
Overview

This standard is about installing, replacing and removing gas systems, installations and components. It is for the industrial part of the non-residential downstream gas industry. It can apply to gas systems, installations and components for any type of fuel gas or combinations of fuel gas.

It includes checking that required tools, equipment, materials and components are available on site, fabricating, installing and removing gas systems and components, working with other trades, ensuring work complies with legislation and specification, and liaising with supervisors.

Any person carrying out this role must have site specific competence relevant to the level of risk.

This standard is for those installing, replacing or removing gas systems, installations or components in non-residential downstream, industrial properties.

Performance criteria

You must be able to:

1. work in line with plans, safe systems of work and risk assessments
2. check that specified tools, equipment, materials and components are available
3. check that work sites and building fabric are protected against possible damage
4. use tools and equipment that are appropriate for work activities
5. minimise damage to client property and building features whilst carrying out work
6. ensure that isolation is carried out by appropriate people before starting work
7. liaise and cooperate with people from other trades at appropriate points in the work
8. ensure that the work on associated electrical, water or ventilation systems is suitable, completed and authorised by responsible person(s)
9. fabricate gas systems, installations and components in line with specification
10. carry out removal and installation work in line with specification, plans, safe systems of work and industry standards
11. work in line with safe systems of work as identified in risk assessments at all times
12. install plant and equipment and confirm that they meet location, siting and clearances required by manufacturers' and industry standards' specifications
13. reduce and dispose of waste in line with legislation, re-cycling waste materials from work activities when appropriate
14. check that existing gas systems are clean and free of debris
15. use appropriate methods to prevent unauthorised use of un-commissioned gas systems, installations and components
16. liaise with the responsible people and others who will be affected by work activities to minimise disruptions to work
17. comply with authorisation and verification processes that ensure correct working practices of other input services
18. access and interpret the information contained in statutory and normative documents, industry standards, guidance documents and manufacturers' instructions to ensure that work is carried out to specification
19. interact with customers at appropriate times during your work
20. advise all people who are affected by your work about any delays as soon as they occur
21. report any delays in work schedules to job supervisors in line with agreed reporting procedures
22. advise responsible person(s) of any unsafe situations, and actions required to remedy those situations, without delay
23. ensure that isolation is lifted by appropriate people once work is completed

Knowledge and understanding

You need to know and understand:

1. regulations and guidance governing health and safety in the workplace, environmental protection and the use of risk assessments
2. hazard operability standards, failure mode, deficit analysis and hazard identification for industrial plant
3. the use of dynamic risk assessment in emergency situations
4. legislation covering general responsibilities for own safety and that of others
5. how to use plans, safe systems of work and risk assessments
6. the tools and equipment necessary to provide safe access to work at heights, or in restricted or confined spaces
7. methods of working which protect the building décor, customer property and existing systems and components
8. care and maintenance requirements of tools and equipment, and checks for safe condition
9. tools, equipment, materials and components required for install, replace and remove activities
10. how to purchase and obtain materials and components, availability, supplying, advising, checking and delivery procedures
11. how to secure and store tools, equipment, materials and components to minimise loss or wastage
12. potential hazards that could arise from work activities
13. steps to take should materials, components, tools and equipment not be available to commence work
14. how to access and interpret required information including statutory and normative documents, industry standards, guidance documents and manufacturers' instructions
15. the range of industrial gas systems, installations and components, their typical uses and how they operate
16. the roles and responsibilities of the people from other trades that you need to work with
17. the requirements for installation and maintenance of cleanable filters, access doors and panels and disposal of hazardous waste
18. how to measure and record installation and site details for prefabrication purposes
19. specific ventilation and emission requirements relating to industrial catering and the effects of cooking fumes on combustion
20. the implications of working with systems with electrical or electronic components
21. how to confirm the suitability of new or existing gas input systems
22. how to confirm and verify the suitability of work on associated electrical, water or ventilation systems including electricity, water, ventilation and flue/extraction systems
23. the need to liaise with others whose procedures or routines may be affected by the suspension of the gas plant and equipment and gas system operation
24. the points in the install, exchange and remove process where co- operation and liaison with other trades and property occupier may be required
25. the industry practices and work standards for fabricating gas systems, installation and components
26. the positioning and fixing requirements for gas systems, installations and components
27. how to connect gas systems, installations and components
28. the regulations and requirements covering the installation of previously used (second hand)

plant and equipment

29. the authorisation and verification processes, roles and responsibilities which apply to working with associated electrical, water or ventilation services and personnel
30. how to communicate with customers and when it is appropriate to do so
31. the implications of your work on industrial processes
32. the impact of gas systems on industrial processes
33. precautionary actions to prevent unauthorised use of un-commissioned gas systems, installations and components

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Install, replace and remove gas systems, installations and components in industrial properties



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