

**Gaasivarustus. Hoone gaasitorustik.
Maksimaalne töö rõhk kuni 5 bar. Talituslikud
soovitused**

Gas supply - Gas pipework for buildings -
Maximum operating pressure less than or equal
to 5 bar - Functional recommendations

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

<p>Käesolev Eesti standard EVS-EN 1775:2008 sisaldab Euroopa standardi EN 1775:2007 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 27.02.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.08.2007.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1775:2008 consists of the English text of the European standard EN 1775:2007.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 27.02.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 01.08.2007.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

**Gas supply - Gas pipework for buildings - Maximum operating
pressure less than or equal to 5 bar - Functional
recommendations**

Alimentation en gaz - Tuyauteries de gaz pour les
bâtiments - Pression maximale de service inférieure ou
égale à 5 bar - Recommandations fonctionnelles

Gasversorgung - Gasleitungsanlagen für Gebäude -
Maximal zulässiger Betriebsdruck kleiner oder gleich 5 bar -
Funktionale Empfehlungen

This European Standard was approved by CEN on 30 June 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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Foreword

This document (EN 1775:2007) 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 February 2008, and conflicting national standards shall be withdrawn at the latest by February 2008.

This document supersedes EN 1775:1998.

The CEN/TC 234 functional standards specify the common appropriate principles and the recognised practices concerning design, construction, operation and maintenance, all for the safety and integrity of gas supply systems, taking the form of general recommendations and/or 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, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This functional standard is to be used as a reference standard in codes of practice in CEN member countries. These codes of practice also need to take account of regulations made by the municipal, regional or national authorities in each country to design and construct gas installations for buildings.

At the time this standard was prepared, new pipe materials and jointing techniques were being developed or are already authorized for use in some member countries. Any requirements additional to the requirements of this standard put in place in member countries shall be identified in CEN/TR 13737. It is important to ensure that designers and installation operatives are trained in the correct methods of application for each system as prepared by its supplier/manufacturer.

This standard contains general recommendations for the safety of persons, animals and property and the protection of their environment.

The recommendations in this standard are intended to be applied by competent persons who have suitable knowledge and experience.

This standard does not consider contractual agreements, qualifications or authorizations imposed by gas distribution system operators, LPG suppliers or public authorities upon companies who design, construct or work on gas installations.

1 Scope

1.1 This standard specifies general recommendations for the design, construction, testing, commissioning, operation and maintenance of installation pipework; pipework between the delivery point of the gas and the inlet connection to the gas appliance.

This standard specifies common basic principles for gas installation pipework.

Users of this European standard need to be aware that more detailed national standards and/or codes of practice may exist in the CEN member countries.

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

In the event of conflicts in terms of more restrictive requirements in national legislation/regulation with the requirements of this standard, national legislation/regulation takes precedence as illustrated in CEN /TR 13737.

NOTE 1 CEN/TR 13737 contains:

- clarification of relevant legislation/regulations applicable in a country;
- if appropriate, more restrictive national requirements;
- national contact point for the latest information.

This standard applies to:

- gas installations in residential, commercial and public access building having a maximum operating pressure (MOP) less than or equal to 5 bar;
- industrial gas installations having a maximum operating pressure (MOP) less than or equal to 0,5 bar.

NOTE 2 For industrial gas installations having a MOP above 0,5 bar, or installations having a MOP above 5 bar, see prEN 15001-1.

This standard is applicable to new installation pipework as well as to replacements of, or extensions to, existing installation pipework.

This standard does not contain detailed recommendations relating to the laying of buried pipework.

NOTE 3 For more information on buried pipework, see EN 12007-1, EN 12007-2 and EN 12007-3.

NOTE 4 For more information on gas pressure regulating installations, see EN 12279.

NOTE 5 For more information on gas metering systems, see EN 1776.

1.2 This standard is applicable to installation pipework supplied from gas distribution systems and from liquefied petroleum gases (LPG) storage vessels.

Excluded are:

- single appliance LPG installations without fixed pipework, achieved by a flexible appliance connector from an adjacent LPG storage cylinder.
- LPG storage vessels.

1.3 In this standard the term 'gas' refers to combustible gases, which are gaseous at 15 °C and 1 013,25 mbar. These gases, odorized for safety reasons, are commonly referred to as manufactured gas, natural gas or liquefied petroleum gases (LPG). They are also referred to as first, second or third family gases (see EN 437).

In this standard, all pressures are gauge pressures, unless otherwise stated.

2 Normative references

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

EN 331, *Manually operated ball valves and closed bottom taper plug valves for gas installations for buildings*

EN 437, *Test gases — Test pressures — Appliance categories*

EN 751-1, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 1: Anaerobic jointing compounds*

EN 751-2, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 2: Non-hardening jointing compounds*

EN 751-3, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 3: Unsintered PTFE tapes*

EN 1057, *Copper and copper alloys — Seamless, round copper tubes for water and gas in sanitary and heating applications*

EN 1254-4, *Copper and copper alloys — Plumbing fittings — Part 4: Fittings combining other end connections with capillary or compression ends*

EN 1762, *Rubber hoses and hose assemblies for liquefied petroleum gas LPG (liquid or gaseous phase) and natural gas up to 25 bar (2,5 Mpa) — Specification*

prEN 1763, *Flexible rubber and plastics hoses, tubing, coupling tails and assemblies for use with propane and butane in the vapour phase — Requirements*

EN 10226-1, *Pipe threads where pressure tight joints are made on the threads — Part 1: Taper external threads and parallel internal threads — Dimensions, tolerances and designation*

EN 10226-2, *Pipe threads where pressure tight joints are made on the threads — Part 2: Taper external threads and taper internal threads — Dimensions, tolerances and designation*

EN 10242, *Threaded pipe fitting in malleable cast iron*

EN 14291, *Foam producing solutions for leak detection on gas installations*

EN 14800, *Corrugated safety metal hose assemblies for the connection of domestic appliances using gaseous fuels*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 Definitions relating to pressures

3.1.1

design pressure

pressure on which design calculations are based

3.1.2

operating pressure (OP)

pressure which occurs within the pipework under normal operating conditions