

Gas supply systems — Gas pressure regulating installations on service lines — Functional requirements

The European Standard EN 12279:2000, with the incorporation of amendment A1:2005, has the status of a British Standard

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National foreword

This British Standard is the official English language version of EN 12279:2000, including amendment A1:2005.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment 1:2005 is indicated by **A1** **A1**.

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Summary of pages

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English version

Gas supply systems – Gas pressure regulating installations on service lines – Functional requirements

Systèmes d'alimentation en gaz – Installations de détente-régulation de pression de gaz faisant partie des branchements – Prescriptions fonctionnelles

Gasversorgungssysteme – Gas-Druckregleinrichtungen in Anschlußleitungen – Funktionale Anforderungen

This European Standard was approved by CEN on 19 August 1999; amendment A1:2005 was approved by CEN on 7 July 2005.

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 234, Gas supply, the Secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2000, and conflicting national standards shall be withdrawn at the latest by October 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

There is a complete suite of functional standards prepared by CEN/TC 234, Gas Supply, to cover all parts of the gas supply system from the input of gas to the transmission system up to the inlet connection of the gas appliances, whether for domestic, commercial or industrial purposes.

In preparing this standard a basic understanding of gas supply by the user has been assumed.

Gas supply systems are complex and the importance on safety of their construction and use has led to the development of very detailed codes of practice and operating manuals in the member countries. These detailed statements embrace recognized standards of gas engineering and the specific requirements imposed by the legal structures of the member countries.

Foreword to amendment A1

This European Standard (EN 12279:2000/A1:2005) has been prepared by Technical Committee CEN/TC 234 "Gas supply", the secretariat of which is held by DIN.

This Amendment to the European Standard EN 12279:2000 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2006, and conflicting national standards shall be withdrawn at the latest by February 2006.

This amendment replaces Clause 12 of EN 12279:2000.

This amendment is meant to give guidance to the manufacturers concerning maintenance aspects which have to be considered in their operating manuals in order to fulfil the PED requirements.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This European Standard contains the relevant functional requirements for gas pressure regulating installations forming a part of the service lines in gas supply systems. It is applicable to the design, materials, construction, testing, operation and maintenance of gas pressure regulating installations which form a part of the service line for the supply of residential, high rise, public access, commercial and mixed use buildings (see EN 1775) and for which the maximum upstream operating pressure is equal to or less than 16 bar and the design flow rate is equal to or less than 200 m³/h (normal m³/h).

This European Standard does not apply to gas pressure regulating installations commissioned prior to the publication of this standard.

Basic system requirements for gas pressure regulating installations are contained in this European Standard. Requirements for individual components (valves, regulators, safety devices, pipes, etc.) or installation of the components, are contained in the appropriate European Standards.

For gas pressure regulating installations forming a part of service lines with design flow rates of more than 200 m³/h (normal m³/h) or for a maximum upstream operating pressure of more than 16 bar, EN 12186 applies.

The requirements of this European Standard are based on good gas engineering practice under conditions normally encountered in the gas industry. Requirements for unusual conditions cannot be specifically provided for, nor are all engineering and construction details prescribed.

The requirements of this European Standard are based on the physical and chemical data of gaseous fuels in accordance with Table 1 of EN 437:1993 for first and second family gases. For gaseous fuels heavier than air additional considerations may be necessary.

The objective of this European Standard is to ensure the safe operation of such systems. This does not, however, relieve all concerned of the responsibility for taking the necessary care and applying effective quality management during the design, construction and operation.

This European Standard specifies common basic principles for gas supply systems. Users of this European Standard should be aware that more detailed national standards and/or codes of practice can exist in the CEN member countries.

This European Standard is intended to be applied in association with these national standards and/or codes of practice setting out the above mentioned principles.

In the event of conflicts in terms of more restrictive requirements in national legislation/regulation with the requirements of this standard, the national legislation/regulation shall take precedence.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 124	Gully tops and manhole tops for vehicular and pedestrian areas – Design requirements, type testing, marking, quality control.
EN 334	Gas pressure regulators for inlet pressures up to 100 bar.
EN 437:1993	Test gases – Test pressures – Appliance categories.
EN 1775	Gas supply systems – Gas pipework for buildings – Maximum operating pressure ≤ 5 bar – Functional recommendations.
EN 12007-1	Gas supply systems – Pipelines for maximum operating pressure up to and including 16 bar – Part 1: General functional recommendations.
EN 12186	Gas supply systems – Gas pressure regulating stations for transmission and distribution – Functional requirements.
EN 12327	Gas supply systems – Pressure testing, commissioning and decommissioning procedures – Functional requirements.
EN 60079-10	Electrical apparatus for explosive gas atmospheres – Part 10: Classification of hazardous areas (IEC 60079-10:1995).
prEN 50154	Erection of electrical installations in hazardous areas; electrical installations in hazardous gas atmospheres (other than mines).

3 Definitions, symbols and abbreviations

For the purposes of this standard, the following definitions, symbols and abbreviations apply.

3.1 General

3.1.1 authorized person: a competent person who is appointed to fulfill a given task on gas supply systems or installation pipework

NOTE: The appointment procedure is defined in each member country.

3.1.2 competent person: a person who is trained, experienced and approved to perform activities relating to gas supply systems or installation pipework

NOTE: The means of approval, if any, will be determined within each member country.

3.2 Installation

3.2.1 residential building: a building which contains one or more dwelling places but excludes areas intended principally for professional activities and for public use

3.2.2 high rise building: a building of which the height from the floor of the highest occupied level to ground level is:

- for a residential building, greater than 50 m
- any other building, excluding an industrial production plant, greater than 30 m

NOTE: It is recognized that the safety of the gas installation is related to the use of the building and the vertical height of the sections of pipework.