strip jacket back to the valley of the second corrugation. Light scoring is allowed when cutting the FlashShield jacket.
- a. true
 - b. false
69. _____ feature must be utilized with FlashShield.
- a. Foil biting
 - b. Piloting
 - c. Alignment
 - d. all of the above
70. Gastite/FlashShield Recommended Torque Values for 1 inch would be _____?
- a. 25
 - b. 35
 - c. 45
 - d. 65
71. Gastite/FlashShield Recommended Torque Values for 3/8 inch would be _____?
- a. 25
 - b. 35
 - c. 45
 - d. 65

4.3 Routing

72. Where any run is greater than _____, additional support (appropriate to the weight of the tubing) must be provided at the point of penetration through the floor.
- a. two stories
 - b. 20-ft
 - c. 16-ft
 - d. both a & b
73. There is no requirement to maintain separation from other electrically conductive systems when routing FlashShield.
- a. true
 - b. false
74. _____ may be routed beneath, through and alongside floor and ceiling joists.
- a. Gastite
 - b. FlashShield
 - c. both a & b
 - d. none of the above
75. Horizontal Support Spacing (Non-Rooftop, Non-Wall Cavity) for 1/2" Gastite would be _____?
- a. 4'
 - b. 6'
 - c. 8'
 - d. none of the above
76. Horizontal Support Spacing (Non-Rooftop, Non-Wall Cavity) for 3/4" Gastite would be _____?
- a. 4'
 - b. 6' Canada

- c. 8' USA
 - d. both b & c
77. Clearance holes for 1" FlashShield would be _____?
- a. 1"
 - b. 1 3/4"
 - c. 2"
 - d. 3"
78. Clearance holes for 1" Gastight would be _____?
- a. 1"
 - b. 1 3/4"
 - c. 2"
 - d. 3"
79. Clearance holes for routing Gastite®/FlashShield™ CSST are to be approximately ____ inch greater than the O.D. of the Gastite/FlashShield CSST.
- a. 3/8
 - b. 1/2
 - c. 5/8
 - d. 3/4
80. Drilling of any structural member must be in conformance with_____.
- a. table 4-4
 - b. the manufactures suggestions
 - c. local building codes
 - d. all of the above

4.3.4 Concealed Fittings

81. The _____ Mechanical Fittings have been tested and listed per the requirements of ANSI LC-1 for concealed use.
- a. Gastite
 - b. FlashShield
 - c. CSST
 - d. both a & b
82. The fitting may be used for concealed attachment including _____.
- a. branch runs using tee fittings
 - b. length splices manufactured from approved fuel gas piping materials
 - c. stub-outs manufactured from approved fuel gas piping materials
 - d. all of the above
83. New Installations (Fig. 4-32) – When multiple gas outlets are supplied from a single run of Gastite/FlashShield CSST, each downstream outlet branch can be connected to the main run using a _____ which can be located in a concealed location.
- a. appliance valve
 - b. tee-type fitting
 - c. y-type fitting
 - d. all of the above
84. Fireplace _____ valves (Fig. 4-33) – Gastite/FlashShield CSST connections to fireplace key valves can be located in a concealed location when accessibility is not readily provided.
- a. standard
 - b. concealed
 - c. key
 - d. all of the above
85. Manifold stations for dual pressure systems which include the _____ shall not be installed in concealed locations regardless of the qualifications of the tubing.

- a. multi-port manifold
- b. shut-off valve
- c. pressure regulator
- d. all of the above

86. New Ceilings in Unfinished Rooms/Basements – Gastite/FlashShield CSST fittings originally installed in accessible ceiling locations _____ be concealed in the event a ceiling is installed at a later date.

- a. can not
- b. can possibly
- c. can
- d. none of the above

87. Concealed tubing can be modified to permit an extension to another appliance location provided there is sufficient capacity to supply both appliances at the same time. If an accessible location for the modification is not available, the existing tubing run can be modified with a _____ that will result in a concealed fitting behind the wallboard.

- a. appliance valve
- b. tee-type fitting
- c. y-type fitting
- d. all of the above

4.3.6 Outdoor

88. When installed outdoors, the external jacketing shall remain intact as much as practical for the given installation. Any portions of the exposed stainless steel tubing shall be _____ to prevent later threats by acid or chloride based cleaning solutions for masonry.

