

Interview Assessment: Application for Gas Service Worker Licence¹

Please note the following when applying for a gas service worker licence:

- a. You will be notified to attend an interview to assess your practical experience and competency level. Details of the interview including the date, time and venue will be sent to you via email.
- b. You may assess whether you have the knowledge and experience to perform gas service work by going through the list of sample questions below.
- c. You are expected to stay up-to-date with the relevant statutes, regulations, codes of practice, and mandatory requirements on gas supply and installation, procedures for admittance / turn-on of gas supply, and gas safety knowledge

¹ Disclaimer

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General

Understanding of job scope

1. Describe your gas-related work experience.
2. Describe the scope and role of a Licensed Gas Service Worker (LGSW).
3. Name and describe the role of key players involved in gas installation work.
4. List the type of installations whereby a licensed gas service worker can carry out gas service work.
5. What are the forms required by the gas transporter and gas retailers for gas supply and gas connection respectively?
6. What is the town gas supply pressure?
7. Under what circumstances can an employer engage an unlicensed worker to carry out gas service work?
8. What are the essential parameters in the gas specification of town gas and natural gas that an LGSW needs to know?
9. What are the factors affecting gas pressure loss?
10. Explain the purpose of "Statement of Turn-on" and its implication if it is not issued.
11. Describe the procedure and state the requirements for a gas installation inspection.

Definitions

12. What is the definition of "responsible person" in relation to any premises and what is the role of the 'responsible person'?
13. What is the definition of the term "gas installation"?
14. What is the definition of the term "gas service work"?
15. What is the difference between a pre-aerated and post-aerated flame?

Procedures

16. Describe the procedure on the gas supply application to a gas retailer.

Gas Safety

17. Describe the scenario of a blow-off and explain why it occurs.

18. Describe the scenario of a flash back and explain why it occurs.

19. When does town gas become harmful?

20. Describe the procedure for working on pipes with existing gas, to ensure the work will not pose any danger.

21. Describe the first aid to be rendered to a person who is affected by gas inhalation.

22. In the event of a suspected gas leak, what are the safety precautions to be taken and what is the emergency number to call?

Design and Testing of Gas Installation

Design stage

23. What are the factors and requirements to be considered when designing gas pipe routing?

24. How does the gas appliance's inlet gas supply pressure affect the design of the "consumer's internal pipe"?

25. In the gas installation design stage, what are the details that should be included in the plan and specification submission?

26. What design considerations are required in determining the location of gas meters?

27. Describe the main components of a gas installation from Gas Service Isolation Valve (GSIV) to gas appliance and its purpose.

28. Where should the gas meter be located for premises with a gate post?

29. Describe the location of gas installation zones that gas pipes are allowed to be chased in walls. Explain the requirements for designing pipes to be chased in walls.
30. List the types of pipes which can be chased in walls to supply gas in domestic premises.

Installation standards

31. What standards do copper pipes in domestic premises need to comply with?
32. What standards do GI pipes in commercial premises need to comply with?
33. What standards do flexible tubing need to comply with?
34. What is the requirement for a gas installation with mechanical ventilation and what are the safety devices required?

Installation requirements

35. Describe the gas appliance installation process.
36. Describe the site preparation and arrangement for gas installation work.
37. What are the requirements for the installation of gas pipes in air-conditioned or basement areas and what are the safety devices required?
38. Describe the function of a typical interlocking system in a gas installation and its purpose.
39. Describe the purpose of a solenoid valve.
40. Describe the function of a non-return valve and when it should be installed.
41. Describe the working principles and functions of a low pressure cut-off switch.
42. Explain why the gas pipes in common areas need to be marked so that the pipe is readily identifiable and how it can be done. State which regulation in the Gas (Supply) Regulations stipulates this requirement and what is the penalty if the requirement is not met.

Corrosion prevention of gas pipes

43. Describe the corrosion protection methods for gas pipes.
44. How is paint used to protect pipes and at the same time for identification?
45. What is the painting process for corrosion protection?
46. What are the requirements for protecting buried pipes from corrosion and damage?

Final pressure test

47. Explain the process for gas supply application and the documents required for the final pressure testing.
48. Describe the final pressure testing process.
49. Name and describe the role and responsibility of the parties that must be present during the final pressure test.

Proof test of installations

50. Describe the proof test procedure for gas installations in commercial and residential premises.
51. State the pressure requirement for proof test on copper pipes and galvanised iron pipes.
52. What is the testing equipment to be used for soundness test/proof test? Describe the main components of this testing equipment.
53. Describe the site preparation and arrangement for purging, admittance and turn-on of gas supply to a new gas installation.
54. What must the LGSW do if the gas supply does not turn-on immediately upon completion of the proof test?

Gas purging process

55. What are the safety measures to be adopted in carrying out the purging process on a gas installation?
56. When can a direct purging of gas installation be carried out?

Gas installation safety

57. What should the LGSW look out for in the gas appliance before commencing gas service work and why?
58. What are the safety precautions to be taken before turning on gas for gas installations?
59. What safety messages should be conveyed to gas consumers?
60. Describe the methods for testing a gas leak from the meter point to the appliances and explain the advantages and disadvantages of each of these methods.

Regulations and Codes

Gas Act

61. Which section in the Gas Act prohibits the engagement of unlicensed gas service workers?

Gas (Supply) Regulations

62. Describe the procedures for admittance of gas supply as stated in the Gas (Supply) Regulations (When a professional engineer engages you as the appointed licensed gas service worker to carry out such work).
63. Describe the application procedures for turn-on of gas supply as stated in the Gas (Supply) Regulations and the process to obtain the approved plan and specifications.
64. According to the Gas (Supply) Regulations, who is authorised to carry out gas installation work?

65. Which regulation in the Gas (Supply) Regulations defines the responsibility of a licensed gas service worker?

Codes, regulations and standards

66. What is the Code of Practice for gas installation and what does it cover?

67. Is the SS608 Singapore Standard for Gas installation a legal document? Which Regulation requires the gas service worker to ensure that the gas service work complies with SS608?

68. Under regulation 14 of the Gas (Supply) Regulations, what are the requirements for the replacement or alteration of a gas installation?

69. List the requirements under regulation 20 of the Gas (Supply) Regulations for the installation of a gas appliance.