(ICS 23.040.10; 23.040.15; 91.140.40)

SINGAPORE STANDARD Code of practice for gas installation





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Code of practice for gas installation

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Foreword

This Singapore Standard was prepared by the Working Group on Gas Installation set up by the Technical Committee on Building Maintenance and Management under the purview of the Building and Construction Standards Committee.

This standard is a revision of SS 608:2015+A3:2023, "Code of practice for gas installation".

The key changes in this revision include:

- updating the design, materials, and installation methods for gas installations;
- revising the testing pressure; and
- introducing additional requirements for high-rise buildings and meter installations.

It is presupposed that in the course of their work, users will comply with all relevant regulatory and statutory requirements. Some examples of relevant regulations and acts are listed in the Bibliography. The Singapore Standards Council and Enterprise Singapore shall not be responsible for identifying all of such legal obligations.

In preparing this standard, reference was made to the following publications:

- Code of practice for Fire Precautions in Buildings 2023
- IGEM/G/5 Edition 3 Gas in multi-occupancy buildings with amendments April 2023
- Gas Metering Code 2021
- Gas Supply Code 2024
- SS 575:2012 Code of practice for Fire Hydrant, Rising Mains and Hose Reel System

The following definitions used in the standard have been reproduced/adapted from the Gas Act 2001 and Gas (Supply) Regulations 2009:

- Consumer's internal pipe
- Gas appliance
- Gas installation
- Gas meter control valve
- Gas service isolation valve
- Gas service work
- Gas tightness
- Leak free
- Meter installation
- Purging
- Responsible person

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Acknowledgement is made for the use of information from the above publications.

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NOTE

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review unless there are requests to review such standards.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

Code of practice for gas installation

1 Scope

This standard specifies the essential requirements for the safe and good practices in gas service work. It concerns the gas installation downstream of the gas service isolation valve (GSIV). It is applicable to the conveyance of town gas or natural gas up to 50 kPa gauge.

This standard covers design, materials, installation, testing, commissioning and maintenance of the gas installations and appliances. It is applicable to new gas installations as well as additions and alterations to existing gas installations.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API Specification 5L	American Petroleum Institute – Specification for line pipe
API 1104	American Petroleum Institute – Welding of pipeline and related facilities
ASME B16.5	Pipe flanges and flanged fittings: NPS 1/2 through NPS 24, metric/inch standard
ASME B16.34	Valves – Flanged, threaded, and welding end
ASTM A234	Standard specification for piping fittings of wrought carbon steel and alloy steel for moderate and high temperature service
BS 143 and 1256	Threaded pipe fittings in malleable cast iron and cast copper alloy
BS 381C	Specification for colours for identification, coding and special purposes
BS 669-1	Flexible hoses, end fittings and sockets for gas burning appliances – Stripwound metallic flexible hoses, covers, end fittings and sockets for domestic appliances burning 1st, 2nd and 3rd family gases – Specification
BS EN 88-1	Safety and control devices for gas burners and gas burning appliances – Pressure regulators for inlet pressures up to and including 50 kPa
BS EN 331	Manually operated ball valves and closed bottom taper plug valves for gas installations for buildings
BS EN 969	Ductile iron pipes, fittings, accessories and their joints for gas pipelines – Requirements and test methods
BS EN 1057	Copper and copper alloys – Seamless, round copper tubes for water and gas in sanitary and heating applications
BS EN 1092-1	Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories, PN designated – Steel flanges
BS EN 1254-1	Copper and copper alloys – Plumbing fittings – Capillary fittings for soldering or brazing to copper tubes
BS EN 1254-2	Copper and copper alloys – Plumbing fittings – Compression fittings for use with copper tubes
BS EN 1254-3	Copper and copper alloys – Plumbing fittings – Compression fittings for use with plastics and multilayer pipes