- a. wrapped with tape
- b. sleeved
- c. sealed
- d. both a & b

89. When installed along the outside of a structure (between the ground and a height of ___ ft.) in an exposed condition, the Gastite®/FlashShield™ CSST shall be protected from mechanical damage inside a conduit or chase.

- a. 4
- b. 5
- c. 6
- d. 7

4.3.7 Fire Rated Construction

90. The Gastite® plastic jacket on the steel tubing has a maximum ASTM E84 rating of ___ for flame spread, and ___ for smoke density.

- a. 5, 30
- b. 15, 30
- c. 50, 25
- d. 25, 50

91. Therefore, the jacket should remain intact when passing through typical building constructions such as plenums, floor and ceiling joists, rim joists, walls or other fire rated resistance construction limited to materials of ASTM E84 ratings of ___ flame and ___ smoke, or lower.

- a. 5, 30
- b. 15, 30
- c. 50, 25
- d. 25, 50

92. The FlashShield jacket has a maximum ASTM E84 rating of ___ for flame spread and ___ for smoke density

- a. 5, 30
- b. 15, 30
- c. 50, 25
- d. 25, 50

93. The jacket should be removed when passing through typical building construction such as plenums, floor and ceiling joists, rim joists, walls, and other fire rated resistance construction limited to materials of ASTM E84 ratings of 25 flame and 50 smoke or lower.

- a. true
- b. false

94. Gastite gas tubing may be run within _____.

- a. ductwork
- b. plenums
- c. both a & b
- d. none of the above

4.3.8 Routing Through Masonry Material

95. "Masonry material" includes but is not limited to _____.

- a. brick
- b. concrete
- c. stucco
- d. all of the above

96. The term "through masonry construction" refers to any enclosed/concealed construction spaces where CSST is routed in close proximity to masonry but does not apply to exposed CSST mounted to a set masonry surface.

- a. true
- b. false

97. When it is necessary to install Gastite®/FlashShield through masonry materials the tubing shall be routed through a conduit that is a _____" larger in diameter (to ease routing) than the OD of the CSST and appropriate for the application.

- a. 1/4
- b. 3/8
- c. 1/2
- d. 3/4

4.3.9 Installation within a Chimney Chase

98. Gastite tubing shall not be installed within a chase and/or enclosure that includes a metallic appliance vent and/or metallic chimney liner that protrudes through and/or past the roof unless:

- a. Permitted by the fireplace installer
- b. An express separation distance as required by the installer can be achieved along the entire length
- c. both a & b
- d. none of the above

99. FlashShield™ CSST may be routed within a chimney chase, some of the restrictions of section 4.3.9 (Installation within a chase) do apply.

- a. true
- b. false

4.4 Strike Protection

100. The tube can be considered free to move when there is at least _____ of clearance on all sides of the tubing.

- a. 1/4"

- b. 1"
- c. 2"
- d. the tube's outside diameter

101. The tubing shall be protected at points of support and when passing through structural members such as _____.

- a. studs
- b. joists
- c. plates
- d. all of the above

102. Where all of the following conditions exist mechanical strike protection must be used.

- a. concealed
- b. constrained
- c. within 4" of a potential threat
- d. both a & b

4.4.1 Strike Plates

103. Striker plates other than those provided or specified by Gastite are strictly prohibited.

- a. true
- b. false

104. The extent of protection shall be defined as follows: At concealed support points and points of penetration less than ___ inches from any edge of a stud, joist, plate, etc., a listed striker plate is required at the area of support to provide coverage for ___ inches from the point of restraint in one or both directions.

- a. 1, 4
- b. 2, 4
- c. 2, 5
- d. 3, 6

105. The extent of protection shall be defined as follows: At concealed support points and points of penetration 2 to 3 inches from any edge of a stud, joist plate, etc., listed _____ striker plates are required to provide protection throughout the area of penetration

- a. 1/8
- b. 1/4
- c. 3/8
- d. 1/2

106. The extent of protection shall be defined as follows: When multiple runs are located between the same two studs such as manifold runs or meter bank runs, a _____ panel type striker plate may be used as an alternate to individual striker plates for each tubing run

- a. 5" x 10"
- b. 6" x 17"
- c. 7" x 17"
- d. 8" x 17"

107. The extent of protection shall be defined as follows: When installed inside insulated exterior walls, tubing shall be routed between the face of the insulation and the _____ wall surface (Fig. 4-45). If rigid insulation is used, enough space must be provided for movement of the tubing (see Section 4.4) or heavy wall conduit must run over the length of the restrained area.

- a. exterior
- b. interior
- c. center of the
- d. all of the above

108. The extent of protection shall be defined as follows: At points of penetration greater than ___ inches from any edge of stud, joist, plate, etc., no protection is required.

- a. 2
- b. 3
- c. 4
- d. 5

109. The extent of protection shall be defined as follows: Tubing routed horizontally through structural members shall be protected from puncture threats with the appropriate shielding material (Figure 4-41 and 4-42). At penetration points, listed plates of the appropriate size shall be utilized. Tubing between constraints that are less than ___ inches apart and meeting the criteria requiring full striker plates, shall be additionally protected by Steel Conduit (Fig. 4-43).

- a. 12
- b. 18
- c. 24
- d. 30

110. The extent of protection shall be defined as follows: Gastite/FlashShield CSST greater than ___" nominal diameter installed within a concealed hollow wall cavity of 2"x4" construction shall be protected along the entire concealed run length with Steel Conduit (see Section 4.4.2).

- a. 3/8
- b. 1/2
- c. 3/4
- d. 1

111. The extent of protection shall be defined as follows: The width of installed striker plates shall be at least ___ times the outside diameter of the Gastite/FlashShield CSST.

- a. 1
- b. 1.5
- c. 2
- d. 2.5

4.4.2 Steel Conduit

112. At termination points not covered by the ANSI standard, floppy steel conduit (heavy wall) shall be installed as additional protection (Fig. 4-46 and 4-47). Gastite/FlashShield requires a minimum of ___ inches of conduit and supplies precut conduit in one foot lengths.

- a. 4
- b. 5
- c. 6
- d. 8

113. Floppy Steel conduit may be used in place of hardened steel striker plates when passing through structural members.

- a. true
- b. false

4.5 Meter

114. The gas piping for the meter stub-out is usually subject to local requirements such as size, location, and material type. It is always important to confirm local code and utility requirements.

Gastite®/FlashShield recommends the use of ___" CSST or greater as the minimum trunk line size.

- a. 3/8
- b. 1/2
- c. 3/4
- d. 1

115. Size ____" should not be used for trunk lines. This will allow for the addition of future gas appliances and minimize the opportunity for whistling.
- 3/8
 - 1/2
 - 3/4
 - 1
116. Unsupported Meters – Meters that depend on the service supply line and/or the house piping for support may be directly connected to the Gastite/FlashShield CSST. As shown in the Figures 4-48 and 4-49, a rigid connection point is created using a Gastite®/FlashShield™ termination fitting, Gastite® designed stub-out or rigid pipe components.
- true
 - false
117. Self-Supported Meters – Meters that are independently supported with a bracket can be directly connected to the Gastite®/FlashShield™ CSST as shown in Figure 4-51.
- true
 - false
118. If practical, direct Gastite/FlashShield CSST connections shall include a ____ inch loop of tubing (as shown) to accommodate differential settling and meter movement.
- 2 to 4
 - 2 to 5
 - 3 to 6
 - 4 to 6
119. No mechanical protection of the tubing is required for outdoor meter connections; however, ensure that the _____ supports this practice as some utilities have regulations specifying meter attachments.
- inspection department
 - municipality
 - local utility
 - all of the above
120. Ensure that any exposed sections (jacket removed) of the stainless tubing at the fitting are wrapped with tape. This is especially important with _____ constructions.
- vinyl siding
 - metal siding
 - masonry
 - stucco

Gastite Quiz Part 1-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
<u>38</u>	a b c d	<u>78</u>	a b c d	<u>118</u>	a b c d
<u>39</u>	a b c d	<u>79</u>	a b c d	<u>119</u>	a b c d
<u>40</u>	a b c d	<u>80</u>	a b c d	<u>120</u>	a b c d

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